

Original article

Patterns and Trend of Contraceptive Uptake Among Users in Kwara State, Nigeria (2018-2022)

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ABSTRACT

Background and aims. This study aimed to investigate patterns and trend of contraceptives uptake among users of family planning methods in Kwara State. Specifically, trends, patterns and differentials in Family-Planning (FP) uptake among this group of people across a five-year period were studied. **Methods.** Data of FP uptake by users from 2018 to 2022 was retrieved from District Health Information System 2 database. Population comprised all female contraceptive users in Kwara state at the study period totaling 155,848. Descriptive statistics and inferential statistics were used to analyze the data. **Results.** Findings revealed fluctuation in the trend of uptake among users from 2018 to 2022, showing a 126.5% rise from 2018-2019, which fell in 2020, rose by 24.2% in 2021 and fell again in 2022 with the highest number of users recorded in 2021. The region with the highest number of contraceptive users was Kwara-South (41.3%), followed by Kwara-Central (36.2%), while Kwara-North (22.5%) had the least number of users. Overall, the preferred method was the implants though there were differentials in preferences based on regions. **Conclusion.** The study concluded that there is a significant pattern and trend of contraceptive uptake worth noting contributing to the low CPR in Kwara State. The state government should ensure increased access to information and contraceptive services and also engage in massive public enlightenment on contraceptives use through demand-generation activities. The findings of this study can be used to inform policy makers and health practitioners, in order to create effective strategies to improve CPR in Kwara State.

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INTRODUCTION

In comparison to other continents, Africa's population has continued to grow far more quickly, and by 2050, the continent is expected to make up more than half of the world's population [1]. Many countries in Sub-Saharan Africa (SSA) continue to be highly concerned about the region's rapid population expansion. This is because it has implications for a variety of socioeconomic problems, developmental issues, and health problems, such as poor maternal and neonatal health, inadequate capital investment, environmental degradation, and poverty [2]. Total fertility rate (TFR), is notably different across SSA countries. The low rate of contraceptive uptake and high unmet needs for contraception, either for limiting or spacing, in these regions are major contributors to the persistently high fertility level and high rates of maternal and child mortality [3-5]. Maternal mortality rates in sub-Saharan Africa account for roughly two-thirds of the

world's total maternal deaths today (66.3%), despite a significant decline from 532000 in 1990 to 303000 in 2015 [6]. Countries must raise their rates of contraceptive prevalence if they want to reap the demographic gains and health advantages of using contraception.

With an estimated 206 million people, Nigeria is the seventh most populous nation in the world. The country's rapid population growth has been attributed to its high total fertility rate (TFR), which is 5.3 children per woman (compared to 2.3 globally [7,8]). Nigeria's high TFR has detrimental effects on both families and the nation. According to studies, lowering fertility can help families and nations prosper economically while also reducing poverty. For instance, it is predicted that a one child per woman reduction in fertility will result in a 13% gain in GDP per capita within 20 years in Nigeria [9]. However, despite its many advantages and numerous initiatives by the government and development partners to promote its acceptance and use, contraceptive acceptance in Nigeria has remained low [10] and has remained constant among women who are currently married at 17%, which is significantly lower than the average CPR in Africa, which is 36% [11]. In Nigeria, variation in CPR exists across the country's 36 states and the FCT by socio demographic characteristics like education, income quintiles, religion, and cultures [11]. The usage of any modern method has, over a 28-year period (1990-2018), dramatically increased from 4 to 12%, according to the Nigeria Demographic and Health Survey [11].

