

# Family Planning Uptake by Women of Reproductive Age in Selected Health Facilities in Owan East Local Government Area of Edo State, Nigeria

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**ABSTRACT:** The study conducted an assessment of family planning uptake among women of reproductive age in selected health facilities in Owan East Local Government Area of Edo State, Nigeria. The research was guided by two objectives and two research questions, employing a cross-sectional descriptive study design. The target population comprised women aged 15-24 years seeking postnatal care in the selected health facilities, with 418 respondents selected using the simple random sampling method. Data was collected using a validated 13-item open-ended questionnaire, with established face and content validity, and reliability estimates of 0.83 using the test-retest method. Data analysis involved the use of frequency counts and percentages. The findings revealed that while the methods for family planning intake by women were deemed sufficient and efficient, challenges encountered by women sometimes hindered access to family planning contraceptives in the study area. As a result, the study recommends that education should be provided at the point of service to enable informed choice of method based on the type of contraception need (limiting and spacing).

**Keywords:** Family planning, reproductive age, women, health, contraceptives

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## INTRODUCTION

Sub Saharan Africa countries where Nigeria belongs are characterized by high fertility and correspondingly high rates of population growth for the foreseeable future. Most countries in the region will grow by 100-300 percent by 2050 and in total the population of the region will double over the next 45 years. The main driver of high fertility (5 children per woman) in most countries is persistent demand for large numbers of children, as expressed by women responding to questions about desired childbearing. Fertility would decline only if women had no undesired childbearing, that is, if greater accesses to quality family planning services respond to unmet need (Levin, 2019). The provision of a wide range of contraceptive methods increases the opportunity for individual couples to obtain a method that suits their needs (Ministry of Public Health and Sanitation, 2018). The relatively high birth rate in Nigeria which has been accompanied by steady declines in death rates has resulted in high rates of population growth.

Nigeria's annual rate of population growth of about 2.87 % has been a major concern for population experts and policy makers for some time. With an estimated doubling period of less than 25 years at the current rate of population growth, the current level of consumption can only be maintained if production of goods and services will also double in less than 25 years. Unfortunately, this is almost impossible to achieve as all available literature indicates that the rate of growth of the economy has been lower than the rate of growth of the population. Standards of living tend to worsen when the rate of population growth exceeds the rate of economic growth.

Family planning programs that offer a variety of safe, effective, acceptable and affordable contraceptive methods helps women to prevent unwanted pregnancies and sexually transmitted diseases (STDs) and also achieve their child bearing goals. Method mix is a key determinant of the fertility impact of contraceptive practice. The use of more effective methods even by a

smaller proportion of eligible couples can produce a greater decline in fertility than can the use of less effective methods by a large proportion of couples (Magadi and Curtis, 2003). Unmarried, sexually active women (where majority are in age group 15-24 years) use injectables most frequently (16.8%) and condom use was only 18.2% (Biddlecom, 2018).

Since the middle of the 1960s, access to comprehensive family planning services has been widely recognized as a basic human right (UNDP, 1966). In spite of this, family planning programmes and policies have been one of the most under-resourced developmental problem (Sinding, 2019). As a result, it is estimated that about 214 million women in the developing world have an unmet need for family planning (WHO, 2017). At the 2012 London Summit, the Family Planning 2020 (FP2020) movement was initiated; it was agreed that this programme would enable 120 million more girls and women to access modern contraceptives by 2020 in the world's poorest countries (Schlachter, 2016). Achieving this would cost approximately \$8 billion, and prevent 54 million unintended pregnancies, 80,000 maternal deaths, and up to one million infant deaths. Some recent United Nations (UN) predictions show that half the projected growth in population between now and 2050 will occur in Africa— a continent with the world's highest fertility rates and the lowest use of modern contraception (UN, 2015).

