EXPERIENCE OF WOMEN CONTRACEPTIVE USERS IN AKURE LOCAL GOVERNMENT AREA OF ONDO STATE: IMPLICATIONS FOR SUBSEQUENT CHOICE AND COMPLIANCE

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DEDICATION

This work is dedicated to the

Almighty God,
who has kept me alive to this day, gave me the inspiration, strength and comfort to complete this work

and to

My Uncle,
Mr. E.K. Omole
who is the source of my academic achievement in life.

ABSTRACT

This study is aimed at determining the contraceptive experiences of women contraceptive users in Akure Local Government Area of Ondo State and the degree to which these experiences have influenced their subsequent choice and compliance to contraceptive regimen. Akure Local Government Area currently has an estimated population of 1,856 contraceptive users in the nine government-owned family planning clinics. Using a combination of stratified and systematic random sampling techniques, 740 contraceptive users from seven family planning clinics from one urban and two rural settings in the Local Government Area was studied. A set of pre-tested questionnaires was administered. A total of 735 duly completed questionnaires was subsequently analysed.

Results showed that Intra-Uterine Contraceptive Device (I.U.C.D.) is the method most commonly used followed by injectables and the pills. The major reason for the popularity was mainly due to their minimal side-effects. However, compared with other methods, the I.U.C.D. has the highest rate of compliance 224 (39.6%) and periodic abstinence has the lowest non-compliance rate 1 (0.6%). Furthermore, the majority of non-compliers who use injectables, 46 (27.2%), defaulted largely as a result of financial handicap and

experiences of side-effects as compared to those who use I.U.C.D. who did not perceive a need for subsequent follow-up in the absence of problems or complaints. An overall compliance rate of 77.0% was recorded in respect of appointment keeping, use of contraceptives and strict adherence to instructions for all the methods. The highest number of non-compliers 42 (24.9%) and 41 (24.3%) were found among the 30-34 and 35-39 years age brackets respectively.

The result shows that five variables significantly affect compliance with chosen method of contraception. These are: marital status, type of job performed, number of living children, experiences with first chosen method, conduciveness of clinic setting for privacy.

Based on these findings, increased individual client counselling at the clinic level and the creation of highly subsidised family planning service centres in the markets and public places are suggested.

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I am greatly indebted to the Ondo State Ministry of Health that offered me this rare opportunity to undertake this study and for providing necessary financial support. I will like to thank Prof. J.D. Adeniyi (the Project Leader of ARHEC) for his continued support and provision of necessary documents that have contributed immensely to making this text become a reality.

My sincere gratitude goes to my family for encouraging me to undertake the course and for their patience and understanding during the periods I was away from home. I also wish to extend my thanks to the staff of the following family planning clinics: State Specialist Hospital, Akure; Local Government Maternity Centre and Dispensary, Arakale, Akure; Maternal and Child Health Centre, Akure Local Government Secretariat; Comprehensive Health Centre, Iju/Itaogbolu; Police Clinic, Akure; Army Barracks Clinic, Akure; Basic Health Clinic, Ogbese; Primary Health Care Centre, Ado-Ekiti; Family Planning Clinic, University College Hospital, Ibadan for their cooperation and provision of ideas, documents and for granting me permission

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CERTIFICATION

I certify that this work was carried out by Mrs. Adenike Olotu of the African Regional Health Education Centre, Department of Preventive and Social Medicine, College of Medicine, University of Ibadan, Ibadan, Nigeria.

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CHAPTER ONE

INTRODUCTION

Over the years, the knowledge of family planning appeared to have increased among women of childbearing ages on the advantages of the use of different family planning methods. (Schuler et al, 1982).

This level of awareness has been said to be brought about by the concern about the increase in the world population (Malcolm and Clivewood 1972) and the efforts of various Governments to propagate birth control at the community end clinic levels. As a result of this effort access to family planning services appeared to have increased.

In most developing countries particularly in the Western States of Nigeria, attitude to use of family planning devices vary greatly from a moderate to very low degree of acceptance. As a result of this fairly poor attitudinal disposition, birth control has not reached a level of high general acceptance. In addition, cultural taboos, beliefs, religious practices also appeared to have contributed to poor level of acceptance (Funmilayo, 1987).

These factors do not only affect consumers' failure to utilise the available family planning services but the few contraceptive acceptors fail to comply with contraceptive regimen or with appointment

schedule (Soladoye, 1980). All these might have resulted in large household family size and the consequent poor economic status of household members.

Birth control is advantageous for many reasons. First, it could play a vital role in reducing infant, under-five and maternal mortality as a result of birth spacing and reduction in the number of crude abortions. Secondly, a planned family could make a big difference to health and happiness of all family members due to individuals access to large amount of nutritional and economic resources.

However, despite these advantages, the experience with the use of contraceptive methods differ from one individual to the other based on prior knowledge about contraception before acceptance, avenue through which family planning method was introduced, physical and medical/ health status of the person as at time of acceptance and the approval from spouse. This may be further increased by age at acceptance, parity, marital status, method of contraception in relation to physical and biological make up.

All these experiencial factors can have implications for the choice of contraception, its continuation or discontinuation, subsequent choice and compliance with accepted methods.

This study therefore is aimed at determining the contraceptive experiences of women of childbearing age in Akure Local Government

Area of Ondo State and the degree to which these experiences have influenced subsequent choice and compliance to contraceptive regimen.

Significance of the Study

The Federal Government of Nigeria, aware that the population of the country is increasing at an alarming rate with serious socio-economic and demographic consequences, launched the National Population Policy in February 1989. This policy emphasises a limitation of four children to each woman and the promotion of contraceptive use among women in the country.

Observation from research studies (Nichols et al, 1982) has revealed that clients who are sexually active require the use of one form of contraception or the other, failure of which can give rise to unwanted pregnancies, deaths occurring from criminal abortions, transmission of sexually transmitted diseases (STDs) with consolidated complications such as infertility or damage to the reproductive organs in the immediate future.

This present study can contribute to the reduction of maternal morbidity and mortality as collected data can highlight major determinants of women's choice of contraceptive at first acceptance and reasons for acceptance and discontinuation of the first ever selected method.

Secondly, the characteristics of compliers and non-compliers with different types of contraceptive methods can be profiled thereby leading to the production of a "litmus" scale for predicting compliance with different contraceptive users. In this way, family planners can be assisted to identify almost immediately likely non-compliers who may need further counselling services.

Furthermore, the information collected can assist family planning practitioners in prescribing more appropriate and acceptable methods of contraception for different clients thereby increasing contraceptive acceptance rate. In addition, appropriate educational strategies to facilitate increased contraceptive use can be designed and used. All these can lead to population control and improved standard of living among the target population.

Scope of the Study

The study specifically targets contraceptive users (women of childbearing age) who have accepted family planning and have utilised a contraceptive method between January 1989 and December 1991 in the area of study. This period of contraceptive acceptance is to enable the study identify compliers, non-compliers and the characteristics of each group.

occupation, educational qualification and number of living children.

The study is made up of five sections. Chapter One - this chapter introduces the study, focus and scope. Chapter Two reviews literature on choice of contraception, experiences with different contraceptive methods and compliance with regimens. It also examines the magnitude of problems associated with unwanted pregnancies, abortions, overpopulation and the transmission of STD's and factors affecting non-compliance with contraceptive regimens.

The study area, the objectives of the study and the research methodology are described in Chapter Three. The fourth chapter presents the results of the study while Chapter Five discusses the results and draws conclusions and recommendations.

OPERATIONAL DEFINITIONS

Compliance: For the purpose of this study compliance refers to the willingness of an acceptor to continue with a particular family planning method and the current use with regular follow-up appointment to date except where interrupted by a planned pregnancy.

Non-compliance: refers to the discontinuation of a contraceptive either as a result of default in follow-up appointment at clinics, total default or irregular use of contraceptive when client is still engaging in regular coitus with no plans for pregnancy.

Compliers: are women contraceptive users who have not missed any follow-up appointment or instructions as directed by her contraceptive regimen.

Non-compliers: are contraceptive users who have missed at least one follow-up appointment or drug regimen/instructions contrary to her stipulated contraceptive regimen.

I.U.C.D.: means intra-uterine contraceptive device.

O.C.: means oral contraceptive or pill.

Injectables: refers to hormonal contraceptives given through intramuscular injection.

Contraceptive user/client/family planning acceptors: These terms have been used interchangeably for women who have adopted and are currently using a family planning method.

Health provider/family planning provider: The term is used interchangeably for health staff providing family planning services.

Billings method: refers to the rhythm or ovulation method of family planning.

CHAPTER TWO

LITERATURE REVIEW

It has long been recognised that mothers constitute vulnerable members of the family and that their health needs are of great importance. In developing countries, it is estimated that about 23.0% of the population consists of women in the childbearing ages of 15-49 years and that majority of the health problems affecting women occur within these childbearing years. (Maine, 1981).

The maternal mortality rate is a sensitive indicator of the health status of a nation. The rate for Africa is estimated by WHO at 6.4 deaths per 1,000 or 640 deaths per 100,000 live births. This estimate is over 20 times that of developed countries where the rate is said to be about 0.3 per thousand or 30 per 100,000 live births. In countries like the United Kingdom, the rate has dropped to 10 deaths per 100,000 live births (Adewunmi, 1986).

Of all the factors responsible for maternal mortality in developing countries, childbirth remains the greatest single hazard facing women of childbearing ages. The average number of children born to each woman in her reproductive life is between six and seven children (Omu, 1990). This means a crude birth rate of 45-48 births per 1,000. This is extremely high. This situation makes women of

childbearing age to be at a higher risk of dying (than men of similar age group) mainly from deaths related to pregnancy and delivery. It is estimated that 40-60% of all deaths in women between the ages of 15-34 years are due to risks associated with reproduction which can be significantly reduced through fertility control (Oyediran, 1984).

The population growth of a country could be affected by many factors. This include the decline in infant mortality rate, (which may be partly attributed to the resultant effect of the Expanded Programme on Immunization) high incidence of adolescent pregnancy thus giving rise to increased birth rate, long reproductive life span of about 25-30 years of women in developing countries as compared with 2-3 years for those in developed countries (Waboso, 1973).

In the developed countries, one of the most dramatic changes in the last three decades of population transition, has been the ability of the sexually active woman (married or single) to exercise control over her family size due to the mass availability of highly effective contraceptives. Unfortunately, while the developed countries and a few developing ones are using this new technology as an important component of their economic development, evidence abound that Nigeria has a low level contraceptive acceptance. For instance, in the National Fertility Survey data between 1981-1982, only 6.2% of married fecund non-pregnant women were using any

form of contraception. More worrying is the fact that 80.0% of the users were on ineffective methods like chemical contraception, coitus interruptus, rhythm method and spermicides. This implies that the affected women are susceptible to pregnancy which if carried to term can lead to increase in population.

THE NEED FOR FERTILITY CONTROL IN NIGERIA

There is a yearning need to encourage and practise fertility control measures in Nigeria's present state of national development based on the following factors.

(a) Effect of fertility on maternal and child health

(b) Adolescent sexuality/Induced abortion andsequelae.

(c) Demographic problems.

(a) Effect of fertility on maternal and child health

Nigeria has one of the highest maternal and perinatal mortality and morbidity in the world. Of these, women dying from pregnancy, labour, delivery and events associated with the puerperium, more than 50% of them are women who have had five or more deliveries. (Adewunmi, 1986).

It has been documented that 30-200 Nigerian women out of 10,000 die during the process of pregnancy and delivery compared to 1 per 10,000 in England and Wales (Adewunmi, 1986). Death is

highest in four specific types of pregnancies - pregnancies before 18 years, after 35 years, after four births and pregnancies less than two years apart. These pregnancies carry increased risks because of immaturity of the reproductive organs, increased risk of medical conditions with increasing age, increased risks of complications with subsequent pregnancies (Oyediran, 1990). Other related factors include poor socio-economic and environmental conditions as well as inadequate provision of health care facilities and health manpower particularly in the rural communities.

(b) Adolescent sexuality/induced abortion and sequelae

Pre-marital sexual activities often without contraception among adolescents are increasing in Nigeria. This invariably leads to early pregnancy and childbirth which can disrupt both the physiological and the intellectual development of young girls, and can deprive them of prospects for education and self-fulfilment (Harrington, 1978). The magnitude of these problems increases in adolescents who start child bearing early because they are likely to have more pregnancies which carry repeated risks at each time.

The effect of fertility on child health is also great. For example, risks to the baby of the older woman include foetal asphyxia due to prolonged labour and increased likelihood of congenital defects

or genetic defects such as Down's Syndrome or Mongolism, which usually result in mental-retardation of the child. (Myles, 1985). Although there are no exact data on the number of unwanted pregnancies that occur worldwide each year, the number of abortions performed gives an indication of the extent of the problem. Abortion remains a major means of fertility control in the world, especially in Nigeria (Ladipo, 1983).

It is estimated that every year worldwide 20-30% of all pregnancies end in induced abortion (Ladipo, 1989). Approximately 30-45 million women in developing countries resort to abortion each year. (Ladipo, 1986). In Nigeria, there are more than 500,000 induced abortions every year. Poorly and often illegally performed abortions are responsible for one-quarter of all maternal deaths as a result of bleeding injuries to vital organs like uterus and gut infection. There is concrete evidence that clandestine induced abortion is a major cause of death among Nigerian adolescent girls and are equally responsible for secondary infertility among those who did not die. (Nichols and Ladipo, 1986).

The adolescent mother is at greater risk of developing complications related to her immature pelvis, such as obstructed labour, vesico-vagina fistula and recto-vagina fistula(Ladipo, 1986). Since these fistulae permit urine and faeces to drain through the vagina

uncontrolled, the resulting effect is infertility due to repeated infections of the reproductive organs, urinary tract infections, as well as social ostracisation due to the foul odours emanating from the young mother.

Not only is the risk of mortality greater for the adolescent mother, but it is also greater for her infant because of the increased risk of biological and emotional immaturity of the adolescents.

(c) Demographic problems

In the 1952-53 Census, the population of Nigeria was put at 35 million. In 1963, it was estimated at 55.7 million and as at 1992, it has reached 88.5 million. (Makinwa, 1976). At the present growth rate, more than 150 million Nigerians by the year 2,000 can be expected, given the young age structure of the Nigerian population, more young people are likely to enter the reproductive years than those moving out by virtue of age. This population hike will most likely affect housing, transport, employment, school placement and feeding which are presently difficult or insufficient.

The magnitude of the problem is further underscored by the following observations. Firstly, the gross domestic product of Nigeria grew by about 3.1 per cent in the 1960s and an increase of 7.4 per cent per year in the 1970s. (Makinwa, 1976). However,

since the 1980s the economy has been declining, partly due to the rapid population growth. Thus, Gross Domestic Produce per capita in 1981 had declined to 1973 levels, and in 1990, the levels have gone below those in 1950s (before independence).

Secondly, a decline in agricultural activities have been noticed than over the last decade leading to consistent decrease in available food supply. The situation seems to have been aggravated by the rapid population growth acting in concert with drought and other natural disasters. The land resources with rapid increase in population is dwindling as a result of fragmentation of land holdings to give every member of the family access to the land. (Makinwa, 1976).

Thirdly, primary school enrolment has increased from 3.7 million pupils in 1970 to more than 20 million in 1990. With the nomadic education gathering momentum, the number should certainly be higher. The implication of this is increased financial burden on the government as well as the parents.

CONTRACEPTIVE EXPERIENCES

It is well recognised that large numbers of individuals, who choose to adopt family planning measures, discontinue use after a short term (Fakeye, 1988). In addition a large number of acceptors of family planning methods many times drop out of clinic follow-up schedule. All these seem to occur as a result of various experiences of these acceptors. Experience, according to Oxford English Dictionary (1989) refers to "an unusual event or activity that affects one in some way which may hinder or encourage future actions on the same issue".

Factors responsible for variability of experiences include

(1) the contraceptive method selected by the acceptor

(2) compatibility of method with acceptors' physical and medical health status

(3) factors related to service such as cost of services, type of family planning providers and their level of training

(4) availability of drugs, equipments and essential facilities

(5) easy access to family planning clinic

(6) personal factors - ability of acceptor to adhere strictly to instructions given on use, age, parity, educational qualification and socio-economic status.

It is important to document the experiences with the use of different contraceptives (see Appendix A) in order to increase their acceptance and effectiveness as this may encourage or inhibit compliance. For example, Takeshita (1970), in a study of family planning acceptors found that 2% of the cases who were registered as acceptors of the pill and 8% registered as acceptors of the conventional method id not use the methods they registered for, in addition 43% gave up the method they accepted temporarily for reasons of side effects and becoming pregnant.

This section therefore examines the experiences with different family planning methods.

Experiences with the use of oral contraceptives

The pill has been found to be one of the most popular chosen methods by contraceptives users all over the world. (VanFook Kee, 1972; Jessie Tan, 1972; Ogedengbe, Giwa, Osagie, Ola, 1987; Fakeye, 1988).

In Singapore's National Family Planning Programme, the oral contraceptive was the most popular method offered. Between 1966 and 1972, an average of 53% of all new acceptors chose the pill.

The major reason for termination of use of pills given by majority of users were planned pregnancies and occurrence of side-effects each of which accounted for 21 per cent of all terminations.

Such side-effects include:

(1) menstrual disturbance,

(2) weakness, dizziness etc.

(WanFook Kee and Jessie, 1972).

In another study on differentials in contraceptive use-effectiveness in the Philippines, at the end of two years, a little more than one-third of the pill acceptors were still taking pills. (Laing, 1972).

The reasons most commonly given for discontinuation were side-effects and other medical reasons. It was also found that women initially on the pill were most likely to change to rhythm or withdrawal methods and pregnancy rates among pill acceptors increased from 18 per cent to 27 per cent for those who lived at an increasing distance of 40 minutes drive to the clinic.

In a study on profile of family planning clients at the Family Health Clinic, Lagos, Nigeria (Oyediran and Ewuml, 1972), it was found that out of 1,972 clients, 16% had prior experience with oral contraceptive but only 8% had used I.U.C.D. Reasons for discontinuation cited by users of all methods were pain, ill health, excessive bleeding and menstrual disturbance was frequently cited by users of the pill and a desire to become pregnant was frequently cited by users of the I.U.C.D and the pill. Among the acceptors, the 12 months

first method continuation was higher for I.U.C.D acceptors than for the oral contraceptives which was 62%.

The result of a follow-up study of acceptors of pill and I.U.C.D at Ilorin by Fakeye and Okwerekwu (1988) showed 22.3% pill continuers and 64% pill drop-outs. Most pill adoptors were drop-outs rather than discontinuers. More than two-thirds of all clinic drop-outs occurred in the first three months and non-compliance was common among users of oral contraceptives. Service related reasons for drop-outs included long waiting time, maltreatment by staff, objections of significant others and the use of alternate clinics.

In a comparative study of two communities (St. Kitt-Nevis and St. Vincet) on post family planning acceptance experience in the Caribbean, findings showed that only 12% of all St Kitt-Nevis and 17% of all St. Vincent acceptors had not missed at least one follow-up visit (Barley and Keller, 1982). A little more than one third of St. Kitt-Nevis women who were late for their last appointment (36%) said they did not come back to the clinic because they had experienced side effects (headaches, weight gain, nausea, etc) of the method. Nearly one-quarter of these women (23%) said they did not come to their appointment because of problems related to the clinic such as the clinic hours were inconvenient (10%), the clinic was too far (5%), they did not like the present personnel at the

clinic (4%), they preferred another place (3%), or the waiting time was too long (1%).

Of the St. Vincent women, one out of five women who were late for their last appointments (18%) said they did not come back to the clinic because of problems with the method. 16% of the women said they did not come to their appointment because of the problems concerning the clinic - that is, they prefer another place (5%), the clinic was too far away (4%), the clinic did not have the method wanted (3%), the waiting time was too long (2%) and the clinic hours were inconvenient (2%). The women most likely to be late for the last appointment were the youngest, those with the most children and those who selected the pill.

Malcom Potts and Cllvewood (1972), in measuring persistence of couples with a specific method over unit intervals of time for a variety of cultural background found that the continuation rate for pills is usually less than that of I.U.C.D. but that the women who accept this method are generally younger and of lower parity.

Ogedenge, Ciwa Osagie and Ola (1987) in a study in urban Lagos found that the pill was the third popular method of choice of the women. Ukoh and Oyarebu (1987) found that the predominant forms of contraception used by teacher trainees in an urban community in Benin City were the pill 22%, condom 13% etc. Omu and

Tabowei (1984) in Benin City found that oral/injectable contraceptive was the commonest method used in the community. The younger women, probably because of their education, tend to accept the oral pill more than their older counterparts. Non-compliance was higher with oral/injectable. This was probably due to the complications of the methods or the lack of motivation.

