ABSTRACT

Background: Combined oral contraceptive pills were the first contraceptive method to provide sexual freedom of choice for women through reliable, personal and private control of fertility. They are the most widely used hormonal contraceptives and also the most popular non-surgical method of contraception. Objective: To review the profile of acceptors of combined oral contraceptive pills at the University of Uyo Teaching Hospital, Uyo. Methodology: An 8 year review of all clients that accepted combined oral contraceptive pills in the family planning clinic. Results: There were 1,146 new contraceptive acceptors during the period of study out of which 309 (27.9%) accepted the pills. Majority of the clients were between 20 and 29 years of age (54.0%), were multiparous (72.8%), Christians (99.7%) and 61.2% had tertiary level education. Two hundred and fifty-five women (82.5%) desired to use combined oral contraceptive pills to space births while 7.8% wanted to limit child bearing. There was a high discontinuation rate among the women (45.0%) and out of these 87.9% of the clients changed to other contraceptive methods. All the clients commenced their pills within seven days of menstruation and only the low dose monophasic preparations were available in the family planning unit and thus were given to the clients. Conclusion: Women who accept to initiate combined oral contraceptive pills in our center are young, well educated, multiparous women who want to space their pregnancies. However, due to the high discontinuation rate among the clients, there is need for further studies evaluating reasons for the high discontinuation rate, exploring interactions between clients and providers' and also providers' attitude towards combined pills in our environment.

Key words: Oral contraceptive pills, Acceptance, Nigeria

INTRODUCTION

Combined oral contraceptive pills (often referred to as birth control pills or simply, the pills) represent the most studied class of medications since they were introduced in 1960. They consist of a combination of a synthetic oestrogen and a progestogen and were the first contraceptive method to provide sexual freedom of choice for women through reliable, personal and private control of fertility. They are the most widely used hormonal contraceptives and also the most popular non-surgical method of contraception. Currently, they are used by more than 100 million women worldwide. Reports from studies in the United States of America indicate that they are used by about 12 million women, while one quarter of women aged 16-49 years in Great Britain and 40% of sexually active women in Holland use the pill.

When used correctly and consistently, combined oral contraceptive pills (COCPs) are among the most effective, reversible method of contraception with failure rates of 0.1 – 3/100 women years (Pearl index 0.16). They also have remarkable non-contraceptive benefits which include dramatic reductions in life time risks of ovarian and breast cancer and more variable reductions in the incidence of colorectal cancer, benign breast disease, uterine myomata, endometriosis, pelvic inflammatory disease, benign ovarian cysts and rheumatoid arthritis. A recent report revealed that use of COCPs has already prevented 200,000 ovarian cancers and 100,000 deaths from the disease. In addition,
over the next decade, the number of cancers prevented is expected to rise to at least 30,000 per year. The development of low dose COCPs has led to a major change in hormonal contraception. Most of the pills in use today contain 30-35 micrograms or less of oestrogen and 400 micrograms or less of progestogen. The introduction of the lower steroid dose formulations has lead to a reduction in most side effects of the COCPs and they are much safer and equally very effective when compared to the previously used pills which contained 50 micrograms or more of oestrogen and which are no more marketed for contraceptive use in most countries.

Due to the paucity of data on the use of COCPs in our environment, this study which was conducted at the University of Uyo Teaching Hospital (UUTH), aims to review the profile of acceptors of COCPs in the center and compare with what obtains in other Nigerian centers.

MATERIALS AND METHODS
This retrospective study was conducted at the maternity unit of the University of Uyo Teaching Hospital located in Uyo, the capital of Akwa Ibom State in the South-South geopolitical zone of Nigeria. The registration numbers of all the clients that accepted COCPs between 1st January 2002 and 31st December 2009 were obtained from the family planning register. With the registration numbers, their record cards were retrieved and studied. Information abstracted included the socio-demographic characteristics of the clients, reasons for accepting COCPs, period of commencement of the pills, source of information concerning contraception and subsequent follow up. The data were analysed using frequency count and percentages.

RESULTS
During the period of study, there were 1,146 new contraceptive acceptors out of which 309 women (27.9%) accepted COCPs. The ages of the clients ranged from 18 – 42 years with modal age group being 20-29 years (54.0%). Traders (24.9%), civil servants (14.9%), house wives (15.2%) and students (10.7%) constituted about 65.7% of the clients. Majority of the clients were multiparous (72.8%), Christians (99.7%) and 61.2% had tertiary level education (Table 1).

Two hundred and fifty-five clients (82.5%) wanted to use COCPs for birth spacing, 24 (7.8%) wanted to limit child bearing, 8 (2.6%) were not certain why they decided to practice contraception, in 22(7.1%) cases; there was no documentation as to their reasons in their record cards.

Sources of information on contraception are shown in table 2. Two hundred and thirty one women (74.8%) obtained their information concerning contraception from health personnel, 12.9% of the clients obtained theirs from friends/relatives and 1.6% obtained theirs from the print media.

