

## TRENDS OF CONTRACEPTIVE UTILISATION IN AMINU KANO TEACHING HOSPITAL, NORTHERN NIGERIA

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## ABSTRACT

**Background:** The use of contraception in Northern Nigeria and indeed among clients in Aminu Kano Teaching Hospital (AKTH), Kano is in the increase. **Objective:** To determine the trend in contraceptive utilization among family planning clinic attendees in AKTH. **Method:** A retrospective review of the records of clients, who attended family planning clinic of AKTH over a 3 year period from 3<sup>rd</sup> January, 2011 to 31<sup>st</sup> December, 2013 was conducted. **Results:** A total of 8488 women attended the family planning clinic over the study period and up to 4679 clients accepted various forms of contraceptives. The contraceptive uptake was 55.1%. About half (49.8%) of the clients were between the ages of 20-29years and grandmultiparas constituted the largest (85.9%) group. Up to 31% of the clients were civil servants. There is a statistically significant ( $p=0.017$ ) rising trend in the yearly utilization of contraception from 1033(12.17%) in 2011, 1284 (15.13%) in 2012, to 2362 (27.83%) in 2013. Injectable method was the most common accounting for 56.3%, while male condom was the least (0.17%). Vasectomy was however not recorded. Irregular vaginal bleeding was the commonest side effect (29.7%) experienced by the clients. **Conclusion:** There is a rising trend of contraceptive utilization in AKTH Kano. Male contraceptive utilization is however, extremely low. There is therefore the need to sensitized and enlightened men to avail themselves for contraception and this will encourage their spouses to improve on the use of the available methods.

**Keywords:** Trends, Contraception, utilization, northern Nigeria

## INTRODUCTION

Contraception has been identified as an effective means of combating the problems of unwanted pregnancies and unsafe abortion.<sup>1</sup> It is equally an effective means of family planning and fertility control, and therefore very important in promoting maternal and child health<sup>1</sup>. It was estimated that about 113.6 million women in the developing countries have an un-met need for contraception.<sup>1</sup>

Nigeria is Africa's most populous state with a low rate of contraceptive use,<sup>2</sup> and an un-met need of about 20%.<sup>1</sup> This is in spite of a high awareness of contraception reported in different part of the world.<sup>1,3</sup> This reason may partly be due to aversion to the modern contraceptive methods. Factors affecting the method of contraception chosen vary widely across different part of the country.<sup>2</sup> Religion, culture and educational background of the

women and their husbands are some of the factors affecting the methods of contraception in Kano, northern Nigeria.<sup>2</sup>

In Great Britain, it was shown that the most accepted method of contraception is the use of oral contraceptive pills (35.0%),<sup>3</sup> followed by male condom (30%), while sterilization is the third method in 12% and 17% of females and males respectively. However, injectable and implants were the least<sup>3</sup>.

In most parts of Northern Nigeria, injectables are the most preferred method of contraception.<sup>1,4-6</sup> In a study carried out in south eastern part of Nigeria, intrauterine contraceptive device was the method of choice (36.03%), male condom was second (34.49%), injectable accounted for (23.25%), oral pills (3.74%), implants (2.09%) and bilateral tubal ligation (0.34%).<sup>7</sup> In a study in Jos,<sup>8</sup> North central Nigeria, oral contraceptive pill was the commonest form (45.3%), followed by injectable (39.0%), bilateral tubal ligation (1.2%), the remaining (14.5%) use the other methods. In a study conducted in Zaria<sup>9</sup>, and in a related previous study in AKTH,<sup>10</sup> it was observed that the commonest method was the injectable, (40.6%). This study was conducted to determine the trend in contraceptive utilization among family planning clinic attendees in AKTH.

## METHOD

This was a retrospective study of the records of clients who attended family planning clinic of AKTH, Kano, over a 3 year period, from 3<sup>rd</sup> January, 2011 to 31<sup>st</sup> December 2013. The lists of all the clients that attended family planning clinic during the study period were obtained from the family planning register. The clients' record cards that accepted any form of contraception as documented on the register were then retrieved from AKTH records department. All the necessary information for the study such as client's age, parity, choice of contraception and side effects, were retrieved and recorded in a proforma for the study. The

data collected were analysed using Minitab (Version 12.21). Absolute numbers and simple percentages were used to describe qualitative variables. Statistical significance was computed by Chi-square where appropriate. A P value <0.05 was considered significant. The results were presented in tabular form as frequencies and percentages. The family planning clinic matron in charge and one other nurse in the clinic assisted in the data collection. This made the data collection easier and relatively faster. Approval from the ethics and research committee of the hospital was obtained prior to the commencement of the study.