There is evidence of regional inequalities in the usage of contraceptives in Nigeria [12]. The intra-regional dynamics of contraceptive awareness and actual usage among different regions have not, however, been sufficiently explored. It is unclear which specific reasons contribute to the poor use of contraceptives in the South-South area. The freedom, empowerment, and autonomy enjoyed by women in the South-South are greater than those of many of their counterparts in the North. According to previous study [13], the zone also has a high degree of knowledge about contraception, but the CPR is still out of step with these realities. Despite comparable historical, political, social, economic, cultural, and religious circumstances, the CPR varies between South-South states. The socioeconomic conditions of the South-East and South-West zones, which are likewise in southern Nigeria, are very similar to those of the South-South. The lowest percentage of women who use contraception overall is found in the South-South geopolitical zone (20.6%), followed by the South-East (21.0%) and the South-West (26.2%) [11]. It is, however, very different from the other northern zones, North-Central (13.3%), North-East (8.4%), and North-West (5.7%) [11]. Women's usage of adequate contraceptives, which differs at different stages of their lives, has been identified as a crucial element in their socioeconomic development and reproductive health. Family Planning (FP) is reportedly essential for improving maternal health, reducing poverty, and economic growth. It also reportedly increases female productivity by lowering fertility rates and assuring child survival [14,15]. Research has indicated that maintaining financial support for family planning may be essential for achieving the SDGs [16,17]. According to previous report [18], modern methods of contraception, in particular, are a proven, cost-effective way to reduce maternal morbidity and death and achieve sustainable development goals. [19] opined that if all women who wanted to take contraceptives had access to them, it is believed that 30% of maternal fatalities and 90% of induced abortion-related maternal deaths might be avoided. Furthermore, earlier study [20] posited that contraception significantly lowers infant, neonatal, and under-five mortality rates

Modern contraceptive methods can be divided into two kinds specifically. These include both short-term methods (such as tablets, condoms, spermicides, injectables, and other traditional methods) and long-acting reversible or permanent contraceptive methods [such as sterilization, implants, and Intra-Uterine Contraceptive Devices (IUCD)]. Short-acting methods are crucial for birth delaying and birth spacing, but long-acting reversible or permanent contraceptive methods are typically employed to limit fertility [21]. In comparison to short acting contraceptives, long-acting contraceptives have been said to have a low failure rate, be safer, and be more cost-effective [22,23]. It is well known that women in sub-Saharan Africa frequently struggle to access or use modern contraception, especially the long-acting methods, for a variety of supply- and demand-side factors [24,25]. They generally rely on traditional and short-acting methods of contraception, which are prone to failure due to improper or inconsistent use [26]. Many long-acting reversible contraceptive (LARC) techniques, on the other hand, offer more than 10 years of extremely effective pregnancy prevention.

Globally, the unmet need for modern contraception was 12% in 2010, while in less developed nations it is 18% (estimated 222 million women), with a substantially larger need in several regions of Africa and Asia (30%–37%) [27,11] Nigeria in particular, the most populous country in Africa, has yet to experience the full benefits of family planning, as use of contraceptives among women who are already married has stayed below the African average [28]. Therefore, it is believed that the high fertility is a significant factor in the nation's high maternal death rate [29]. Despite greater access to family planning options, the CPR has not greatly increased, mostly due to barriers to access and a lack of incentive to take contraceptives due to strong pronatalism beliefs [11]. The Northern region of Nigeria has the second-highest maternal death burden worldwide and one of the lowest rates of contraception use [11]. Due to inadequate investment in strategic behavior change communication and low demand for family planning, this scenario is mediated by

sociocultural factors that contribute to excessive fertility [30]. Additionally, a variety of supply-related concerns restrict the use of contraception.

The ability of a woman to decide whether and when to get pregnant directly affects her health and general wellbeing. Family planning enables spacing between pregnancies and has the potential to postpone pregnancies in young women who are more likely to experience health issues and even die from early childbearing. Family planning enables individuals to have the number of children they choose and to choose the spacing between pregnancies. This is accomplished by using family planning methods and infertility therapy [31]. Family planning is optional, and there are a variety of methods of contraception that can be tailored to meet individual needs and are successful when used correctly [28]. Globally, different family planning methods are chosen and used, and their sources vary. Different family planning methods are preferred and used in different ways, according to certain studies. 18.6% of women in south-eastern Asia use intra-uterine devices as their primary form of contraception [32]. Female sterilization and the pill are the most popular ways in Latin America and the Caribbean (16.0 and 14.9%, respectively), while the pill and female condoms are most popular in Europe and Northern America (17.8 and 14.6% of women, respectively) [32]. With a frequency of 9.6% among women of reproductive age, Sub-Saharan Africa is the only region where injectables are the predominant method [33]. In southwest Nigeria, a three-year evaluation of the pattern of contraceptive usage among women aged 15 to 52 found that the majority (46.3%) chose the Jadelle implant while Norplant (0.5%) was the least popular implant [34].

