

A REVIEW OF FAMILY PLANNING METHODS USED IN KANO, NIGERIA

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Abstract

Objective

To review the acceptance pattern and the influence of age and parity on the choice of Family Planning Methods at the Family Planning Clinic, Aminu Kano Teaching Hospital (AKTH), Kano, Nigeria.

Method

All records of the clients that attended the Family Planning Clinic from January 2003 to December 2007 were analyzed

Results

New clients were 22% while revisits were 78%, with a steady increase in the number of new clients from 4% in 2003 to 26% in 2007. Injectable contraceptives were the most commonly used (40.63%), followed by the intrauterine contraceptive device (IUCD) (34.53%). Most women of low parity used the injectable contraceptive method (36.2%) and oral contraceptive pills (30.7%), while those in the early reproductive age group (37.1%) used oral contraceptive pills and injectable contraceptive method (32.5%) than any other method. Women of high parity (47.1%) and those in the late reproductive age group (51.2%) used injectable contraceptives more, followed by IUCD (43.0% and 46.1% respectively). There was very low acceptance of Implants (0.54%) and voluntary surgical contraception (0.36%). Majority of the clients (67.5%) were informed about voluntary family planning by Health workers.

Conclusion

There is an increasing trend in the yearly number of new clients in our centre. Contraceptive methods that do not involve surgery or the exposure of the women were preferred, and these should be promoted in a conservative society like ours.

The influence of husbands, community and religious leaders and female education are important, if the acceptance of voluntary family planning is to increase in societies like ours, where women marry early and are not socioeconomically empowered. Efforts should be made to step up campaign for voluntary surgical contraception, especially among women who have completed their families, as its utilization is very low in our community.

Keywords: *Voluntary family planning methods, age, parity, acceptance, Kano.*

Introduction

Family planning services are defined as educational, comprehensive, medical or social activities which enable individual, including minors, to determine freely when to have children and to select the means by which this may be achieved¹⁻⁷. They work to promote a positive view of sexuality, and to enable people to make informed choices about their sexual and reproductive health and wellbeing¹⁻³.

The health advantages of family planning include, waiting until the mother is at least 18 years before trying to have children. This serves to improve maternal and child health.¹⁻³ In addition, if more children are desired after a child is born, it is healthier for the mother and child to wait at least 2 years after the previous birth before attempting to conceive, but not more than 5 years. After a miscarriage or abortion it is healthier to wait at least 6 months.¹⁻³

Voluntary family planning is an important health measure, because the failure to plan a pregnancy may adversely affect the health of an individual, the health of a relationship and the health of a family. Today, it has extended to the health of a community, nation and the world as a whole^{1-3,8-10}.

There is an inverse relationship between population and socioeconomic development^{4,11-13}. In developing countries like Nigeria where population momentum is high, socioeconomic development is poor because there are many 'mouths to feed'. The World Health Organization (WHO) estimates that \$3.00 per person per year will provide basic family planning, maternal and neonatal health care to women in developing countries, which most developing countries cannot afford^{2,9,13-15}. Raising a child requires significant amount of resources and time¹⁴. Child birth and prenatal care cost an average of \$7,090 for a normal delivery in the USA in 1996^{1,2,3}. The USA department of Agriculture estimates that for a child born in 2007, a USA family will spend an average of \$11,000 to \$23,000 per year for the first 17 years of a child's life¹³. This amount of money is unaffordable by most families in developing countries⁴. Ironically, it is in developing countries that family planning and control of population growth is least embraced^{4,16}. This calls for awareness campaigns like 'we two ours one', 'Girl or boy let there just be one child', which has been implemented in China, Iran and India, and has succeeded in sharply reducing the birth rate and slowing their population growth in recent years¹³⁻¹⁵.

This policy, which encourages couples to have not more than one child, has been made possible through planned pregnancies, using approved family planning methods to control population growth^{1,15}. In order to encourage the use of modern family planning methods to slow down the population growth, the punishment for an unplanned pregnancy is a fine, while perpetrators of forced abortion or forced sterilization can be charged with assault, punishable by 10 years imprisonment^{1,13}.