One hundred and forty-one clients (45.0%) were recorded to have discontinued COCPs.

| Table 1: Socio-demographic characteristics of the clients |
|-----------------|-----------------|
| **Variable**    | **No (%)**      |
| **Age (years)** |                 |
| < 20            | 14 (4.5)        |
| 20-29           | 167 (54.0)      |
| 30-39           | 116 (37.5)      |
| ≥ 40            | 12 (3.9)        |
| **Parity**      |                 |
| P0              | 37 (12.0)       |
| P1-4            | 225 (72.8)      |
| ≥ P5            | 38 (12.3)       |
| Not recorded    | 9 (2.9)         |
| **Educational status** |            |
| Primary level   | 34 (11.0)       |
| Secondary level | 69 (22.3)       |
| Tertiary level  | 189 (61.2)      |
| Not recorded    | 17 (5.5)        |
| **Occupation**  |                 |
| Trader          | 77 (24.9)       |
| House wife      | 47 (15.2)       |
| Civil servant   | 46 (14.9)       |
| Student         | 33 (10.7)       |
| Teacher         | 17 (5.5)        |
| Seamstress      | 15 (4.9)        |
| Professional    | 9 (2.9)         |
| Unemployed      | 2 (0.6)         |
| Not recorded    | 63 (20.4)       |

| Table 2: Sources of information on contraception |
|-----------------|-----------------|
| **Source**      | **No (%)**      |
| Clinic personnel| 231 (74.8)      |
| Friends/Relatives| 40 (12.9)      |
| Radio/Television | 27 (8.7)        |
| Print media     | 5 (1.6)         |
| Internet        | 4 (1.3)         |
| Not recorded    | 2 (0.6)         |
Out of these 78 (25.2%) changed to an intrauterine contraceptive device (IUCD), 32 (10.4%) changed to injectable hormonal contraception, 14 (4.5%) changed to contraceptive implants (Jadelle), 9 (2.9%) decided to get pregnant while 6 (1.9%) did not have any reasons for discontinuing their pills.

All the clients commenced their contraceptive pills within seven days of menstruation. During the study period, only low dose monophasic preparations were available in the family planning unit and were thus given to the clients.

**DISCUSSION**

COCPs have become an integral part of fertility choice in almost every country since its introduction in 1960. Although more popular in the developed world, recent reports indicate that they are increasingly being used by women in developing countries. In our center, COCPs were most commonly accepted by young multiparous women who preferred to delay pregnancy. This is what obtains in other parts of Nigeria. In Nigeria, family planning programs often target their services to young married women who are in the midst of their childbearing years and want to space births. In addition, young Nigerian women are increasingly becoming aware of their reproductive health rights and also the advantages of utilizing modern contraceptive methods to either limit family size or delay childbearing. Age, marital status, desired family size, frequency of sexual intercourse, health concerns and exposure to sexual transmitted infections can all influence a woman's contraceptive use and choice of method.

COCPs were initiated by all the clients within the first seven days of menstruation. However, current recommendations support initiating the pills at any time during a woman's menstrual cycle as long as the provider is reasonably sure the client is not pregnant. In a recent study, the quick start approach (taking the first pill at the clinic in the presence of the provider regardless of the menstrual cycle day) was associated with higher continuation rates and clients were more likely to start the second pack of pills than women who initiated the pills after they left the clinic. Unlike progestogen only pills, COCPs are not recommended for breastfeeding mothers because oestrogen diminishes the quality and quantity of breast milk. However, they may be used 6 weeks post partum if lactation is well established and other options are not available or unacceptable. In non-breastfeeding mothers, COCPs can be initiated 3 weeks after delivery and also immediately after an abortion.

Low dose monophasic preparations (where each active pill in the cycle contains the same amount of hormones) were the only preparations available in the family planning clinic and thus given to the clients. Due to the continuous publicity regarding the metabolic side effects of the pills, multiphasic preparations (biphasic and triphasic) where varying doses of the steroids are given through a 21 day cycle were introduced to lower the amount of steroids while mimicking the hormonal peak and trough levels within the physiological menstrual cycle. This was in an effort to achieve fewer metabolic effects and minimize the occurrence of breakthrough bleeding and amenorrhea while maintaining efficacy. However, metabolic studies with multiphasic products have shown no outstanding advantages over the monophasic ones and they are much more expensive.

Almost half of the clients discontinued their pills and out of these, over half of them changed to another method of contraception. Due to the retrospective nature of the study, the reasons for the clients discontinuing COCPs and changing to other contraceptive methods could not be determined as these were not documented in their record cards. However, available evidence shows that 25-36% of COCPs users in developing countries discontinue them within a year of starting. Surveys from several countries also show that most of the discontinuations are due to side effects (such as changes in menstrual patterns, headaches, nausea and less frequently vomiting), health concerns and false rumours about health problems. A family health international study of perceptions of the pill safety in eight developing countries found that concern about pill use was universally high. With the exception of two countries, more than 50% of the respondents thought the pill increased a woman's risk of infertility. However, proper counselling about potential side effects and providing good management of medical concerns has been shown to improve use and typically, side effects diminish within a few months after a female begins oral contraceptive use.
The new COCPs, yasmin (containing an oestrogen and drospirenone-a progestogen with both anti androgenic and mineralocorticoid activity) and dianette (containing an oestrogen and the antiandrogen cyproterone acetate) have been introduced in the developed world. Yasmin which is as effective as other COCPs in preventing pregnancy (Pearl index 0.57) has several benefits due to the unique progestogen drospirenone. It reduces the incidence of acne and hirsutism, and causes less water retention and thus less fluid-related weight gain than other COCPs. Dianette is also useful for women with symptoms of hyperandrogenism who require contraception.

Majority of the women had their knowledge of family planning from clinic personnel. This is similar to what obtains in most parts of Nigeria and indeed Sub Saharan Africa. Unfortunately, the attitude of health providers towards particular contraceptive methods in developing countries have been shown to influence continuation rates among clients through the kind of information they give when interacting with clients. Hence, there is need to evaluate the interaction between clients and providers and also assess the quality of counselling and provider attitude towards COCPs, particularly as a significant number of the clients in our center changed to other contraceptive methods after discontinuing COCPs.

In conclusion, women who accept to initiate COCPs as method of contraception in our center are young, well educated, multiparous women who want to space their pregnancies. However, there is a high discontinuation rate among the clients. There is therefore need for further studies evaluating reasons for the high discontinuation rate, exploring interactions between clients and providers and also providers’ attitude towards COCPs in our environment.

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