The uptake of contraceptives remains quite low in Nigeria, despite a little improvement. According to the Kwara State FP situation report, the state's CPR was 22.4%, mCPR was 17.1%, and unmet need was 24.4%. In Kwara State, just 22% of women currently use FP. According to the District Health Information System 2 (DHIS2) portal, uptake in 2019 was 54,021, in 2020 it was 50,478, and in 2021 it was 56,170, with the northern section of the state of Kwara giving the lowest numbers. Low decision-making has been pointed up as the cause of the state's acquired results. In order to shed more light on the number and distribution of family planning methods among first time adopters and create effective family planning programs for women in Kwara State, this study aims to explore the patterns and trend of contraceptives uptake among users in the state (2018-2022).

Research Questions

The following questions were raised for this study: 1). What is the trend of contraceptive uptake among users in Kwara State (2018 – 2022); 2). What are the differentials in the trend of users of contraceptive uptake by regions in Kwara State (2018 – 2022)?; 3). What is the most preferred contraceptive uptake by methods among users in Kwara State (2018 – 2022)?; and 4). What are the differentials in the preferred contraceptive uptake by method among users based on regions in Kwara State?

Research Hypothesis

Ho₁: There is no significant difference in the trend of users of family planning based on regions in Kwara State from 2019 to 2022

METHODS

Study Design

This study was a cross-sectional type of descriptive survey research as this study investigated the rate at which women of reproductive age uptake family planning at every quarter of each year period. This type of descriptive survey research suits the current study because it enabled the researcher to gather data on different factors such as regions of users at each given time period. The target population for the study comprised all users of contraceptives in Kwara State from 2018 to 2022, who constituted the sample size for this study. The total of all the users for the years studied was 155,848. Given that Kwara State has 16 local Government Areas (LGAs) which had been stratified into three regions (districts), a multi-phase sampling technique was used. At the 1st-phase, a stratified sampling procedure was used to take all records of reproductive women up-taking family planning by method across all regions in Kwara State from 2018 to 2022. At the 2nd-phase, a purposive sampling method was used to select all records of users of family planning by method from 2018 to 2022. These records retrieved were taken in every month and collated across all LGAs of Kwara State in every quarter of the year.

Data Collection Procedure

These records were used for data collection for this study and were considered valid and reliable as they were ready-made available on DHIS2. Data collected were analyzed and subjected to descriptive statistics of bar-charts to answer the research questions and inferential statistics of two-way Analysis of Variance to test the hypothesis postulated for this study at 0.05 alpha level.,

After data retrieval, before analysis, short-acting reversible contraceptive methods data were adjusted for revisits. Short acting methods like condoms, pills and injectables implies that the client will have to make repeated visits within a year to refill, therefore to be able to accurately estimate the clients that visited the facilities to take short acting method within the reporting year. This is done for injectables by dividing with a factor of 4, pills by dividing with a factor of 15 and condoms by dividing with a factor of 120.

RESULTS

All data gathered were analyzed using bar-charts to answer the research questions raised in this study and results were as follows.

Question One: What is the trend of contraceptive uptake among users in Kwara State (2018 – 2022)

The numbers of users of contraceptives across all regions in Kwara State were collated from 2018 to 2022 and the summary statistics was presented in Figure 1.

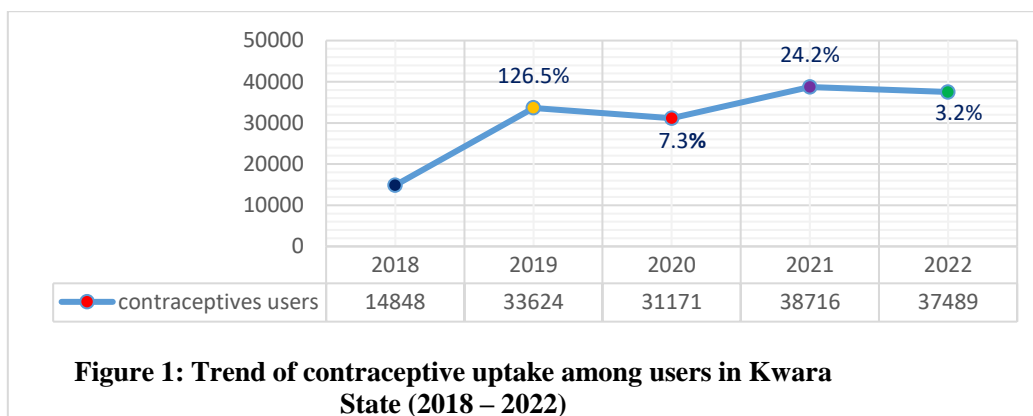


Figure 1: Trend of contraceptive uptake among users in Kwara State (2018 – 2022)