There is the urgent need to intensify the campaign for modern family planning methods and its utilization in developing countries like Nigeria, where rapid population growth has given birth to a monster called “**poor socioeconomic development**”, with its accompanying social vices of political instability and civil conflict, human and drug trafficking, rural-urban migration, and lack of appreciable foreign investments and job growth^{4,11,12}. The 49 countries of sub-Saharan Africa trail most others through the demographic transition, which is the transformation of a population with large families and short lives, to one of small families and longer lives^{11,12}. Sub-Saharan Africa lags behind on many of the Millennium Development Goals (MDGs), a set of goals agreed upon by world leaders at the United Nations Summit in 2000, to reduce poverty, improve health and foster economic development¹³. This region is especially deficient in areas of reproductive health that are crucial for meeting MDGs for child and maternal health¹³.

In Sub-Saharan Africa, 23% of married women subscribe to a method of family planning-18% a modern and 5% traditional^{1,8,13-15}. However, an even larger percentage of women (25%) - report having an ‘unmet need’, meaning that they would prefer to stop having children or delay their next birth. However, they are not using any method of family planning¹³⁻¹⁵. Meeting this unmet need is an important step towards improving reproductive health in Sub-Saharan Africa, where today more than 175 million women of childbearing age (ages 15 to 49 years) live. According to the United Nations population division, that number is projected to rise to about 220 million in 2015^{11,12}.

Family planning has steadily fallen as an international priority in recent years, with the advent of prevention of Human Immunodeficiency Virus (HIV) transmission, despite its documented impact on both maternal and child health¹¹. The assistance of the United States of America in family planning services, contraception and related programs has fallen by more than \$100 million, a 35% reduction when adjusted for inflation between 1995 and 2005^{11,12}.

As 2015 (the target date for achieving the MDGs) approaches, much work remains to be done in all areas of reproductive health, especially in increasing family planning, reducing maternal and perinatal mortality, and slowing the spread of HIV infection¹³. Many countries are making advances in reaching the targets, yet throughout sub-Saharan Africa, there are still great needs and opportunities to do more¹³⁻¹⁵.

It is against this background, that this study was designed to review the use of family planning methods in Aminu Kano Teaching Hospital, Kano, Nigeria, in order to make recommendations that will improve its future acceptance and utilization, reduce the 'unmet needs' and to meet one of the main goals of the International Conference on Population and development of Action on universal access to reproductive health services and family planning by 2015 in our community, which is located in sub-Saharan Africa.

Methods

Family Planning Clinic records at Aminu Kano Teaching Hospital, Kano, Nigeria, from January 2003 to December 2007 were retrieved and analyzed. The parameters that were retrospectively examined were, age and parity of the clients, educational and marital statuses, occupation, number of new clients and source of information on family planning, type of contraceptives accepted by clients, influence of age and parity on choice of family planning method.

The women were divided into the Early Reproductive Age Group (women that were between 15 and 34 years of age), and the Late Reproductive Age Group (those between 35 and 49 years of age). They were also divided into the low parity group (those with less than five living children), and high parity group (those with five or more living children). The division of the patients into early reproductive and late reproductive age groups, and low and high parity was based on the Federal Ministry of Health and National Population Fertility classification in Nigeria¹⁷.

The data obtained were entered into a computer system and using Epi-Info 3.2.2, 2004 statistical software. Qualitative data were presented as frequencies and percentages, while quantitative data were described using mean, median and standard deviation. Chi-square test and exact probability test were used to determine significant association between age and parity with other qualitative variables. A P-value of <0.05 was considered significant. Odds ratio (OR) and 95% confidence interval (CI) were determined where applicable.

