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Demand for Long Acting Reversible Contraceptives and Associated Factors among Women Accessing Family Planning Service in ARFH Model Clinic Ibadan, South West Nigeria

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Abstract

Inability of clients to pay as low as $ 1.2 to initiate a Family Planning method has contributed to the country's low Contraceptive Prevalence Rate (CPR) in Nigeria. Until the adoption of free family planning policy in Nigeria, women had to pay fees ranging from about $1 to $3. Considering the fact that abortion is illegal in Nigeria, coupled with the fact that illegal abortion can be expensive, many of these women ended up with unintended pregnancies. The adoption of the policy on free family planning services to women by the Federal Government of Nigeria in 2012 was therefore received positively by civil society organisations. This paper intends to highlight the position before and after the adoption of this policy, by using the ARFH Model Clinic statistics as a primary guideline. In addition, the paper will provide an analysis of how this policy can be better implemented. Findings from this study show that free family planning service influences choice of modern contraceptives as demand for implanon increased when provided free compared to other modern methods. It is therefore, recommended that family planning services for all methods in all public health facilities should be provided free.

Keywords: Modern contraceptives; Poverty; Free service; Implanon

Introduction

The contraceptive prevalence rate in many Sub-Saharan African countries is still low despite the relative high knowledge and awareness of contraception. Research literature has examined factors associated with acceptance of family planning and continuous use of contraceptive. However, in some parts of Africa, the role of autonomy and poverty-wealth interaction in the use of modern contraception has not been sufficiently addressed, probably due to a dearth of comparable nationally representative data. The implication is that policies and programmes directed towards increasing the use of contraceptives may not fully achieve the expected results if certain factors remain unclear [1,2].

Nigeria is the seventh most populous nation in the world with a current estimated population of 183 million, projected to reach 285 million by 2050 [3,4]. There are an estimated 35 million women of reproductive age in the country, with an annual number of births of approximately 7 million and annual population growth of 3.2% per annum. The country's rapid population growth is attributable to a high total fertility rate (TFR) of 5.5 children per woman. Nigeria is yet to derive significant benefits of family planning, as her use of contraceptives has remained persistently low, prevalence of modern contraceptive use stagnating at 10% among currently married women [5], much lower than the African average [6].

The resultant high fertility is a significant contributor to high maternal mortality in Nigeria. Even though Nigeria has only 2% of the global population, it contributes a disproportionate 14% to the global burden of 289,000 annual maternal deaths. Factors reported to account for this low contraceptive uptake include the desire for large family size, illiteracy, poverty, ignorance, religious beliefs, husband dominance, community beliefs, affordability and inaccessibility of family planning services.

Factors which determine contraceptive choices are variable, varying from one region to another. Social, economic, educational, care-seeking behavior and religious factors have been reported to account for these differences [7]. Even though Nigeria is said to have the largest economy in the Africa, with a per capita GDP of $2,710, the poverty level is high and an estimated 62% of Nigerians live below the poverty line.

In Nigeria, it has been reported that there is an increase in the percentage of clients changing from one contraceptive method to another with a shift towards the injectable and norplant over the last 30 years. The use of any modern contraceptive method was reported to be high among women of child bearing age in rural communities in South Western Nigeria, with the prevalence rate of 66.3%, and the unmet need was 26.3% [8].

The knowledge of the factors which influence contraceptive choices may upsurge its acceptance and uptake. This paper assesses the choice of modern contraceptives among women attending the family planning clinic of Association for Reproductive and Family Health, Ibadan, South West Nigeria, as well as determinants influencing these choices, which could assist in determining the type of contraceptive devices supplied to a family planning clinic and also in devising a strategy for improving contraceptive acceptance and family planning policy implications. Factors associated with utilization of long acting and reversible contraceptive methods.

Methodology

Data was obtained from service statistics of walk-in clients at

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ARFH Model Clinic between 2007 and 2013. Frequency distribution tables and percentages were used to describe the data. Demand load for each contraceptive method was also described relative to total number of contraceptive services provided annually.

The period in question were dichotomized into using 2010 as cut-off point between period before free contraceptives and after. The Wilcoxon Rank Sum Test was used to compare the demand for contraceptives between the two periods to study demand for contraceptives. Data analysis was done with SPSS Version 20 and inferences were drawn at 95% confidence level.