The population of 26 African countries is predicted to at least double by 2050. Some experts worry that rampant population growth in Africa will not just aggravate the current migration crisis but could play into the hands of terror groups across the Sahel who seek recruits among large, poor families with few options (AfDB et al., 2022). The United Nations Population Fund (UNFPA), the agency charged with ending maternal deaths and promoting family planning services, is also facing a \$700 million funding gap for contraceptives over the next three years (UNFPA, 2015). Family planning improves the health and overall well-being of women and families around the world. In 2010, a summary of the evidence showed family planning's connection to all of the eight Millennium Development Goals (Cates et al., 2020). Since then, many stakeholders have advocated for family planning to be a fore front within the next global development agenda. Many of the advocates come from the reproductive health community, but it has also come from many heads of state and key decision-makers in developing countries, global policy makers as well as major funders of women's health around the world (DFID, 2022). Simultaneously, the international community has shifted its focus towards a post-2015 development agenda that widens the lens from primarily micro-level social development to include macro-level economic, sustainability and governmental objectives. As the development framework becomes broader, the extensive

ripple effect of family planning's benefits remains clear. Evidence made available since the published summary in 2010 continues to confirm that family planning has an impact on global goals that will remain for a while (Canning & Schultz 2022).

It is also clear that access to family planning has a beneficial impact on several of the newly proposed global development objectives. For example, with regard to sustainable livelihoods and job growth, family planning programmes can reduce unwanted fertility in resource-poor settings. This, in turn, allows women greater opportunities to participate in paid employment and to increase their productivity and earnings (Osotimehin, 2022). Furthermore, when women are employed or have more control over household incomes, they tend to spend more than men do on food, health, clothing and education for their children and this expenditure can generate improvements in household nutrition, health and education.

There continues to remain variations in contraceptive use and the unmet needs for family planning across Sub-Saharan Africa. For example, in Southern Africa, contraceptive use is approximately 51% and comprises almost exclusively modern methods while unmet needs in this region represent 16%. In contrast only 15% of women use modern contraceptive in West Africa and 24% of them report an unmet need for family planning making it one of the highest in Africa (Sedgh et al., 2016). One of the direct consequences of relatively low use of contraception and high unmet needs is that family sizes remain large. On average a West African woman has approximately six children in her lifetime while fertility in Southern Africa is much lower at three children per woman, partly due to the high use of modern contraception (Sedgh et al., 2016).

In developing countries like Nigeria, children are highly valued as they do not only represent the virility of a man, but also act as a source of income in places where agriculture is the main source of livelihood, acting as extra hands for work. In addition to this, parents and extended relatives depend on their children for maintenance as they get old and are thus hesitant to restrict births (Mokomane, 2023). In 1992, due to the rapid population growth that was seen in Nigeria, the then Nigerian president suggested that each family should have only four children. In response to this, the mass media started awareness campaigns on the disadvantages of having too many children. During this period, family planning clinics were also established in government owned hospitals, mostly in urban centres (Ogunbekun et al., 2019). This however did not achieve the desired results mostly due to the cultural and religious preferences of the various ethnic groups that make up Nigeria. Some reports in Nigeria have showed that in general, Nigerian women would want to have fewer children than they actually have; in other words, Nigerian

women are more receptive of family planning than their male counterparts mostly because they bear the burden of childbearing as well as attending to household chores and sometimes understand the probable break down in their health as a result of child-bearing (Anyanwu & Ezegebe, 2013). Between 1990 and 2015 in Nigeria, the maternal mortality ratio (MMR) declined by almost 30%, falling from 1,110 deaths per 100,000 live births to 814 deaths per 100,000 live births (WHO et al., 2016). In spite of the reported decline in maternal deaths, many women in Nigeria still die from pregnancy-related causes and more recent trends in MMR suggests that there has been stagnation in the decline. In 2013 for example, the WHO reported that approximately 40,000 women died due to maternal causes. This figure accounts for 14% of the global maternal death burden, which is disproportionate when Nigeria constitutes only 3% of the world population. Data from the Nigeria Demographic and Health Surveys (NDHS) show that the percentage of currently married women with an unmet need for contraceptive increased between 1990, 2003 and 2008 while a decline in unmet needs was observed between 2008 and 2013. Egede et al., (2015) looked at contraceptive choices and behaviours in all the regions in Nigeria. Their study revealed that intrauterine contraceptive devices (IUCD) were the most popular choice and accounted for 77.9% of the Nigerian women users and it was followed by injectables (12.6%), oral contraceptive pills (4.1%) and progestin implants (2.3%). The less popular were condoms, spermicidal, and female sterilization (1.5%, 0.1% and 0.1% respectively). This may reflect the relative availability of each method and cost variations.