Results

New clients were 22%, while revisits were 78% of the clinic attendants during the period of study. There was a steady rise in the number of new clients from 4% in 2003 to 26% in 2007. The age range of the clients was from 16 to 42 years, with a mean age of 27.5 ± 4.2 years, and a peak age group of 25-29 years. The parity range was from 1 to 12, with a mean parity of 3.9 ± 1.2 and peak parity group of ≥ 5 . Majority (73.4%) of the patients did not have tertiary education. Among them 76.4% were housewives, 99.9% were married and 84.2% were Muslims. (**Tables 1a and b**)

Most of the clients (65.7%) were informed about family planning by hospital workers, followed by mass media (13.5%), friends and peer group (10.8%), Nobody (7.2%), neighbours (2.7%), husband (0.2%). **Figure I.**

Among those in the early reproductive age group, oral contraceptive therapy (37.1%) was the method that was more frequently used. It was used 94 times more than those in the late reproductive age group (OR= 94.5, CI=29.1-371.77, $P < 0.05$). Condom (OR= 10.16, CI=1.39-208.83, $P < 0.05$) and spermicides (OR= 11.76, CI=1.63-239.64, $P < 0.05$) were also used 10 and 11 times more than in the latter group. Injectable contraceptives (51.2%) were more frequently used by the women in the late reproductive age group, and were used 5 times more than those in the early reproductive age group (OR= 0.46, CI=0.36-0.59, $P < 0.05$), followed by IUCD (46.1%) which was used 6.0 times more by the former group (OR= 0.40, CI=0.31-0.52, $P < 0.05$). The use of bilateral tubal ligation (0.36%) and implants (0.54%) in the two groups was low and did not show statistically significant difference between the two groups. **Table 2.** Injectable contraceptives were used more frequently by women of low (36.2%) and high (47.1%) parity, followed by oral contraceptives (30.7%) among women of low parity, and IUCD (43.0%) among women of high parity. The use of oral contraceptive pills (OR= 5.48, CI=3.66-8.22, $P < 0.05$), and spermicides (OR= 10.54, CI=1.46-214.33, $P < 0.05$) were statistically significantly higher among women of low parity, while Injectable contraceptives (OR=0.64, CI=0.49-0.82, $P < 0.05$), IUCD (OR= 0.54, CI=0.41-0.69, $P < 0.05$) and implants (OR= 0.14, CI=0.01-1.19, $P < 0.05$) were statistically significantly higher among women of high parity. The use of bilateral tubal ligation (OR= 0.23, CI=0.01-2.45, $P > 0.05$) and Condom (OR=4.18, CI=0.88-27.15, $P > 0.05$) did not show statistically significant difference between the two groups. **Table 3.**

Discussion

The younger mean age of 27.5 ± 4.2 years, and similar mean parity of 3.9 ± 1.2 among the family planning acceptors in this study compared with other studies from Southern Nigeria, may probably be due to early marriage prevalent in our community in North West Nigeria^{6,7}. This may also explain why the peak age group of the acceptors in this study of 25-29 years, is younger than the peak age group of 31-35 years that was reported from Nnewi in South Eastern Nigeria⁶, despite the same peak parity group.

The proportion of new clients in this study of 22% is similar to 20% that was reported from Lagos, Nigeria⁷. The steady rise in the number of new clients from 4% in 2003 to 26% in 2007 was also the experience of other authors from Nigeria^{6,7}. Increasing awareness and formal education, as well as decreasing male opposition in the face of global economic recession, have been said to be responsible for the increased acceptance of modern family planning methods in our society^{4-6,7,16}.

Majority of the women (84.2%) were Muslims, probably because our hospital is located in a predominantly Islamic community, which may also explain why most of the women (99.9%) were married. In our conservative society, unmarried status among women is stigmatized, and request for voluntary family planning is granted only when the woman is accompanied by her husband, or come with a signed letter of authority from her husband. The only acceptor who was unmarried was granted family planning on medical grounds.

Most of the acceptors were housewives (76.4%), and 73.4% did not have tertiary education, which may be because of the high prevalence of early marriage in our community⁵. The husband's influence will be very important, as these women are likely not to be socioeconomically empowered to control reproduction. Family planning providers should, in addition to female education and counseling, reach out to the males, community and religious leaders, if acceptance and uptake of voluntary family planning is to increase in conservative communities like ours.