Experiences of women from previous research indicate that side-effect has been reported as a major reason for discontinuation of the pill.

Experience with use of Intra-Uterine Devices

Ogedengbe, Giwa Osagie, Ola, et al (1987) in the study of contraceptive choice in an urban clinic in Lagos found that I.U.C.D was the most popular method of choice. In addition, it was found that I.U.C.D was acceptable to all ages and parity except those with only 1 child or none.

In another study on profile of family planning clients at the Family Health Clinic, Lagos, Nigeria, Oyediran and Ewumi (1972), it was found that the 12-month first method continuation was higher for I.U.C.D acceptors (79%) than for acceptors of the oral contraceptives.

Fakeye and Okwerekwu (1988) also found that there were more continuers among I.U.C.D users. 51.4% and less drop out 24.9% in

contrast to pill users. Reasons for discontinuation of I.U.C.D. were expulsion 24 (9.0%), medical reasons such as bleeding and pain 118 (18.0%), planning pregnancy 45 (17.0%), other personal reasons 129 (48.5%) and transfer out 9 (3.4%). 3 (64%) of all I.U.C.D. discontinuations occurred in the first six months and 84% by nine months of use.

Laing (1972) in a study in the Philippines found that the most successful method was the I.U.C.D. At the end of six months, 86 per cent of I.U.C.D. acceptors still retained the device, whereas 66 per cent of pill and rhythm acceptors and 40 per cent of acceptors of other methods were still using their first method. By the end of 12 months, less than one-fourth of I.U.C.D. acceptors had stopped using the I.U.C.D. and nearly two-thirds of the I.U.C.D. acceptors were still using the I.U.C.D., the differences between the continuation rate of I.U.C.D. and other methods have been attributed to the fact that I.U.C.D. is the only major method that does not require sustained motivation to ensure continued use.

In respect to changes in family planning methods, among those first using the I.U.C.D., more than half (58 per cent) selected the pills, while about one-fourth (27 per cent) shifted to rhythm or withdrawal. Thus, women shifting from the I.U.C.D. were likely to select more effective substitute methods than were women shifting from the pill.

In addition, it was found that fertility reduction among I.U.C.D. users was 50% more effective than pills and nearly three times as effective as acceptance of rhythm or other methods.

Result of a study conducted in Lagos (Olukoya, 1985) in a university clinic showed that continuation rate was better for both the pill and the I.U.C.D. The reasons for this may be reflected in the clinic itself, the university clinic being more centrally located and more modern and spacious.

It has been reported that studies conducted in countries with low levels of education generally find that the use effectiveness of the I.U.C.D. is superior to that of the pill (Population Reports, 1987). An estimated 10 to 15 per cent of I.U.C.D. acceptors, especially young women who have not had children, discontinue use because of pain and irregular or heavy bleeding. Between 5 and 15 per cent of users are expected to spontaneously expel the I.U.C.D. and among post partum women who receive an I.U.C.D. immediately after delivery the expulsion rate is considerably higher. In addition, I.U.C.D's are associated with a 2 to 10 times greater risk of pelvic infections, including those caused by sexually transmitted diseases. Such pelvic infection carries a substantial risk of subsequent sterility, the I.U.C.D. is not a good method for women who may be exposed to sexually transmitted diseases.

Hutchings, Patti, Gordon and Perkin (1985) found that the theoretical effectiveness of the method, if used consistently and exactly as directed is 97 to 99 per cent, and this is likely to be related to the properties of the I.U.C.D. itself and user attributes such as age, parity and frequency of intercourse. The author concluded that in developed countries, I.U.C.D's are the second most effective method of reversible contraception in use, after oral contraceptives.

I.U.C.D. is a relatively inexpensive form of contraception because of its long life. I.U.C.D. insertion can be accomplished during a single visit to a health care facility and consistent or daily action on the part of the user is unnecessary. Unlike the use of barrier methods, I.U.C.D. use is independent on the time of intercourse and has a relatively low rate of discontinuation. Common I.U.C.D. side effects - increased menstrual bleeding, spotting and cramping have been said to account for 10-20 per cent of method discontinuation. Although the occurrence of uterine perforation is rare, I.U.C.D. users face this risk. In addition, I.U.C.D. may be expelled and while expulsion carries no direct harmful effect, if unnoticed by the user it can result in an accidental pregnancy (Hutchings et al, 1985).

Experiences with use of Periodic Abstinence/Rhythm method

There is very little information about experiences with use of periodic abstinence/rhythm method. One thing which is known about the use of periodic abstinence/rhythm method is that the success of this method depends on the couple's ability to learn the method and willingness to adhere to it, failure of which will result in unwanted pregnancy. (Population Crisis Committee Report, 1985).

Trusell and Grummer-Straw (1990) found probabilities of pregnancy during the first year are 3.1 per cent during perfect use. However the author found that it is extremely unforgiving of imperfect use and that those who have a poor attitude towards the rules are more likely to take risks and those who get away with taking a risk are likely to take risks again.

Experience with use of Barrier Methods - Condoms, Diaphragm etc.

Although the worldwide percentage of married couples using condoms has increased over the past decade, as about 6,000 million condoms are being used each year, yet they rank near the bottom in terms of worldwide use. Female barrier methods, such as spermicides and diaphragms rank lower, at 1% for married women of reproductive age.

Experience has shown that women tend to under-report condom use and there is already growing use of condoms in developing

countries in response to AIDS (Population Reports, 1990).

It has been said that condom use places a considerable burden on the user as it requires not just the man's consent but usually his initiative. Not facing unwanted pregnancy himself, he may not be motivated to put on a condom, which he must do in the midst of sexual arousal and for protection against disease. At least, he must use a condom for each and every act of intercourse.

As a result of these problems, most couples apparently do not use condoms every time they have intercourse. In Bangladesh only about 60% of men who said that they were using condoms for contraception used them at every act of intercourse. In Barbados even fewer men - only 30% used condoms every time. Inconsistent use has been said to account for a large proportion of unwanted pregnancies among condom users. In addition incorrect use may explain some pregnancies and infections among condom users and sometimes condoms may break leading to unwanted pregnancies (Population Reports, 1990).

Apart from the above, inexperience users have reported more broken condoms and a preference for "dry sex".

Spermicides, creams, foams and vaginal tablets, diaphragm

The above named contraceptives all fall into the barrier method. Barrier methods are the oldest contraceptives known.

All barrier methods are said to carry some major disadvantages. Average use failure rates of between 10 and 20 per cent per year have been reported which are much higher than those for steroidal methods or I.U.C.Ds. Although barrier methods are themselves generally free of major side-effects, the increased risk of pregnancy necessarily affects the risk-benefit calculations for women who must definitely avoid pregnancy. Moreover, most barrier methods require the user to take a conscious action to avoid pregnancy before each sexual act. For many couples, that requirement is esthetically unappealing or difficult, either physically or psychologically, to follow consistently (Population Reports, 1985).

Women who use the diaphragm have been reported to be more prone to bladder infections. Occasional allergic reactions to rubber or cream or jelly may also occur. A diaphragm may become disloged during coitus if the woman is on top or has a relaxed vagina as a result of childbirth. The use of diaphragm is easier for a woman with long fingers as women with short fingers need to use an inserter. In addition it should be used in combination with a spermicide, foam, jelly, or cream.

Use of creams, jellies are considered messy by some acceptors hence the decrease in the use of this method (Population Crisis Committee Report, 1985).

Experiences with use of Injectables

Experience with use of injectables has shown that injectables Contraceptives are one of the most effective reversible contraceptives with no serious side-effects other than occasional heavy bleeding. They are said to be convenient, requiring administration only every 3 months and they appeal to women who feel confident about medicines given by injection. (Population Crisis Committee Report, 1985).

Reports of side-effects among current contraceptive users in Thailand have been reported to be the highest among women using injectables (approximately 40 per cent experience side-effects) and this was responsible for a large number of discontinuation among previous users.

However, in the same study, 64 per cent of women who had used injectables for 10 or more years reported no problems with the method as compared with 59 per cent of those who had used injectables for 0-4 and 5-9 years. Although the proportion of very long torm users of injectables who reported medical and health problems remained about the same as in the shorter term groups (approximated 32 per cent), the proportion experiencing headaches, and dizziness declined to

two per cent from seven per cent among users of 5-9 years and eight per cent among users of 0-4 years. The number of women using injectables decreases with duration of use, but about 20 per cent of such women said they had relied on that method for at least 10 years (Hervey, Stephen and Chamratrithirong, 1988).

In Nigeria, Ogedengbe et al (1987) found injectables as the second most popular choice of family planning method in Lagos. Furthermore, Omu and Tabowei (1984) found injectable contraceptive was one of the commonest method used in Benin City. In the same study non-compliance was highest with oral/injectable with 42.9%. This was probably due to the complications of the method, or the lack of motivation.

Ogedengbe, Giwa Osagie et al (1987) found that acceptors of injectables were older women of high parity and lower educational standard.

THE PHENOMENON OF COMPLIANCE

While the Oxford English Dictionary (1989) defined compliance as "the acting in accordance with; the yielding to a desire, request, condition, directions etc; or a consenting to act in submission or active obedient to", Etzioni (1961) described it as "readiness of individual to act in conformity with the norms of society, political or religious

organization, groups or professional association, court orders or an institute like school or hospital".

More recent definition of compliance by Draccup and Meleis (1982) defined it "as the extent to which an individual choose behaviours that coincide with a clinical prescription". They also defined non-compliance as a departure from the consensual regimen, in terms of behaviours of "omissions" (like foregetting medications at the prescribed times and missing clinic appointment) and behaviours of "commissions" (like taking too many medications, smoking and eating prescribed and restricted diets).

Various operational definitions have been used for contraceptive compliance. Westoff et al (1953) classified compliance in terms of irregular uses and non-compliant. Cobb et al (1966) considered those women who did not take one pill on each of the schedule days to be non-compliant whereas Laurie and Korba (1972) classified women as irregular users if they omitted one or more tablets in a cycle. Other researchers reporting contraceptive omission do not offer a specific definition.

FACTORS AFFECTING COMPLIANCE WITH HEALTH INSTRUCTIONS

In respect to compliance, Oladepo in 1986 highlighted some problem issues involved in the investigation of specific factors associated with non-compliance. He identified four factors that appear to be responsible for such limited progress. These include:

(a) Inadequate number of well defined studies.

(b) The over-estimation of compliance by health care providers.

(c) The tendency of health care providers to seek technological solutions to all health problems, not minding the characteristics of people who are going to use them.

(d) The interaction of many variables that are always present in health regimens.

Davis (1967) identified several factors affecting compliance with health instructions. These include:

(i) Personal characteristics

(ii) Client/Health care providers relationship

(iii) Distance

(iv) Family support characteristics

(v) Clients' satisfaction with health providers' care.

Personal characteristics

Literature review on compliance presents conflicting conclusion regarding what demographic attributes characterize a non-compliant client. Therefore, it is only possible to cull some impressions about what client characteristics influence non-compliant behaviour.

Investigations that have been made about demographic variables in relation to compliance behaviour include age, sex, socio-economic status, education, marital status, religion and race.

Dixon et al (1957) in their study on out-patient treatment with Para-Amino-Salycyclic Acid (PAS) found that females are more likely to default than males. On the other hand, Moulder (1981) who carried out a study on patients' compliance with individualized home exercise programme found that female subjects tended to be much more compliant than the males.

In the United States of America, it was found that old people (David, 1963) clients in lower socio-economic status group (Watts, 1966) and client with little education (Johnson 1966. Ross and Duff, 1984) are least likely to follow doctors' orders.

Ajao (1978) identified reasons for non-compliance with medical recommendations by 833 patients of Ife-Ijesa towns in Osun State of Nigeria. He recorded the following: 28% felt that they were well, 25% felt that they lacked necessary information, 23% had some personal

problems, 8.5% were utilizing other sources of care, 8.5% complained of poor hospital services, and 6% complained of financial problems.

Haynes (1976) made a critical review of the "determinants" of patient compliance with therapeutic regimes in U.S.A. and found out that compliance increases with age and with socio-economic status and in addition compliance was found to be higher in white population than in black.

In conclusion, therefore, while many authors found association between personal characteristics and compliance, Hulka et al (1975) found no significant correlation between compliance and age, sex, marital status, education, social class, current activity or presence of spouse.

Client - Health Care Provider's relationship

Few empirical situations have dealt with the way in which interaction between client and provider influences client compliance (Ellis, 1969).

Davis (1963) emphasized that a formal type of interaction between the client and health provider was more likely to result in compliance than a friendly one; Chaney et al (1967) opined that a long standing, warm relationship with client provides a better compliance with medical advice, Svarstad (1974) also reported that friendliness or approachability of the health providers are significantly associated with compliance.

Johnson's report in U.S.A. (1965), barriers in health provider-client communication could not account for non-compliance. However, when health providers fail to convey significance of regimen to the client, Davis (1968) is of the opinion that there is a reciprocal failure on the part of the clients to comply. In the same way, Oladepo (1986) concluded that use of patient education methods significantly improved the compliance behaviour of patients to their treatment regimen.

A study conducted by Salako and Adadevoh (1972) at Ibadan, in Nigeria found that out that 35% of their respondents described their medications wrongly, 60% did not take their drugs properly, while 45% missed the dosages.

This result gives a negative effect of poor communication like hurried, fragmented and conflicting instructions or using medical terms which are unfamiliar to the clients. Wildmer et al (1983) who studied the compliance characteristics of 291 hypertensive patients to the prescription of family physicians in rural Mid-Western areas of Michigan State, reported that all the patients had a mean compliance percentage of eighty-seven (87%). The emphasis here was laid on the importance of good patient-physician relationship.

One can therefore conclude that absence of interpersonal warmth and rapport and impersonal treatment of clients by health providers can affect compliance.

Distance

The distance the client has to travel to receive care has been identified as a factor to be considered in compliance.

Acton (1975) found distance from the client's home to the health care facility to be an important explanatory variable in differences in utilization. Fielder (1981) hypothesized that distance served as a measure for several things: the physical distance as well as time and money cost to travel.

Along the Eastern shore of Maryland, in rural Iowa and Karsas, U.S.A., transportation was found to be a barrier to both access and utilization and these affect compliance (Burmeisters, 1976; Dougharty, 1970).

A more recent study of Soladoye (1980) on patients with pulmonary tuberculosis, found that long distance and high cost of transportation to and from the hospital are associated with non-utilization and non-compliance.

Family support characteristics

Previous studies on the role of family and social support on client compliance have shown that family support is very important (Stuart and Davies, 1972; Pratt, 1973). Ku and Jordan (1964) also found that family discord can be closely associated with non-compliance. Milton (1968) identified the importance of availability of local help and family cohesiveness during crises as being associated with increased

levels of compliance. Abraham-Son et al (1961) found that a more stable home situation is perhaps associated with positive reinforcement of medical care. Kirscht et al (1981), while identifying the impacts of different interventions to increase adherence, found that social support increases compliance level.

Conclusion can therefore be made that family support systems will be of prime importance in influencing decision about health related actions such as clinic attendance and adherence to contraceptive regimen.

Client's satisfaction

Many studies have found that when clients are satisfied with the outcome of a visit and when their expectations have been met, they are much more likely to adhere to recommendations and to return for follow-up visits (Stone, 1979).

Houston and Pasamen (1971) in their study of hospital patients found a high (90%) satisfaction levels, even though a quarter of the patients still noted a deficiency in the information they wanted to receive. Kaiser and Kaiser (1974) stressed the desire of women to have more information about how their body function, diagnostic and therapeutic procedures and drugs prescribed.

Clients have been shown to be more inclined to comply with instructions when health provider.

(a) give more information (Houston, 1972; Bellin and Genger, 1972)

(b) counsel clients ((Linn, 1975)

(c) explain payment plans (Bashshuv et al, 1967)

(d) have a favourable attitude toward the client (King, Goldman, 1975)

(e) spend more time with the client (Linn, 1975; Below, 1974)

Excessive waiting times are associated with poor compliance (Aday and Andersen, 1975) and high drop-out rates (Finnerty, Mattic and Finerty, 1973). Hulka et al (1975) also found that adherence to medications can be increased if :-

(1) the doctor reinforces the importance of the regimen at the initial visit;

(2) patient's expectations are met; and

(3) patients are satisfied with the care received.

Some field researchers in Nigeria like Kale and Pearson of the College of Medicine, University of Ibadan, have attributed the non-compliance of patients to unsatisfactory effect of drugs (Kale, 1978; Pearson, 1986).

One can therefore conclude that if correct instructions are given to clients, appropriate positive health behaviours expected of them in return will lead to increased rate of compliance.

COMPLIANCE IN CONTRACEPTIVE USE

It is necessary to have sound estimates of patient compliance in order to assess the benefits of a given regimen or its effectiveness relative to other existing forms of therapy. Researchers have focused specifically on how well patients follow tuberculosis, rheumatic fever streptococcal and diabetes regimen etc. In documenting the extent of patient non-compliance in these forms of therapy, researchers have also attempted to identify indexes that might be used to predict patient cooperation. Selected demographic variables (age, sex, socio-economic status, education, religion, marital status and illness-related variables) severity of the disease, length of time under treatment, number of doses and drugs prescribed have been evaluated with respect to their possible influence on patient compliance.

Few studies have been carried out on client compliance with contraceptive regimen in view of the various experiences of contraceptive users with the different methods. Some of these studies have focused on compliance with a particular family planning method rather than considering all methods with a view to determining which of the methods has the highest rate of non-compliance.

In spite of the enormous and urgent need to use contraceptive in Nigeria, its practice level is extremely low. Apart from intra-uterine device, there has been no significant difference between the users of the pill/injectable, withdrawal method and coitus interruptus

on one part and non-users on the other hand. This is because for adequate compliance there must inevitably be high motivation which is not very necessary with intra-uterine device (Omu and Tabowei, 1984).

A similar situation has been reported from the Calabar project and in Kenya. Ninety-eight per cent of those who practised some form of contraception among those women with birth interval within 12 months used oral contraceptive pill, which has perhaps been haphazard.

Omu and Tabowei (1984) concluded that non-compliance is probably due to inadequate information and counselling on the use of these techniques. Secondly, the orchestrated side-effects make tremendous negative-impact on compliance. The most important reason perhaps, is the case of termination by users under any veiled excuse. On the other hand, the insertion and removal of intra-uterine device needs some form of technology yet little motivation on the part of the user. The practice level of I.U.D. is however low because of fear of complications.

The use of oral contraceptives (OCs) in family planning programs is an exceptional example of the problem of ensuring compliance, since there are many women world-wide taking OCs over extended periods of time. In the less developed countries in particular, the

problems of ensuring client compliance in family planning programs are aggravated by educational and cultural environments that do little or nothing to promote an understanding of the principles and practices of conception (Brian Seaton, 1985).

This area of non-compliance is fraught with difficulties, not the least of which is the embarrassment of those who are found to be non-compliant. As a result some clients refuse participation in such studies hence it is difficult to ascertain who complies or who does not comply.

Reasons for non-compliance with oral contraceptives may range from illness, lost or damaged OC packets, forgetting, complaints about side-effects, etc. In some cases over compliance occur where the client consumes more than the prescribed number of pills - the prescribed number being one pill par day as an attempt to cover up the missed pills.

Brian Seaton (1985) in a study observed that OC acceptors fall into two groups:

(1) whose who follow the prescribed regimen carefully and are compliant,

(2) those who apparently have their own perceptions of how OC pills should be taken, which may only loosely relate to the proscribed regimen and are therefore highly non-compliant.

On compliance with use of condoms/diaphragms, Population Reports (1990) asks "If condoms can be so effective in preventing pregnancy, why are the average observed rates both for pregnancy and STD infection so much worse?" The answer was that limited evidence suggests that the individual, not the condom, is usually responsible for infections and unwanted pregnancies.

Condom places a considerable burden on the user as it requires not just the man's consent but usually also his initiative. When men and women are not faced with the risk of unwanted pregnancy they may not be motivated to put on a condom (men) or diaphragm (women) before sexual intercourse or in the midst of sexual arousal. As a result, most people apparently do not use condom/diaphragm everytime they have intercourse.

In addition, incorrect use which may be attributed to inadequate information on use can give rise to non-compliance. Also, differing experience with using condom/diaphragm whether users apply a lubricant that was weakened by poor conditions in storage or device has a hole or defect. The responsibility for compliance lies with both male and female spouse but more with the woman since she is the target of any unwanted pregnancy.

Uniqueness of compliance in contraceptive regimen

Contraceptive regimens have unique characteristics that affect client compliance. First unlike many of the drugs described in medical literature, contraceptive drugs or devices are generally preventive rather than curative. Relatively high drug compliance early in the treatment of streptococcal infections, for instance, may be a direct result of the immediate salubrious effect of the medication. The patient feels better after taking a few pills and continues to stay on the regimen as long as she is rewarded in this way. As his discomfort is relieved, his non-compliance with the regimen may increase.