The invasive nature of Bilateral Tubal Ligation (BTL), religious beliefs and cost consideration may contribute to making it less acceptable compared to the other methods available (Ijarotimi, 2017). Most studies on contraceptives in Nigeria converge with Egede et al. (2015) and found that the majority of women use IUCDs. IUCDs are the most widely used reversible contraceptives in the world, and it has been estimated that over 130 million women of reproductive age use it for birth control. Regional differences in choices have also been observed by many studies. Progestogen-only injectables use of 12.6% is found in Ife (South-western) Nigeria which is lower than the 71.8% found in Aba (South-eastern Nigeria) but comparable to 14.2% reported from Jos (North-central Nigeria) (Buhling et al., 2014).

In a comparison of 15 countries, Blanc et al., (2012), showed that within a year of starting a method, 7-27 of women ceased to practice contraception for reasons related to quality of the service environment. The provision of a range of contraceptive methods at family planning services has also been shown to influence contraceptive option. In a U.S. study, rapid population growth, high rates of unemployment, elevated levels of religious affiliation, higher socioeconomic status and

ready access to family planning services were all associated with increased uptake of contraceptives. Similarly, a study in Philippines found that the presence of family planning services and community labor-market conditions and infrastructure development were strong influences on contraceptive use. Other studies have examined other community characteristics including the influence of levels of community economic development, levels of school participation, economic roles of children and community fertility norms on contraceptive (Chacko, 2021). The study by Chacko, (2021) also shows that the availability and quality of permanent village-based government health care affects the use of modern contraception.

There are currently over one billion people between the ages of 15 and 24, by far the largest childbearing cohort in history (Bayer, 2022). Sexual activity among youth places them at risk of unintended pregnancy and STIs, including HIV/AIDS. Meeting the reproductive health needs of this underserved population is therefore an essential matter for global and domestic discussion since addressing the unmet contraceptive needs will dramatically impact on their health and on future world population. Individual contraceptive use is influenced by factors at the individual, household, and community level, but the geographic distribution of contraceptive use is often associated with contextual variables, particularly at the community level (Stephenson et al., 2017). These contextual variables typically include social, economic, and cultural influences at the community level (Burgard, 2018). Increased use of contraception is linked to rapid population growth rates, high levels of unemployment, religious affiliation, higher socioeconomic status, and greater availability of contraceptive services (Grady, 2023).

A study in the Philippines found that provision of family planning outreach services and the average community wage for women were significant community-level predictors of the use of contraceptive services (DeGraff, 2017). Research in South Africa has also shown significant relationships between the wealth status, level of female autonomy, level of female education of communities, and the choice of contraceptive method (Stephenson et al., 2008). Other studies have examined the relationship between spatial patterns of use of contraceptive methods and the influence of community-level factors. In Bangladesh and India, districts located on the border and which share a common language were positive outliers for contraceptive use (Amin et al., 2022). Within the last four decades, there have been increased pressures towards family limitation in Nigeria (Oyedokun, 2014). These are the results of the rapid growth of the large towns, the very great extension of educational facilities, and among the elite, the far greater difficulty of securing top jobs that have come with independence. In Nigeria, there have been approximately 11 major family