## RESULTS

A total of 8488 women attended the family planning clinic over the study period and up to 4679 clients accepted various forms of contraceptives. Retrieval rate of all the case records of the clients that attended family planning clinic was 100%. The contraceptive uptake was 55.1%. There was statistically significant ( $p = 0.017$ ) increase in the number of clients accepting a method of contraception over the period from 1033 (12.17%) in 2011, 1284 (15.13%) in 2012, and 2362 (27.83%) in 2013, as shown in table 1.

The socio-demographic and reproductive characteristics of the clients are presented in table 2. Young women between the ages of 20-29 constituted the majority accounting for 49.8%, followed by those between the ages of 30-39; accounting for 42.7%. Women between the ages of 40-49 accounted for 6%, and those who were less than 20 years accounted for only 1.5%. Age of the clients did not significantly ( $p = 0.067$ ) affect contraceptive utilization.

Women with parity between 5 and 9 constituted the majority accounting for 85.9%, those with parity of 4 and below accounted for 10.2% and those with parity 10 and more accounted for 3.9%. Grandmultiparity is significantly associated ( $p=0.002$ ) with contraceptive utilization.

Seventy four per cent of the clients are Muslims and 26% are Christians. Majority of the clients were civil servants accounting for 31%, followed by students 26.1%, while 21.4% of the clients were petty traders. The remaining 21.5% of the clients were housewives. Higher educational status ( $p = 0.000$ ) and occupation ( $p = 0.010$ ) of the clients significantly affected the utilization of contraception.

Three thousand nine hundred and seventy seven (85%) of the clients have formal education, with 55.60% tertiary, 25.13% secondary and 4.27% primary. Seven hundred (14.96%) of the clients have Qur'anic education and only two (0.04%) of the clients have no any documented form of education.

Table 3 shows the various methods of contraception. Injectable contraceptives were the most preferred method of contraception in

this study, accounting for 56.3%, followed by intrauterine contraceptive devices which accounted for 12.9%. Minipills and combined pills accounted for 12.5% and 10.7% respectively. Jadelle was more preferred than Implanon, each accounting for 4.4% and 2.8% respectively. Bilateral tubal ligation was the least method preferred by the clients accounting for only 0.3%. Only eight women collected male condoms for their husbands, and this accounted for only 0.17%.

The common side effects experienced by the patients were irregular vaginal bleeding accounting for 29.7% and weight changes accounted for 14.9%. One thousand one hundred and nine experienced nausea and vomiting, while the remaining 31.7% of the clients had no any documented form of side effects. This is shown in table 4.

**Table 1: Trend in contraceptive uptake in the study population**

YEAR	TOTAL FAMILY PLANNING CLINIC ATTENDEES	NUMBER OF CONTRACEPTIVE ACCEPTORS	PERCENTAGE
2011	2100	1033	12.17%
2012	2416	1284	15.13%
2013	3972	2362	27.83%
<b>TOTAL</b>	<b>8488</b>	<b>4679</b>	<b>55.13%</b>

$$X^2 = 14.71, df = 1, p = 0.017 (CI = 10-16)$$

**Table 2: Socio-demographic and reproductive characteristics of the clients.**

VARIABLES	FREQUENCY/P-VALUE	PERCENTAGE
<b>1. AGE GROUP</b>		
<19	68	1.5%
20-29	2330	49.8%
30-39	2001	42.7%
>/=40	280	6.0%
<b>TOTAL</b>	<b>4679</b>	<b>100</b>
<b>2. PARITY</b>		
0-4	475	10.2%
5-9	4020	85.9%
>/= 10	184	3.9%
<b>TOTAL</b>	<b>4679</b> <b>p=0.002</b>	<b>100</b>
<b>3. RELIGION</b>		
ISLAM	3461	74%
CHRISTIANITY	1218	26%
<b>TOTAL</b>	<b>4679</b>	<b>100</b>
<b>4. OCCUPATION</b>		
CIVIL SERVANTS	1450	31.0%
STUDENTS	1220	26.1%
BUSINESS	1000	21.4%
HOUSEWIVES	1009	21.5%
<b>TOTAL</b>	<b>4679</b> <b>p=0.010</b>	<b>100</b>
<b>5. EDUCATIONAL LEVEL</b>		
QUR'ANIC	700	14.96%
TERTIARY	2601	55.60%
SECONDARY	1176	25.13%
PRIMARY	200	4.27%
NONE	2	0.04%
<b>TOTAL</b>	<b>4679</b> <b>p=0.000</b>	<b>100</b>