As revealed in Figure 1, there was a rise in the number of users of contraceptives from 2018 to 2019 by 126.5%. This fell by 7.3% in 2020 and rose again by 24.2% in 2021 and in the year 2022, the rate of users of contraceptives slightly decreased by 3.2%. This implies that there was a fluctuation in the trend of contraceptives uptake among users from 2018 to 2022 in Kwara State.

Question Two: What are the differentials in the trend of users of contraceptive uptake by regions in Kwara State (2018 –2022)?

The numbers of users of contraceptives in all quarters across all (local government) areas were collated and summed based on regions (districts) in Kwara State from 2018 to 2022. The summary statistics was presented in Figure 2.

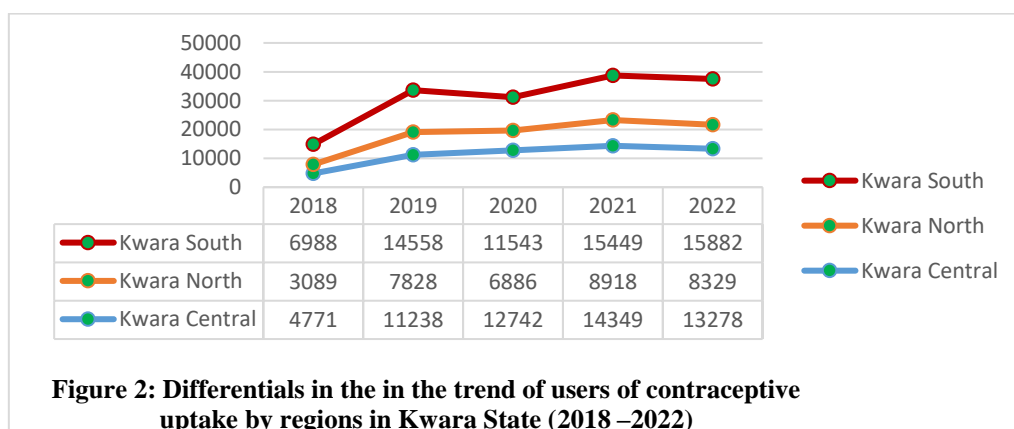


Figure 2: Differentials in the in the trend of users of contraceptive uptake by regions in Kwara State (2018 –2022)

As shown in Figure 2, there was an unsteadiness in the trend of users of contraceptives especially in Kwara South and Kwara Central. However, Kwara South region had the highest number of users of contraceptive uptake accounting for 41.3% of all users, followed by Kwara Central region (36.2%) while Kwara North region had the least number of users (22.5%) of contraceptive uptake from 2018 to 2022 in Kwara State.

Question Three: What is the most preferred uptake by methods among users of contraceptive uptake (2018 – 2022)?

The choices of family planning uptake by methods among users in Kwara State were collated and subjected to descriptive statistics of percentage, mean and rank order. The summary statistics was presented in Figure 3.

