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# **Original Research Article**

# Five-years retrospective study on utilization and uptake pattern of family planning services in primary health centres in a peri-urban settlement in southwest Nigeria

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#### **ABSTRACT**

**Background:** Family planning is one of the most basic and essential healthcare services that can promote and ensure women's reproductive health worldwide. However, there has been a low level of utilisation of family planning services by women in developing countries. Therefore, the paper documented the utilisation rate, the uptake pattern of family planning services, and the socio-demographic characteristics of the women who attended the selected primary health centres in the Ife-Central local government area.

**Method:** A five-year retrospective review of primary health centre's records of clients who attended selected health centres from January 2017-December 2021. Data was obtained from the client cards and the family planning record book. A total of 2572 clients' records were evaluated.

**Results:** the study revealed the modal age group of 25-34 (58%) and modal parity of 3-4 (51%) children. The most significant proportion of the women was married (94.6%), with a secondary level of education (89%). Injectables were the most utilized family planning services among women in primary health centres, followed by the uptake of condoms. The Implant was the only increasing uptake pattern of family planning services within 5 years in primary health centres. **Conclusion:** Injectable contraceptives have a higher utilization rate, and the uptake pattern of family planning services varied in selected PHCs. However, the uptake pattern of implants increased consistently. Therefore, there is a need for continuous awareness creation and advocacy for the uptake of family planning services to promote women's health and well-being. Trial registration: It was not retrospectively registered.

**Keywords:** Utilization, Pattern, Family planning services, Primary health centres

#### **INTRODUCTION**

Family planning services accessible to individuals would bring about a drop in unintended pregnancies by about 77%, which can lead to corresponding reduction in number of women requiring medical care from complications of unsafe abortions.<sup>1,2</sup> It was estimated by in 2018 that 830 women die of pregnancy-related causes daily, amounting to more than 300,000 deaths each year, and 99% of these

deaths occur in low-and middle-income countries.<sup>3</sup> High fertility and population growth rates are among leading economic and social problems faced by developing world. High population growth rate also been associated with increased poverty and decreased life expectancy.<sup>4</sup> However, projection to improve access to family planning can significantly reduce these mortality rates.<sup>5</sup> Utilization of family planning services shows correlation with maternal mortality. Studies shown that countries with low contraceptive rates also high mortality ratios.<sup>6</sup>

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Globally, it has been estimated that about 17% of married women have an unmet need for family planning. This significantly contributes to many unintended pregnancies and high maternal morbidity and mortality, especially in developing countries.<sup>3,7</sup> The utilisation of family planning services has increased in many parts of the world but remained low in Sub-Sahara Africa at 22.9%.<sup>8</sup> Nigeria has the second highest maternal mortality (after India). About 15% of married women uptake modern family planning services, lower than the current sub-Saharan Africa average coverage of 17%.<sup>9</sup> This has been attributed to illegal abortions and the high transmission rate of sexually transmitted infections, directly or indirectly related to the low uptake of family planning services.<sup>2</sup>

Nonetheless, the low percentage of individuals using family planning services suggests that some women are not planning their pregnancies deliberately or experiencing problems accessing this service. <sup>10</sup> The under-utilization of family planning services in developing countries includes poor physical access to the provider and time constraints, type of community (remoteness of communities), poverty, illiteracy, poor co-ordination of family planning programs, and harmful cultural and religious beliefs. <sup>1,7,11</sup>

There is an increase in the uptake pattern of modern family planning services. While the trend of uptake of traditional family planning services has been decreasing with the proportion of married or in-union women using traditional methods, decreasing from 6% in 2000 to 5% in 2017 across world regions. <sup>12</sup> In the United States of America, there is an increase in the uptake pattern of family planning services. <sup>13</sup> The uptake of family planning services among sexually active unmarried women aged 15-49 years in Sub-Saharan African countries is higher than among married women. <sup>14</sup> The uptake pattern of injectables and condoms was reported to increase in Sub-Saharan Africa. <sup>15</sup>

However, in Nigeria, uptake pattern has on fluctuating side and primarily low, despite the high fertility rate in the country. <sup>16</sup> National demographic health survey (NDHS) documented reasons for non-uptake of contraceptive methods, which include demographic and socioeconomic factors, fertility-related factors, opposition by partners, lack of knowledge, family planning method related reasons. <sup>17</sup> Moreover, previous studies in Nigeria focused mainly on larger cities, and change starts remotely. Hence, paper documented rate of utilization and uptake pattern of family planning services in selected PHCe centres in Ifecentral local government, Ile-Ife, Osun state, Nigeria.