Reports

The study investigated trend of demand for prescriptive contraceptives at ARFH Clinic between 2007 and 2013 and specifically comparing uptake before and after year 2010 when free contraceptives services commenced. Demand for contraceptives is still increasing but the rate of increase seem to have plateaued in recent years, as rate of increase between 2011 and 2012 was 18% which is same as 2012 to 2013. Injectables contraceptives are the most sought after method but relative to other methods, demand for IUCD and injectable are decreasing while uptake of oral pills and implant are increasing. This finding is similar to a study by Shehu and Burodo [9] in Northern, Nigeria. Uptake of oral pills, implant, total demand for prescriptive contraceptives, male condoms, and female condoms showed a significant increase ($p<0.05$) in the demand for contraceptives after the free services began while for IUCD, injectable, and ECP were not significantly different ($p>0.05$). The findings however disagrees with a similar study by Ejembi et al., which revealed that poverty is not a factor influencing modern contraceptive choice among women in Nigeria.

Trend in demand generation for contraceptives at ARFH clinic in eight years

Demand for prescriptive contraceptives at ARFH Clinic between 2007 and 2013 is discussed. Male and female condoms are not included in the demand generation activities because they are mostly distributed during mass campaigns. This study focuses on the prescriptive and non-prescriptive contraceptive methods, both long-acting and short-acting methods that clients requested and obtained after due counseling at ARFH Clinic during the period.

Figure 1 shows trend in total demand for prescriptive modern contraceptives as well as rate of increase in the demand. Prescriptive modern contraceptives refer to pills, implant, injectable contraceptives, IUCD, and ECP. Figures 2-6 show the trend in demand for prescriptive modern contraceptives at ARFH clinic while Figures 7 and 8 show the demand for male and female condoms. The two forms of contraception have been delineated because most of the clients that obtained condoms are for dual purpose or obtained them during mass campaigns and also during HIV counselling and testing. Values on the chart show both the demand load for contraceptives as well as percent contribution of each method to total contraception in the given years.

Total demand for prescriptive contraceptives

Figure 1 shows the trend in total demand for prescriptive contraceptives at ARFH Model Clinic between 2007 and 2013. There has been an increase in the demand for modern contraceptives over the period under study especially since 2010, when the free accessibility to modern contraceptives commenced in Nigeria. The chart also shows comparison between subsequent demand loads to give insight into rate of increase in the demand for contraception.

Year 2010 marked a significant rise in the demand for modern

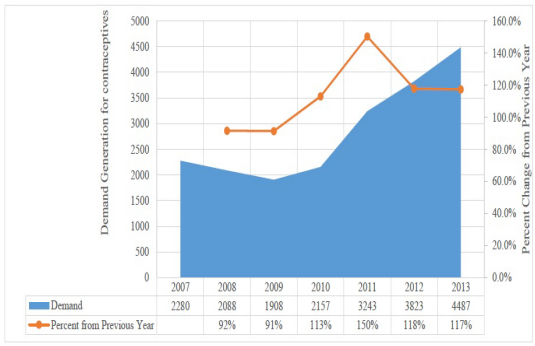


Figure 1: Trend in the Demand for Contraceptives at ARFH Clinic between 2007 and 2014.

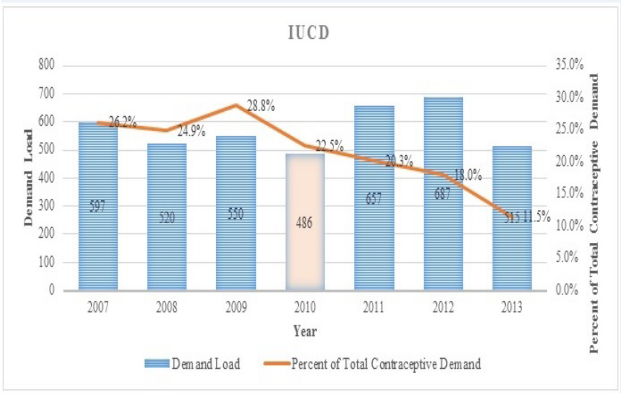


Figure 2: Demand Generation for IUCD at ARFH Clinic between 2007 and 2014.

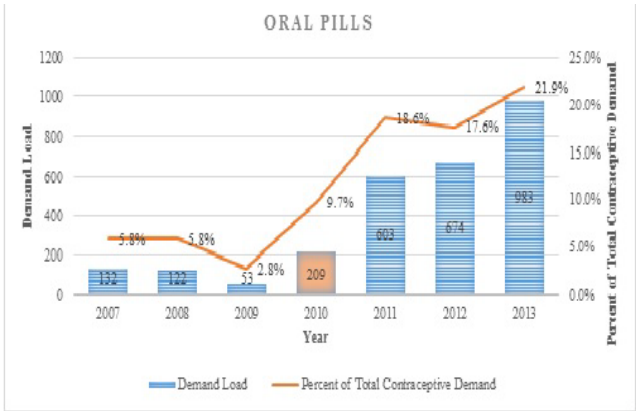


Figure 3: Demand Generation for Oral Contraceptives at ARFH Clinic between 2007 and 2014.

contraceptives at ARFH Clinic. Demand for modern contraceptives had increased by 13% between 2009 (1908 clients) and 2010 (2157 clients). Demand for contraceptives is still increasing but the rate of increase seem to have plateaued in recent years, as rate of increase between 2011 and 2012 was 18% which is same as 2012 to 2013, as shown on Figure 1.

