CONTRACEPTIVE TRENDS IN A TERTIARY FACILITY IN NORTH WESTERN NIGERIA: A10 YEAR REVIEW.

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ABSTRACT

Background: Of all the direct influences on fertility, contraceptive use is the single most important factor for reproductive health policy makers and program managers. Increase in its use, accounted for the largest proportion of fertility decline worldwide including the sub-Saharan region

Objective: *To determine the trends of contraceptive use and the preferred method of contraception among the clients visiting the family planning clinic of Aminu Kano Teaching Hospital, Kano.*

Study design: *This is a retrospective descriptive study, involving all acceptors of contraceptive methods from January 1999 and December 2009 in the family planning unit of Aminu Kano Teaching Hospital Kano, North western Nigeria.*

Results *The injectable contraceptives were used the most by the clients (6878) while the least number of the clients (208) used the implants. Female sterilization, however, contributed about 3%, to the contraceptive method, while male condom and implants each had the smallest contribution of about 2.5% and 1.9% respectively. No man had vasectomy over the 10-year period.*

Conclusion*: There is an increase in the trend of contraceptive use over the study period. Injectable contraceptives are the most commonly used method in this study.*

Keywords*: Contraceptive, trends, Aminu Kano Teaching Hospital, Kano, Northern Nigeria.*

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INTRODUCTION:

As the world's population grows, improving living standards without destroying the environment is a global challenge[1]. Slowing down the population growth could help improve living standards and would buy time to protect natural resources. To sustain higher living standards, world population size must stabilize. This can be brought about by reduction in the fertility rate that is compatible with the attainment of economic social goals.[1, 2] Of all the direct influences on fertility, contraceptive use is the single most important factor for reproductive health policy makers and program managers, and increase in its prevalence accounted for the largest proportion of fertility declines worldwide including the sub-Saharan region.[3-7] Around the world over 600 million married women are using contraception and in many countries a growing share of unmarried women aged 15 to 24 are sexually active before marriage and increasingly use contraception in particular condoms[8]. Contraceptive use and fertility rates vary substantially among regions. Fertility levels closely correspond to levels of contraceptive use. In countries where contraceptive use is uncommon the fertility rate is high[1, 9, 10]. In a few countries of Asia and Latin America, at least three-fourths of married women use a contraceptive method. In contrast, in some sub-Saharan African countries fewer than 10% of married women use contraception. Fertility rates range from just 2.3 children per woman in Vietnam to 7.2 in Niger[1].

The low prevalence of contraceptive use in Nigeria and indeed in the sub-Saharan

region is due to interplay of many factors: socio-cultural, economic, political, religious and demographic. Continued strong cultural preference for large families, large rural populations relying on subsistence farming and low levels of economic development are contributory[6, 11-14]

Based on statistics about contraceptive prevalence, developing countries as groups are about halfway through the demographic transition from high to low fertility. Levels of contraceptive use of 75% to 84%, as found in North America and Northern Europe, reflected the completion of the transition. The highest contraceptive prevalence rate found in any country with a population over 3 million is 87% in Hong Kong and 86% in the United Kingdom. Among 30 countries surveyed in sub-Saharan Africa since 1990, contraceptive prevalence varied substantially. In five countries – Cape Verde, Kenya, Mauritius, South Africa, and Zimbabwe – over one-third of married women used contraception. In seven other countries – Chad, Eritrea, Guinea, Mali, Mozambique, Niger and Nigeria – contraceptive prevalence was 6% or lower[1].

Surveys suggest that parts of Africa have started down the path already taken in other regions[16,17.] Zimbabwe has perhaps the most articulate family planning programme in Africa[12] while significant positive progress in recent fertility transition has been made in Botswana, Swaziland, South Africa and Kenya[11]. Fertility fell by more than 1% per year in more than 51% of sub-Saharan countries with more than one survey since 1990[1].

An increase in modern methods use – in particular injectables, female sterilization, oral contraceptives and the intrauterine device (IUD) account for half or more of the increase in total contraceptive use among married women in all countries and account for almost three-fourths of all contraceptive use[4, 7]. On the average worldwide, nearly 9 in every 10 contraceptive user rely on modern methods while only about 1 in every 10 rely on traditional methods of withdrawal and periodic abstinence.

The specific contraceptive methods that women use vary substantially from country to country and even within one country from region to region. The method mix in a country reflect many factors, including the availability of various contraceptive methods and people's awareness of them, their cost, and where they can be obtained. In addition, personal preferences, social norms, gender preferences, women's education, rural or urban residence and perceived acceptability of family planning use affect contraceptive choices[18-21].