#### **METHODS**

#### Study design

The study adopted a five-year retrospective analysis of records of reproductive-aged women. who attended primary health centres to uptake family planning services in Ife-central local government, Osun State, from January 2017 to December 2021.

#### Study setting

This study was conducted in selected primary health centres in Ife-Central local government in Ile-Ife, Osun State. Ile-Ife is an ancient Southwest Nigeria city located in present-day Osun State. It has a total area of 1,791 km2 and a population of 509,035, according to the 2006 census. It is situated at the geographical centre of the Yorubaspeaking states of Nigeria. It has 18 primary health centres (PHCs) that provide family planning services. However, 3 out of the 18 have high patronage of clients because the PHCs deliver the services for all the different types of family planning available in Nigeria. Hence, they have high patronage of clients. The services range from hormonal and mechanical to permanent methods of family planning. Thus, these PHCs, Arubiewe, Enuwa and Igboya, participated in the study.

#### Study population

The study population for study women of reproductive age 18-49years that had attended selected PHCs within the last five years. A total of 2,572 family planning records of women who attended the selected PHCs from January 2017 to December 2021 were reviewed and found appropriate for the study. One thousand three hundred 52 respondents (1352), 663, 557 were from Enuwa, Igboya, and Arubiewe PHCs, respectively.

#### Statistical analysis

The data obtained was coded and entered into the spreadsheet. The analysis was done using SPSS (version 20.0). Descriptive statistics such as frequency counts, percentages, charts, and mean  $\pm$  SD were used to summarize and present the results. The Chi-square test was used to determine whether the relationship between the categorical variables was statistically significant at p $\leq$ 0.05.

Table 1: Socio-demographic data of respondents from the selected health centres.

Characteristics	Health centre			Total
	Enuwa, n=1352 (52.5)	Igboya, n=663 (25.7)	Arubiewe, n=557 (21.6)	2572 (100%)
Age (Years)				
15-24	257 (19)	85 (13)	53 (9)	395 (15.3)
25-34	742 (55)	416 (63)	336 ((60)	1494 (58.1)
35-44	327 (24)	143 (22)	147 (26)	617 (24)
45-54	26 (2)	19 (3)	21 (4)	66 (2.6)

Continued.

Characteristics	Health centre			Total
	Enuwa, n=1352 (52.5)	Igboya, n=663 (25.7)	Arubiewe, n=557 (21.6)	2572 (100%)
Religion				
Christians	1036 (77)	506 (76)	442 (79)	1984 (77.1)
Muslims	316 (23)	157 (24)	115 (21)	588 (22.9)
Tribe				
Yoruba	1282 (95)	648 (98)	543 (97)	2473 (96.1)
Igbo	65 (4.7)	14 (1.8)	13 (2)	92 (3.6)
Hausa	05 (0.3)	01 (0.2)	01 (0.1)	7 (0.3)
Marital status				
Single	18 (1)	21 (3)	02 (0.4)	41 (1.6)
Married	1334 (99)	642 (97)	555 (99.6)	2531 (98.4)
Parity				
1-2	547 (40.4)	20 (3)	211 (38)	778 (30.2)
3-4	629 (47)	338 (51)	283 (51)	1250 (48.6)
None	18 (1)	254 (38)	3 (0.5)	275 (10.7)
Above 5	158 (17)	51 (7)	60 (10.5)	269 (10.5)
Education				
None	5 (0.3)	27 (4)	5 (1)	37 (1.4)
Primary	192 (14)	150 (23)	51 (9)	393 (15.3)
Secondary	1132 (84)	458 (69)	497 (89)	2087 (81.1)
Tertiary	23 (1.7)	28 (4)	4(1)	559 (2.2)
Total	1352 (100)	663 (100)	557 (100)	2572 (100)

Table 1 collected information about the sociodemographic characteristics of the respondents. Results from the study indicate that the highest population of women who attended the health centres were between 25-34 years, married, and had given birth to 3-4 children. Also, the most significant proportion of them had completed secondary school.