Majority of the women were informed about voluntary family planning by health workers in the hospital, which was also the finding in other studies from Nigeria⁵⁻⁷. This showed that there is still poor communication about family planning and sex education in our community and schools, which may be as a result of conservatism and socio-cultural restrictions on discussions on such matters, and calls for campaigns to relax these restrictions. Such should be done through

community and religious leaders in order to make it acceptable to the community.

Injectable contraceptives were the most commonly used method of family planning, which does not agree with studies from less conservative societies in southern Nigeria where IUCD was the most commonly used method^{6,7}. This may be because insertion of IUCD requires more exposure of the women, which has been found, not be acceptable in our conservative society⁵. Fakeye et al also found injectable contraceptives to be more acceptable to women in the predominantly Muslim society in the Northern Nigeria, because of its association with amenorrhoea, which will allow them to perform their religious functions¹⁶.

The influence of age and parity on the choice of method of contraception were subjected to statistical analysis, and it was found that among women of low parity, injectable contraceptives were the most common method used, while among those in the early reproductive age group, oral contraceptive pills was the most common method used. This is probably because these methods of contraception are associated with less exposure of the females, and do not require surgery to administer them compared to other methods.

The most common method used by women of high parity and those in the late reproductive age group were injectable contraceptives, followed by IUCD. This does not agree with most studies from southern Nigeria, where IUCD was the commonest method used by the acceptors because it is said to be safe and easily reversible^{6,7,10}, and perhaps, because Injectable contraceptives are associated with less exposure of the females to administer them compared to IUCD.

The infrequent use of implants in this study may be because insertion and removal of Implants will require minor surgical procedures that may not be acceptable to the women. This calls for proper counseling to motivate the women to accept it. The low usage of oral contraceptive pills by women of high parity and those in the late reproductive age group, may be because it is associated with high risk of complications in the older women, which has made it to be relatively contraindicated in women aged 35 years and above, and 30 years and above in those who are obese¹⁸. Also the infrequent use of Condom and Spermicides may be because virtually all the women were married, and their high failure rate and association with each act of coitus¹⁹, may not be acceptable in a marital union.

The very low preference for voluntary surgical contraception in this study may be because in our society where marital relationships are dynamic, with high frequencies of remarriages²⁰, the males and females may not be comfortable with a permanent method of contraception. Also the

fear of surgery, and myths that they may reincarnate with blocked tubes and infertility, as well as male ego which may not allow the men to consent to Vasectomy, may have militated against voluntary surgical contraception¹⁶. Community campaign on the advantages of surgical contraception is urgently needed, in order diffuse the fear and myths that are associated with them, and increase the acceptance of this safe and reliable form of contraception, especially among women who have completed their family.

Conclusion

There is an increasing trend in the yearly number of new clients in our centre. This can be improved by encouraging community campaign on voluntary family planning, which should be done through the husbands, community and religious leaders.

The influence of the husbands, community and religious leaders and female education are important, if the acceptance of voluntary family planning is to increase in societies like ours, where women marry early and are not socioeconomically empowered.

In the campaign for voluntary family planning in conservative societies like ours, the methods that do not involve much exposure of the women are more acceptable and should be promoted more.

Effort should be made to step up campaign against the myths that are associated with voluntary surgical contraception, and increase its acceptance and utilization, especially among women who have completed their families in our community.

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TABLE 1A: AGE AND PARITY DISTRIBUTION OF THE CLIENTS

CHARACTERISTIC	FREQUENCY (%)
Age group	
≤ 19	46(4.1)
20-24	290(26.0)
25-29	390(35.0)
30-34	292(26.2)
35-39	87(7.8)
≥40	10(0.9)
Parity	
0	5(0.5)
1	224(20.1)
2	221(19.8)
3	185(16.6)
4	159(14.3)
≥5	321(28.8)