Decisions about childbearing and contraceptive use are most likely to meet a person's needs when they reflect individual desires and values, are based on accurate, relevant information and are medically appropriate - that is when they have informed choices. To make informed choices, people need to know about family planning, to have access to a range of methods, and to have support for individual choice from social policies and community norms. Informed choice offers many benefits because people use family planning longer if they choose methods for themselves. Also access to a range of methods makes it easier for people to choose a method they like and to switch methods when they want. People's ability to make informed choices invites a trusting partnership between clients and providers and encourages people to take more responsibility for their own health. Enabling clients to make informed choices is a key to good-quality family planning services[22 – 24.]

OBJECTIVES:

To determine the trend of contraceptive use and the preferred method of contraception amongst the clients visiting the family planning clinic in Aminu Kano Teaching Hospital, Kano

Materials and Method

Study Area

Aminu Kano Teaching Hospital, Kano is one of the tertiary/ referral health facilities for Kano and its environs. It is a 500 bed hospital established in 1988. Located in Kano, the largest commercial centre of Northern Nigeria. This hospital receives clients from within Kano and neighbouring states of Bauchi, Katsina, Jigawa Kaduna and Zamfara. The hospital has sixteen(16) departments. The clinical departments are, Obstetrics and Gynaecology, Surgery, Internal medicine, Paediatrics, Ophthalmology, Orthorhinolaryngology, Anaesthesia and family Medicine. The Para- clinical departments include; haematology and blood bank, microbiology, histopathology, chemical pathology, radiology, physiotherapy, community medicine and the pharmacy. The hospital operates family planning clinics, five days a week (Mondays to Fridays) seeing an average of 60 clients per clinic per day.

Study Design/Study Population

This was a ten year retrospective study at the Aminu Kano Teaching Hospital, Kano Nigeria, from 1999 to 2009. The total number of each of the method used by the clients for each year was retrieved from the record department of the Family Planning Unit of the hospital.

Data analysis

Data obtained was analysed using Epi info version 3.01 statistical software (CDC Atlanta, Georgia,USA). Absolute numbers and simple percentages were used to describe categorical variables. Similarly, quantitative variables were described using measures of central tendency (mean, median) and measures of dispersion (range, standard deviation) as appropriate

Table 1: New acceptors of contraceptives

YEAR	Number of clients
1999-2001	1523
2002-2004	3353
2005-2007	4539
2008-2009	1931
Total	11,346

RESULT:

There were a total of 11,346 clients who used the different contraceptive methods. The methods were oral contraceptives, male condom, female sterilization, implants, injectables (Noristerat and Depo provera) and intrauterine contraceptive device (IUD).

A total of 6878 clients used the Injectables. This was the method used by the highest number of clients, while implant, was used by the least number (208) of clients. However, female sterilization contributed about 3% while the male condom and implants shared the least contributions to the contraceptive use (2.5% and1.8% respectively)

Table 1 shows the number of new clients over the period of the study. For graphic representation the 10 years over which the study covered was divided into four phases of two years each.

Table 2 and 3 highlight the trends of the contraceptive method and their various percentage contributions. Oral contraceptive had 18.8% in the first two years. This decreased to 17.5% and then 6.0% during the last two years period gradually increased to 8.4%.

Male condom at the outset made its maximal contribution of 6.9% to the total contraceptive mix. This sharply dropped to 2.5% during the subsequent 2 years and made very insignificant contributions thereafter.1

The injectables had contributed 52.4% at the beginning, increased to 54.4% and then increased over time through 63.9% to 70.2%.

The intrauterine device made its maximum contribution to the contraceptive mix in the third 2-year period of the study at 24.0%. This gradually decreased over the next phase to 10.8%.

The contribution of implants to the contraceptive mix started at its minimum of 3.5% and decreased to 0.5% and1.7% and finally increased in the last phase of the study at 3.1% thus, having a zigzag pattern.

The contribution of female sterilization to the study was an abysmal 1.6% in the first phase. This increased steadily over time to peak at 5.3%. No man had vasectomy.

Table 2: Number of clients that used the various methods of contraceptives.

Year	Oral Contraceptive	Male condom	IUD	Female sterilization	Norplant	Injectable
99-01	286	105	256	24	54	798
02-04	586	84	774	67	18	1824
05-07	273	107	1089	90	79	2901
08-09	162	45	208	102	59	1355
Total	1307	341	2327	283	210	6878

Table 3: Percentage contribution of each method

Year	Oral Contraceptive	Male Condom	IUCD	BTL	Implants	Injectable
99-01	18.8	6.9	16.8	1.6	3.5	52.2
02-04	17.4	2.5	23.1	2.0	0.5	54.3
05-07	6.0	2.4	24.0	2.0	1.7	63.9
08-09	8.4	2.3	10.8	5.3	3.1	70.2

Table 4: Total contribution of each method over the study period.