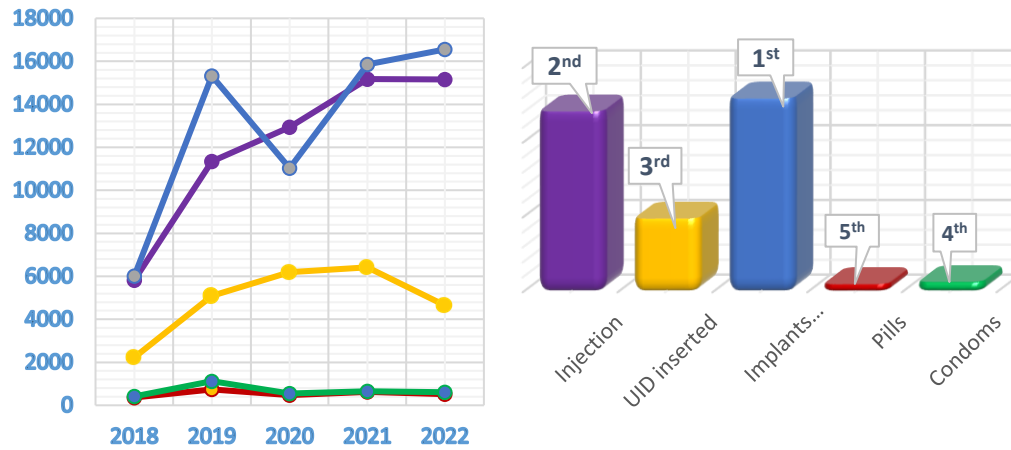


Figure 3: Ranking of preferred contraceptive uptake by methods among users in Kwara

As depicted in Figure 3, the most preferred uptake by methods was implant followed by injection and IUD inserted while condoms and pills were less preferred among users of contraceptives uptake in Kwara State.

Question Four: What are the differentials in the preferred contraceptive uptake by method among users based on regions in Kwara State?

The choices of contraceptive uptake by methods among users were collated and summed based on regions (districts) in Kwara State. The summary statistics was presented in Table 1, while the differentials in preferred uptake is shown in figured 4.

Table 1: Descriptive statistics of differentials in the preferred contraceptive uptake by method among users based on regions in Kwara State

Contraceptive Uptake by Method	Kwara Central		Kwara North		Kwara South	
	Freq	Rank	Freq	Rank	Freq	Rank
Injection	20893	2 nd	14676	1 st	24874	2 nd
IUD inserted	8632	3 rd	5051	3 rd	10896	3 rd
Implants Inserted	24057	1 st	13868	2 nd	26849	1 st
Pills	1267	5 th	478	5 th	968	4 th
Condoms	1529	4 th	977	4 th	833	5 th

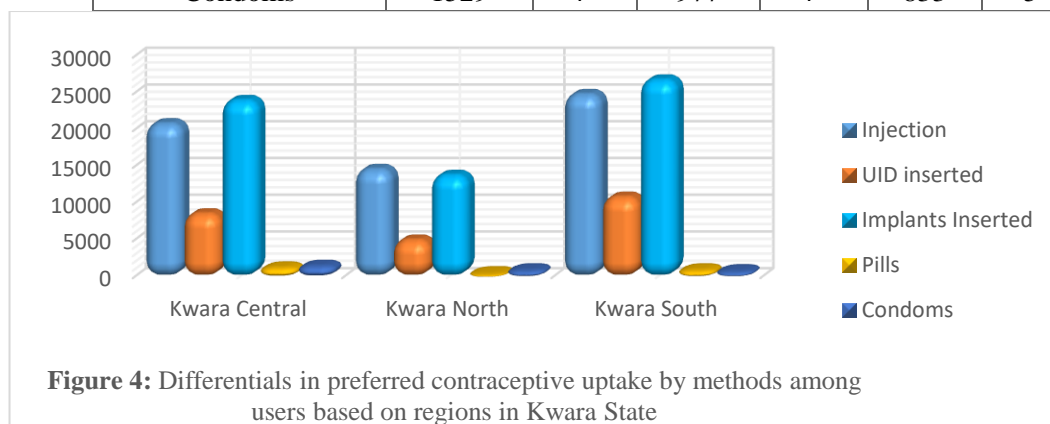


Figure 4: Differentials in preferred contraceptive uptake by methods among users based on regions in Kwara State

As revealed in Figure 4, contraceptives users from Kwara Central and Kwara South regions preferred implant followed by injections and IUCD while *condom* and pills were less preferred. Whereas contraceptives users from Kwara North region preferred injections followed by implant inserted and IUCD and less of condom and pills.

Hypotheses Testing

Hypotheses were tested using a two-way Analysis of Variance at 0.05 alpha level.