In using contraceptives, however, the acceptor is receiving no on-going reinforcement - unless the failure to become pregnant is interpreted in this way. Thus, the prophylactic nature of contraceptive regimens may contribute to non-compliance.

Secondly, psychologists and psychiatrists are in general agreement that most decisions relating to pregnancy involve ambivalence (Sandberg and Jacobs, 1971; Fawcett, 1970). Often this feeling of ambivalence pervades attitudes about sexual activity in general. Presumably the decision to avoid an illness involves less ambivalence, this difference can give rise to increase in non-compliance rate.

Thirdly, contraception involves a choice on the part of the user among a variety of methods. When a patient is under treatment for a specific disease or is under going preventive therapy for an illness, there is often little or no choice about the type of drugs he or she is to receive. It is the physician who makes the decision. But there are many effective means of preventing pregnancy and it is usually the client who makes the final decision about what method will be used. Knowledge of the existence of other means of preventing pregnancy and uncertainty as to whether or not the correct choice was made may lead to a higher non-compliance in contraceptive use. (Horn, 1976).

Contraception is unique in that more of the burden of choice is on the acceptor and confidence about having made a correct decision may be lacking particularly if the client has suffered from complaints about side-effects of chosen method depending on the seriousness of the side-effects on the daily life of client.

Fourthly, when a patient is given a disease-related drug, usually just one person is involved, by contrast, the decision to use a particular contraceptive may be affected by social and psychological interactions between sexual partners as well as by social mores. (Miller, 1986). This is important because disapproval of method of choice by male spouse can affect compliance. Where the spouse disagrees with methods

as use of condoms or spermicides, foams, creams, because of its unnatural and messy nature, this may affect the woman's compliance.

Fifthly, unlike the treatment of many acute diseases, contraception is often an on-going form of therapy, which may cover ten or more years, therefore continued motivation is essential for 100 per cent compliance. Motivation becomes important here in view of the various experiences of clients at the clinics such as long hours of waiting, inadequate supply of drugs, poor interpersonal relationship between providers and clients, increased cost of drugs, long distances of clinic to clients place and to crown it all experiences of various side-effects from contraceptive methods all play an important part in non-compliance. (Fakeye and Okwerekwu, 1988).

CONCEPTUAL FRAMEWORK

There are many reasons why people behave the way they do. In this study, health education models like the Health Belief Model (Rosenstock, 1974), the Precede Model (Green et al, 1980) and the Fishbien's Theory Model (Fishbien, 1980) will be used to examine the factors that underline the various behaviours affecting contraceptive use.

The Health Belief Model

The health belief model (a model proposed for the analysis of compliance) was developed by Hochbaun (1956), Kegeles (1963), Rosenstock (1960) and further elaborated by Becker and colleagues (1979). This model states that individuals engage in preventive health behaviour based on three main factors: perceived vulnerability, perceived severity and perceived benefits (Becker, 1966; Rosenstock, 1974). This means that a person would have to believe that he or she was susceptible or vulnerable to a disease in order to take action. The value of compliance is thus based on the probability that, in the client's view, compliance will reduce the perceived threat and not be too costly in money, time and emotional energy (Becker et al, 1979). These two variables are modified by other factors in Becker's model, including demographic variables, structural variables relating to treatment, client attitude and health providers interaction.

Disease threat is composed of two conditions. First, the person must perceive that he/she is susceptible. This implies that he/she believes that he personally has a reasonable chance of acquiring the disease condition. This is subjective perception. There is a range of vulnerability as perceived by the individual which can be viewed on a spectrum. On the one hand is the individual who denies any possibility of involvement with the disease process. At the other end

is the person who expresses a feeling of real danger of contacting a specific disease.

Perceived severity is the second component of disease threat. This implies that the individual should perceive that the occurrence of the disease would have a moderately severe impact on an aspect of his life. This perception varies with the degree of seriousness being seen from two points of views. One can look at it from the physical perspective, that is the impact of the health problem on personal well-being. Is there a chance of pain, suffering, deformity, disability or even death? Social consequences are the second perspective, one is concerned about the effect of the condition on work, family life and social relationships.

In this study, the health belief model is selected to explain the perceived reasons for compliance with contraceptive regimen. A client is likely to comply with a given contraceptive as a result of how she perceives herself vulnerable to pregnancy. Thus, when a contraceptive user is given a follow-up appointment, it is her perception of cost and benefits of prevention of pregnancy that will determine her compliance actions.

The other dimension to the model is the perceived barriers which form the other side of a cost benefit analysis of the proposed action. This takes place within the individual as she weighs the

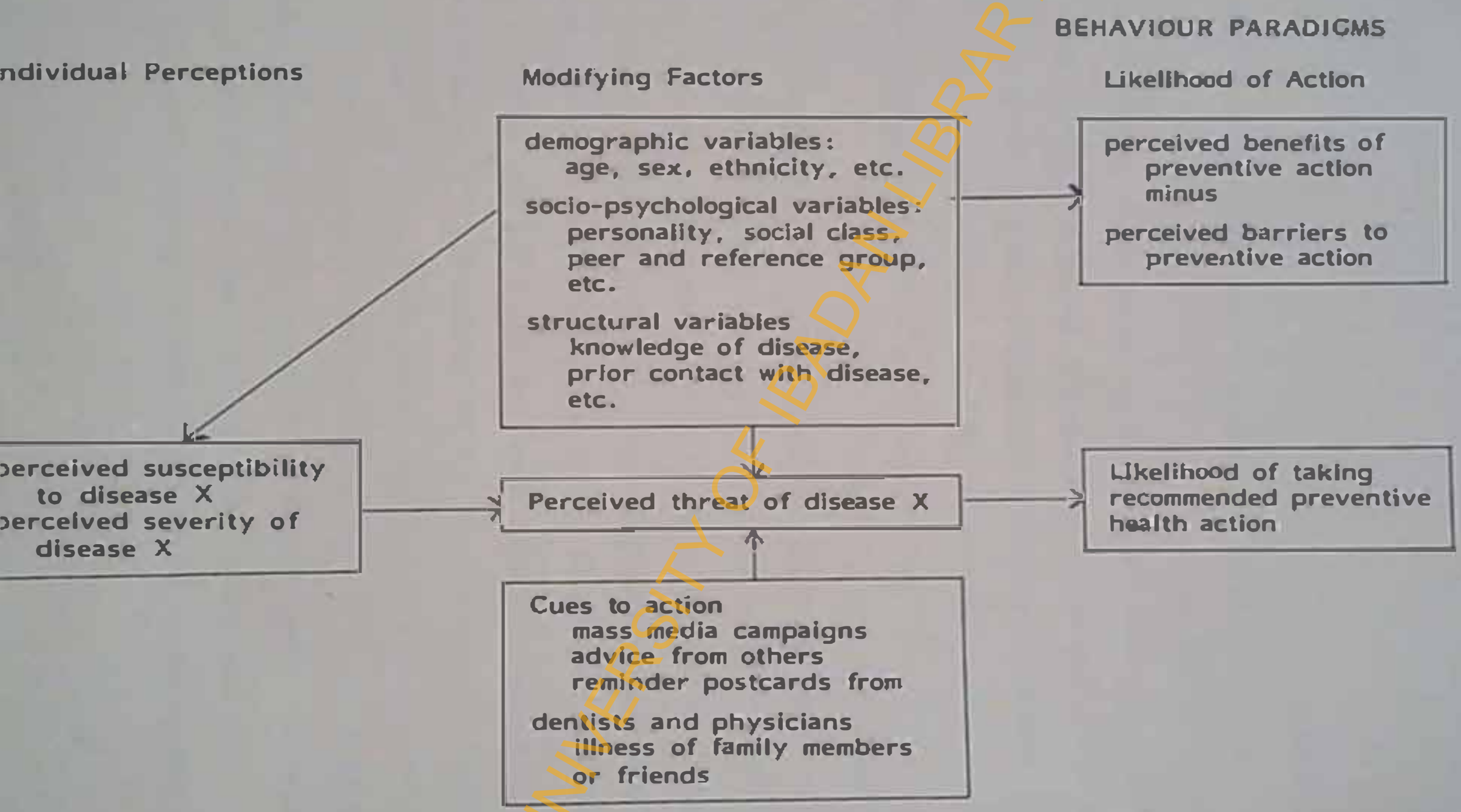
effectiveness of the action with the expenses likely to be incurred in buying contraceptives or the side-effects to be experienced.

In summary, Rosenstock (1974) notes that the combined levels of susceptibility and severity provided the energy or force to act and the perception of benefits (less barriers) provides a preferred path of action. Some stimuli may also be necessary to trigger the decision making process. These are called "cues to action". Cue might be internal for example, irregularity of menstration, or external, mass media communications, interpersonal interactions or communications from health care providers.

Finally the model assumes that certain variables "modifying factors" such as demographic, socio-psychological and structural might influence health-related behaviour. Demographic variables include sex, age, race, socio-psychological variables are personality traits, social class, peer and reference groups. The structural variables are knowledge of a disease, prior contact with the disease and other considerations that improve level of knowledge.

The elements of this model may assist the author in designing health education intervention that will influence client's readiness to attend follow-up appointments and comply with contraceptive regimen by emphasizing the benefits of complying and by removing obstacles which might prevent compliance.

FIGURE 1: Basic elements of the Health Belief Model



Source: Rosentock I.M (1974)

The Behavioural Antecedents Model (Green's Precede Framework)

This model was developed by Green and has been utilized extensively in health education theory and practice (Oladepo, 1986). The framework directs the health educator's initial attention to outcomes rather than to inputs, forcing him to begin the health education planning process from the outcome end. It encourages the asking of "why" questions before the asking of "how" questions. Thus, it is a diagnostic tool for identifying the health problem and the behaviour or behaviours that influence it and the antecedent factors. It takes on an epidemiological mode of enquiry. It is also a planning model in that the results of the diagnostic process guide one to choose among intervention alternatives the most appropriate for the situation as diagnosed.

There are six relevant phases of precede framework. Phases 1-3 focus on the assessment of general problems, identification of specific health problems and identification of specific health related behaviours that appear to be linked to the health problem. The health related behaviours are further classified into behavioural and non-behavioural factors.

The fourth phase classified the behavioural factor into three sub-factors, viz:

1. **Predisposing:** this comprises of a person's knowledge, attitude, beliefs, values and perceptions that facilitate or hinder personal motivation for change.

2. **Enabling:** this may be considered to be barriers created mainly by societal forces or systems. Limited facilities, inadequate personal or community resources, lack of income and restrictive laws are examples of enabling factors.

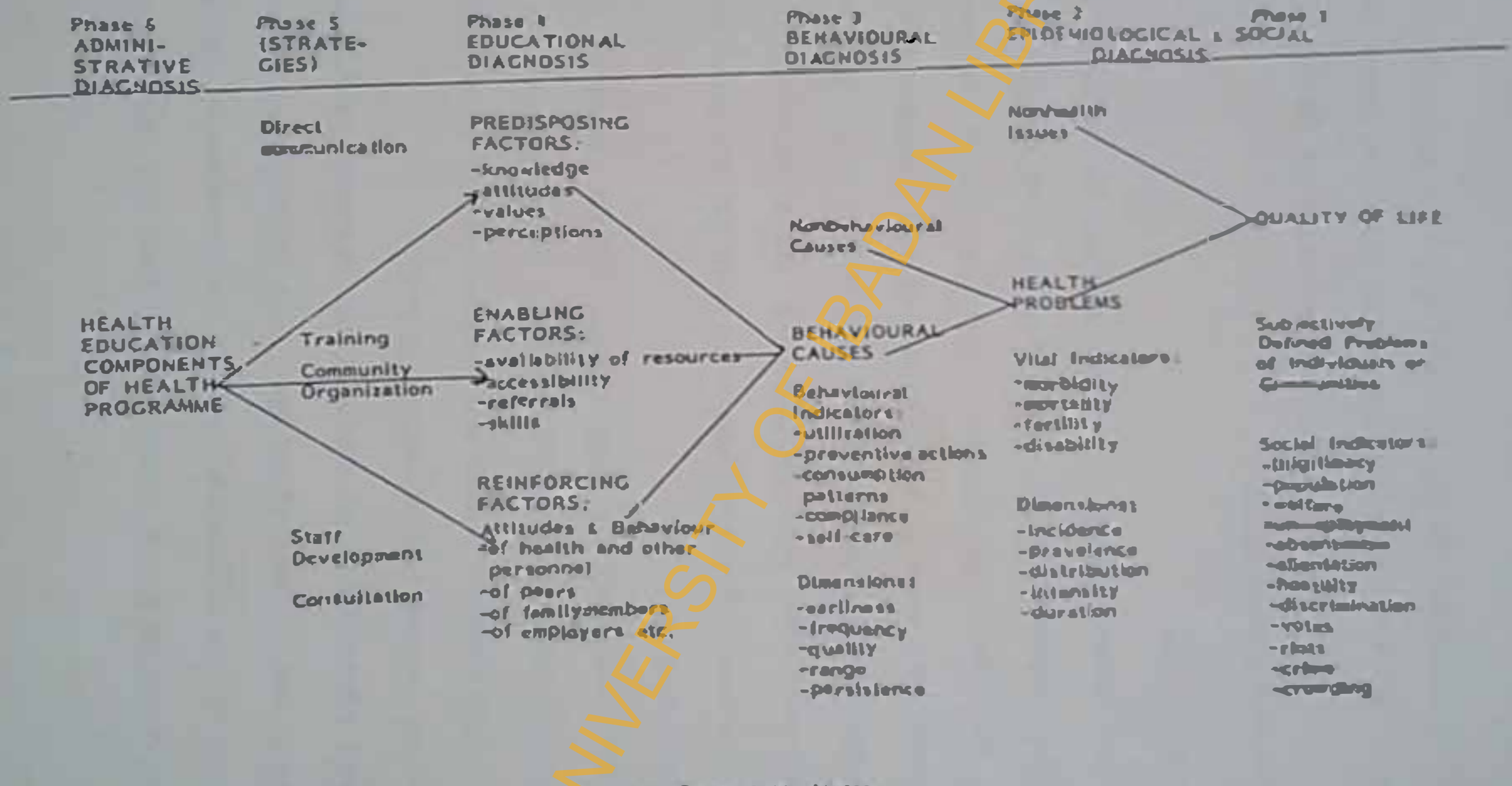
3. **Reinforcing:** these sub-factors are those related to the support the learner receives from significant others such as spouse, peer, parents, the result of which may be either to encourage or to discourage behavioural change.

Phase 5 discusses how the health educator decides which of the sub-factors in phase four are to be focused for intervention.

Phase 6 is the actual development and implementation of a programme. All that remains is the selection of the right combination of interventions and an assessment of administrative problems and resources.

Green's precede framework is selected because it gives a better understanding of the behavioural and non-behavioural factors that were preventing clients from attending regular follow-up clinic appointment and complying with contraceptive regimen at the family

FIGURE 2: The Precede Framework (Behavioural Antecedents Model)



Source: Green L.W. (1980)

planning clinics in the study area. Thus, the various reasons for compliance/non-compliance obtained can be classified into predisposing; enabling and reinforcing factors. The predisposing factors can include knowledge of the client about contraceptive use including her attitudes, values and perception to use.

The enabling factors may include availability of resources e.g. personnel, contraceptives, accessibility of family planning centre, her skills in complying with contraceptive regimen or advice or skills of health personnel.

Reinforcing factors relate to attitudes and behaviour of significant others such as health providers, peers, parents, neighbours and spouse influence which may facilitate or hinder the woman's personal motivation to take and comply with contraceptive regimen as well as follow-up appointment. This classification can help in tackling various factors identified and also in directing energy on desired health education interventions and this will be evaluated in an on-going process.

Fishbien's Theory Model

This theory, otherwise referred to as the theory of reasoned action, has been chosen to further give a better understanding to why client comply or fail to comply with contraceptive regimen.

Fishbein's Theory of Reasoned Action (Ajzen and Fishbein, 1980) was first proposed in 1967. Subsequently it has been further developed and tested. The ultimate goal of this model is to predict and understand behaviour. The theory has been applied to health behaviours such as family planning behaviour (Davidson and Jaccard, 1975; Fishbein et al, 1980; Jaccard and Davidson, 1971).

This theory assumes that an individual's behaviour is under volitional control and can be predicted from intentions. An intention is viewed as a function of two factors, viz: (a) personal factor (attitude) and (b) subjective norms (social/environmental factor). According to the model, the simplest and most efficient way to predict behaviour is to determine if people intend to perform the behaviour in question since people's intentions are assumed to be the best predictor of their behaviour (Fishbein, 1980).

There are two basic determinants of intentions. First, is the client's positive or negative evaluation of complying with the contraceptive regimen. In this realm the person's attitude towards the behaviour is determined by (1) the belief that the performance of this behaviour will result in certain outcomes or consequences (behavioural beliefs), and (2) the person's evaluation of these outcomes (Fishbein, 1980).

Second is the client's perception of whether significant others e.g. husband, boyfriend, peer, parents, etc. think that she should or should not perform the specific behaviour (that is, use contraceptives). Furthermore, her beliefs about the attitudes of other people important to her (social factor/environment/subjective norm/ normative component) towards performing the behaviour in question can influence her intention for example her Church pastor or head of her social organization or club. An individual will tend to perform a behaviour when she evaluates it positively and when she holds the belief that significant others think she should perform the behaviour.

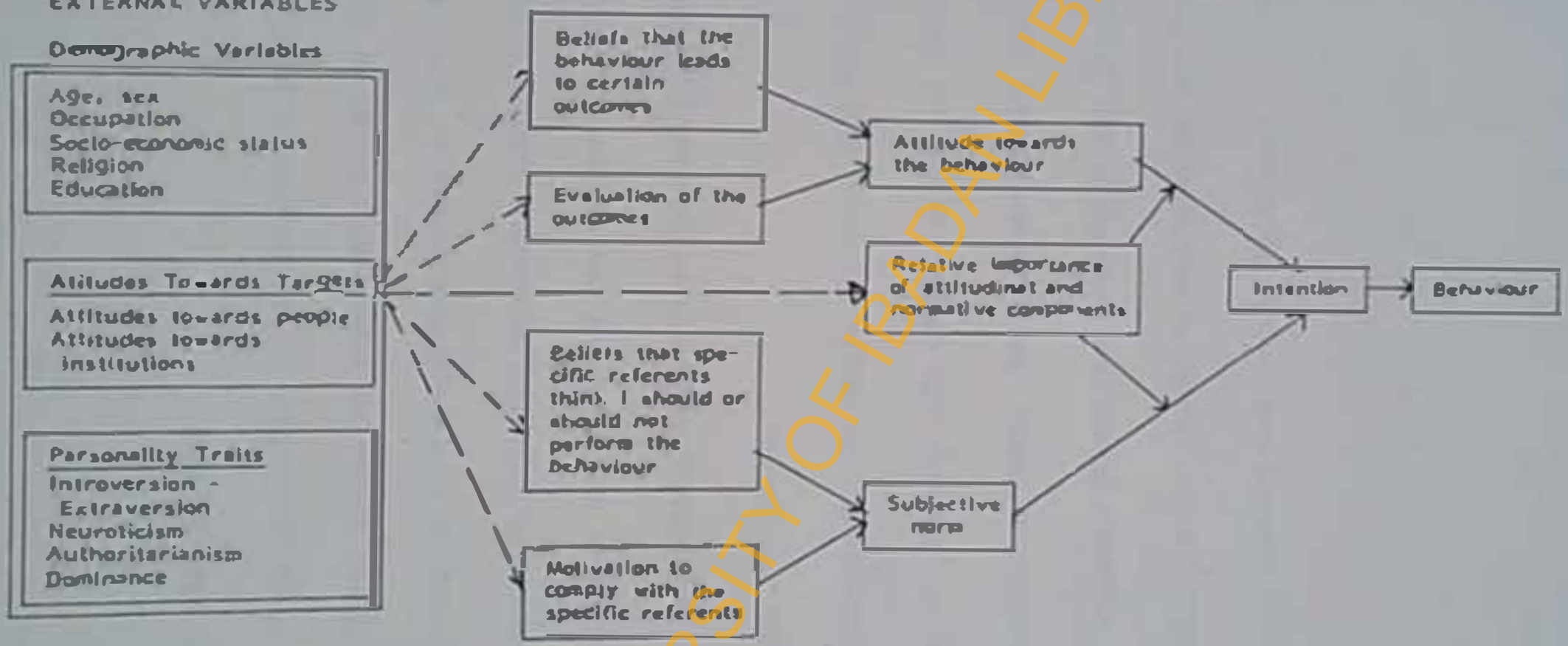
The model further proposed that different types of external variables influence intention as well as behaviour indirectly through their effects on behavioural beliefs, outcome, evaluation, normative beliefs, motivations to comply or the relative weights of the attitudinal and normative components. Demographic variables (age, sex, occupation, socio-economic status, religion and educational qualification) and personality traits are external variables which influence the relative importance of the two components (e.g. attitudinal and normative components).