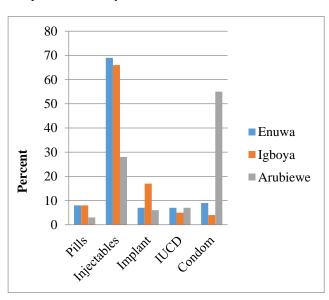


Figure 1: Rate of utilization of family planning services in selected PHCs.

In Figure 2 only implant was found to be increasing throughout the years reviewed in the health centres; it increased from 1.1% to 20% in the five years. However, the uptake pattern for the other family planning services fluctuated in the reviewed period.

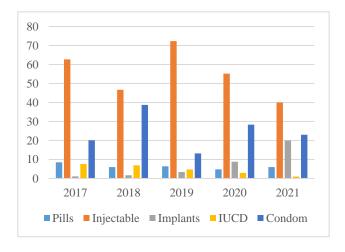


Figure 2: Rate of Utilization of family planning methods from 2017-2021.

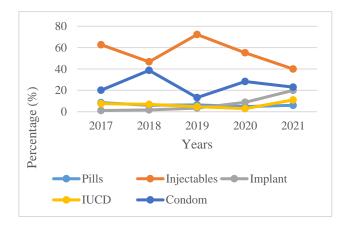


Figure 3: Uptake pattern of family planning services between year 2017-2021.

#### **DISCUSSION**

A total of 2,572 family planning records of women who attended the selected PHCs from January 2017 to December 2021 were reviewed and found appropriate for the study. One thousand three hundred fifty-two respondents (1352), 663, 557 were from Enuwa, Igboya, and Arubiewe PHCs, respectively. The study's outcome revealed that the highest proportion of the respondents are within the age range 25-34, and a more significant percentage are Christians, just as found by Ovinlola et al. The result showed that the highest proportion of respondents is within the 25-34 years of age. This result is similar to studies documented, where the modal age was found to be between 25-34. 18,19 However, it contrasts with the study of, where the modal age was found to be 30-39 years.<sup>20,21</sup> Likewise, the highest proportions of the respondents were Christians. This finding is similar to the study conducted by, where most respondents were Christians.<sup>22-24</sup> This contrasts with, in which most respondents were Muslims. 19,21 Also, most of respondents that utilized family planning services were married; this buttressed socio-cultural influence of Nigerian society, where an unmarried woman is not expected to be using family planning services since she is not likely to be a sexually active reference. This is similar to the result of the study conducted by but is contrary to that of, where unmarried women mainly uptake family planning services.<sup>19</sup> Highest level of education of the respondents was secondary education, attributed to the level of literacy among women in geographical area of study population. This finding is similar to study conducted by. 16,21,22

According to the study's result, the most utilized family planning method is injectable, which was adopted by 2 out of the 3 PHCs. This could be because injectable is more convenient and does not affect the spouse in any way. It is considered the most effective of all; however, in contrast to another study conducted in, it was shown that methods such as a condom and are most preferred.<sup>23-25</sup> In the other PHC (Arubiewe) selected, the most common form of family planning method used was condoms, as supported by, though not in line with the study of.<sup>26-28</sup> This level of uptake could be because the women may prefer receiving injections as an effective method of family planning.