planning programmes that have been implemented since the late 1980s when family planning programmes were initially introduced. Many of these programmes focused on improving service delivery through service provision, counselling and mass media campaigns. While some family planning programmes have reported increases in contraceptive use after implementation, contraceptive use in Nigeria remains relatively low (Akinlo et al., 2023). Some of the programmes have revealed that communities are not usually involved in the planning and pre-implementation phases of programmes, which could have encouraged their full participation and help to unravel the barriers to uptake of services (Asekun-Olarinmoye et al., 2023). Asekun-Olarinmoye et al. (2023) concluded that understanding the main factors influencing contraceptive use among women is the key to the development of effective family planning programmes. Some of the reports from some of the programmes reveal that there have been increases in modern contraceptive use in the areas that the programme occurs. The ACCESS/MCHIP USAID Nigeria programme reported that at baseline use of FP services was approximately 5% in 2006 across the three states and that by end-line, use of FP services had increased to 13.5% in 2012. It also reported that maternal deaths had reduced from approximately 3.7% at the baseline to 0.7% in these areas. Another programme, the Community Participation for Action in the Social Sector Project also reported increases in the use of modern contraceptive use in some of the states post programme. Post-programme figures showed that the use of modern family planning methods in the intervention states had increased from 18% and 5% to approximately 25% and up to 11% in Kano and Bauchi respectively. The Community-Based Access to Injectable Contraceptive (CBA2I) programme also reported that in the 11 months that the programme lasted for, it was able to provide injectables to 1,662 women and that uptake of the injectables increased from 20% in 2011 at baseline to 38% after the project ended in the facilities where the programme occurred. In response to this situation, a national policy on population for development, unity, progress, and self-reliance was formulated in 1998 and revised in 2004. The major goal of the policy is a reduction in fertility through increased adoption of contraception (Federal Government of Nigeria, 2004). Despite the various efforts made by the government, overpopulation continues to persist in the study area. Therefore, this study aims to investigate the uptake of family planning among women of reproductive age in selected health facilities in Owan East Local Government Area of Edo State, Nigeria.

### **Purpose of the study**

The purpose of this study is to assess family planning

uptake by women of reproductive age in selected health facilities Owan East Local Government Area of Edo State, Nigeria.

### **Specifically, the study**

1. Evaluated the methods of family planning services obtained by respondents from primary health care facilities.
2. Challenges that hinder meeting the desired FP need of the mothers

### **Research questions**

The following research questions were asked.

1. What are the methods of family planning services obtained by respondents from primary health care facilities?
2. What are the challenges that hinder meeting the desired FP need of the mothers?

## **METHODOLOGY**

### **Study design**

A cross-sectional descriptive study design was used. The design helped in collection of information that is objective and relevant to allow empirical testing of the hypothesis. Both qualitative and quantitative data were collected.

### **Study area**

The study was conducted in Owan East Local Government Area of Edo State, Nigeria. The headquarters is in the town of Afuze. The Owan East Local Government Area comprises 69 towns/villages made up of eight clans (Emai, Igue, Ake-levbu, Ihievbe, lkao, Ivbi-Mion, Ive-Ada-Obi, Otuo and Uokha).

### **Study population**

1,100 Women aged 15-24 years seeking postnatal care in selected health facilities in Owan East Local Government Area.

### **Inclusion criteria**

Women between 15- 24 years of age, without postpartum amenorrhea, seeking postnatal care in health facilities in Owan East Local Government Area of Edo State, two months or more after delivery.

### **Exclusion criteria**

Women below 15 years and above 24 years of age and

those who did not give consent Women with postpartum amenorrhea.

### Sample size

The sample size for this study was 440 respondents which formed 40% of the entire population.

### Sampling procedure

The health facilities where the study was conducted were picked using simple random sampling method from a list of health facilities that provide postnatal services in Owan East Local Government Area. The sampling frame for participants constituted women aged 15-24 attending postnatal clinic in selected health facilities. Participants were selected using systematic random sampling. The study population (N) was estimated at 1000 postnatal clients in selected clinics while the sample population (n) was 384 respondents. The sampling interval, therefore, was  $1000/384 = 2.604 \approx 3$  that is every third client attending the clinic who met the inclusion criteria was selected as a participant.

### Data collection tools

Data was collected using structured questionnaire that was administered by interviewer. However, out of 440 questionnaires administered on the respondents, only 418 questionnaires were retrieved and used for the study. To ensure data quality, the data collection tools were pre-tested to ensure reliability and validity. There was continuous scrutinizing of the data collected to ensure accuracy, consistency, and uniformity of the data.

### Data analysis

The collected data was be coded, entered the computer, cleaned and analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 23. Descriptive statistics was used to summarize and organize the data.

### Ethical considerations

Permission to carry out the study was sought from the Ministry of Health. Informed consent was sought from all the study participant. Confidentiality, anonymity, and privacy were fully guaranteed throughout the study.