The individual's personality traits which are the distinguishing quality or characteristics that make up a person's character which include his/her physical, emotional and social characteristics may

affect her compliance with contraceptive regimen. These characteristics must be taken into consideration in selecting an appropriate birth control method by the client to reduce the non-compliance rate (for example a client who is obese is not a good candidate for using oral contraceptives). Also an individual with a distinguished personality, like T.V. star will have no time for frequent follow-up appointments and will be better off with a method which has long follow-up appointment such as intra-uterine device if she does not have any contra-indication to the use.

In using this theory, family planning providers can better plan their intervention strategies. For example, if the major reason for non-compliance is that their spouses discourage them from coming to the clinic, the best intervention will be directed to patient education to the concerns of both patient and family members. Or if the non-compliance is due to side-effects produced by contraceptives, the best intervention will be geared towards re-evaluating the appropriateness of the chosen method for the client and the possibility of selecting an alternative method that will soothe the client.

FIGURE 3: Fishbein's Theory Model
(Indirect effects of external variables on behaviour)



→ possible explanations for observed relations between external variables and behaviour

⟹ stable theoretical relations linking beliefs to behaviour

Source: Adjzen and Fishbein (1980)

BACKGROUND TO THE STUDY

Historically, the realisation of the magnitude of maternal mortality and morbidity motivated women like Margaret Sanger in U.S.A. and Marie Stopes in Britain and others in the industrialised countries of the world to organise population control pressure groups so as to promote the health of the mother and child.

This pioneering efforts have metamorphosed into International Planned Parenthood Federation.

The first introduction of family planning into Nigeria began in the 1950s because of alarming rate of the number of abandoned children and criminal abortions. Some philantropists who were struck by the plight of Nigerian women particularly in the Lagos area, who died in large numbers after childbirth and induced abortion formed the Family Planning Council and invited Pathfinder of U.S.A. to Lagos

to survey the family planning needs in Nigeria. This led to the establishment of the Marriage Guidance Council at the Lagos City Council in 1958 (the first Family Planning Clinic in Lagos) under the direction of Dr. Adeniyi Jones of the Ministry of Health. This clinic later folded up due to inadequate financial support. Later, the Family Planning Council of Women Societies in Lagos was formed through the Social Welfare Workers of the Federal Ministry of Labour. The pioneer body consisted of people from all walks of life such as educators, lawyers, journalists, health professionalsand religious leaders.

In 1964, the Family Planning Council of Nigeria, a voluntary, non-profit organization later known as Planned Parenthood Federation of Nigeria (PPFN) came into existence.

With the birth of University College Hospital (as the first Teaching Hospital in the country) family planning activities commenced at Ibadan, Prof. A.O. Ojo of the Department of Obstetrics and Gynaecology, U.C.H., Ibadan started a 5-7 p.m. Family Planning Clinic in 1965 and later pioneered the training of non-Physician Family Planning Providers. At the same time, Mrs. Ebun Delano (already a trained Family Planning Provider) working with Prof. Ojo expanded the activities of this family planning clinic providing both services and training of trainers.

By 1970, sixty-one Family Planning Council clinics offered Family Planning Services and advice on a regular basis in 11 out of the then 12 States of Nigeria (Lagos 16 clinics, West 22, Midwest 3, Kwara 2, North Central 3, North Eastern 1, North Western 1, Benue Plateau 4, South Eastern 5, East Central 3, Rivers 2. Kano was not represented (Report for the International Parenthood Federation II, 1972).

In spite of the initial wide scale scattering of the family planning services in 1970, there was hardly any outward growth or further expansion in the remaining part of the seventies and early eighties. Low practice level of family planning was ostensibly demonstrated by the National Fertility Survey data of 1981-82. The survey results showed that only 6.2% of married, fecund, non-pregnant women were using any form of contraception at the time of the survey compared to 54.0% in Republic of South Korea, 31.0% in Brazil and 61.0% in Panama.

AVAILABLE FAMILY PLANNING METHODS IN NIGERIA

There are many available birth control methods in Nigeria today, some of these are listed and discussed below:

Pills

This family planning device is one of the steroidal contraceptives, which are available in form of oral tablets. They contain synthetic forms of the naturally occurring female steroidal hormones oestrogen or progesterone or both combined.

Injectable contraceptives

In many parts of the world and for vast numbers of people, injections symbolize modern medicine. This family planning device which is also in the group of steroidal contraceptives like the pills, are made and administered in the form of injections and this may be one of the reasons why injectable contraceptives are highly popular despite irregular supplies.

Today, there are two such preparations widely available on the world market: Depo Provera (depot-medroxyprogesterone acetate or DMPA), a three-month injectable and Noristerat (norethisterone enanthate or NET-EN), a two-month injectable.

Intra-Uterine Devices

The Intra-Uterine Devices (IUCD) are family planning devices which are made of flexible wire with copper wound around it or made in form of flexible plastic material with progesterone implanted in it for small releases of small amounts of progesterone direct into the

uterus. These devices are made in various forms or shapes such As t-shaped (e.g. copper T), spiral shape (e.g. Lippes loop) to fit into the uterus. They come in various sizes which are expected to fit snugly into the shape of the uterus according to the degree of laxity of the uterus which is determined by the parity of the would-be user.

Barrier methods

Barrier methods are the oldest contraceptives known. Spermicides, diaphragms and other female barrier methods have many early precursors.

Vaginal portions to immobilize or kill sperm and vaginal plugs to block sperm passage were used by the ancient civilization. Modern barrier methods such as those listed above, modern condom, foam vaginal creams, vaginal tablets etc. represent considerable evolutionary improvement over the older traditional methods which are no more popular in the urban centres.

Most barrier methods (because they are devices which are to be administered before intercourse by the user) require the user to take a conscious action to avoid pregnancy before each sexual act. For many couples this requirement is esthetically unappealing or difficult either physically or psychologically to follow consistently.

added to this, is the fact that the average use failure rates of this method is between 10-20 per cent (Population Report, 1989).

(i) Cervical caps: The cervical cap is a rubber cup used in the same manner as the diaphragm to cover the cervix and form a barrier against sperm. Caps, currently on the market must, like the diaphragm, be used with a spermicide and left in place for about six hours after intercourse. This device is commonly used among Western women who reject most systemic forms of contraception.

(ii) Spermicides: These are preparations used for killing sperms which enter through the vagina up to the cervix. They are avaliable in the forms of foams, tablets which dissolves readily on vaginal application, creams, jellies, vagina suppositories which are inserted before intercourse.

In some countries, condoms with a spermicidal lubricant are available in the market.

Periodic Abstinence

This method involves abstinence from sexual intercourse during the woman's fertile period. This method is otherwise referred to as natural family planning or fertility awareness. The method relies on such old and new techniques as the calendar (or rhythm) method,

the cervical mucus (or Billing's ovulation) method, the basal body temperature (BBT) method and the sympto-thermal method. The latter relies on a combination of indicators of fertility such as changes in cervical mucus to predict ovulation and BBT to detect its occurrence. All methods require substantial periods of sexual abstinence each cycle because of the difficulty of precisely defining the onset and duration of the fertile period. High levels of motivation and good communication between sexual partners is essential, (Population Report, 1989).

Voluntary sterilization

Voluntary sterilization is otherwise referred to as permanent surgical contraception. As the name implies, it involves a minor surgical operation in which the vas deferens is ligated in the male and the fallopian tubes are ligated (tubectomy or tubal ligation) in the female. This surgical operation can be performed on an out-patient basis without general anaesthesia, (Population Reports, 1985).

This method which is described as virtually 100 per cent effective and the best method is gradually being accepted in Nigeria by women but is yet to be accepted by the men probably due to fear about impotence.

CHOICE OF A FAMILY PLANNING METHOD

Clients should choose contraceptive methods only after adequate information on the different methods has been given. In choosing a contraceptive method, most consumers are likely to consider the following:

(1) reliability
(2) safety
(3) reversibility
(4) cost
(5) convenience
(6) consumer control
(7) cultural acceptability.

Reliability: Most consumers want a contraceptive that is 100% effective both in theory and in practice. However in practice none of the methods can be said to be 100% effective.

Safety: Even where the health risks of unwanted pregnancy are high, potential contraceptive users may be wary of a method which involves even slightly increased risk of a major health problem. Many consumers are unlikely to tolerate troublesome side-effects in a method used continuously (Population Reports, 1985).

Reversibility: Although a few couples choose permanent sterilization, most potential family planner, users around the world still want a method that allows complete return to fertility when the method is discontinued (Population Reports, 1985).

Cost: Consumers are prepared to pay for contraception in many developing countries and many prefer to purchase them through commercial outlets or private health practitioners. However, the full retail cost of most current contraceptives is prohibitive for the majority of potential Third World consumers (Population Reports, 1985).

Convenience: Motivation in the practice of family planning becomes an essential part of the service to ensure compliance. as certain family planning methods which are difficult to understand and use, those which must be used at the time of coitus, those which require a daily regime or those which necessitate having supplies on hand all require a high degree of efforts on the part of the users. Simple long acting methods have been found to be the key to sustained contraceptive practice for many potential users (Population Reports, 1985).

Consumer control: Women increasingly want to take more responsibility for their own reproductive health and prefer methods of

contraception which they can control. In the Third World cultures, when men and women are segregated and where most physicians are males or females, self-administered methods which minimize contact with doctors may have an advantage (Population Reports, 1985).

Cultural acceptability: Methods which require contact with the genital area, which produce menstrual irregularities, or which have other characteristics at odds with particular traditional mores will be less acceptable initially even if they are highly safe and effective (Population Reports, 1985).

CHAPTER THREE

METHODOLOGY

The Study Setting

In Ondo State, family planning services started with clinic services under the direction of Dr. Bregger (a Gynaecologist and Obstetrician at the then General Hospital, Akure). In November 1983, another clinic sprung up at Ilara-Mokin in Ifedore Local Government Area. In 1984, the first training of Family Planning Providers sponsored by the United Nations Fund for Population Activities (UNFPA) commenced at Aramoko with Dr. Adetunji as the training coordinator.

Today, Ondo State has a total of 40 Family Planning Clinics (Federal Ministry of Health Publication 1991). Presently in Nigeria, Family Planning is integrated into the National Midwifery curriculum and a National Policy on Population was drafted and approved by the Federal Government of Nigeria on February 4, 1988. This Policy was launched at Ondo State capital and at Local Government levels in 1990. This National Policy is aimed is aimed at enabling all Nigerians to achieve socially and economically productive lives.

The study took place in Akure Local Government Area of Ondo State. Akure, from the time of the creation of Ondo State in 1976

has been the state headquarters until it was created into a Local Government Area with its headquarters at Akure. In 1989, the Local Government Area was reorganised such that certain towns and villages formerly under this local government such as Ilara-Mokin, Ipogun, Ibule, Ijare went to Ifedore Local Government leaving Akure Local Government with Akure, Iju, Itaogbolu, Ogbese, Oda as the towns/ villages in the local government area. Today, Akure LGA is one of the twenty-six local government areas in the State.

Akure LGA is situated centrally from the major cities in the State being about 40 kilometres from Ondo, 52 kilometres from Owo, 48 kilometres from Ilesha in Osun State. Akure LGA covers a large area of about 4,320 square kilometres. It is bounded in the North by Ikerre LGA, South by Ilesha LGA in Osun State, in the West by Ondo LGA, and in the East by Owo LGA.

The population of Akure LGA from 1991 Population Census figure is 316,925.

The people are predominantly Yorubas, all speaking the Yoruba language with a difference in dialect with Akure, Iju and Itaogbolu speaking Akure dialect and Ogbese speaking Akure and partly Owo dialect.

Akure grew from a small town in the old Ondo Province in the defunct Western Region of Nigeria to the present major administrative, commercial and state headquarters having all the State Government Ministries headquarters, a Federal University of Technology, the only state School of Nursing and Midwifery, a School of Health Technology, the highest number of Family Planning Clinics in the state and the state Family Planning Coordinating Unit.

There are very few industries in Akure the state capital. This is because less than 5% of the industrial establishments in the old Western State were located in the state as at the time of creation of the state in 1976, hence the state is gradually building up its own home industries.

Akure has the largest number of health personnel in the state. Family planning facilities in the LGA are thirteen in number but for the purpose of this study the government owned family planning clinics will be utilised.

These are

(1) Army Barracks Clinic, Akure;

(2) State Specialist Hospital, Akure;

(3) Local Government Clinic and Maternity, Akure;

(4) Maternal and Child Health Care Centre, Akure, (PHC)

(5) Police Clinic, Akure;

(6) Federal University of Technology Health Service Centre;

(7) Comprehensive Health Centre, Iju/Itaogbolu;

(8) Basic Health Clinic, Itaogbolu;

(9) Basic Health Clinic, Ogbese;

These clinics are involved in various training programmes such as health providers market women C.B.D. Programme of the Better Life Programme, campaigns and workshops against AIDS, population control.

The educational facilities in the area include 40 primary schools, 18 secondary schools and one Federal University of Technology.

The local government area has pipe borne water and electricity supply in all its towns and villages.

The economic base of the people is primarily agriculture providing income and employment for over 70% of the population. Among the subsistence crops are yam, cocoyam, rice, plantains, beans, maize, pepper, tomatoes, groundnuts and a great variety of vegetables.

Fruits which are either cultivated or could be found growing in the forests include mango, grape, pawpaw, orange, pineapple and banana.

Major cash crops are cocoa, rubber, oil palm products, and kolanuts. These are sold by peasant farmers usually through licensed buying agents.

Internal exchange activities for subsistence crops are dominated by market women who organise the flow of various food crops such as yam, gari, rice, maize, plantain, beans and vegetables, in several centres of population in the towns and villages. Akure township has a shopping complex which is a commercial centre but is patronised by the privileged group because of its siting which is at the extreme of the town and the prices of goods sold there which are slightly higher than in the main township.

Other supporting occupations are tailoring, teaching, hairdressing, brickmaking, furniture etc.

Each community in the towns and villages has a community leader who is referred to as the Oba. Each household in turn has a head who is the most senior male in the household. The husband is the head of each family. Families in Akure LGA are mostly polygemous in nature with a man having two or more wives. Each wife is expected to look after her children in her own allocated apartment while the husband pays the school fees and other expenses of the children. The husband who

is the head of the family makes all decisions for all members of the family and in most cases, his decision is final and not subject to review. He determines who needs medical attention, where he/she is to receive it since he pays for the services.

A major problem in Akure LGA as in Ekiti land of the state is the issue of role performance by the person occupying the status of the head of household. To what extent is he performing his role as a husband, father, and head of household? Many of the married women particularly the illiterates tend to change husbands as a result of unfulfilled expectations from husbands in terms of financial support etc. when in fact the women are supposed to bear children on regular basis (Orubuloye, 1991).

OBJECTIVES

Broad Objective

The broad objective is to determine the contraceptive experiences of women of childbearing age in Akure LGA, Ondo State and assess the implications for subsequent choice and compliance.

Specific Objectives

1. To identify major information sources to family planning awareness and acceptance among the study population.

2. To describe the respondents contraceptive experiences in the last three years.

3. To determine which methods of family planning have high or low rates of compliance among family planning acceptors.

4. To determine the characteristics of contraceptive users who comply with contraceptive regimen and those who do not.

5. To identify factors which encourage or inhibit compliance with contraceptive regimen.

6. To use the findings in highlighting population education on contraceptives and implications for population control.

HYPOTHESES

The following assumptions are formulated to be tested. They are:-

1. Age of contraceptive users will not influence their compliance with their chosen method of contraception.

2. Marital status will not influence compliance with chosen method of contraception.

3. Respondents type of marriage will not influence their compliance with chosen method of contraception.

4. The number of living children of contraceptive users will not influence their compliance with chosen method of contraception.

5. Religion of contraceptive users will not influence their compliance with chosen method of contraception.

6. The level of education of contraceptive users will not influence their compliance with chosen method of contraception.

7. The type of job performed by contraceptive users will not influence their compliance with chosen method of contraception.

8. Respondents socio-economic status will not influence their compliance with chosen method of contraception.

9. Support given by spouse will not influence the respondents' compliance with chosen method of contraception.

10. Respondents' sources of awareness of information about family planning will not influence their compliance with chosen method of contraception.

11. Experience with first chosen method will not influence subsequent compliance with contraceptive regimen.

12. Cost of family planning services will not influence clients' compliance with chosen method of contraception.

13. The degree of conduciveness of clinic setting for privacy will not influence the respondents compliance with chosen method of contraception.

Research Design

This is a cross-sectional descriptive study designed to study women of childbearing age who have accepted a contraceptive method between January 1989 and December 1991.

For the purpose of achieving the set objectives, an interview-questionnaire was administered between February and April, 1992 to 740 randomly selected women contraceptive users. The purpose of which was to determine the contraceptive experiences of these respondents, obtain information about their demographic characteristics and their perceived reasons for compliance/non compliance with contraceptive regimen/follow-up appointment.

Time-squence of study

Screening and selection of subjects were done in the month of January, pretest in the first week in February and interviewing of respondents in all the study areas were concluded in April, 1992. interviewing of respondents was done in the morning hours (8.00 - 3.30 p.m.) of the working days for those who were still attending the clinics and office tracing. interviewing in the evenings (4.00 - 6.00 p.m.) for those who attend family planning evening clinics on Tuesdays, Mondays, Wednesdays, Tursdays and Fridays and Saturdays eveninings are spent in tracing clients who cannot be traced in the clinics to their homes.

The study population

The study population consists of all women of childbearing age (15 - 49 years) who registered for a contraceptive method in any of the nine government owned family planning clinics. These clinics have reliable records of appointments and attendance at the clinics and are better patronised by clients.

1. The subjects must have accepted and utilised a contraceptive method between January 1989 - December 1991.
2. There must have been a record of her full home/office address in the clinic record.

Sample size and sampling procedure

All women of childbearing age i.e 15 - 49 years who have accepted a family planning method at any of the nine clinics in the LGA were eligible for the study.

A stratified random sampling technique was used to select the study population. First, the nine government owned family planning clinics in the LGA were stratified into six based on management differences.

1. Military Group - Army Barracks Clinics
2. Educational Institution - Federal University of Technology Health Services Centre, Akure.
3. Police Group - Police Clinic, Akure
4. Rural Setting Group - (1) CHC Iju-Itaogbolu
   (2) BHC Ogbese
   (3) BHC Itaogbolu

5. Local Government Based - (1) Arakale Local Government Maternity and Dispensary, Akure.

(2) Maternal and Child Health Care Services (PHC), Arakale, Akure.

6. Hospital Setting Group: State Specialist Hospital, Akure.

Secondly, not less than 50% of the family planning clinics in each group was selected randomly from the six categories using a table of random numbers. A total of seven clinics out of nine were finally selected as follows:

1. Army Barracks Clinic
2. Federal University of Technology Clinic
3. CHC Iju-Itaogbolu
4. BHC Ogbese
5. State Specialist Hospital, Akure
6. MCH Centre, Arakale, Akure
7. Police Clinic

The total number of eligible contraceptive users in the selected clinics as contained in the attendance register for the study period was first compiled (The total number for each clinic is recorded in Figure 4). Army Barracks Clinic - 61 clients

Police Clinic - 20 clients

State Hospital - 758 clients

CHC Iju-Itaogbolu - 106 clients

BHC Ogbese - 17 clients

FIGURE 4: SAMPLING PROCEDURE

Family Planning Clinics stratified according to Management Groups	Total No. of contraceptive users	Total No. of Subjects. after selecting 40% of contraceptive users
MILITARY GROUP		
(1) Army Barracks Clinic, Akure	61	24
POLICE GROUP		
(2) Police Clinic, Akure	20	8
HOSPITAL SETTING GROUP		
(3) *State Specialist Hospital, Akure	758	303
RURAL SETTING GROUP		
(4) *(1) CHC Iju/Itaogbolu	106	42
(2) BHC Iju/Itaogbolu	-	-
*(3) BHC Ogbese	17	6
LOCAL GOVERNMENT GROUP		
(5) (1) Arakale LG Mat. Centre & Dispensary, Akure	-	-
*(2) M.C.H Centre, Akure	824	329
EDUCATIONAL INSTITUTION GROUP		
(6) *(1) FUTA Health Services Centre, Akure	70	28
T O T A L	1,856	740

KEY: *Clinics selected for study.