Moreover, injectable contraceptives were perceived by women as cheaper and safer than other methods. This corroborates the finding from.<sup>23,24</sup> However, it contrasts with the result documented by.<sup>25</sup> The condom was the most utilised family planning method in Arubiewe PHC. This finding supports the report documented by, where the uptake of condoms was found to be the contraceptive of choice. Nevertheless, it is in contrast with findings of.<sup>26-28</sup>

Also, the pattern of uptake varies over the years in the three centres, with injectable contraceptives, pills and condoms topping the list, but without a consistent request for them. This result agrees with the outcome documented by, where only implants have increased continuously over the

years. 14,16 It contrasts with the study conducted by, where the contraceptive uptake pattern was raised. 12,27 This increase in implants uptake could be a result of a longer duration of action as compared to other short-acting methods of family planning services since it will save the women from the daily uptake of pills, regular visitation to the clinic for the administration of injectable contraceptives and from the fear of passing the devices through their vagina. The fear of side effects of other family planning services could have made the use of condoms in Arubiewe increase as compared to other methods. Moreover, injectable contraceptives were the most utilized services in both Enuwa and Igboya. This increase in the level of uptake has been attributed to the rising trend in the uptake pattern of injectable contraceptives observed among the women utilizing family planning services in the PHCs.

## **Implication**

The pattern of uptake and rate of utilization need to be considered in planning strategies to improve the uptake of family planning services among the target population. This implies developing and integrating socio-culturally appropriate family planning methods that can improve uptake and enhance the utilization of family planning services among women of the reproductive-aged group.

#### Limitations

Only the family planning records of women who attended primary health care centres over the years were examined for the study. Also, the facility's paper-based recordkeeping system made some records unusable because some documents were torn or incomplete, and about 0.02% were in this category.

## **CONCLUSION**

The study reviewed the five-year rate of utilization and uptake pattern of five types of family planning methods/services available in selected PHCs in Ife central LGA of southwest Nigeria. It was concluded that injectable contraceptives have a higher utilization rate, and the uptake pattern of family planning services varied in selected PHCs. However, the uptake pattern of implants increased consistently. Therefore, there is a need for continuous awareness creation and advocacy for the uptake of family planning services to promote women's health and well-being.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

## **REFERENCES**

 United Nations Population Fund. In: Office UNFPA Nigeria Country Office Publication, editor. Nigeria

- Family Planning Analysis: Selected Demographic and Socio-Economic Variables. Abuja: UNFPA. 2010;1-7.
- Onwujekwe O, Ogbonna C, Enemuoh C, Uzochukwu B. Are people using modern contraceptives, and how much do they pay for them? Afr J Heal Econom. 2013;2:1-12.
- World Health Organization. Family planning evidence brief: family planning financing (No. WHO/RHR/18.26). World Health Organization. 2018. Available at: https://apps.who.int/iris/handle/10665/255863.
- Mondal MNI, Shitan M. Impact of Socio-Health Factors on Life Expectancies in the Low and Lower Middle-Income Countries. Ira J Publ Heal. 2013;42(12):1354-62.
- Ahmed S, Creanga AA, Gillespie DG AO. Economic Status, Education and Empowerment: Implications for Maternal Health Service Utilization in Developing countries. PLoS ONE. 2010;5(6):1-6.
- Stover, J. and Ross J. How Increased Contraceptive Use has Reduced Maternal Mortality. Matern. Child Heal J, 2010;14:687-95.
- Utoo PM, Araoye MO. Awareness and utilization of family planning methods among mothers of under-fives in Gindiri, North-Central Nigeria. J Community Med Prim Care. 2013;25:23-9.
- United Nations, Department of Economic and Social Affairs, Population Division. World Family Planning (ST/ESA/SER.A/414). 2017. Available at: http://www.un.org/en/development/desa/population/pub lications/pdf/family/WFP2017\_Highlights.pdf. Accessed on 26 Nov, 2022.
- Igwegbe AO, Ugboaja JO, Monago EN. Prevalence and determinants of unmet need for Family Planning in Nnewi, South-East Nigeria. Int J of Med Med Sci. 2009:1:325-9.
- Klerman L. Family planning services: an essential component of preconception care. Matern Child Health J. 2006;10:157-60.
- Oye-Adeniran BA, Adewole IF, Umoh AV, Oladokun A, Gbadegesin A, Odeyemi KA et al. Sources of contraceptive commodities for users in Nigeria. PLoS Med. 2005;2:e306.
- Kavanaugh ML, Jerman J. Contraceptive method use in the United States: trends and characteristics between 2008, 2012 and 2014. Contraception. 2018;97(1):14-21.
- Prata, N., Weidert, K. and Screenivas, A. Meeting the Need: Youth and Family Planning in Sub-Saharan Africa. Contraception. 2013;88(1):83-90.
- 14. United Nations Department of Economic and Social Affairs. Trends in Contraceptive Use World Wide. 2015. Available at: http://www.un.org/en/development/desa/population/pub lications/pdf/family/trendsContraceptiveUse2015Report .pdf. Accessed on 26, Nov, 2022.
- 15. Monk E, Andrea S, John EE, Essien JE. Contraceptive Practices in Nigeria: Literature Review and Recommendation for Future Policy Decisions. Open Access J Contraception. 2010;1:9-22.

