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OVERVIEW OF CONTRACEPTIVE USE IN JOS UNIVERSITY TEACHING HOSPITAL, NORTH CENTRAL NIGERIA

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ABSTRACT

Background: Modern contraceptive methods accepted by 17,846 new clients in Jos University Teaching Hospital, a tertiary health institution, over two decades are presented.

Methods: This was a review of the contraceptive trend in new clients who used the various methods of contraception over an 18-year period, 1985-2002.

Results: The accepted methods were the intrauterine device (26.1%), oral contraceptive pills (23.5%), female sterilization (21.7%), the Injectable (14.2%), male condom (9.5%), Norplant implants (4.9%) and vasectomy (0.1%). Reversible methods were used by 78.2% and the permanent forms by 21.8%. The women were the acceptors of the methods in 90.5%, while men contributed only 9.5% of the new acceptors. Ten men only had vasectomy over the period of study.

Conclusion: The Intrauterine device was the leading method of contraception accepted by the women and male vasectomy was the least accepted by men. There is the need for increased male involvement in contraceptive issues.

Key words: contraceptives, oral pills, intrauterine devices, Norplant, female sterilization (*Accepted 11 May 2007*)

INTRODUCTION

Around the world, over 600 million married women are using contraception and in many countries a growing number of unmarried women between 15 and 24 years of age are sexually active before marriage with increased use of contraception and the condom in particular[1]. 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[2-4].

The low prevalence of contraceptive use in Nigeria in particular and the sub-Saharan region in general, is due to interplay of many factors namely social, 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[5-9]. In the past, lack of government commitment to family planning programs in some countries limited the access to the range of contraceptive methods and services needed to meet the people's needs.

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An increase in the use of modern methods, such as the injectables, female sterilization, oral contraceptives and the intrauterine devices (IUD), accounts for half or more of the total increase in contraceptive use among married women in all countries and three-fourths of all contraceptive usage[10,11]. On the average world-wide, nearly 9 in every 10 contraceptive users rely on modern methods while only about 1 in every 10 relies on traditional methods of withdrawal and periodic abstinence[11].

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 is a reflection of many factors, including the availability of various contraceptive methods and people's awareness of them, 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[12-15].

To make informed choices, people need to know about family planning, have access to a range of methods, and have support for individual choice from social policies and community norms. Informed choice offers the benefit that people use a family

planning method for a longer period if they choose such methods for themselves. In addition, access to a wide 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. This encourages people to take more responsibility for their own health and enables clients to make informed choices. This is key to good-quality family planning services[16-18].

The objective of the study was to determine the preferred methods of contraception amongst the men and women, and the trend of acceptance over the period of study.

CLIENTS AND METHOD

This was a retrospective study at the Jos University Teaching Hospital, Jos Nigeria, between 1985 and 2002 (18 years). The Family Planning register of the clinic were retrieved and data extracted. New acceptors were determined for Oral Contraceptives Pills (OCPs), injectables, male condoms, Intrauterine Devices (IUDs), Norplant implants, vasectomy and female sterilization. The total number of each contraceptive method for each year was determined from the family planning record of the clinic. All the new clients that accepted the modern methods of contraception were collated. Statistical analysis was by simple percentages.

RESULTS

There were a total of 17,846 new clients who accepted the modern contraceptive methods namely the Oral Contraceptives Pills (OCPs), injectables, male condoms, Intrauterine Devices (IUDs), Norplant implants, vasectomy and female sterilization.

Table 1 shows the number of new clients over the period of the study. For graphic presentation, the 18 years of study was divided into 6 periods of three years each. The highest number of acceptors 4,738 (27.0%) was recorded between 1988 and 1990, and the least number of new acceptors 1,329 (7.5%) was recorded between 2000 and 2002.

A total of 4,651 (26.1%) clients used the intrauterine devices, while Norplant implants were least used by 894 (5.0%) of the clients. Female sterilization, a permanent form of contraception was accepted by 3,873 (21.7%), and vasectomy, the male form of permanent contraception was accepted by 10 (about 0.1%) men, Figure 1.

Figure 2 highlights the trend of the contraceptive method mix and their various contribution rates. Oral contraceptives were accepted by 19.6% of the clients in the first three years. This increased to 27.6% and then 29.7% during the two subsequent 3-year periods and then gradually decreased. Male condom at the outset made its maximal contribution of 23.3% to the total contraceptive mix. This dropped sharply from 23.3% to 11.4% during the subsequent 3 years and made contributions of about 0.2% thereafter.The injectables demonstrated an up and down picture, contributing 7.6% at the beginning, increasing to 16.2% and dropping to 11.5% and again increasing over time through 15.1% to 23.8%. The intrauterine device made its maximum contribution (37.8%) to the contraceptive mix in the first 3 years of the study period, and gradually decreased over the next period but resurged again in the last two periods. Norplant implants contributed to the contraceptive method mix by starting at a minimum of 2.6% and steadily increasing to reach its peak contribution in the last period of the study at 8.6%.

Female sterilization contributed 9.1% in the first period, and increased steadily to 42.6% in the fourth period, and stabilized at about 30% in the last period of the study. It was consistently the most dominant method in the last four periods of the study. There were only 10 men who accepted to have vasectomy done in the study.