Hypothesis One: There is no significant difference in the trend of contraceptive intake among users by regions, in Kwara State from 2018 to 2022

Table 2A. Two-way Analysis of Variance showing the difference in the trend of contraceptive uptake by method among users by regions, in Kwara State from 2018 to 2022

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	874518.358 ^a	14	62465.597	5.056	.000
Intercept	7033456.179	1	7033456.179	569.293	.000
Years	528127.648	4	132031.912	10.687	.000
Regions	173621.418	2	86810.709	7.027	.001
Years * Regions	150295.918	8	18786.990	1.521	.146
Error	11675218.825	945	12354.729		
Total	20205962.000	960			
Corrected Total	12549737.183	959			

a. R Squared = .070 (Adjusted R Squared = .056)

Table 2B: Post-Hoc test showing differences in the trend of contraceptive uptake among users in Kwara State based on years

Years	N	Subset	
		1	2
2018	192	43.2408	
2020	192		87.4264
2022	192		103.9020
2019	192		105.7824
2021	192		109.1667
Sig.		1.000	.080

Table 2C: Post-Hoc table showing differences in the trend of contraceptive uptake among users in Kwara State based on region

Regions	N	Subset	
		1	2
Kwara North	320	70.0426	
Kwara Central	320		89.3059
Kwara South	320		105.4266
Sig.		1.000	.073

Means for groups in homogeneous subsets are displayed. Based on observed means.

The error term is Mean Square (Error) = 12680.031.

- a. Uses Harmonic Mean Sample Size = 314.754.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

As revealed in Table 2, a significant difference existed in the trend of uptake by method among users with respect to years ($F_{(4, 945)} = 10.687; p < 0.05$). This difference was noted in the year 2021 (table 2a) with the highest mean score

followed by the year 2019, 2022 and 2020 while the year 2018 had the lowest users with the least mean score. In the same vein, there was a statistical difference in the trend of contraceptive intake among users based on regions ($F_{(2, 945)} = 7.027$; $p < 0.05$) with Kwara South having the highest mean score (number of users) followed by Kwara Central while Kwara North had the least mean score (table 2b).

However, the interaction of years and regions as *italicized* in Table 2 showed no statistical variance in the trend of uptake by method among users of contraceptives intake ($F_{(8, 945)} = 1.521$; $p > 0.05$) and hence, there was no statistically significant difference in the trend of contraceptive uptake by method among users by regions, in Kwara State from 2018 to 2022.

DISCUSSION

This study investigated the patterns and trend of contraceptives uptake among users in Kwara state from 2018 to 2022. Findings revealed there were downward and upwards trends in the number of users plaguing different quarters that spanned the five years under study. There was a noticeable rise from 2018 to 2019 accounting for a 126.5%. The highest number of users was recorded in 2021 which slightly dropped in 2022. This implies that there was a fluctuating pattern in contraceptive uptake among users in Kwara State from 2018 to 2022. This is similar to 3-year review conducted among women attending a family planning clinic in Lagos, Nigeria which revealed a fluctuation in the pattern of contraceptive use among respondents [34]. The authors reported a progressive reduction in the number of women seeking contraceptives at the family planning clinic between 2010 and 2012, this was attributed to the increase in the clients' acceptability of the female sterilization methods over the same study period thus reflecting on an equivalent reduction in the nonpermanent methods. The fluctuations in the present study may not be farfetched from users' decision-making habits which is usually affected by many health determining factors such as myths and misconceptions, culture among others.

Also, results from this study revealed that southern part of Kwara State had the highest number of users of contraceptives for all the years reviewed except for 2020, while Kwara North region had the least number of users from 2018 to 2022. This translates that Kwara South (64,420; 41.3%) contributed the highest number of Family Planning uptake in Kwara State, followed by Kwara Central (56,378; 36.2%) while Kwara North (35,050; 22.5%) had the least contribution to the contraceptive uptake in the state. Even though the secondary data analysis used in this study had some limitations especially that of accessing more information about the sample population, studies have shown that women with higher level of education are likely to accept FP. The Southern region of the state accounts for women with high literacy levels which could explain the reason why the highest numbers of users came from Kwara South. For example, the study conducted in Talensi District, Ghana revealed that respondents' educational attainment was positively related to their use of family planning services [35]. According to this finding, those with greater levels of education are more likely than those with lower levels to use family planning services. Our findings re-iterate the work of previous study [12] where regional inequalities existed in the usage of contraceptives among their respondents. The poor use of contraceptives among women in south-south compared to their Northern counterparts was attributed to the freedom, empowerment, and autonomy enjoyed by women in the South-South which was seen to be greater than those in the North. It was reported that even though the south-south zone was noted to have high degree of knowledge about contraception, the CPR is still out of step with these realities [13]. The present study deem it fit to attribute the high uptake of contraceptives by users in Kwara south to high educational level which may as the case may be, translate to high contraceptive knowledge. Previous study [11] buttresses the work conducted among postpartum women in tertiary institution in Nigeria [12] and on spatial distribution and factors associated with modern contraception among women in Nigeria [13] by reporting that the lowest percentage of women who use contraception overall is found in the South-South geopolitical zone (20.6%), followed by the South-East (21.0%) and the South-West (26.2%). It is, however, very different from the other northern zones, North-Central (13.3%), North-East (8.4%), and North-West (5.7%) [11], this is comparable to the present study.