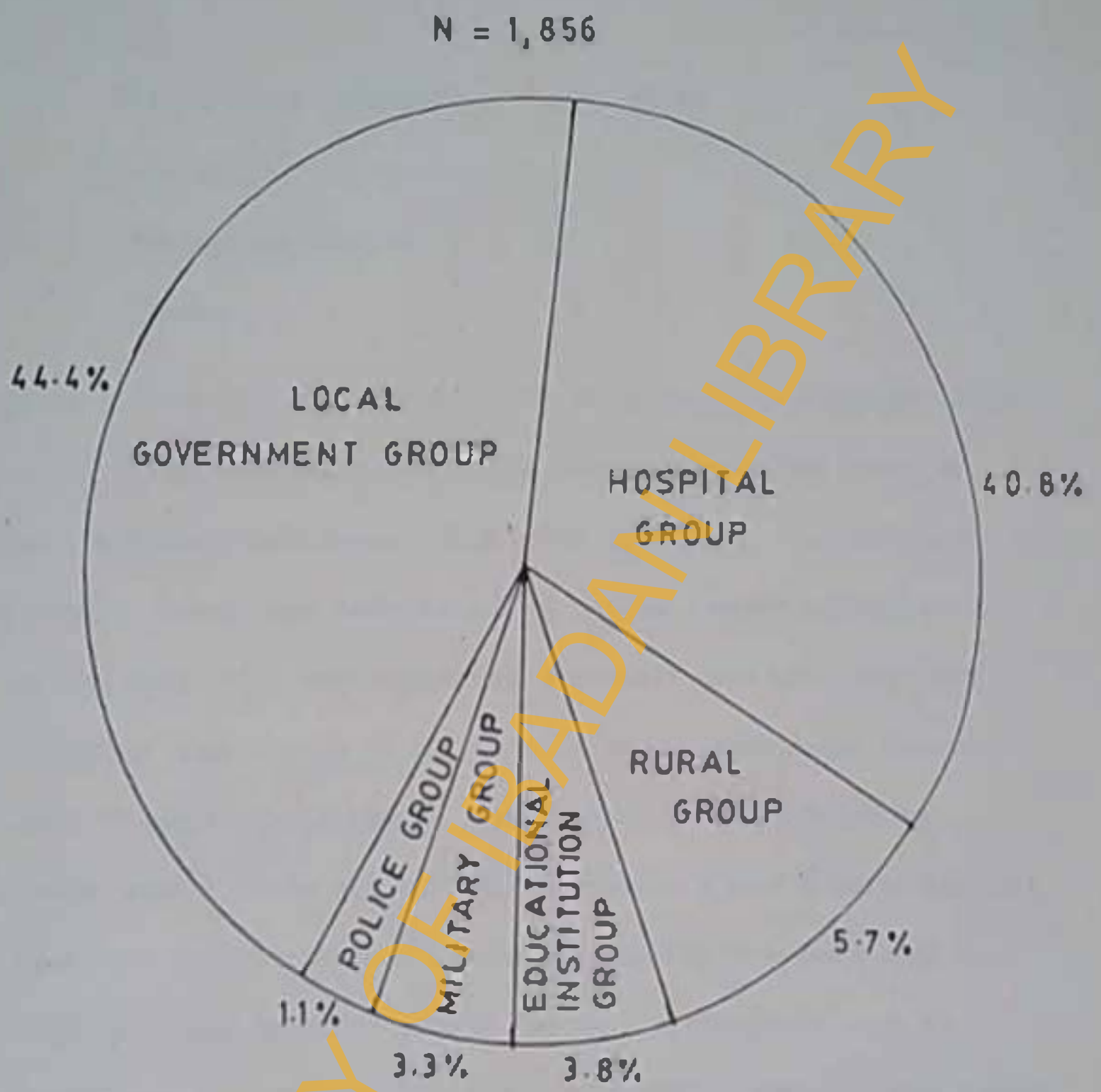


Fig. 5 : Distribution of contraceptive users in the selected Clinics in Akure Local Government Area

M.C.H Centre Arakale - 824 clients

Federal University of Technology Health Centre - 70

This gives a total of 1,856 clients. 40% of all eligible acceptors from each of the seven selected clinics were randomly selected using a systematic sampling technique. Every 5th person on the compiled list of eligible client were selected giving a total sample population of 740. Out of this 740 study population compliers and non-compliers were identified from review of the records as follows: Army Barracks clinic with 24 respondents had 16 compliers and 8 non-compleirs. Police clinic with 8 study subjects had 3 compliers and 5 non-compliers. State Specialist Hospital with 303 subjects had 242 compliers and 61 non-compliers. Comprehensive Health Centre Iju/Itaogbolu with 42 respondents had 33 compliers and 9 non-compliers. Basic Health Clinic Ogbese with 6 subjects had 4 compliers and 2 non-compliers. Maternal and Child Health Care Services, Arakale with 329 study subjects had 250 compliers and 79 non-compliers and Federal University of Technology Health Services Centre with 28 study subjects had 23 compliers and 5 non-compliers. A total of 571 compliers and 169 non-compliers were finally selected for the study (See Appendix C).

instrument for data collection

Questionnaire

The main data collection instrument was a questionnaire. A self administered questionnaire consisting of closed and open-ended questions was developed.

The questionnaire divided into three parts, sought information on

1. Demographic characteristics such as age, marital status, residential address, religion, occupation, educational qualification, income etc.
2. Respondents acceptance process. This included source of information awareness on contraceptive use, experience with use of first chosen contraceptive method subsequent choice and reasons for change and compliance.
3. Assessment of quality of service provided at the different clinics by the health personnel and facilitating or inhibiting factors related to service provision which have implications for compliance with contraceptive regimen.

Review of records

Records that were reviewed included clients register of attendance and individual client card to determine the level of contraceptive acceptance and compliance.

Reliability and validity of instrument

In order to ensure reliability and validity, the services of public health specialists and experts in medical statistics were sought to know the extent to which the questions in the questionnaire addressed the variables of interest in the study.

Instrument for data collection was translated into Yoruba language for better understanding and interpretation for respondents who cannot read or translate English. This Yoruba version was re-translated back into English by another expert. The original and later English versions were compared and were deemed to be approximate. This was to ensure reliability.

Pre-testing of questionnaires was carried out on 20 women contraceptive users at the Family Planning Clinic, University College Hospital, Ibadan and 10 contraceptive users at the Primary Health Care Centre, Ado-Ekiti.

Confusing and difficult questions generated by the pre-test were re_worded and re-tested. In addition few irrelevant questions were removed while a few inclusions were made where important information was found to have been omitted in the responses. For example in the demographic section on occupation "unemployed" and "artisan" had to be included in the answer options. Also, for educational qualification "Modern Three" had to be included in the options.

In the acceptance process section, the questionnaire did not reflect approval or support from spouse which could be a factor that can encourage or hinder compliance, this was added.

The response to Question 13 which stated that "What was your major reason for going to the clinic?" and that of Question 14 which states "If the reason was to obtain contraceptive, what was your reason for seeking the use of contraceptives?" were found to be identical therefore Question 14 was deleted.

In Question 28, it was found that many of the respondents gave the date the interview was conducted as the day of last clinic attendance instead of the last date before the interview. This information was therefore included.

In Question 29, in the light of the findings at the pre-test, "every 6 months" had to be included in the answer options for regular follow-up appointment.

It was found that the questionnaire after analysis did not have any measure of compliance with the contraceptive regimen hence the inclusion of Questions 31 and 32.

Options for assessment of cost of family planning services in Question 35 was modified to read "high", "moderate", and "low".

Finally, other answer options for Question 36 which sought information on how a client gets to the clinic were included such as

"I drive myself" "husband drops me" in view of the pre-test findings.

Data collection stage

Prior to the main study, two research assistants were trained for a period of one week on how to collect data. Before the collection of data permission to conduct the study was obtained from the selected clinics.

The clinics were visited to obtain permission from heads of units in the various establishments.

A total of 740 questionnaires was administered to clients at the clinics, homes and offices by the author and two research assistants between the hours of 8.00 a.m. to 6.00 p.m. For respondents who can read and write, subjects completed the questionnaires on the spot and were retrieved immediately while respondents who cannot read and write were interviewed and the answer, filled in by the author or research assistants.

Some of the addresses given by clients who had defaulted could not be traced but such clients were substituted for in the attendance register using the systematic random sampling technique.

All the questionnaires administered were returned. However five (5) questionnaires were not fully completed and had to be discarded.

Method of data analysis

The results from the questionnaires were manually sorted, edited, coded and fed into the computer for analysis. Responses to open-ended questions were coded using the variations in the responses to develop the coding guide.

The frequency data were arranged in contigency tables, while inferential statistics were used in analyzing the data. Tables, diagrams were used to describe the variables in the findings. The relationships and associations between these variables were determined using the chi-squared test at 5% degree of confidence interval and z-normal distribution test.

Limitations of the study

A few problems were encountered during the study, some of these are (1) some of the study subjects who were randomly selected from the attendance register and who had to be traced to their homes could not be reached because their addresses were incorrect and untraceable. To correct this anomaly, substitution had to be made for such subjects from the attendance register of eligible respondents. In addition, some of these clients who had defaulted from between 3 months to 1 year had to be traced to their homes on more than two occasions before they were interviewed. The substitution for clients with

untraceable addresses as well as those with repeatedvisits prolonged the period of study as more time was spent in locating these clients and thus increased financial expenses.

Other limitations included the unwilling attitude of many respondents in answering questions or being made to fill the questionnaire in spite of assurances regarding anonymity and confidentiality. This arose because many of the respondents attended the family planning clinics without the approval of their spouses. The reluctance in answering questions prolonged the interview period for some of the respondents hence it slowed the pace of completion of the data collection.

Studies on contraceptive compliance were observed by the author to be quite few. If there had been documentation of more studies on contraceptive experience and compliance, it would have enriched the literature review of this study.

CHAPTER FOUR

RESULTS

This chapter presents the findings of the compliance behaviour of the respondents. Hypotheses generated on demographic, attitudinal and behavioural variables were tested for acceptance or rejection. Reasons for non-compliance are shown.

In all, 735 (99.3%) contraceptive users responded comprising 23 (3.1%) from Army Barracks Clinic, 8 (1.1%) from Police Clinic, 303 (41.2%) from the State Specialist Hospital, 326 (44.3%) from the Maternal and Child Health Care Service Centre, Akure. Others include 5(0.7%) from the Basic Health Clinic, Ogbese, 28(3.8%) from the Federal University of Technology Health Service Centre and 42 (5.7%) from the Comprehensive Health Centre Iju/Itaogbolu.

DEMOGRAPHIC CHARACTERISTICS

Respondent's ages and compliance

HYPOTHESIS 1: Age of contraceptive users will not influence their compliance with their chosen method of contraception.

Respondents' ages and compliance are shown in Table 1. In all, respondents' age range falls between 15 and 49 years. Of these 735

respondents 203 (27.6%) were in the age bracket of 30 - 34 years. The highest number of compliers 161 (28.4%) and non-compliers 42 (24.9%) were found between the ages of 30 - 34 years.

The result of chi-square test on respondents' ages and compliance was not significant statistically ($P > 0.05$). Therefore, the above hypothesis is accepted.

Respondents marital status and compliance

HYPOTHESIS 2: Marital status will not influence compliance with chosen method of contraception. The marital status of the contraceptive users are compared in Table 2. Majority of the contraceptive users 657 (89.4%) were married. 78 (10.6%) were not married. Majority of the compliers 514 (90.8%) and non-compliers 143 (84.6%) were found among married women.

Statistically, the result of chi-square test on respondents marital status and compliance was significant ($P < 0.05$). The result suggests that the marital status of contraceptive users does influence their compliance with chosen method of contraception. Therefore the above hypothesis is rejected.

Type of marriage of respondents and compliance

HYPOTHESIS 3: Respondents type of marriage will not influence their compliance with chosen method of contraception.

Table 3 displays the compliance status of respondents and their type of marriage. Majority of the respondents 468 (63.7%) were from monogamous marriage while 235 (32.0%) were from polygamous marriage. The result shows that more compliers 368 (65.0%) and non-compliers 100 (59.2%) are found from the monogamous marriage. However out of 235 (32.0%) respondents studied among polygamous marriage 55 (32.5%) were non-compliers compared with 180 (31.8%) respondents who were compliers.

Statistically, the result of chi-square test was not significant ($P > 0.05$). This shows that the type of marriage of respondents does not influence their compliance. Therefore, the earlier hypothesis is accepted.

The number of respondents' living children and compliance

HYPOTHESIS 4: The number of living children of contraceptive users will not influence their compliance.

Table 4 present the compliance status of contraceptive users in relation to the number of living children. Out of 735 respondents 580 (78.9%) had 4-6 living children while 152 (20.7%) had 0-3 living children. The highest percentage of compliers 383 (67.7%) and non-compliers 100 (59.2%) were found among respondents with 4-6 living children.

Statistically, the result of chi-square test on clients' number of living children was significant ($P < 0.05$). The result suggests that the number of living children of contraceptive users does influence their compliance with the chosen method of contraception. Therefore the above hypothesis is rejected.

Educational qualification and compliance

HYPOTHESIS 5: Religion of contraceptive users will not influence their compliance with chosen method of contraception.

In Table 5, religion of respondents and compliance with chosen method of contraception are presented. Most respondents 627 (85.3%) were christians while 89 (12.1%) were muslims and 7 (1.0%) practise other religions. The percentage of christians who complied 483 (85.3%) and those who did not comply 144 (85.2%) were nearly equal. Similarly, the percentage of compliers among muslims 72 (12.7%) and non-compliers 17 (10.0%) were close. However, there were more non-compilers 4 (2.4%) than compliers 3(0.5%) among those practising other religions.

Statistically, the result of chi-square test on religion of respondents and compliance was not significant ($P > 0.05$). This means that the religion of contraceptive users does not influence compliance. Therefore, the earlier hypothesis is accepted.

Educational qualification and compliance

HYPOTHESIS 6: The level of education of contraceptive users will not influence their compliance with chosen method of contraception.

Table 6 compares contraceptive users' educational qualification with their compliance status. Most respondents 300 (40.8%) had Primary/Modern school education, 224 (30.5%) had secondary education and 85 (11.6%) had post-secondary education while 92 (12.5%) were non-literates.

The percentage of compliers and non-compliers among the non-literates was almost the same while there are more compliers among respondents with primary/modern education 237 (41.9%) and respondents with secondary education 178 (31.4%). When compared with respondents with post secondary education 29 (17.2%) and any other educational qualification (Arabic) 10 (5.9%), the percentage of non-compliers was higher.

Statistically, the result of chi-square test on educational qualification of respondents and compliance was not significant ($P > 0.05$). This means that the level of education of respondents does not influence their compliance. Therefore the earlier hypothesis is accepted.

Occupation of respondents and compliance

HYPOTHESIS 7: The type of job performed by contraceptive users will not influence their compliance with chosen method of contraception.

Table 7 presents the occupation of respondents and compliance. The bulk of respondents are traders 335 (48.4%) and civil servants, 272 (37.1%). More respondents in the complier group, 289 (51.1%), are traders in contrast with civil servants 72 (42.6%) in the non-complier group. There are more non-compliers among unemployed/housewives/ students 9 (5.4%) as compared to the compliers 9 (1.6%).

Statistically, the result of chi-square test on occupation and compliance was significant ($P < 0.05$). This means that the occupation of respondents does influence their compliance. Therefore the earlier hypothesis is rejected.

Socio-economic status of respondents and compliance

HYPOTHESIS 8: Respondents socio-economic status will not influence their compliance with chosen methods of contraception.

Table 8 presents respondents' socio-economic status and compliance with chosen method of contraception. Majority of the respondents 488 (66.4%) earned between 0 - ₦400.00 per month while 232 (31.6%) earned ₦400 - ₦800.00 and 15 (2.0%) earn ₦800 - ₦1,200. The highest percentage of compliers 380 (67.1%) and non-compliers

108 (63.9%) were found among those earning 0-₦400.00 per month. However, the highest percentage of non-compliers was found among the respondents earning 0-₦400.00 per month.

Statistically, the result of chi-square test on socio-economic status of respondents and compliance was not significant ($P > 0.05$). This means that the socio-economic status of respondents does not influence their compliance. Therefore, the earlier hypothesis is accepted.

TABLE 1

Respondents' Ages and Compliance

Respondents' Age	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
*15 - 19 years	4	0.7	1	0.6	5	0.7
20 - 24 years	38	6.7	16	9.5	54	7.3
25 - 29 years	111	19.6	36	21.3	147	20.0
30 - 34 years	161	28.4	42	24.9	203	27.6
35 - 39 years	144	25.4	41	24.3	185	25.2
40 - 44 years	74	13.1	21	12.4	95	12.9
45 - 49 years	34	6.0	12	7.1	46	6.3
Total	566	100	169	100	735	100

$X^2 = 1.623025$ df = 6

$P > 0.05$

* Excluded from X^2 calculation.

TABLE 2

Respondents' Marital Status and Compliance

Respondents' Marital Status	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Unmarried women	52	9.2	26	15.4	78	10.6
Married women	514	90.8	143	84.6	657	89.4
Total	566	100	169	100	735	100

$X^2 = 4.636$ df = 1 (P = 0.03)

P < 0.05

TABLE 3

Respondents' Type of Marriage and Compliance

Type of Marriage	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Monogamous	368	65.0	100	59.2	468	63.7
Polygamous	180	31.8	55	32.5	235	32.0
No Response*	18	3.2	14	8.3	32	4.3
Total	566	100	169	100	735	100

$X^2 = 0.660$ df = 1 (P = 0.416)

P > 0.05

*Excluded from X^2 calculations

TABLE 4

Respondents' Living Children and Compliance

Number of Living Children	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
0 - 3 living children	180	31.8	69	40.8	152	20.7
4 - 6 living children	383	67.7	100	59.2	580	78.9
*No response	3	0.5	-	-	3	0.4
Total	566	100	169	100	735	100

$X^2 = 4.156$ df = 1 (P = 0.04)

P < 0.05

* Excluded from X^2 calculation.

TABLE 5

Religion of Respondents and Compliance

Respondents Religion	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Christian	483	85.3	144	85.2	627	85.3
Muslim	72	12.7	17	10.0	89	12.1
Other Religions	3	0.5	4	2.4	7	1.0
*No response	8	1.4	4	2.4	12	1.6
Total	566	100	169	100	735	100

$X^2 = 5.388$ df = 2 (P = 0.06)

P > 0.05

* Excluded from X^2 calculation

TABLE 5

Religion of Respondents and Compliance

Respondents Religion	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Christian	483	85.3	144	85.2	627	85.3
Muslim	72	12.7	17	10.0	89	12.1
Other Religions	3	0.5	4	2.4	7	1.0
*No response	8	1.4	4	2.4	12	1.6
Total	566	100	169	100	735	100

$X^2 = 5.388$ df = 2 (P = 0.06)

P > 0.05

* Excluded from X^2 calculation

TABLE 6

Educational Qualification of Respondends and Compliance

Respondents Educational Background	Compliers		Non-Compliers		Total	
	No	%	No	%	No	%
Non-literates	71	12.5	21	12.4	92	12.5
Primary/Modern Education	237	41.9	63	37.3	300	40.8
Secondary Education	178	31.4	46	27.2	224	30.5
Post-Secondary Education	56	9.9	29	17.2	85	11.6
Any other (Arabic)	23	4.1	10	5.9	33	4.5
No Response	1	0.2	-	-	1	0.1
Total	566	100	169	100	735	100

$X^2 = 8.366$ df = 4 (P = 0.07)

P > 0.05

* Excluded from X^2 calculation.

TABLE 7

Type of Job Performed by Respondents and Compliance

Type of Job	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Unemployed/House Wives						
Students	9	1.6	9	5.4	18	2.5
Traders	289	51.1	66	39.0	355	48.4
Artisan	48	8.5	12	7.1	60	8.2
Civil Servant	200	35.3	72	42.6	272	37.1
Others	19	3.3	10	5.9	29	3.8
*No response	1	0.2	-	-	1	0.1
Total	566	100	169	100	735	100

$X^2 = 15.607$ df = 4 (P = 0.003)

P < 0.05

*Excluded from X^2 calculation.

TABLE 8

Socio-Economic Status of Respondents and Compliance

Respondents Monthly Income	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
0 - ₦400	380	67.13	108	63.9	488	66.4
₦400 - ₦800	174	30.74	58	34.3	232	31.6
₦800 - ₦1,200+	12	2.12	3	1.8	15	2.0
Total	566	100	169	100	735	100

$X^2 = 0.808$ df = 2 (P = 0.66)

P > 0.05

OTHER CHARACTERISTICS RELATED TO COMPLIANCE WITH CONTRACEPTIVE REGIMEN

HYPOTHESIS 9: Support given by spouse will not influence the respondents' compliance with chosen method of contraception.