## RESULTS

The result from the analysis of the personal data of the respondents showed that in terms of the age distribution,

out of the 418 respondents used in the study, 127 (30.38%) were 17 years old or younger, 221 (52.87%) were in the range of 18-20 years old, while 70 (16.75%) were 21 years of age or older. Furthermore, the results of respondents' educational backgrounds showed that, of the 418 respondents sampled for the study, 133 (31.82%) have no formal education, 154 (36.84%) have completed their FSLC, 111 (26.56%) have completed their SSCE, while 20(4.78%) have completed their tertiary education (Table 1). In terms of marital status, out of 418 respondents, 213 (50.10%) agreed they are married, 41 (9.81%) agreed that they are divorced, while 164 (39.23%) agreed that they are single. In line the occupational status of the respondents, out of 418 respondents used in the study, 201 (48.09%) agreed they are unemployed, 131 (31.34%) agreed that they are self-employed, while 86 (20.57%) agreed that they are public employees (Table 1).

### Research question one

What are the methods of family planning services obtained by respondents from primary health care facilities?

In terms of types of family planning methods, the result from the analysis of the data of the respondents showed that out of the 418 respondents used in the study, 56 (13.40%) use natural methods of family planning, 88 (21.05%) use withdrawal methods, 41 (9.81%) use intra uterine device, 69 (16.51%) use injectables, 102(24.40%) use condoms, 34 (8.13%) use oral pills, while 28(6.79%) use none of the above methods (Figure 1).

### Research question two

What are the challenges that hinder meeting the desired FP need of the mothers?

The result from the analysis of the challenges faced by the respondents showed that out of the 418 respondents used in the study, 148 (35.41%) agreed that some methods are expensive, 92 (22.0%) attributed the challenges to the low knowledge of family planning, 67 (16.03%) attributed it to limited supply of contraceptives, 63 (15.07%) attributed it to ineffectiveness of some methods, while 48(11.48%) attributed the challenges to failure to use contraceptives as recommended (Figure 2).

## DISCUSSION

The finding of this study revealed that there are many methods of family planning but mothers find it difficult to use this methods due to several challenges that they encounter. The finding is noteworthy as it is in line with Biddlecom, (2018) that family planning programs that offer a variety of safe, effective, acceptable and

**Table 1:** Personal data of respondents

Variable		Frequency	Percentage
Age	≤17 years	127	30.38
	18-20 years	221	52.87
	≥21 years	70	16.75
	<b>Total</b>	418	100
Educational level	No formal education	133	31.82
	First School Leaving certificate	154	36.84
	Senior Secondary Certificate	111	26.56
	Tertiary education	20	4.78
	<b>Total</b>	418	100
Marital status	Married	213	50.10
	Divorced	41	9.81
	Single	164	39.23
	<b>Total</b>	418	100
Occupation	Unemployed	201	48.09
	Self employed	131	31.34
	Public employee	86	20.57
	<b>Total</b>	418	100

Source: Field work (2023)