Demand for IUCD

Demand for IUCD has not showed an upward trend over time. The

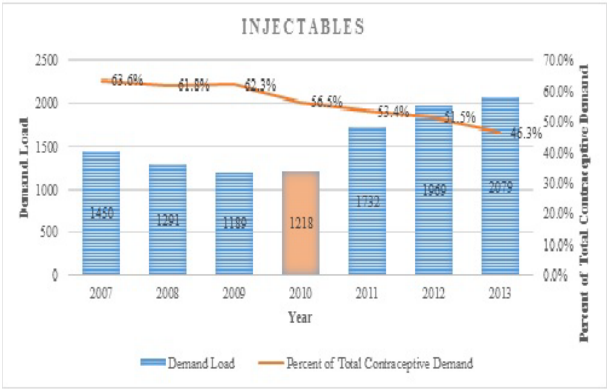


Figure 4: Demand Generation for Injectable Contraceptives at ARFH Clinic between 2007 and 2014.

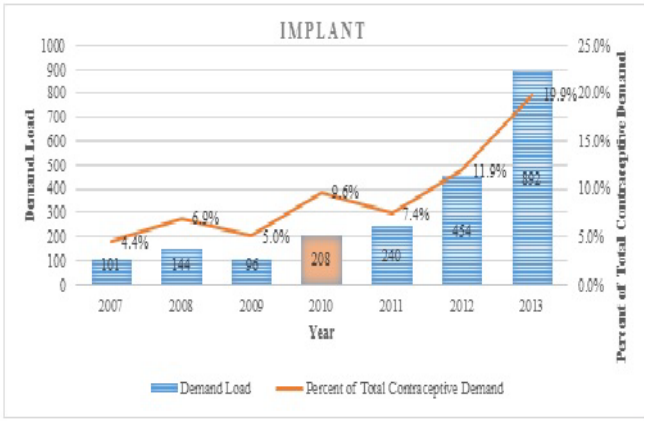


Figure 5: Demand Generation for Implants (Jadelle and Noristerat) at ARFH Clinic between 2007 and 2014.

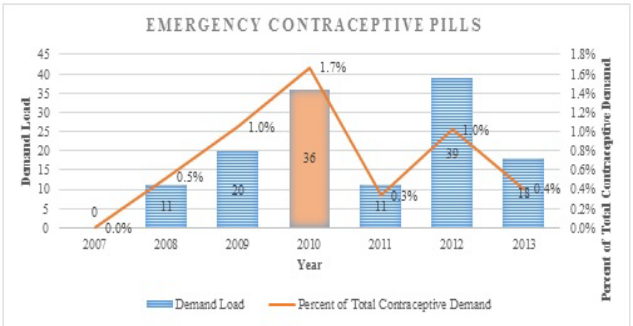


Figure 6: Demand for Emergency Contraceptive Pills at ARFH Clinic between 2007 and 2013.

demand for it has gone up and down as shown in Figure 2. Specifically, in 2010, the number of clients was lower (486) compared to previous years. However, the number increased greatly years after the free access to contraception. On the other hand, despite the fact that overall demand for modern contraception increased with time, demand for IUCD has decreased with time, as fraction of total contraceptive demand for IUCD went down from 28.8% in 2009 to 22.5% in 2012 and further down to 11% in 2013.

Demand for oral pills

Figure 3 shows the trend of demand for oral contraceptives at ARFH Model Clinic between 2007 and 2013. Since the advent of free access to contraception in 2010, there has been an obvious increased in demand for the service at the clinic despite the fact that demand for the commodity was waning before the time, as fraction of total demand for oral pills initially decreased from 5.8% in 2007 to 2.8% in 2009 only to increase to 9.7% in 2010 to 21.8% in 2013. More than a fifth of demand for contraceptives at the facility is currently oral pills. Perhaps the side effects that initial fears of women about oral pills have been allayed and the women do not need to be visiting the clinic often to access this, being a short-term method.