- Macro, I. C. F., and National Population Commission. (2014). Nigeria demographic and health survey 2013.
- Joe-Ikechebelu NN, Azuike EC, Agbor IE, Nwankwo BE, Onyemachi PE, Obi IV et al. Uptake of Modern Family Planning Methods Among Women of South Western Nigeria: A Snapshot. CPQ Med. 2018;2(6):1-10.
- 18. Kana MA, Tagurum YO, Hassan ZI, Afolanranmi TO, Ogbeyi GO, Difa JA et al. Prevalence and Determinants of Contraceptive Uptake in Rural Northeastern Nigeria: Results of a Mixed Qualitative and Quantitative Assessment. Ann. Nigerian Med. 2016;10(1):3-10.
- Ezine O, Idogho O, Theophilus A, Ikani S, Oluigbo O. Study on the Patterns and Trend in Contraceptive Uptake in South-South and North-Western Zones of Nigeria: 2003-2011. Open Access J Contracep. 2014;5:65-72.
- Ogboghodo EO, Adam VY, Wagbatsoma VA. Prevalence and Determinants of Contraceptive Uptake among Women of Child-Bearing Age in a Rural Community in Southern Nigeria. J Community Med Pri Heal Care. 2017;29(2):97-107.
- Lamaro T, Tadele N. Family Planning Service Utilization and It is Associated Factors among Married Women in Benchi-Maji Zone, Southwest, Ethiopia: Community-Based Cross-sectional Study. Clin Mother Child Heal, 2017;14(1):258-66.
- Amentie M, Abera M, Abdulahi M. Utilization of Family Planning Services and Influencing Factors Among Women of Child Bearing Age in Assosa District, BenishangulGumuz Regional State, West Ethiopia. Sci J Clin Med. 2015;4(3):52-9.
- Namdev G, Likhar SK, Mishra MK, Athavale AV, Shukla U. Trends of Utilization of Family Planning Methods at District Hospital of Madhya Pradesh: A Retrospective Study. Natl J Community Med. 2013;4(1):121-4.
- Amu EO, Odu OO, Solomon OO. Family Planning Utilization Pattern in Ekiti State University Teaching Hospital, Ado-Ekiti, Nigeria: a Six-Year Review. SSRG Int J Med Sci. 2017;4(5):4-8.
- 25. Uwameiye BE, Halimah EC. Family Planning Awareness and Usage among Women: Implication for Family Life Education. Br J Educat Society Behavioural Sci. 2016;16(2):1-7.
- Olaleye AO, Akintayo AA, Adewoyin YO. Utilization of family planning services in a Nigerian tertiary hospital: a six-year review. Trop J Obstetr Gynaecol. 2014;31(2):7-15.
- Darroch JE, Singh S. Trends in Contraceptive Needs and Use in Developing Countries in 2003, 2008, and 2012: An Analysis of National Surveys. Lancet. 2013;381:1756-62.

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