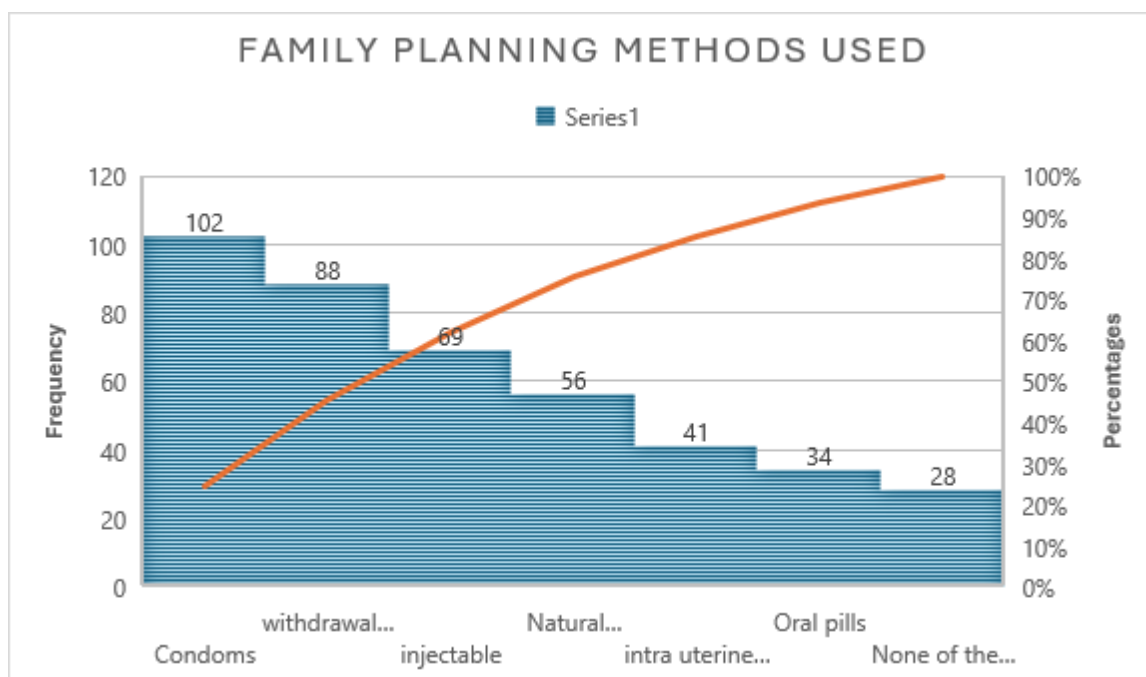
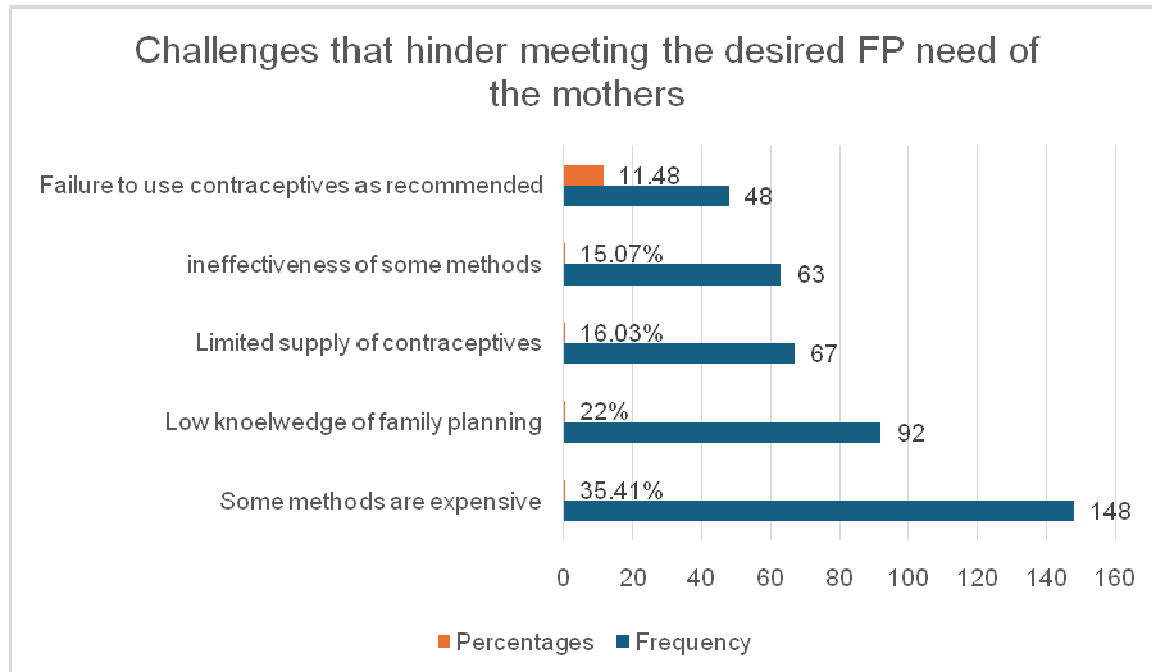


Figure 1: Family planning methods used

affordable contraceptive methods helps women to prevent unwanted pregnancies and sexually transmitted diseases (STDs) and also achieve their childbearing goals. Method mix is a key determinant of the fertility impact of contraceptive practice. The use of more effective methods even by a smaller proportion of eligible couples can produce a greater decline in fertility than can the use of less effective methods by a large proportion of couples (Magadi & Curtis, 2003). Unmarried, sexually active women (where majority are in age group 15-24 years) use injectables most frequently (16.8%) and

condom use was only 18.2%. Individual contraceptive use is influenced by factors at the individual, household, and community level, but the geographic distribution of contraceptive use is often associated with contextual variables, particularly at the community level (Stephenson et al., 2017). These contextual variables typically include social, economic, and cultural influences at the community level (Burgard, 2018). Increased use of contraception is linked to rapid population growth rates, high levels of unemployment, religious affiliation, higher socioeconomic status, and greater availability of



**Figure 2:** Challenges that hinder meeting the desired FP need of the mothers.

contraceptive services (Grady, 2023).