Demand for injectable contraceptives

There has been a recent belief that women generally prefer injectable contraceptives compared to other methods of contraception because of its high providence of confidentiality. Trend in demand for injectable contraceptives is shown in Figure 4. Despite the high preference for injectable by the women, it was decreasing in demand load till 2010 when they had free access hence, after which there was considerable increase in demand. However, the increase in demand is not commensurate with increase in contraceptive methods in the facility, as demand for injectables relative to other methods has been decreasing with time and has kept decreasing despite the increase in demand and preference of the women for it. For instance, demand for injectable relative to other modern methods was 63.6% in 2007 but has decreased to 46.0% in 2013. This may be due to the fact that women have to be visiting the facility too often to access this service. But with the current task-shifting to CHEWS demand for injectable contraceptives may increase at the community level and not at the health facilities. Hence, a strong monitoring, evaluation and information system must be put in place to capture this changing trend.

Demand for implant

Demand for implant at the health facility has kept growing with time, see Figure 5. Almost one-fifth (19.7%) of demand for contraceptives in 2013 was implant. Demand for this method of contraception increased drastically with time and there are tendencies it would continue with time as the rat to increase it more than double annually since 2011.

Demand for emergency contraceptives

Generally, only about 1% of demand for contraceptives at the clinic is emergency contraceptives. However, demand for this method drastically increased from nothing in 2007 to 1.7% in 2010 and down to 0.4% in 2013. If there was widespread side-effect after the high demand in 2010, then this could explain the gross withdrawal from the method.

Demand for non-prescriptive methods – male and female condoms

Demand for condoms at facility is not only for child spacing or birth control but also for prevention of STIs. Demand for male condoms is generally higher than female condoms but the results below shows that the demand for female condom is decreasing almost as the same rate as that of male condoms is increasing, as shown in Figures 7 and 8.

Summary of demand for contraception

Generally, more than half of contraceptive demand at the facility was for injectable contraceptives but this trend has been retrogressive,

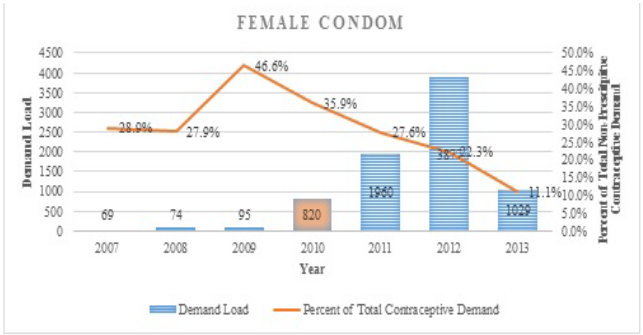


Figure 7: Demand for Male Condom at ARFH Clinic between 2007 and 2013.

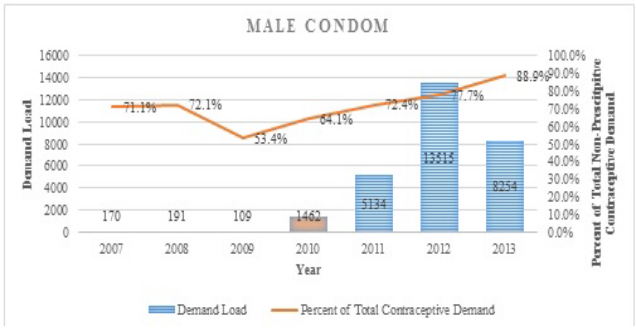
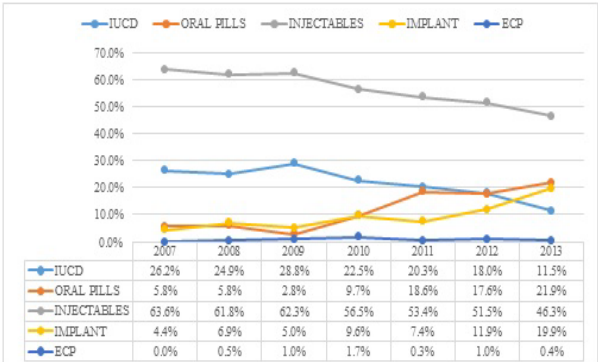


Figure 8: Demand for Female Condom at ARFH Clinic between 2007 and 2013.