Tables 9 and 10 present the spouses' support for contraceptives used by the respondents. In Table 9, out of 735 respondents, 381 (51.8%) indicated that their spouse support the use of contraceptives while 344 (46.8%) indicated their spouses' non-support for use of contraceptives.

Table 10 compares the assistance given by respondents' spouses with their compliance status. Out of 735 respondents, 284 (38.6%) indicated that their spouses gave no support, 156 (21.2%) of the respondents spouses gave moral/physical support, while 133 (18.1%) gave financial support. The highest percentage of compliers, 230 (40.6%) and non-compiler, 54 (32.0%) were found among those whose spouses gave no support.

There is a higher percentage of non-compliance among respondents whose spouses gave financial as well as moral and physical support. The percentage of compliance among respondents whose spouses gave no support 230 (40.6%) was higher than the percentage of non-compliance 54 (32.0%) among the same group.

Statistically, the result of chi-square test on the support received from spouses in respect to contraceptive users and compliance was not significant ($P > 0.05$). The result suggests that support received from clients' spouses does not influence their compliance with chosen method of contraception. Therefore, the above hypothesis is accepted.

Respondents' sourcesof awareness of information about family planning and compliance

HYPOTHESIS 10: Respondents' sources of awareness of information about family planning will not influence their compliance with chosen method of contraception.

Table 11 compares the respondents' sources of awareness of information on contraceptive use with their compliance status. 547 (74.4%) of the respondents wore aware of contraception through the

health staff and 111 (15.2%) through their spouses. The highest percentage of compliers, 426 (75.3%) and non-complier 121 (71.6%) were found among those whose source of information were from health personnel.

The percentages of non-complier whose source of information was from husband/boy friends 29 (17.2%) and others (friends, in-laws etc), 9 (5.3%) were higher than those of the complier group with 82 (14.5%) and 25 (4.4%) respondents respectively. The percentage of complier among respondents who had their source of information from the media 32 (5.6%) was higher than those in the non-complier group 5 (3.0%).

Statistically, the result of chi-square test on respondents source of awareness of information about family planning and compliance was not significant ($P > 0.05$). This result suggests that source of awareness of information about family planning will not influence respondents compliance with chosen method of contraception. Therefore the above hypothesis is accepted.

Prior exposure to family planning information and respondent's compliance

Table 12 presents the information on whether respondents were given prior explanation about family planning before acceptance in relation to their subsequent compliance status. Most respondents 697

TABLE 9

Spouse Support of Use of Contraceptives and Compliance

Responses	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Yes	284	50.2	97	57.4	381	51.8
No	275	48.6	69	40.8	344	46.8
No response	7	1.2	3	0.8	10	1.4
Total	566	100	169		735	100

$X^2 = 2.689$ df = 1 (P = 0.101)

P > 0.05

* Excluded No responses

TABLE 10

Assistance Received by Respondents from Spouse and Compliance

Spouses' Support	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Financial support	100	17.7	33	19.5	133	18.1
Moral/physical support	119	21.0	37	21.9	156	21.2
None	230	40.6	54	32.0	284	38.6
*No response	117	20.7	45	26.6	162	22.1
Total	566	100	169	100	735	100

$X^2 = 2.34$ df = 2 (P = 0.310)

P > 0.05

* Excluded from X^2 calculation

TABLE 11

Respondents' Source of Awareness of Information about Family Planning

Respondents source of information	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Health staff	426	75.3	121	71.6	547	74.4
Media (TV, Radio) Posters etc)	32	5.6	5	3.0	37	5.0
Husband/Boy friend	82	14.5	29	17.2	111	15.2
Others (friends inlaw)	25	4.4	9	5.3	34	4.6
*No response	1	0.2	5	2.9	6	0.8
Total	566	100	169	100	735	100

$X^2 = 2.90$ df = 3 (P = 0.406)

P > 0.05

* Excluded from X^2 calculation

TABLE 12

Prior Exposure to Family Planning Information and Respondents' Compliance

Prior exposure to family planning information	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Yes	542	95.8	155	91.7	697	94.8
No	7	1.2	3	1.8	10	1.4
*No response	17	3.0	11	6.5	28	3.8
Total	566	100	169	100	735	100

$X^2 = 0.04$ df = 1 (P = 0.8393)

P > 0.05

*Excluded from X^2 calculation.

TABLE 13

Respondents' Reasons for Clinic Attendance and Compliance

Reasons	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
I want to space my children	252	44.5	75	44.4	327	44.5
Avoid unnecessary pregnancy	72	12.7	38	22.5	110	14.9
Rest for a while	21	3.7	5	3.0	26	3.5
Want healthy living	19	3.4	7	4.1	26	3.6
Stop child bearing	180	31.8	36	21.3	216	29.4
For family planning Education	7	1.2	4	2.4	11	1.5
I do not know	2	0.4	1	0.6	3	0.4
Counselling	7	1.2	3	1.8	10	1.4
Husband has other wives	1	0.2	-	-	1	0.1
No response	5	0.9	-	-	5	0.7
Total	566	100	169	100	735	100

TABLE 14

First Choice Contraceptive Method

Methods	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
I.U.D	224	39.6	52	30.8	276	37.5
Pills	102	18.0	50	29.6	152	20.7
Injectable	188	33.2	46	27.2	234	31.8
Condom	30	5.3	11	6.5	41	5.6
Diaphragm	21	3.7	6	3.5	27	3.7
Others	1	0.2	1	0.6	2	0.3
No response	-	-	3	1.8	3	0.4
Total	566	100	169	100	735	100

TABLE 15

Experience with First Chosen Method and Subsequent Compliance

First Experiences	Compliers		Non-Compilers		Total	
	No.	%	No.	%	No.	%
Method effective/No complaints	473	83.6	7	4.1	480	65.3
Experienced side effects	-	-	40	23.7	40	5.4
*Method not effective	2	0.3	11	6.5	13	1.8
*Services too expensive	-	-	1	0.6	1	0.1
Staff poor relationship	-	-	7	4.1	7	1.0
Inconveniences suffered (Problems of transportation distance too far clinic time not suitable, long waiting time at clinic)	91	16.1	100	59.2	191	26.0
*No response	-	-	3	1.8	3	0.4
Total	566	100	169	100	735	100

$X^2 = 260.29$ df = 1 (P = 0.000001)

P < 0.05

* Excluded from X^2 calculations.

TABLE 16

First chosen contraceptive method and respondents' experiences in relation to their compliance status

Contraceptive Methods	COMPLIERS									NON-COMPLIERS									Overall Total
	Experiences						Total			Experiences						Total			
	Method effective	Had side-effect	Method not effective	Services too expensive	Staff poor interpersonal relationship	Suffered inconveniences	No.	%		Method effective	Had side-effects	Method not effective	Services too expensive	Staff poor interpersonal relationship	Suffered inconveniences	No.	%		
I.U.D	171 (30.2)	-	-	-	-	53 (9.4)	224	39.6		2 (1.2)	18 (10.6)	-	-	2 (1.2)	30 (17.7)	52	30.8		276
Pills	102 (18.0)	-	-	-	-	-	102	18.0		5 (2.9)	9 (5.3)	1 (1.6)	-	2 (1.2)	33 (19.5)	50	29.6		152
Injectables	157 (27.7)	-	-	-	-	31 (5.5)	188	33.2			13 (7.7)	2 (1.2)	-	3 (1.8)	28 (16.6)	46	27.2		234
Condoms	25 (4.4)	-	-	-	-	5 (0.9)	30	5.3			-	4 (2.4)	1 (0.6)	-	6 (3.5)	11	6.5		41
Diaphragm Foams etc	17 (3.0)	-	2 (0.3)			2 (0.3)	21	3.7			-	4 (2.4)	-	-	2 (1.2)	6	3.5		27
Others (Periodic abstinence Withdrawal	1 (0.2)					1 (0.2)	1	0.2				-		-	1 (0.6)	1	0.6		2
No response	-					-	-					-		-		3	1.8		3
TOTAL	473 (83.6)		2 (0.3)			91 (16.1)	566	100		7 (4.1)	40 (23.7)	11 (6.5)	1 (0.6)	7 (4.1)	100 (59.2)	169	100		735

TABLE 17

Reasons for change of method and compliance

Reasons for change	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Side-effects	4	0.7	19	11.2	23	3.15
Method not suitable for body	2	0.4	5	3.0	7	1.0
Excessive menses	4	0.7	11	6.5	15	2.0
Husband does not like method	2	0.4	-	-	2	0.3
I always have pains	-	-	3	1.8	3	0.4
I missed my menses	2	0.3	9	5.3	11	1.5
Age barrier	5	0.9	5	2.9	10	1.4
Method wastes time	1	0.2	3	1.8	4	0.5
Method due for change	2	0.3	1	0.6	3	0.4
No response	544	96.1	113	66.9	657	89.4
Total	566	100	169	100	735	100

TABLE 18

Assessment of Cost of Family Planning and Compliance

Assessment of Cost of family planning	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
High	55	9.7	15	8.9	70	9.5
Moderate	227	40.1	96	56.8	323	44.0
Low	283	50.0	58	34.3	341	46.4
*No response	1	0.2	-	-	1	0.1
Total	566	100	169	100	735	100

$X^2 = 15.23679$ df = 2 (P = 0.0004)

P < 0.05

* Excluded from X^2 calculation.

TABLE 19

Respondents' mode of transportation and compliance

Respondents Mode of Transportation	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Taxi	381	67.3	113	66.9	494	67.2
Bus	40	7.1	16	9.5	56	7.6
Trekking	98	17.3	22	13.0	120	16.3
Lift	3	0.5	2	1.2	5	.7
I drive myself	15	2.7	7	4.1	22	3.0
Husband drops me	29	5.1	9	5.3	38	5.2
Total	566	100	169	100	735	100

$X^2 = 4.25435$ df = 5 (P = 0.513)

P > 0.05

TABLE 20

Respondents' change in contraceptive use and compliance

Number of times Respondents Change Method	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
None	509	89.9	139	88.2	648	88.2
One	48	8.5	20	11.8	68	9.2
*Two	3	0.5	7	4.1	10	1.4
*Three	1	0.2	2	1.3	3	0.4
No response	5	0.9	1	0.6	6	0.8
Total	566	100	169	100	735	100

$X^2 = 2.367$ df = 2 (P = 0.306]

P > 0.05

* Excluded from X^2 calculation.

TABLE 21

Respondents' change of contraceptive methods

Methods	1st Chosen Method		2nd Chosen Method		3rd Chosen Method		4th Chosen Method
I.U.D	276	37.5	294	40.0	291	39.6	-
Pills	152	20.7	137	18.7	140	19.1	-
Injectables	234	31.8	247	33.6	238	32.4	-
Condom	41	5.6	36	4.9	40	5.4	-
Cream/foams Diaphragm tablet	27	3.7	14	1.9	14	1.9	-
Withdrawal Method	2	0.3	6	0.8	6	0.8	-
Periodic Abstinence	-	-	-	-	6	0.8	-
No response	3	0.4	1	0.1	-	-	-
Total	735	100	735	100	735	100	

TABLE 22

Assessment of Family Planning Providers Skills and Respondents' Compliance

Degree of Skill possessed by Health Provider	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
High	81	14.3	30	17.7	111	15.1
Moderate	463	81.8	131	77.5	594	80.8
None	4	0.7	2	1.2	6	0.8
*No response	18	3.2	6	3.6	24	3.3
Total	566	100	169	100	735	100

$X^2 = 1.68001$ df = 2 (P = 0.431)

P > 0.05

* Excluded from X^2 calculation.

TABLE 23

Attitude of family planning providers and respondents' compliance

Attitude of Family Planning Provider	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Abusive/bully	11	1.9	10	5.9	21	2.8
Not abusive or bully	480	84.8	132	78.1	612	83.3
Don't know	54	9.5	17	10.1	17	9.7
*No response	21	3.8	10	5.9	31	4.2
Total	566	100	169	100	735	100

$X^2 = 7.963$ df = 2 (P ≃ 0.01)

P < 0.05

* Excluded from X^2 calculation.

TABLE 24

Conduciveness of setting for privacy and respondents' compliance

Conduciveness of Health Care Setting for Privacy	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
Highly Conducive	125	22.6	36	21.3	164	22.3
Moderately Conducive	208	36.8	42	24.9	250	34.0
Not at all Conducive	186	32.9	76	45.0	262	35.6
*I don't know	24	4.2	5	2.9	29	4.1
*No response	20	3.5	10	5.9	30	4.0
Total	566	100	169	100	735	100

$X^2 = 10.92$ df = 2 (P = 0.004)

P < 0.05

* Excluded from X^2 calculation.

TABLE 25

What major barriers do you think will make a woman not to comply with contraceptive regimen?

Reasons given for non-compliance	Compliers		Non-Compliers		Total	
	No.	%	No.	%	No.	%
I don't know of others	104	18.4	22	13.0	126	17.1
If she misses her appointment/period	38	6.7	13	7.7	51	7.0
If she has no money	104	18.4	27	16.0	131	17.8
If she/child is sick	44	7.8	15	8.9	59	8.0
If she is too busy/travel or forget	62	10.9	21	12.4	83	11.3
Lack of understanding of instructions	29	5.1	6	3.5	35	4.8
Grief	4	0.7	5	3.0	9	1.2
If husband does not allow her	10	1.8	6	3.6	16	2.2
If the family planning provider bullies	4	0.7	3	1.8	7	1.0
If she has no Problem/ compaints	94	16.6	20	11.8	114	15.5
No response	73	12.9	31	18.3	104	14.1
Total	566	100	169	100	735	100

TABLE 26

Respondents' current contraceptive method and possible reasons for future non-compliance

Method	Reasons											Total	
	I don't know of others	If she misses her appointment/ pregnant	If she has no money	If she/child is sick	If she is too busy/travel or forgets	Lack of understanding of instructions	Grief	If husband does not allow her	If the family planning provider bullies her	If she has no problem/complaint	No response	n	%
I.U.C.D	44 15.1	19 6.5	41 14.1	22 7.6	31 10.7	12 4.1	4 1.4	7 2.4	3 1.1	60 20.6	48 16.5	291	39.6
Pills	25 17.9	10 7.1	27 19.3	12 8.6	23 16.4	8 5.7	-	2 1.4	2 1.4	13 9.3	18 12.9	140	19.0
Condom	6 1.5	4 1.0	9 22.5	1 2.5	5 12.5	3 7.5	2 .5	1 2.5	1 2.5	6 15	2 5	40	5.4
Injectables	44 28.5	15 6.3	53 22.3	23 9.7	22 9.2	9 3.8	3 1.3	6 2.5	1 0.4	30 12.6	32 15.4	238	32.4
Cream	5 35.7	3 21.4	1 7.1	-	-	1 7.1	-	-	-	3 21.4	1 7.1	14	1.9
Withdrawal Method	-	-	3 50	-	-	-	-	-	-	-	3 50	6	0.8
Abstinence	-	-	1 16.7	1 16.7	2 33.3	2 33.3	-	-	-	-	-	6	0.8
TOTAL	124 16.9	51 6.9	135 18.4	54 7.3	83 11.7	35 4.8	9 1.2	16 2.2	7 1	112 15.2	104 14.1	735	100

(94.8%) stated that they were given enough explanation before acceptance. Out of this group 542 (95.8%) were in the complier group compared with those in the non-complier group 55 (91.7%).

Reasons for clinic attendance and compliance

Table 13 shows the respondent's reasons for attending family planning clinics and their compliance status.

Majority of the respondents 327 (44.5%) attended family planning clinics to space their children, followed by 216 (29.4%) whose purpose was to stop child-bearing. The high percentage of compliance 180 (31.8%) was recorded among those who wanted to stop child-bearing as against 36 (21.3%) among the non-compiler group.

Experience with first chosen method and compliance

HYPOTHESIS 11: Experience with first chosen method will not influence subsequent compliance with contraceptive regimen.

(a) **First choice contraception:** (Table 14) presents the first chosen methods.

The I.U.C.D is the most commonly chosen method. It was selected by 276 (37.5%) respondents. This is followed by injectables by 234 (31.8%) respondents, the pills by 152 (20.8%) respondents and the condom by 41 (5.6%) respondents.

(b) Experiences with first choice contraception

Majority of the respondents 480 (65.3%) had no complaints, 40 (5.4%) experienced side effects and 191 (26.0%) suffered logistic inconveniences (see Table 15). A higher percentage of those who had no complaints 473 (83.6%) were in the complier group. All the respondents 40 (23.7%) who experienced side-effects were in the non-complier group.

Statistically, the result of chi-square test on the experiences with first chosen method and compliance was significant ($P < 0.05$). This result suggests that the experience with first chosen method did influence respondents compliance. Therefore, the above hypothesis is rejected.

(c) First chosen contraceptive method and experience

Majority of I.U.C.D users 173 (62.7%) indicated that the method was effective, 83 (30.1%) suffered inconveniences while 18 (6.5%) experienced side-effects. (Table 16).

Majority of pill users 107 (70.4%) indicated that the method was effective, 33 (21.7%) suffered inconveniences while 9 (5.9%) experienced side effects.

For users of the injectables 156 (67.0%) indicated that method was effective, 59 (25.3%) suffered inconveniences while 13 (5.6%) experienced side effects.

Users of condoms, withdrawal method and diaphragm experienced no side effects but suffered inconveniences.

(d) Reasons for change of initial method and compliance

The highest percentage of non-compliers 19 (11.2%) was recorded among clients who experienced side effects, followed by those who have excessive menses 11 (6.5%), I missed my period 9 (5.3%) as compared with those who complied. (Table 17).

(e) Assessment of cost of family planning and compliance

HYPOTHESIS 12: cost of family planning services will not influence clients' compliance with chosen method of contraception.

The response of assessment of cost of family planning services and compliance is presented in Table 18. Majority of the respondents 341 (46.5%) stated that the cost was low, while 323 (44.0%) indicated that the cost was moderate.

203 (50.1%) of those who felt that cost was low were from the compiler group as compared with 58 (34.3%) from the non-compiler group. The highest percentage of non-compliers 96 (56.8%) was recorded among those who indicated that the cost was moderate as compared with 227 (40.2%) who were compliers in the same group.

Statistically, the result of chi-square test on the assessment of cost of family planning services and compliance was significant

($P < 0.05$). This result suggests that cost of family planning services does influence the users' compliance with chosen method of contraception. Therefore, the above hypothesis is rejected.

(f) Respondents' mode of transportation and compliance

Table 19 summarises the respondents' mode of transportation to the family planning clinic and compliance. In all, most respondents 494 (67.2%) came to the clinic always by taxis and 56 (7.6%) by commercial buses. Among those who take taxis 381 (67.3%) are in the complier group while 113 (66.9%) are in the non-complier group. Also among those who utilise commercial bus services 40 (7.1%) were in the complier group, while 16 (9.5%) were in the non-complier group.

(g) Respondents' change of contraceptive methods based on experiences

Table 20 presents the number of times respondents changed method of contraception and compliance.

Results showed that 509 (89.9%) of those who did not change their first chosen method of contraception were compliers while 139 (82.2%) were non-compliers.

The percentage of non-compliers were higher among respondents who changed method once 20 (11.8%) and 7 (4.1%) among those who changed method twice as compared with the percentage of compliers among those who changed method once 48 (8.5%) and twice 3 (0.5%).

The rate of non-compliance seem to diminish with frequency of contraceptive use change.

(h) Respondents' pattern of changes in contraceptive use

Table 21 presents the pattern of change of contraceptive methods by respondents. I.U.C.D was chosen as initial method by 276 (37.5%) respondents, the pills by 152 (20.7%), Injectables by 234 (31.8%), condom by 41 (5.6%), Diaphragm, and spermicides (cream, foams, tablets) by 27 (3.7%) and withdrawal method by 2 (0.3%).

Those who changed to second method increased among I.U.D users to 294 (40.0%) respondents, injectables 247 (33.6%) and withdrawal method 6 (0.8%). However, users of pills reduced to 137 (18.7%) and condoms to 36 (4.9%).

Among those who changed to third method, I.U.C.D users decreased slightly to 291 (39.6%) respondents, Injectables to 238 (32.4%) while pill users increased to 140 (19.1%).

While more acceptors are opting for I.U.C.D and injectables the number of pill users appeared to be on the decrease.

(i) Characteristics of compliers and non-compliers

Results show that a compliler is likely to have the following characteristics: married, mostly monogamous, between 30 - 44 years of age, have about 4-6 children and is likely to be a trader or artisan.

In contrast, a non-compliler is likely to have the following characteristics, aged 15 - 29 years, single or in polygamous marriage and with less than three living children. In addition, she is most likely to be a civil servant, an unemployed house-wife or student.

(j) Assessment of family planning providers' skills and respondents' compliance

Table 22 shows respondents assessment of skills of family planning providers and respondents compliance with chosen contraceptive method. Majority of the respondents 594 (80.8%) assessed providers skills in I.U.C.D insertion, ability to give clear instruction and impart adequate knowledge on contraceptive use to clients as moderate. Of this group 463 (81.8%) were compliers while 131 (77.5%) were non-compliers.