Mean age= 27.5± 4.2

Mean parity= 3.9±1.2

TABLE 1B: GENERAL CHARACTERISTICS OF THE CLIENTS

CHARACTERISTIC	FREQUENCY (%)
Educational status	
Primary	105(9.4)
Secondary	400(35.9)
Tertiary	296(26.6)
Qu'ranic only	212(19.0)
No form of education	102(9.1)
Occupation	
House wife	852(76.41)
Civil servant	150(13.45)
Business	44(4.0)
Student	69(6.18)
Marital status	
Married	1114(99.9)
Unmarried	1(0.1)
Religion	
Islam	939(84.2)
Christianity	176(15.8)

Figure 1. Source of information

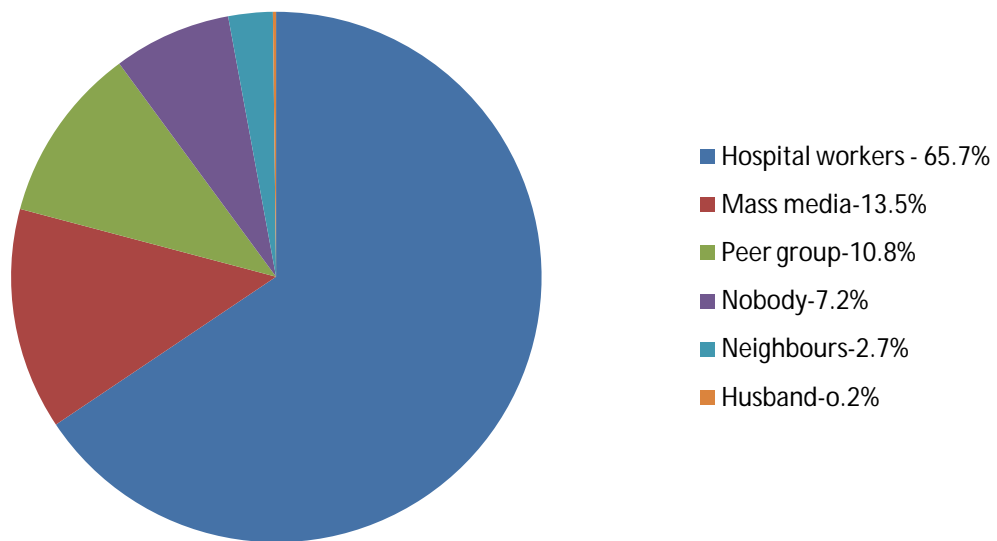


TABLE 2: INFLUENCE OF AGE ON CHOICE OF CONTRACEPTIVE**METHOD**

Variable	ERAG	LRAG	P-value	OR	CI
	n = 631	n = 484			
IUCD	162 (25.6)	223 (46.1)	< 0.05	0.40	0.31-0.52 (S)
Injectables	205 (32.5)	248 (51.2)	< 0.05	0.46	0.36-0.59 (S)
Oral pills	234 (37.1)	3 (0.6)	< 0.05	94.50	29.10-371.77
Spermicides	15 (2.4)	1 (0.2)	< 0.05	11.76	1.63-239.64
Condoms	13 (2.1)	1 (0.2)	<0.05	10.16	1.39-208.83
BTL	1 (0.2)	3 (0.6)	> 0.05	0.25	0.01-2.73
Implants	1 (0.2)	5 (1.0)	> 0.05	0.15	0.01-1.33

ERAG- Early reproductive age group

LRAG- Late reproductive age group

**TABLE 3: INFLUENCE OF PARITY ON CHOICE OF CONTRACEPTIVE
METHOD**

Variable	Low Parity n = 661	High Parity n =454	P-value	OR	CI
IUCD	190 (28.7)	195 (43.0)	< 0.05	0.54	0.41-0.69
Injectables	239 (36.2)	214 (47.1)	< 0.05	0.64	0.49-0.82
Oral pills	203 (30.7)	34 (7.5)	< 0.05	5.48	3.66-8.22
Spermicides	15 (0.3)	1 (0.2)	< 0.05	10.54	1.46-214.33
Condoms	12 (1.8)	2 (0.4)	> 0.05	4.18	0.88-27.15
BTL	1 (0.2)	3 (0.7)	> 0.05	0.23	0.01-2.45
Implants	1 (0.2)	5 (1.1)	< 0.05	0.14	0.01-1.19