Method	Percentage
Oral contraceptive	11.5
Male condom	2.5
Female sterilization	3
Intrauterine device	20.5
Implants	1.9
Injectables	60.6
Total	**100**

DISCUSSION:

The Aminu Kano Teaching Hospital (AKTH) provided all the range of family planning methods. This study looked at the trend of the contraceptive mix over 10years period.

Injectable contraceptives, was the most widely used contraceptive method by our clients(60.6%).This may be due to subsidy provided for this method, ease of administration i.e does not required expertise of the doctors.

Female sterilization is the most popular method worldwide. However, it contributed the least quota to the contraceptive mix in this study. This was due to a number of factors including cost, socio-cultural believes and premium given to child birth in our environment, and because it is a permanent method of family planning.

The male condom was the 4th most popular contraceptive method in the first 2 years of this study with a 6.9% contribution to the contraceptive mix. However, it subsequently became one of the least popular amongst the various methods contributing about 2.3% in the year 2008-2009. The enthusiasm that greeted the introduction of this method probably explained why the great number of acceptors opted for this method at the beginning of the study, especially with the prevailing 'suspicion' of the longer-acting and permanent methods as it pertained to return to fertility. This suspicion explained why female sterilization and Implants made their least contributions to the contraceptive mix at the beginning of the study: 1.6% and 3.5% respectively. The average contribution of male condom to the total contraceptive mix was 3%. This agreed with other results. In developing countries, the prevalence of condom use among married women of reproductive age is between 2-6% in about half of the countries surveyed and below 2% in the other half[25]. However, globally the percentage of married couples using condoms for family planning appears to have declined slightly during the past decade[26] and condoms rank near the bottom among contraceptive methods used by married couples[27]. These two facts are reflected by the result of this study with the least total contribution at 2.3%. A number of factors are adduced for this decreased. While the family planning unit is open to all regardless of marital status or sex, its greatest clientele was made up of married women especially those referred from the postnatal clinic after the puerperium. However, few couples that practice family planning use condoms as their contraceptive of choice. Most of the need for condoms is among sexually active unmarried youth[25] who did not constitute a sizeable percentage in this clinic. Also because the condom is the only contraceptive method that clearly prevents transmission of STIs, the AIDS epidemic has brought urgency and new attention to issues of condom use involving trust, negotiation and communication between sex partners[28]. For many people, especially married women, asking an intimate partner to use a condom suggest a lack of trust[29, 30] and particularly in a long term relationship, requesting to use condoms could imply distrust rather than caring[31-33.] Hence the condom has suffered from an image problem and is associated with illicit sex, infidelity and immoral behaviour[33, 34.] In West Africa, many men believe that condoms use is appropriate with their girl friends or casual partners but not with their wives[30]. Finally, because much of the need for condoms is to prevent HIV/AIDS and others STIs among unmarried people, particularly the youth, its actual use might have increased in Kano as part of the AIDS-prevention campaigns.

Over the 40 years since oral contraceptives (OCPs) were first marketed, they have symbolized modern contraception and have remained the most widely used hormonal method worldwide. They trail only voluntary sterilization and IUDs in worldwide use among married women[35.] This was partly confirmed in this study where it contributed 11.5% of the total contraceptive mix trailing injectables and

the intrauterine device, which contributed 60.6% and 20.5% respectively.

The intrauterine device made a debut at its maximum contribution of 24% and gradually diminished. The initial 'rush' was associated with the subsidy provided for this method at the outset. With the introduction of a token fee, however, the number of clients waned. Together, with oral contraceptives, male condom and injectables, there was an upsurge in its contribution during the 1999-2007 part of the study. This was explained by incessant industrial actions embarked by the Resident Doctors and therefore methods like sterilization and implants that were mostly carried out by the doctors were performed on a lowered scale. This reflected in an increase in the other methods that did not require the expertise of the doctors.

Of the other modern methods, implants were the only one that made insignificant contribution at an overall 1.9%. It commenced at a modest 3.5% decreasing gradually to reach 1.7% during the third phase of the study. This could be due to the need to make an incision before its removal.

No man had vasectomy in this study. Male sterilization is virtually nonexistent in surveyed countries of sub-Saharan Africa. Less than 1% of women in developing countries rely on it for contraceptive protection[1]. This is due to inadequate information, cultural barriers, fears, misconceptions and male chauvinism[36].

In conclusion, majority of the clients in this study used the injectable contraceptive methods. Public awareness on other methods of contraception should be promoted.

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