Table 1**: New Acceptors of Modern Contraceptive Methods In Jos, Nigeria**

Period in years	Number of clients (%)
1985-1987	4,738 (26.5)
1988-1990	4,823 (27.0)
1991-1993	3,108 (17.4)
1994-1996	2,187 (12.3)
1997-1999	1,661 (9.3)
2000-2002	1,329 (7.5)
Total	**17,846 (100.0)**

Figure 1**: Contraceptive Methods Accepted Over The Study Period**

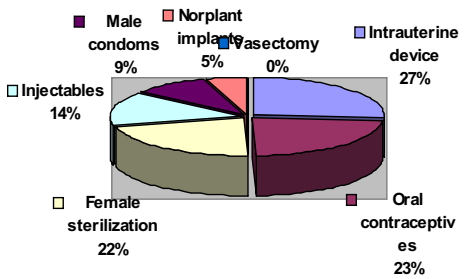
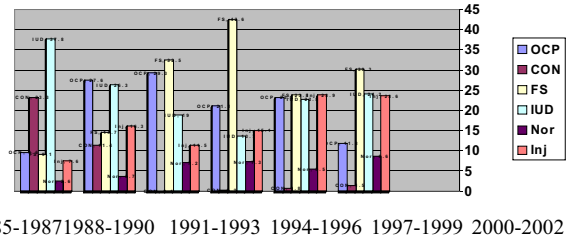


Figure 2: **Percentages of Clients That Used The Various Methods of Contraception Over The Period Of Study**



Key: OCP = Oral Contraceptive Pill, CON = Condom, FS = Female Sterilization, IUD = Intrauterine Device, Nor = Norplant, Inj = Injectable

DISCUSSION

The Jos University Teaching Hospital (JUTH) provided a wide range of family planning methods during the study period. The intrauterine contraceptive device was the leading method of contraception among the clients, followed by the oral contraceptive pills. Female sterilization was in third place in the first period, but became the most popular method at the end of the study period. This was due to a number of factors. EngerderHealth New York, an international Non-Governmental Organization, invested in training of skilled manpower and resource development to enhance service to desiring clients at the facility. The net effect of this investment was that female sterilization became available to clients at affordable cost. As the services for female sterilization improved (which needed no re-supplies, and minimal side effects once the procedure was performed) more women became satisfied with the method. Satisfied women popularized the method and demystified any earlier misconceptions about female sterilization.

The male condom was the 2nd most popular contraceptive method in the first 3 years of this study contributing 23.3% to the contraceptive mix. However, it subsequently became the least popular method contributing less than 1% in most instances. The enthusiasm that greeted the introduction of the condom probably explained why the greatest number of acceptors of this method was at the beginning of the study. At that time, there was some degree of 'suspicion' of the longer-acting and permanent methods as pertained to return to fertility. This suspicion explained why female sterilization and Norplant made their least contributions to the contraceptive mix at the beginning of the study with 9.1% and 2.6% respectively. The average contribution of male condom to the total contraceptive mix was 6%. Globally the percentage of married couples using condoms for family planning appears to have declined slightly during the past decade[19] and condoms rank near the bottom among contraceptive methods used by married couples[20]. This fact was reflected in the study with the total contribution of 9.5%; but a declining rate from 23.3% at the onset to less than 0.1% at the end of the study period. A number of factors are adduced for this trend. 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. However, few couples use condoms as their contraceptive method of choice. Most of the need for condoms is among sexually active unmarried youth[21] who did not come to the clinic for the method. They would rather purchase it over the counter in chemist shops to avoid the peering eyes of concerned health care workers and relatives. The condom is the only contraceptive method that clearly prevents transmission of STIs, the HIV/AIDS epidemic therefore has brought about an urgency and new attention to issues of condom use involving trust, negotiation and communication between sex partners[22]. Because of the need for condoms to prevent HIV/AIDS and other STIs among unmarried people, particularly the youth, the actual use might have increased in Jos as part of the AIDS-prevention campaign. The institution, which was the main source of condoms at the beginning of the study, has since lost its central position as a supplier to other outlets such as chemists, pharmacies, hotels, bars and grocery stores where condoms are now easily obtained without filling out a prescription. This explains why condom use in the clinic fell sharply in the latter part of the study despite intensified campaigns against HIV/AIDS and the use of the condom.

Over the 40 years since oral contraceptives were first marketed, they have symbolized modern contraception and have remained the most widely used hormonal method worldwide[2]. They trail only after IUDs in worldwide use among married women[23]. This was confirmed in this study where it contributed 23.5% of the total contraceptive mix trailing the intrauterine device, which contributed 26.1%. More clients used the pill in this study than the other hormonal methods (injectables and Norplant) put together. However, in the last phase of the study, the injectables overtook the oral contraceptive pills, which might indicate changing trends in contraceptive preference by clients at the facility.The intrauterine device made a debut at its maximum contribution of 37.8% and gradually reduced. 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. The non-surgical methods of contraception namely the oral contraceptives, condoms and injectables, demonstrated a slight upsurge during the 1997-99 period of the study. This was explained by incessant industrial actions embarked upon by the Resident Doctors as surgical methods (female sterilization and Norplant insertion) performed by doctors were not done at this time and therefore recorded a decrease. There was therefore an increase in the non-surgical methods, which did not require the expertise of the doctors. With the stabilization of services in the last period, female sterilization and Norplant insertion recovered the lost grounds, with female sterilization increasing by a margin of 6.5% (from 23.8% to 30.3%).

Norplant was the only method that made significant contribution with an overall 6% increase. It contributed a modest 2.6% initially, but increased gradually to reach 8.6% during the last phase of the study. This was most probably due to the repeated trainings in Norplant insertion/removal and improvement in the quality of service with improved clients' satisfaction over time. Ten men had vasectomy during the period 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[2]. This has been attributed to inadequate information, cultural barriers, fears, misconceptions and male chauvinism[24], amongst others.

In conclusion, contraceptive use among the men folk was very minimal, and this requires prompt attention by use of vigorous advocacy to the men, to enlist their involvement. Permanent forms of contraception are gaining ground in this facility and needs to be encouraged and sustained. Further study is required to determine factors that influence the acceptance of a modern contraceptive method in the centre.

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