This study found that the most commonly chosen method of contraception among users in Kwara State over the years examined was the implant. This discovery contradicts other studies conducted in Nigeria. For instance, research conducted in Rivers State found that the intrauterine device (IUCD) was the most favored contraceptive technique among users [36]. Furthermore, sterilization and IUCD were the prevailing methods of family planning in a reproductive health survey conducted in Estonia and it was concluded to be the most widely used methods of family planning among clients on a global scale [37]. The majority of clients in Enugu and in Ogbomosho, opted for the intrauterine contraceptive device (IUCD) [38,39]. In a comparable scenario, 2 community-based surveys among women documented that intrauterine contraceptive devices (IUCDs), oral contraceptive tablets, and injectable contraceptives were the most commonly utilized techniques among users in developing nations [40,41]. A study conducted in Northwestern Nigeria among women accessing family planning in a tertiary hospital also demonstrated that participants had a preference for the injectable method. In a turn of events, a study among clients of Family planning in Lagos corroborates the finding

of this study by reporting Jadelle as the most preferred method [34]. The discrepancies observed in the present investigation, as well as in previous studies, could perhaps be attributed to individual preferences. Subsequent study revealed that, when categorized by year, the implants exhibited the greatest number of users in all years except for 2020, when injectables were the most popular approach. This may be due to the consequences of the COVID-19 epidemic, which led people to choose a method that involves less physical interaction compared to the process of getting an implant. The implant now holds the record for the most number of users in Kwara state. This could be attributed to the several advantages associated with it, including its user-friendly nature and long-lasting efficiency.

The choices of contraceptive uptake by methods among users when collated and summed based on regions (districts) in Kwara State, revealed that users from Kwara Central and Kwara South regions preferred implant followed by injections and IUCD while condom and pills were less preferred. Whereas contraceptives users from Kwara North region preferred injections followed by implant and IUCD and less of condom and pills. Long distance and inaccessibility to the MoH may account for Kwara North not catching up over the years as stock outs may have been experienced in their facilities. Due to the limitations of the data collected, the study was restricted adjudging what could have caused this, but stock outs of FP products are a common phenomenon in the state. Another angle to look at it could be that myths and misconceptions increased over the years in this region i.e., Kwara North, which is home to people who share similarities with the Northern Nigeria where religion and culture play a large determining role in health behavior. Generally, the variation in use of different methods in these regions could also be as a result of fluctuations in supply related to specific periods of time, which may include erratic supply of modern contraceptives, gaps in logistics supply chain, donor dependence, poor-quality services, and dearth of skilled health personnel to provide specific family planning services e.g., the Long Acting Reversible Contraceptives (LARC).

The hypothesis revealed a significant difference in the trend of uptake by method among users with respect to years. This difference was noted in the year 2021, followed by 2019, 2022 and then 2020 while the year 2018 had the lowest number of users with the least mean score. In the same vein, there was a statistical difference in the trend of contraceptive uptake among users based on regions with Kwara South having the highest mean score (number of users) followed by Kwara Central while Kwara North had the least mean score. However, there was no statistically significant difference in the trend of contraceptive uptake by method among users by regions, in Kwara State from 2018 to 2022. This hypothetical finding further reiterated the other findings in this study by revealing a significant difference in the yearly trend of uptake among users as well as significant differences based on regions for the years studied.