### Conclusion

The study's findings indicate that the various methods available for women to use for family planning are deemed to be adequate and effective. However, it is noted that women often face challenges in accessing family planning contraceptives, which can hinder their ability to utilize these methods. Despite the overall sufficiency and efficiency of the available options, it is important to address the barriers that women encounter in order to ensure widespread access to family planning services.

### Recommendations

The following recommendations are made;

1. The state and local government should increase the availability of family planning services in all the communities and create awareness among the single and unmarried women for improved uptake.
2. Education should be given at the point of service to enable choice of method depending on the type of need for contraception (limiting and spacing).
3. There is need for advocacy on girl child education. From the findings, it is found that contraceptive use is low among who have no education and primary education and who are not working.

Therefore, field worker should give more attention to this target group.

4. Appropriate intervention should also be taken to increase education among these women.

### REFERENCES

- African Development Bank (AfDB). Organization for Economic Cooperation and Development, United Nations Development Programme, United Nations Economic.
- Akinlo, A., Bisiriyu, A., & Esimai, O. (2023). Influence of Use of Maternal Health Care on Postpartum Contraception in Nigeria. United States Agency for International Development. Available at :<https://dhsprogram.com/pubs/pdf/WP92/WP92.pdf>.
- Amin, S., Basu, A. M., & Stephenson, R. (2022). Spatial variation in contraceptive use in Bangladesh: looking beyond the borders. *Demography*, 39(2), 251-267.
- Anyanwu, J., Ezegebe, B., & Eskay, M. (2023). Family Planning in Nigeria: a Myth or Reality? Implications for Education. *Journal of Education and Practice*, 4(15), 108-113.
- Asekun-Olarinmoye, E., Adebimpe, W., Bamidele, J., Odu, O., Asekun-Olarinmoye, I., & Ojofeitimi, E. (2023). Barriers to use of modern contraceptives among women in an inner-city area of Osogbo metropolis, Osun State, Nigeria. *International Journal of Women's Health*, 5(1), 647-655.
- Bayer, A. (2022). Unmet Need for Contraception in the 21st Century . Washington: Population Resource Center.
- Biddlecom, A. (2018). Abortion in Kenya. In Brief(4), 2008. New York: Guttmacher Institute.
- Blanc, A. K., Sian L.C., & Trevor, N. C. (2012). "Monitoring Contraceptive Continuation: Links to Fertility Outcomes and Quality of Care. *Studies in Family Planning* 33(2), 127-140.
- Buhling, K., Zite, N., Lotke, P., & Black, K. (2014). Worldwide use of intrauterine contraception: a review. *Contraception*. 89(1), 162-173.
- Burgard, S. (2018). Factors associated with contraceptive use in late and post-apartheid South Africa. *Studies in Family Planning*, 35(2),