Statistically, the result of chi-square test on respondents' assessment of family planning providers skill and compliance was significant (P < 0.5).

(k) Attitude of family planning providers and respondents' compliance

Table 23 compares the degree of bullying of clients by providers and their subsequent compliance with chosen method of contraception.

Majority of the respondents 612 (83.3%) were of the opinion that health staff do not bully or abuse clients. Out of this number 480 (84.8%) respondents were in the complier group and 132 (78.1%) in the non-complier group.

Higher percentages of non-compliers 10 (5.9%) and 17 (10.1%) respectively reported that health staff bully or abuse clients and those who do not know as compared with 11 (1.9%) and 54 (9.5%) respectively in the complier group.

Statistically, the result of chi-square test on attitude of family planning providers and respondents' compliance was significant (P < 0.05) suggesting that the attitude of family planning providers influences the users compliance with chosen contraceptive method.

(l) Conduciveness of clinic setting for privacy and respondents' compliance

HYPOTHESIS 13: The degree of conduciveness of clinic setting for privacy will not influence the respondents compliance to chosen method of contraception.

The degree of conduciveness of clinic setting for privacy as compared with clients compliance with contraceptive regimen is shown in Table 24. The highest percentage of compliers 208 (36.8%) was found among those assessed the clinic setting as moderately conducive (provides privacy). In contrast the highest percentage of non-compliers 76 (45.0%) assessed the clinic setting as totally inconducive.

Statistically, the result of chi-square test on respondents' assessment of conduciveness of clinic setting and compliance was significant ($P < 0.05$). This result suggests that the degree of conduciveness of the clinic setting influences the users compliance with chosen method of contraception. Therefore the above hypothesis is rejected.

(m) Identified obstacles to compliance with current contraceptive method in use

Table 25 presents the identified barriers to compliance with currently used contraceptive method.

Among users of I.U.C.D.,, majority of the respondents 60 (20.0%) perceived no need for compliance with follow up appointment when the client has no problem or complaint.

Among users of the pill, majority 27 (19.3%) identified lack of financial resources as barrier to compliance. In the same way, 53 (22.3%) of respondents currently using injectables identified lack of fund as barrier to compliance with contraceptive regimen.

Among users of creams, foams, vagina tablets and diaphragm, majority 5 (35.7%) claim that they do not know of others, followed by 3 (21.4%) who identified missing of a client's appointment or failure of a contraceptive method resulting in pregnancy as a barrier to compliance with contraceptive regimen.

An equal percentage of respondents 2 (33.3%) using the periodic abstinence method identified busy work schedule, travelling, forgetfuiness and lack of understanding of instructions given as barrier to compliance with contraceptive regimen.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

DEMOGRAPHIC CHARACTERISTICS

In this study demographic factors such as age, religion, educational qualification, socio-economic status have no marked influence on the respondents' compliance with contraceptive regimen. This finding is in contrast to other studies where income and education were shown to influence continued use of contraceptives (German rodriguez and Cleland, 1981; Hardy and Herud, 1974; James 1978; Abdulan, 1990)and on appointment keeping behaviour of acceptors (Fakeye, 1988; Seaton, 1985 and Laing, 1972). Even though there is no significant association between the age of clients and their compliance status, clients in age 20-24, 25-29 brackets were observed to be more in the non-compiler group. This group needs to be increasingly targetted in family planning programmes.

However, strong associations were found in this study between respondents' level of compliance and marital status, or number of living children or type of job (occupation). The rate of non-compliance was found to be higher among unmarried women. This can be explained within the cultural reproductive expectation of tho Africans. Various authors (Omu et al, 1981; Oransaye and Odiase,

1983; Nichols et al, 1986; Gyepi-Garbrah, 1988) have found that pregnancy and childbirth outside of marriage are traditionally frowned at. If a girl or a woman became pregnant outside of a socially recognised marriage, she is much likely to seek or attempt induced abortion, or abandon the child if carried to term.

This is because they are not expected to engage in extra-marital or pre-marital sexual practices. This group may not comply with contraceptive use because of the fear that such act should not be made public. This is in agreement with the findings of Ladipo (1984) in which the use of contraception by such individuals are thought to violate the values of the society and are thus considered immoral. This has implication for family planning acceptance particularly among the single women.

Higher level of compliance among women with 4-6 children was found which may be a function of internal motivation to stop child bearing or awareness about the new population policy which allows a woman to have four children. Ladipo (1984) had observed that with increasing age, women begin to express a greater interest in learning how to space their pregnancies.

Another significant finding in this study was that client's occupation influences compliance. A higher percentage of non-compliers was found among civil servants, unemployed/housewives and

students possibly because of their heavy workloads and busy schedules which may prevent them from remembering their contraceptive regimen. Another possible reason is that housewives and students may not be able to afford the cost of regular contraceptive services moreso when the service use must be hidden from their husbands and parents.

The rate of compliance was highest among traders which can be attributed to the community (market) based distribution programme on family planning. This programme was recently introduced to the State Family Planning Headquarters (Akure) through the Better Life Programme in the State.

CONTRACEPTIVE EXPERIENCES

Results of this study indicated that clients whose source of information awareness about family planning was from health staff and the media had a higher compliance to contraceptive regimen than from other sources (husbands/boyfriends, in-laws and parents) though the differences were not statistically significant. These two information sources might have been more credible to the respondents than the others. This finding is in agreement with those of Olukoya (1972), Adetunji (1988) and Douglas Nichols (1987) in which they found that the highest percentage of acceptors have their source of information awareness from health staff.

Majority of clients in the complier group attended family planning clinics to space their children and to stop childbearing. This finding suggests that family planning education is likely making the desired impact in creating more positive behavioural change. However, it may also relate to the harsh economic condition in the country which has reduced family income and extend expenditures.

Results also showed that I.U.C.D. is the most popular and first chosen method followed by injectables. I.U.C.D. can be said to be more acceptable possibly because of its relative advantages over other methods such as few side-effects and long follow-up appointment of 6 months. This finding is in agreement with previous researchers by Fakeye (1988). Olukoya (1983), Oyediran (1984) and Ewumi (1976).

A major finding for non-compliance was the level of side-effects experienced. Most respondents in the non-complier group changed their first chosen contraceptive as a result of side-effects experienced. This was observed more among the pill users, followed by those who took injectables. Family planning literatures have reported a higher side-effects among pill users (Wan Fook Kee and Jessie, 1972; Laing, 1972; Oyediran and Ewumi, 1972; Fakeye and Okwerekwu, 1988). For those using injectables the time interval (3 months apart) between having one shot and the next is too long and may affect recall.

Major factors which inhibit or encourage compliance with respondents' current contraceptive use were lack of money and inadequate time to attend clinic as a result of work, travel or forgetfulness. It stands to reason therefore that clients will comply if the barriers to non-compliance are carefully taken care of.

HEALTH EDUCATION IMPLICATIONS

Effective Information and Communication for Health (ICH) is seen as an integral part of health education. Health education is therefore, concerned with identifying both the behavioural and non-behavioural factors in their dynamic interplay and effects on what people do or fail to do about family planning in each environment or situation setting.

Since voluntarism is the hallmark of family planning, this implies that there is no coercion, and that fundamental human rights of free choice is robustly entrenched in the ethos and bionomics of its practice. It becomes imperative that the reasons which may influence compliance/non-compliance behaviour among contraceptive users having been identified using the behavioural Antecedents Model (Green, 1980), the identified perceived reasons can be classified into three behavioural categories, viz:

Predisposing

1. Reason for attending family planning clinics by majority of the compliers is to space their children and stop childbearing.

   (Positive factor).

2. Non-compliers will not attend follow-up appointment if they perceive themselves as having no problems or complaints with their contraceptive regimen.

   (Negative factor).

Enabling

1. Most clients do not have adequate time to attend follow-up appointment or to adhere to contraceptive regimen because they are too busy at work/travel and forget about instructions on contraceptive use.

   (Negative factor).

2. Lack of money for payment of regular services.

   (Negative factor)

3. Inconveniences suffered in utilising family planning services.

   (Negative factor).

4. Side-effects experienced from contraceptive use.

   (Negative factor).

Reinforcing

1. Non-permission to attend family planning clinics by respondents spouses. (Negative factor).
2. Poor interpersonal relationship between clients and providers of family planning services. (Negative factor).

The positive factor identified above needs to be strengthened while the negative ones need to be worked upon in improving the compliance behaviour among contraceptive users. This can be done by proposing strategies that could improve compliance with chosen method of contraception, viz:

Predisposing

Since most compliers indicated that their use of family planning was to stop childbearing and to space their children, these two reasons need to be further strengthened in any family planning media campaign. This may likely increase the number of those who use family planning services.

Poor perception about the need for adequate follow-up appointment

That in the absence of any complaints or problems with their contraceptive regimen, clients do not need to keep scheduled appointment can be dealt with using health talks at the family planning clinics

emphasizing the need for regular follow-up appointment and adherence to contraceptive regimen. In addition, individual and group counselling of clients, use of role play to change clients' wrong perceptions.

Enabling

Inadequate time to attend follow-up appointment or adhere to contraceptive regimen

(a) In order to improve the attendance of the clients who are always busy at work or travel and therefore forget follow-up appointment and contraceptive regimen - provision of family planning centres close to different working places, homes, schools by the government such that it is within easy reach of students, housewives and civil servants at highly subsidized rates.

(b) Use of exit interviews by family planning workers to serve to remind clients of their clinic appointments at clinic entrances at the end of the day's appointment.

(c) Use of reminder cards for likely defaulters with long follow-up appointment of one to 6 months. In this regard family planning providers can utilize the services of social health workers.

(d) Campaigns organised by market women associations and young women christian associations.

Lack of Money

This negative factor to family planning compliance can be removed through the provision of highly subsidized family planning centres close to clients' places of work or home by the government.

In addition, clients who cannot afford the subsidized costs may on counselling be exempted from payment for family planning services.

Inconveniences suffered in utilising family planning services

A number of inconveniences suffered by clients include transportation problems, distance of clinic to clients' residence very far, long waiting time or clinic time not convenient. This can be resolved through an increase in the number of family planning facilities within the community and improvement on waiting time through an increase in the number of providers.

To make the clinic time convenient, clinics can be held in the morning and afternoon sessions, so that clients who cannot attend morning session can have afternoon appointments between 4.00-6.00 p.m.

Experiences of side-effects

Counselling of individual client on method used is necessary and a re-examination of client for assessment of the suitability or compatibility of method in use with clients' physical and biological

make-up to reduce possible side-effects experienced. This can be achieved by training or re-training of family planning providers on counselling techniques and organisation of training workshop for men (married and unmarried) to enhance compliance of women with their contraceptive regimen.

Reinforcing

Non-permission to attend family planning clinics by respondents' spouses

The health education strategies that can improve this include public campaigns on birth control and role of spouses' in family and reproductive health care services, public enlightenment programmes on family planning on television, and radio with emphasis on role of spouses. Organised group sessions for married men on family planning and their roles at men's club meetings, church meetings, association/committee meetings can influence their attitude and make them more willing to support their wives. Individual counselling may be preferred in some situations. Sex education classes for school children will be an added advantage.

Poor interpersonal relationship between clients and providers of family planning services

An improvement of client-provider relationship is imperative for better compliance. To improve this situation, in-service training programmes need to be organised for family planning providers on interpersonal relationship in health services. Audio-visual aids such

as films can be shown in the process. In addition, role play and the use of hand outs can enhance the training content.

The second approach is to educate providers on what to expect from clients so as to remove prejudices and bias regarding health care providers. Films can be used to emphasise the role of clients in the client/provider relationship.

By utilising these strategies compliance rate of clients may appreciably increase.

CONCLUSIONS

This study explored some factors that affect clients' compliance with chosen method of contraception at the Government Family Planning Clinics in Akure Local Government Area of Ondo State. Six of the thirteen tested hypotheses (the marital status. type of job performed, number of living children, experiences with first chosen method, cost and conduciveness of clinic setting for privacy) were statistically significant ($P < 0.05$) suggesting that these variables affect compliance.

Other incidental findings that were significant are:

1. I.U.C.D. is the most popular chosen method of contraception followed by the injectables and the pills.
2. Major reasons for non-compliance are;
   (a) lack of money

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1. I.U.C.D. is the most popular chosen method of contraception followed by the injectables and the pills.
2. Major reasons for non-compliance are:
   (a) lack of money

(b) inadequate time to attend follow-up clinic because clients are busy/travel or forgot.

(c) clients' perception of no need for regular follow-up in the absence of problems or complaints.

3. Clients' major experiences with contraceptive use which hinder compliance are inconveniences suffered in utilising family planning services (such as problems of transportation, inconvenient clinic appointment time, long waiting time, etc.) and experiences of side-effects and these experiences affect compliance with contraceptive regimen.

4. I.U.D. is the method that has the highest rate of compliance and periodic abstinence has the lowest non-compliance rate.

It is worth noting that majority of the clients had prior information before adopting family planning methods.

This study appears useful because it has revealed some reasons which may facilitate or hinder compliance with chosen method of contraception which has implication for subsequent contraceptive choice.

Health workers could use findings in this study for:

1. Improving service providers' competence by organising in-service training programmes to improve the knowledge and skills of their health personnel in good interpersonal relationship.

2. Improve their use of health education strategies for population education within their community.

This may help to improve the overall compliance with contraceptive regimen in the family planning clinics in Akure Local Government Area of Ondo State.

Projection for Future Research

The study had shown that 23.0% of respondents did not comply with contraceptive regimen. It has also highlighted reasons that facilitate or hinder compliance with contraceptive regimen. In the light of these findings, future study could explore the compliance status of women who attend private health institutions and compare with the results of this study.

RECOMMENDATIONS

The following recommendations are made, based on the findings of this study:

1. Since the findings of the study indicate the need for health education intervention to individual clients, family members, community, etc. It is recommended that the family planning clinics should employ the services of a health education specialist in order to improve its services and achieve the aims of family planning services.

2. From the identified problems and associated factors. It is important for the Nigerian Government (at all levels) to be committed to offering family planning and reproductive health care service as part of their primary health care strategies in order to reduce the intolerable number of unwanted and high risk pregnancies thereby preventing maternal deaths and disabling diseases.

3. Creation of highly subsidised family planning service centres by the Government in the markets, public places, and offices may improve compliance with follow up appointment and other contraceptive regimen and may reduce the cost of transportation.

4. In the course of the home visits to clients, it was observed that many home addresses were untraceable. Health care providers should therefore orient the clients about the importance of giving correct information particularly as regards living addresses.

5. Incorporation of family planning with maternal and child health care services is recommended for increased compliance.

6. The introduction of evening clinics 4.00-6.00 p.m. in addition to morning clinics in all the family planning clinics is recommended to enable civil servants, enjoy the benefits of compliance. This is recommended since the study reveals that nearly half of the civil servants were found not to comply. It may therefore be reasonablyassumed that this category of workers might find it difficult to attend clinics held during their work period.

7. The issue of non-compliance with contraceptive regimen should receive adequate emphasis as part of health education to client. Therefore increased client diagnosis need to be made. Propaganda on radio, television, posters at the clinics, hospitals, public places to enlighten men and women are highly recommended to improve acceptance and compliance.

8. The provision of more trained staff to work in family planning clinics is desirable and should be implemented by the Government.

9. Government should allocate adequate resources and appropriate training to family planning personnel to make family planning programmes more responsive to local cultural values and individual couple preferences.

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APPENDIX A

TYPES OF CONTRACEPTIVES AND THE CRITERIA FOR SELECTION

Oral Contraceptives (The Pill)

There are two types:

(1) Combined oral contraceptive (known simply as the pill)

(2) Low dose "mini pills".

This method is good for a woman who satisfies the following characteristics:

(1) Has heavy, painful menstrual periods

(2) Has sex often

(3) Would like to have more children

(4) Who can adhere to the daily consumption of the pill.

(5) Is anaemic.

The pill on the other hand is not the best method for a woman who

(1) hates taking pills of any kind

(2) Is forgetful

(3) lives at a great distance from a place where pills are available.

Oral contraceptives should not be used by a woman who:

(1) is 35 or older and smokes cigarettes

(2) is very fat

(3) has high blood pressure

(4) has diabetes mellitus

(5) has been breastfeeding for less than six weeks

(6) has sickle-cell anaemia

(7) has heart disease, blood clots, or cancer

(8) gets migraine headaches

(9) has abnormal vaginal bleeding

(10) has liver problems (eyes or skin that look yellow)

(Population Report, 1987).

CONDOMS

There are two types:

(1) Latex (made of sheath of thin rubber)

(2) Condoms with spermicidal lubricant.

Condom is a good method for a man or woman who:

(1) has more than one sexual partner

(2) can make putting on a condom part of fore play

(3) Thinks he or she might have or might get a sexually transmitted disease including AIDS.

It is a good method for a woman who may already be pregnant. It is also good for couples who want to space their children.

Have agreed together to use condoms.

Are worried about side effects of other methods.

Have sex only once in a while.

Condoms use is not the best method for couples who:

(1) do not want more children

(2) will not use condoms regularly and carefully.

There are no contra-indications to the use of condoms.

(Population Reports, 1987).

INTRA-UTERINE DEVICES

There are 4 types of intra-uterine devices:

(1) I.U.D.

(2) I.U.C.D.

(3) Cu-T

(4) Lippes loop

This method of contraception is a good method for a woman who:

(1) wants a method with no bother

(2) does not want more children

(3) has children and does not want more children soon

(4) has successfully used an I.U.D. in the past.

(5) is breastfeeding.

On the other hand, it is not the best method for a woman who:

(1) has painful or long menstrual periods

(2) has more than one sexual partner or a partner with more than one partner

(3) wants children but has had none

(4) had a pregnancy outside the womb

(5) dislikes touching her genitals

(6) is very anaemic.

(Population Reports, 1987).

Centra-indications

I.U.D. should not be used by a womon who:

(1) has active cervical or pelvic infections including sexually transmitted diseases

(2) has had pelvic inflammatory disease more than once

(3) may be pregnant

(4) has abnormal vaginal bleeding or genital cancer.

INJECTABLES

Injectables are of two types. They are:

(1) Depomodroxy-Progesterone acetate DMPA, Depo-Provera

(2) Norethindrone enanthate, NET-EN roristerat.

This method of contraception is good method for a woman who:

(1) lives in o remote area

(2) prefers having injections to taking pills

(3) may not want more children

(4) is not worried if her menstrual periods stop

It is not the best method for a woman who:

(1) has diabetes

(2) has heart disorder or blood clots

(3) has been breastfeeding for less than six weeks

(4) has liver problems

(5) wants children but has had none

(6) worries if her menstrual periods stop.

(Population Reports, 1987).

Contra-indications

Injectables are contra-indicated in a woman who

(1) has cancer of the breast or genitals

(2) has abnormal vaginal bleeding

(3) may be pregnant.

FOAMING SPERMICIDAL TABLETS

This method of contraception is good method for a woman who:

(1) dislikes visiting doctors and having pelvic examinations

(2) has a sexual partner who has agreed to use tablets

(3) wants to space her children

(4) has sex only once in a while

(5) thinks she might have or might get a sexually transmitted disease.

Foaming spermicidal tablets is not the best method for a woman who:

(1) does not want more children

(2) dislikes touching her genitals

(3) does not want to or forgets to put in a tablet before sex.

Contra-Indication

This method is contra-indicated in a woman who finds that the tablets irritates her or her partner's genitals. (Population Reports, 1987).

PERIODIC ABSTINENCE (including Rhythm and Natural Family Planning)

Periodic abstinence requires the couple to refrain from sexual intercourse during the estimated time of fertility. Methods of determining the approximate time of ovulation and the fertile period include

(1) calendar method

(2) a basal body temperature method

(3) a cervical mucus method (Billings ovulation method)

(4) sympto-thermal method.

This method of contraception is good method for couples who

(1) have agreed together to use this method

(2) want to space their children

(3) have religious or moral beliefs that do not allow them to use other methods.

(4) do not mind if pregnancy occurs.

It is not the best method for a woman who

(1) has more than one sexual partner

(2) might have difficulty charting cycles or recognising signs of fertility

It is not the best method for couples who are

(1) not both willing to cooperate in using the method

(2) certain they do not want more children.

Contra-indication

It is contra-indicated in a woman who for medical reasons must not get pregnant (Population Reports, 1987).

TUBAL LIGATION (VOLUNTARY SURGICAL CONTRACEPTION FOR WOMEN)

It is a permanent method of contraception in which the fallopian tubes are closed so that the egg cannot travel through them to meet the sperm. The tubes are surgically closed with bands, clips,

electrocautery or by cutting and tying. The operation can be performed on outpatient basis under local anesthesia.