**Table 3: Methods of Contraception**

METHOD	FREQUENCY	PERCENTAGE
INJECTABLES	2635	56.3%
IUCD	604	12.9%
PILLS	1084	23.2%
INPLANTS (Implanon/Jadele)	336(130/206)	7.2
BTL	12	0.3%
MALE CONDOM	8	0.17%
<b>TOTAL</b>	<b>4679</b>	<b>100</b>

Key: IUCD = Intrauterine contraceptive device

BTL = Bilateral tubal ligation

Table 4: Common side effects experienced by the clients

SIDE EFFECTS	FREQUENCY	PERCENTAGE
IRREGULAR VAGINAL BLEEDING	1388	29.7%
NAUSEA/VOMITTING	700	14.9%
WEIGHT GAIN	1482	31.7%
-		
<b>TOTAL</b>	<b>4679</b>	<b>100</b>

## DISCUSSION

This study evaluated the pattern of contraceptive uptake in AKTH, Kano, and the largest Federal referral centre in Kano State. There was a steady rising trend in contraceptive utilization in AKTH Kano during the study period. This is in agreement with 2008 Nigerian National demographic and Health Survey which showed a rise from 8% in 2003 to 10% in 2008.<sup>1</sup> The reason for this may be due to the fact that modern methods of contraceptives are now increasingly being accepted in our community as a measure of child spacing. The fact that family planning has been inculcated in our postnatal clinic, where women are referred to family planning clinic after the puerperium for advice on child spacing has contributed immensely in contraceptive awareness and acceptability among these clients.

The injectable contraceptives were the most accepted method of contraception in this study, followed by intrauterine devices and oral contraceptive pills (OCPs). This finding agrees with the finding from a similar study conducted within the country.<sup>6, 7, 10</sup> Our finding also concurred with the observed trends worldwide where many women are resorting to injectable contraceptives.<sup>3, 11, 12</sup> However, the studies from Jos<sup>8</sup> and Borno State<sup>15</sup> where OCPs was favoured do not support our finding. Factors that could be responsible for the choice of the injectable contraceptives among the clients in this study were probably due to convenience and longer duration of action

when compared with OCPs, as was observed also in a study conducted in Guatemala,<sup>12</sup> and also the conservative nature of our society where women don't like exposure as required in other methods such as the intra uterine contraceptive devices may be another factor.

Intrauterine contraceptive was the second most common acceptable method (12.9%) in this study and this was in contrast with a study conducted in southeast Nigeria where it was the most preferred method (36.03%).<sup>4, 5</sup> Despite its convenience, less follow up and easy reversibility, many women in this part of the country don't like it, as they must be exposed before insertion.

Use of male condom was only 0.17%. Though, male condom was the second most common contraceptive used in UK<sup>3</sup>, it was found to be the least accepted in this study. This may be due to lack of men sensitization and involvement in contraception<sup>4</sup> and lack of knowledge about its benefit in preventing sexually transmitted infections.

The rate of female sterilization was very low, accounting for only 0.26%. This was in agreement with a study conducted in south eastern Nigeria<sup>7</sup> (0.34%), but lower than 1.2%<sup>6</sup> and the 12%<sup>14</sup> both within and outside Nigeria. The reasons may be due to acceptance of long term contraceptives like implants, and the cost of bilateral tubal ligation,<sup>5</sup> reported in some series.

Sterilization in males was not recorded in this study, as was also the case from a study in Jos, northern Nigeria.<sup>8</sup>

This may probably be due to the fact that contraception is assumed to be a woman's problem in our setting.

Implanon usage constituted only 2.8% in this study, similar result was found from a study in UK,<sup>3</sup> and 2.09% reported from south eastern Nigeria<sup>7</sup>, but our result is higher than a rate of 0.54% from a related study in kano<sup>15</sup>. This difference may not be unconnected by the number of years studied. Common side effect

of irregular vaginal bleeding, reported in our study was in agreement with previous studies.<sup>3, 12,15</sup>

In conclusion, there was a rising trend in contraceptive utilization in AKTH Kano. The common side effects experienced by the clients were irregular vaginal bleeding, weight gain and nausea/vomiting. Male contraceptive utilization is however, extremely low. There is therefore the need to sensitized and enlightened men to avail themselves for contraception and this will encourage their spouses to improve on the use of the available methods.

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