- 91-104.
- Canning, D. and Schultz, T. (2022). The economic consequences of reproductive health and family planning. *Lancet*. 380(9837), 165-171.
- Cates, W., Abdool-Karim, Q., El-Sadr, W., Haffner, D., Kalema-Zikusoka, G., Rogo, K., et al. (2010). *Global development. Family planning and the Millennium Development Goals*. *Science*, 329(5999), 1603.
- Chacko, E. (2021). Women's' use of contraception in rural India: a village level study. *Health and Place*, 7(3), 197-208
- Commission for Africa. (2022). African Economic Outlook 2012: Promoting Youth Employment. African Development Bank. Available at: [file:///C:/Users/Lenovo/Downloads/AEO2012\\_EN.pdf](file:///C:/Users/Lenovo/Downloads/AEO2012_EN.pdf).
- DeGraff, D. S., Bilsborrow, R. E. & Guilkey, D. K. (2017). Community-level determinants of contraceptive use in the Philippines: a structural analysis. *Demography*, 34(3), 385-398
- Department for International Development (DFID). (2022). DFID's education programme in Nigeria: the community perspective. DFID. Available at: <https://icai.independent.gov.uk/wp-content/uploads/ICAI-Nigeria-TORs-FINAL.pdf>.
- Egede, J., Onoh, R., Ugochukwu, O., Umeora, J., Iyoke, C., Benedict, I., Dimejesi, O., Lawani, L. (2015). Contraceptive prevalence and preference in a cohort of south-east Nigerian women. *Patient Preference and Adherence*, 9(1), 707-714.
- Federal Government of Nigeria (2014). National policy on population for sustainable development. Policy Document, 68.
- Grady, W. R., Klepinger, D. H. & Billy, J. O. (2023). The influence of community characteristics on the practice of effective contraception. *Fam Plann Perspect*, 25(1), 4-11.
- Ijarotimi, A., Bakare, B., Badejoko, O., Fehintola, A., Loto, O., Orji, E., & Adegoke, A. (2017). Contraceptive uptake among women attending family planning clinic in a Nigerian tertiary health facility: a 6year review. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 4(3), 721-724.
- Levin, R. (2019). Reflections on High Fertility and Policy Response in Sub-Saharan Africa.
- Ministry of Public Health and Sanitation (2018). Road Map for accelerating the attainment of the MDGs related to Maternal and Newborn health in Kenya. Division of Reproductive Health.
- Mokomane, Z. (2023). Anti-Poverty Family-Focused Policies in Developing Countries. United Nations. Available at: <http://www.un.org/esa/socdev/family/docs/WorkFamilyBalanceandIntergenerationalSolidarity.pdf>.
- Ogunbekun, I., Ogunbekun, A., Orobato, N. (2019). Private health care in Nigeria: walking the tightrope. *Health Policy and Planning*, 14(2), 174-181.
- Osoimehin, B. (2022). Family planning save lives, yet investments falter. *Lancet*. 380(9837), 82-83.
- Oyedokun, A. O. (2014). Domestic violence and contraceptive use in Ife-North Local Government area of Osun State, Nigeria. Unpublished M.Sc. thesis submitted to the department of Demography and Social Statistics. Obafemi Awolowo university, Ile-Ife, Nigeria. P. 169.
- Schlachter, B. (2016). FP2020 Momentum at the midpoint. Family Planning 2020. Available at : [http://progress.familyplanning2020.org/uploads/08/01/FP2020\\_DIGITAL\\_Single\\_LoRes.pdf](http://progress.familyplanning2020.org/uploads/08/01/FP2020_DIGITAL_Single_LoRes.pdf).
- Sedgh, G., Ashford, L., & Hussain, R. (2016). Unmet Need for Contraception in Developing Countries: Examining Women's Reasons for Not Using a Method. Guttmacher Institute. Available at : [https://www.guttmacher.org/sites/default/files/report\\_pdf/unmet-need-for-contraception-in-developing-countries-report.pdf](https://www.guttmacher.org/sites/default/files/report_pdf/unmet-need-for-contraception-in-developing-countries-report.pdf).
- Sinding, S. (2019). Population, poverty and economic development. *Philosophical Transactions of the Royal Society B*, 364(1), 3023-3030.
- Stephenson, R. A. & Tsui, A. O. (2017). Contextual Influences on reproductive health services use in Uttar Pradesh, India. *Studies in Family Planning*, 33(4), 309-320
- United Nations Development Programme (UNDP) (1966). Reproductive Rights. Available at: <http://www.un.org/en/development/desa/population/theme/rights/>
- United Nations Population Fund (UNFPA) (2015). UNFPA Supplies 2015. United Nations Population Fund. Available at : [https://www.rhsupplies.org/uploads/tx\\_rhscpublications/UNFPA\\_Supplies\\_Annual\\_Report\\_2015\\_FINAL.pdf](https://www.rhsupplies.org/uploads/tx_rhscpublications/UNFPA_Supplies_Annual_Report_2015_FINAL.pdf).
- World Health Organization (WHO). (2017). Family planning/Contraception. World Health Organization. Available at: <http://www.who.int/mediacentre/factsheets/fs351/en/>.