	2007	2008	2009	2010	2011	2012	2013
IUCD	26.2%	24.9%	28.8%	22.5%	20.3%	18.0%	11.5%
ORAL PILLS	5.8%	5.8%	2.8%	9.7%	18.6%	17.6%	21.9%
INJECTABLES	63.6%	61.8%	62.3%	56.5%	53.4%	51.5%	46.3%
IMPLANT	4.4%	6.9%	5.0%	9.6%	7.4%	11.9%	19.9%
ECP	0.0%	0.5%	1.0%	1.7%	0.3%	1.0%	0.4%

Figure 9: Comparison of Proportions of Contraceptive Demand in ARFH Model Clinic from 2007 to 2013.

as shown on Figure 9. Demand for IUCD and injectable relative to other methods have been decreasing while the demand for implant and oral pills relative to other methods has been increasing lately. On the other hand, demand for injectables is still increasing but relative to other methods

Comparing demand generation for two periods

Two periods have been identified, which are 2007-2009 (non-free access) and 2010-2013 (free access). Free access to contraception was enacted in Nigeria in the year 2010. Hence, we seek to determine if demand for contraceptive was similar between the two phases. Non-parametric approach was adopted for the study since the sample points are small (7-year point) and the data values are count variables hence may not assume a normal distribution. Also, non-parametric approach does not depend on parameters, in that they do not measure central tendencies and variances. Furthermore, the investigation focuses more on pattern of demand and not demand load. Using the Wilcoxon Rank Sum Test for two independent variables, we were able to compare the demand for contraceptives between the non-free (before) and the free (after) demand for contraceptives. Data analysis was done with SPSS Version 20 and inferences were drawn at 95% confidence level.

Table 1 shows the comparison of trends of demand for contraceptives before and after the introduction of free contraceptive health policy. Sum of ranks before the free healthcare were generally lower than after (all Z values were negative). However, only demand for oral pills, implant, total demand for prescriptive contraceptives, male condoms, and female condoms showed that there was a significant increase ($p<0.05$) in the demand for contraceptives after the free services began. On the other hand, trend in demand for IUCD, injectables, and ECP before and after free services began were not significantly different

PERIOD		Mean Rank	Sum of Ranks	Z	P-value	Remark
IUCD	Before	4.00	16.00	-0.577	0.564	ns
	After	5.00	20.00			
Oral Pills	Before	2.75	11.00	-2.021	0.043	*
	After	6.25	25.00			
Injectable	Before	3.25	13.00	-1.443	0.149	ns
	After	5.75	23.00			
Implant	Before	2.50	10.00	-2.309	0.021	*
	After	6.50	26.00			
ECP	Before	4.38	17.50	-0.145	0.885	ns
	After	4.63	18.50			
Total Non-Prescriptive	Before	2.50	10.00	-2.309	0.021	*
	After	6.50	26.00			
Male Condom	Before	2.50	10.00	-2.309	0.021	*
	After	6.50	26.00			
Female Condom	Before	2.50	10.00	-2.309	0.021	*
	After	6.50	26.00			

Table 1: Comparison of trend in demand before and after introduction of free contraceptives services. *Difference is significant at 5% level; ns: difference not significant at 5% level.

($p>0.05$). Hence, we do not have enough evidence to show that uptake of IUCD, injectables, and ECP had significantly increased after the free service was introduced.

Conclusions

The government of the Federal Republic of Nigeria made a timely decision to increase access to contraceptives use, attend to growing population as well as reduce economic burden and alleviate poverty by enacting the policy that allowed contraceptives to be provided free in 2010, as there was a general decrease in demand for the services especially in 2009 when the trend changed. After the policy for free contraceptives was enacted and implemented since 2010, demand for contraceptives use has been on the increase although the rate of increase at the facility under study seemed to have plateaued.

Growing trend of uptake of oral contraceptives and implants may not be independent of the socio-economic status of the women that access

the facility lately as there was increase in demand when the methods were provided free of charge in comparison to other modern methods. It could also be due to the fact that the methods do not require frequent facility visits. Task-shifting policy with strong information system might provide insight into the changing trend. It is recommended that all modern contraceptives be provided free in Nigeria.

Injectable contraceptives have remained the most sought after method of modern contraception but this trend may not last for too long as demand for implant and oral pills are also increasing. However, with the current efforts by the government and their partners to task-shift to CHEWS on injectable contraceptives, facility-based demand may not improve relative to other methods but at the community level, the demand might be considerably high. However, a strong monitoring, evaluation and information system must be put in place to capture this changing trend at the communities in order place surveillance on the efforts of the CHEWs and monitor probable changing trends.

It has been shown that choice of modern contraception depends a lot on a woman's level of education and more educated women generally go for implant compared to other methods. Specifically, women with tertiary education choose implant and IUCD above injectable contraceptives. This study has shown high increase in demand for implant when provided free in the clinic among other modern contraceptives. It is recommended that the socio-economic status of women that attend ARFH clinic be investigated in order to ascertain if these are some of the factors responsible for the downward trend in the choice of injectable relatives to other methods.

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