Conclusion and Recommendations

The contraceptive uptake in Kwara state is still low, evidenced by the low CPR; therefore, concerted efforts should be made to ensure FP commodity security, and improve utilization of FP services through active community mobilization and public enlightenment by use of mass media, on the benefits of family planning to be able to increase the number of users. More efforts should be made to propose a move towards the use Long-Acting Reversible Contraceptive (LARC) methods, even though the study revealed a slight move towards the use of implant, which is a type of LARC. The state government should ensure access to information and contraceptive service provision. There should be in massive public enlightenment on contraceptives use through demand generation activities. The findings of this study can be used to inform policy makers and health practitioners to create effective strategies to improve contraceptive uptake in Kwara State.

Limitations

The data retrieved was devoid of socio-demographic information about the clients and as such, limited the researcher's scope of analysis

Conflict of interest

No conflict of interest was encountered in the study

Author Contributions

A.A. Adefila, the primary author, contributed to the study's planning, execution, and data analysis. K. A. Jidda served as the corresponding author and assisted in the study's planning and execution. Oyeyemi played a role in planning, executing, and writing significant portions of the paper. A.M. Abdulraheem contributed to the study's planning, execution, and data collection. Y. S. Gabriel also implemented, and authored substantial sections of the paper. E. F. Oyewale contributed to the planning and implementation of the study and authored significant sections of the publication. Each author made contributions to the article and gave their approval to the submitted version.

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أنماط واتجاهات استخدام وسائل منع الحمل بين المستخدمين في ولاية كوارا، نيجيريا (2018-2022)

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المستخلص.

الخلفية والأهداف. هدفت هذه الدراسة إلى دراسة أنماط واتجاهات استخدام وسائل منع الحمل بين مستخدمي وسائل تنظيم الأسرة في ولاية كوارا. على وجه التحديد، تمت دراسة الاتجاهات والأنماط والاختلافات في استيعاب تنظيم الأسرة (FP) بين هذه المجموعة من الأشخاص خلال فترة خمس سنوات. **طرق الدراسة.** تم استرداد بيانات استيعاب FP من قبل المستخدمين من 2018 إلى 2022 من قاعدة بيانات نظام المعلومات الصحية للمنطقة 2. يتألف السكان من جميع مستخدمي وسائل منع الحمل في ولاية كوارا في فترة الدراسة ويبلغ مجموعهم 155848. وتم استخدام الإحصاء الوصفي والإحصاء الاستدلالي لتحليل البيانات. **النتائج.** وكشفت النتائج عن تذبذب في اتجاه الإقبال بين المستخدمين من عام 2018 إلى عام 2022، حيث أظهرت ارتفاعاً بنسبة 126.5% من عام 2018-2019، والذي انخفض في عام 2020، ثم ارتفع بنسبة 24.2% في عام 2021 وانخفض مرة أخرى في عام 2022 مع تسجيل أكبر عدد من المستخدمين. في عام 2021. كانت المنطقة التي بها أكبر عدد من مستخدمي وسائل منع الحمل هي منطقة كوارا الجنوبية (41.3%)، تليها منطقة كوارا الوسطى (36.2%)، في حين أن منطقة كوارا الشمالية (22.5%) لديها أقل عدد من المستخدمين. بشكل عام، كانت الطريقة المفضلة هي الغرسات على الرغم من وجود فروق في التفضيلات بناءً على المناطق. **الخاتمة.** وخلصت الدراسة إلى أن هناك نمطاً واتجاهاً ملحوظاً في استخدام وسائل منع الحمل جدير بالملاحظة مما يساهم في انخفاض معدل الإنعاش القلبي الرئوي في ولاية كوارا. ينبغي لحكومة الولاية أن تضمن زيادة الوصول إلى المعلومات وخدمات منع الحمل وأن تشارك أيضاً في توعية عامة واسعة النطاق حول استخدام وسائل منع الحمل من خلال أنشطة توليد الطلب. يمكن استخدام نتائج هذه الدراسة لإعلام صانعي السياسات والممارسين الصحيين، من أجل إنشاء استراتيجيات فعالة لتحسين الإنعاش القلبي الرئوي في ولاية كوارا.

الكلمات الدالة. الاتجاهات، الإقبال، المستخدمون، وسائل منع الحمل، توليد الطلب.