This method of contraception is good for a woman who

(1) is sure she and her husband do not want more children

(2) would be in danger if she became pregnant

(3) wants a method with no bother.

It is not the best method for a woman who

(1) is single

(2) has not had a child

(3) is having marital problems

(4) is not sure whether she and her husband ever want more children

(5) has psychological problems.

Contra-indications

Female sterilization is contra-indicated in a woman who has the following:

(1) diabetes mellitus

(2) heart disease or clotting disorders

(3) severe malnutrition

(4) is very fat

(Population Reports, 1987).

APPENDIX B

Family Planning Service Points In Akure Local Government Area of Ondo State

1. Army Barracks Clinic, Akure
2. State Specialist Hospital, Akure
3. Arakale Local Government Clinic and Maternity
4. Maternal and Child Health Care Centre PHC Oke-eda, Akure (Now transfered to M.C.H. Arakale)
5. Police Clinic, Akure
6. Basic Health Clinic, Itaogbolu
7. Comprehensive Health Centre, Iju
8. Basic Health Clinic, Ogbese
*9. P.P.F.N. Clinic - Ala Quarters, Akure
*10. Moye Clinic Adegbola, Akure
*11. Dalro and Dalro Hospital, Akure
*12. Sijuade Hospital, Ala, Akure
13. Federal University of Technology Health Services Centre.

* Non-Government owned Clinics

Source: Federal Ministry of Health Publication.

APPENDIX C

TOTAL SAMPLE SELECTION OF COMPLIERS AND NON-COMPLIERS FROM SELECTED CLINICS

	Selected Clinics	No of Compliers	No of Non-Compliers	Total
1.	Army Barracks Clinic	16	8	24
2.	Police Clinic	3	5	8
3.	State Specialist Hospital Family Planning Clinic	242	61	303
4.	Comprehensive Health Centre Iju/Itaogbolu	33	9	42
5.	Basic Health Clinic Ogbese	4	2	6
6.	Maternal and Child Health Clinic, Arakale	250	79	329
7.	Federal University of Technology Akure, Health Care Services Centre	23	5	28
	Total	571	169	740

APPENDIX D

SCHEDULE OF FOLLOW UP APPOINTMENTS AS FOLLOWED BY FAMILY PLANNING CLINICS IN ONDO STATE

Method of Contraception	Interval for Follow up
I.U.D	1 Month appointments following the insertion thereafter 6 months appointments
PILLS	Monthly appointment in the first 3 months 4-6 months appointment thereafter depending on supplies
INJECTIONS	Every 3 months
CONDOM	Follow up appointment is determined by client according to her supplies
DIAPHRAGM	Every 3-6 months in the absence of complaints
CREAMS/FOAMS VAG. TABLETS	2-4 weekly appointments
ABSTINENCE	3-6 months follow-up for check up in the absence of any complaints
WITHDRAWAL	Every 3 months in the absence of pregnancy for check up

APPENDIX E

Client Record

MEDICAL HISTORY

Note here any serious illnesses or condition: [ ]

Diabetes .... ____ Yes ____ No
Jaundiced .... ____ Yes ____ No
Frequent urinary tract infection or [illegible] ____ Yes ____ No
Frequent or severe headaches .... ____ Yes ____ No
Sickle Cell Anemia .... ____ Yes ____ No
Other Serious [illegible] or Condition .... ____ Yes ____ No
If yes, specify in box above
Smoker ____ Yes ____ No

INITIAL MEDICAL EXAMINATION (Only for those selecting IUD, hormonal, diaphragm, or sterilization methods)

Blood pressure ____/____ Weight ____ (kg)
Breasts ____ Normal ____ Lumps
Liver enlarge: ____ Yes ____ No
Vaginal discharge ____ Yes ____ No
If yes: Color ____ Odor ____
Cervix: Erosion ____ Yes ____ No
Discharge ____ Yes ____ No
Tears ____ Yes ____ No
Uterus Position: ____ Anteverted ____ Retroverted
Size: ____ Normal ____ Enlarged ____ Other
Laboratory results (as appropriate) ____________
Other observations: ____________
Contraceptive selected this visit ____________
Brand/Size/Model ____________ Quantity ____________
Date of next ____________
Name of Examiner/Supervisor ____________

PREGNANCIES WHICH OCCUR AFTER INITIAL CLINIC VISIT

Date P. Ended Pregnancy Outcome

___/___/___ Live Birth ____ Miscarriage ____
Stillbirth ____ Live birth died later ____
Complication ____

___/___/___ Live Birth ____ Miscarriage ____
Stillbirth ____ Live birth died later ____
Complication ____

Individual Record System 1 - 3

CLIENT FOLLOW-UP

DATE	METHOD CHANGE (Y/N)	METHOD SUPPLIED	BRAND/SIZE/QTY	B.P	WT. (kg)	PELVIC EXAM (Y/N)	OBSERVATIONS LABORATORY RESULTS (REFERRAL, METHOD FAILURE)	DATE NEXT APPT

CLIENT FOLLOW-UP (continued)

DATE	METHOD CHANGE (Y/N)	METHOD SUPPLIED	BRAND/ SIZE/ QTY.	B/P	WGT (kg)	PELVIC EXAM (Y/N)	OBSERVATIONS LABORATORY RESULTS TREATMENT METHOD FAILURE	DATE NEXT APPT

APPENDIX D

The Individual Record System
Client Record, Page 1

Form 1

Date ___/___/___ Client Reg. Number [ ]

FAMILY PLANNING CLIENT RECORD

DO NOT FILL THIS FORM FOR CASUAL NON-PRESCRIPTIVE USERS

Clinic Name ________

Family Name ________

Given Name ________

Address (or directions to reach home) ________

Age ____ (Estimate if not known) Birthdate ____

Education: ___ None ___ Some Secondary
___ Some primary ___ Secondary completed or more
___ Primary completed

Religion: ___ Moslem ___ Christian ___ Other

How did you learn of this family planning service? (Source of Referral)
___ Clinic Personnel ___ Outreach Personnel ___ Radio ___ TV
___ Print Media ___ Friend/Relative ___ Other Clinic
___ Community Health Worker ___ Other

Reproductive History:
___ No. of children born alive
___ No. of children still living
___ No. of miscarriages/ stillbirths/ abortions

Month/year last pregnancy ended: ___/___

Result of last pregnancy ___ Normal ___ Complicated

Specify compl ________

Menstrual Cycle: ________
Duration: ________
___ Regular ___ Irregular

Date of Last Menstrual Period: ____

Are you currently breastfeeding? ___ Yes ___ No

Do you want to have more children?
___ No, wants no more children
___ Yes, but wants child later (spacing)
___ Not certain or counseling only
___ Yes, wants child now

Contraception used prior to this visit?
___ No ___ Yes (Specify most recent method used)
Method ________
Source ________ Other ____

Client Reg. Number [ ]

Family Name ________

APPENDIX G

QUESTIONNAIRE

The purpose of this questionnaire is to find out your experience with the use of contraceptives with the aim of using the information for population education and control. The information which you give will be kept strictly confidential. You are not required to indicate your name.

Please fill in or tick as appropriate.

SECTION A: DEMOGRAPIC VARIABLES

1. Age .....

2. Marital status: (a) Single ..... (b) married .....
   (c) divorced ..... (d) separated .....
   (e) widowed .....

3. If married, what type of marriage?
   (a) Monogamous ..... (b) Polygamous .....

4. Duration of marriage .....

5. Home address: .....
   .....

6. Number of living children: (a) 0 (b) 1 (c) 2 (d) 3
   (e) 4 (f) 5 (g) 6 and above.

7. Religion:

(a) Islam
(b) Christianity
(c) Traditional religion
(d) Other (specify) .....

8. What type of job do you do?

(a) Teaching
(b) Business (Trading)
(c) Civil servant
(d) Unemployed
(e) Artisan, e.g. Hairdresser, sewing, etc.
(f) Student
(g) Others (specify) .....

9. What is your education qualification?

(a) Illiterate
(b) Primary school
(c) Attended Arabic school
(d) Modern III
(e) Secondary school education
(f) Teacher training education
(g) NCE holder
(h) University degree
(i) OND/HND holder
(j) Others (specify) .....

10. About how much do you earn or get from your work or trade in a month?

(a) Below N250
(b) N250-N400
(c) N400-N600
(d) N600-N700
(e) N700-N800
(f) N800-N900
(g) N900-N1,000
(h) N1,000 and above

SECTION B: INFORMATION ON ACCEPTANCE PROGRESS

11. When did you first attend a family planning clinic?

.....

12. How did you know about this clinic? Through:

(a) Health staff
(b) Woman/Girl friend
(c) Husband
(d) In-law
(e) Boy friend
(f) Parents
(g) Radio
(h) Television
(i) Posters
(j) Health Institution
(k) Others (specify) .....
.....

13. Does your spouse support your use of contraceptives?

Yes No

14. If so, what assistance does he render to encourage or discourage you in using contraceptives?

.....
.....

15. What was your major reason for going to the clinic?

.....
.....
.....
.....

16. Was each of the family planning methods explained to you thoroughly in the clinic before you finally selected one?

Yes No

17. What method did you choose first?

(a) I.U.D.
(b) Pills
(c) Injections
(d) Condom
(e) Diaphragm/foam tablets
(f) Others (specify) .....

18. What was your first experience like with the first chosen method?

(a) Method was effective and satisfactory
(b) I had side effects from contraceptive methods
(c) Method was not effective
(d) Services too expensive
(e) Health staff demonstrated poor human relationship
(f) Inconveniences suffered in getting to clinic was too much
(g) No complaints

19. How many methods have you changed to since your first acceptance?

(a) None
(b) One
(c) Two
(d) Three
(e) Four
(f) .....

20.	First method ever used	Date changed	Method changed to	Reasons for change
	.....	.....	.....	.....
21.	2nd method used			
	.....	.....	.....	.....
22.	3rd method used			
	.....	.....	.....	.....
23.	4th method used			
	.....	.....	.....	.....

24. What method are you currently using?

(a) I.U.D.
(b) Pills
(c) Condoms
(d) Injectables
(e) Barrier method
(f) Withdrawal method
(g) Rhythm method
(h) Abstinence

25. What is your experience with this current contraceptive method?

(a) The method is effective and satisfactory.
(b) I have experienced (complaints) side-effects from contraceptive method
(c) Method is not effective
(d) Services are too expensive
(e) Health staff demonstrate poor human relationship
(f) Inconveniences suffered in getting to clinic is too much.
(g) No complaints.

26. What special advantage are you now enjoying that is different from those you had with your first contraceptive experience? .....
.....

27. If the situation arises, would you still wish to go back to your first contraceptive method? Yes ..... No .....

28. Give reasons for your answer .....
.....

29. When did you last attend the family planning clinic before this interview? .....

30. How often is your regular follow-up appointment at the clinic in the absence of any complaint?

(a) Every week .....
(b) Every fortnight .....
(c) Every three weeks.....
(d) Every month .....
(e) Every six weeks
(f) Every two months
(g) Every three months
(h) Every 6 months

31. Which of these conditions has applied to you since you started using contraceptives

(a) I have missed no follow-up appointment
(b) I have missed only one follow-up appointment
(c) I have missed pills only once
(d) I have missed using two or more pills before
(e) I have never missed using any of my pills before
(f) I have strictly followed instructions given to me at the F/P clinics
(g) Others (specify) .....

32. Do you think you have complied totally with the instructions given you to date

Yes ..... No .....

33. Give reasons for your answer .....
.....
.....

34. Are you satisfied with the cost of contraceptive method you are using?

(a) Quite satisfied
(b) A little satisfied
(c) Cost needs to be slightly reduced
(d) Don't know

INFORMATION ON QUALITY OF SERVICE

35. How will you assess the cost of the family planning services you enjoyed

(a) High .....
(b) Moderate .....
(c) Low .....

36. How do you get to your clinic? Through

(a) Taxi .....
(b) Bus .....
(c) Trekking .....
(d) Lift .....
(e) I drive myself .....
(f) Husband drops me .....
(g) Others (specify) .....

Tick as appropriate your opinion of the services provided in your clinic.

TICK ( ) as appropriate the following responses

	highly	Modera-tely	None	I don't know
37. Staff demonstrate necessary skills as F/P providers				
38. The staff abuse or bully clients	A lot			
39. The setting for the services is conducive for privacy.			Not at all	

40. What do you think will make a woman not to come regularly to FIP clinic or to the her pills or contraceptive method as she is instructed .....
.....

41. What in your opinion can be done to improve family planning servlces in your area? .....
.....

APPENDIX H

QUESTIONNAIRE

Iwe ibere yi wa lati wadi awon iriri awon obinrin ti o nipa ninu eto feto somo bibi. Ipinu awon oluwadi yi ni lati lo awon abajade iwadi yi fun kiko ni nipa fifi eto si pipo si iye enia ni orile-ede. Awon idahun ti e ba fun wa, a ko ni jeki o di mimo fun enikeni rara.

Ma se ko oruko re si iwe yi.

Jowo ko nomba ti o ba mu si inu alafo yi.

ISORI KINI: IDANIMO

1. OJO ORI .....

2. ETO IGBEYAWO .....

   (a) Omoge
   (b) Oloko
   (c) Dalemosu (ko oko sile)
   (d) Ba oko ja (ko ba oko gbe)
   (e) Padanu oko (opo)

3. IRU IGBEYAWO

   (a) Oniyawo kan
   (b) Oniyawo pupo

4. IYE ODUN IGBEYAWO .....

5. ADIRESI ILE IBI TI O NGBE .....
   .....

6. IYE OMO TI O WA LAYE

(a) Ofo
(b) Okan
(c) Meji
(d) Meta
(e) Merin
(f) Marun
(g) Mefa ati jube io

7. ESIN

(a) Musuiumi
(b) igbagbo
(c) Esin ibile
(d) Esin miran (iru - wo)

8. ISE ASEJEUN

(a) Oiukoni
(b) Owo sise
(c) Ise ijoba
(d) Ko ri ise se
(e) ise owo
(f) Omo ile iwe
(g) Iru ise miran (iru - wo)

9. OYE EKO ILE IWE

(a) Ko io si ile iwe ri
(b) Lo si ile-iwe alakobero/oniwe kefa
(c) Lo si ile mewa
(d) Lo si ile iwe modansuku
(e) Lo si ile ise girama
(f) Lo si ile iwe olukoni alakobere
(g) Lo si ile-iwe olukoni girama
(h) Lo si ile-iwe Yunifasiti
(i) Lo si ile-iwe politekiniki
(j) ile iwe ti a ko daruko (iru - wo

10. IYE OWO TI O NRI NIBI ISE TABI OKOWO RE LOSOSU

(a) Igba o le adota naira
(b) Igba o le adota de egbaaji naira
(c) Egbaaji naira de egbata
(d) Egbaata de edegbaarin naira
(e) Edegbaarin de egbaarin naira
(f) Egbaarin de edegbaarin naira
(g) Edegbaarin de egbaarun naira
(h) Egbaarun naira ati jube lo

ISORI KEJI: ALAYE NIPA GBIGBA IFETO SOMO BIBI

11. Nigba wo ni o kokolo sille ifeto somo bibi
.....

12. Bawo ni o se mo nipa lle ifeto somo bibi yi. Nipase

(a) Osise eto llera
(b) Ore obirin (abileko tabi wundia)
(c) Oko mi
(d) Ara lle oko mi
(e) Ore okunrin
(f) Obi mi
(g) Ero asoro magbesi
(h) Ero omohun maworan
(i) Aworan ti a le kiri
(j) lle-lse ilera
(k) Iru-miran (iru - wo)

13. Nje oko re tabi ore re okunrin iowo si po ki o lo awon ohun lfeto somo bibi

(a) Beni
(b) Beko

14. Ti o ba ri be kini iraniowo ti o nfun o nipa llio ohun lfeto somo bibi .....

15. Kini loi pataki ti o fi lo si lle lfeto somo bibi
.....

16. Nje won salaye awon orisirisi ona ti a ngba nfeto somo bibi iekunrere fun o ki o to yan okan ninu awon ona yi

(a) Beni
(b) Beko

17. Ewo ninu eto yi ni o ko yan

(a) I.U.D
(b) Tabuleti (Onikoro)
(c) Aiabere
(d) Roba
(e) Roba oju abe, fomu, tabuieti oju ara, ipara oju abe
(f) Iru miran (iru - wo)

18. Bawo ni iriri ti o ni nipa ilana ifeto somo bibi ti o koko yan

(a) Metodu na sise o si temi lorun
(b) Metodu na fun mi ni awon amin ti ko ba liera mu
(c) Ilana na ko sise
(d) Eto na ti won wo ju
(e) Awon osise ile-ise na ko ni emi ti a fi nba enikeji io po ni irepo.
(f) Awon inira ti mo ni iati de ile-ise ifeto somo bibi na poju
(g) Nko ni esun kankan nipa re.

19. Metodu meio ni o ti paro lati igba ti o ti gba eto yi

(a) Ko si
(b) Okan
(c) Meji
(d) Meta
(e) Merin

20. Metodu ti o ko io

(a) .....
(b) Ojo ti o paro re .....
(c) Metodu ti o pari si .....
(d) idi ti o fi paro re .....

21. (a) Metodu keji ti o lo .....
(b) Ojo ti o paro re .....
(c) Metodu ti o paro si .....
(d) Idi ti o fi paro re .....

22. (a) Metodu keta ti o lo .....
(b) Ojo ti o paro re .....
(c) Metodu ti o paro si .....
(d) Idi ti o fi paro re .....

23. (a) Metodu kerin ti o lo .....
(b) Ojo ti o paro re .....
(c) Metodu ti o paro si .....
(d) Idi ti o fi paro re .....

24. Metodu wo ni o nlo lowolowo

(a) I.U.D
(b) Onikoro (tabuleti)
(c) Roba
(d) Abere
(e) Idena oju idi
(f) Yiyo nkan okunrin kuro
(g) Wiwo kalenda lati lo po pelu okunrin
(h) Imarakuro ni biba okunrin lo po

25. Kini iriri re pelu metodu tuntun ti o nlo yi

(a) Metodu na sise o si temi lorun
(b) Metodu na fun mi ni amin ti ko ba llera mu
(c) Eto na ko sise
(d) Eto na won wo ju
(e) Awon osise ile-ise na ko ni emi ti a fi nba enikeji lo po ni irepo
(f) Awon inira ti mo ni lati de ile ise na poju
(g) Nko ni esun kankan nipa re

26. Kini awon enfani pataki ti o ngbadun nisisyi ti o yato si ti iriri ti o ni nipa metodu ti o ko lo.
.....
.....

27. Ti aye ba si sile, nje o fe lati pada si metodu ti o koko lo

(a) Beni
(b) Beko

28. Se alaye nipa idahun re .....

.....

29. Nigbawo ni o wa si ile ifeto somo bibi gbehin saju ipade ti oni yi .....

30. Asiko wo ni a nfun o fun wiwa dede fun ayewo lai je wipe o ni esun ti o gbe o wa si ile ifeto somo bibi

(a) Ose kan
(b) Ose meji
(c) Ose meta
(d) Osu kan
(e) Osu kan ati abo
(f) Osu meji
(g) Osu meta
(h) Osu mefa

31. Ewo ninu awon nkan wonyi lo ti sele si o lati igbati o ti feto somo bibi

(a) Emi ko pa ipade ayewo kankan je
(b) Mo gbagbe lati lo si ipade ayewo kan soso
(c) Mo gbagbe lati lo onikoro (tabuleti) mi lekansoso
(d) Mo ti gbagbe lati lo onikoro (tabulati) mi meji tabi jube lo ri.
(e) Emi ko gbagbe lati lo onikoro (tabuleti) mi ri lai yese.
(f) Mo tele ilana ti a ko mi lati tele ni ile ifeto somo bibi
(g) Iru miran (iru - wo)

32. Nje o ro pe o tele ase ti a pa fun o nipa eto feto somo bibi patapata lai ru eyikeyi ninu ofin na.

(a) Beni
(b) Beko

33. Se alaye lori idahun re .....
.....

34. Nje o ni itelorun nipa iye owo ti o nsan si eto feto somo bibi ti o nio

(a) Mo ni itelorun ti o po
(b) Mo ni itelorun die
(c) O ye ki a din iye owo re ku die
(d) Nko mo

AKORI KETA: AYEWO DIDARASI ITOJU

35. Bawo ni o ti ri owo ti o nsan fun itoju feto somo bibi si

(a) O poju
(b) O mo ni iwonba
(c) O kere

36. Bawo ni o se nio si ile feto somo bibi? Nipa

(a) Wiwo taksi
(b) Wiwo bosi
(c) Fifese rin
(d) Wiwa iraniowo awon onimoto iati gbe mi iaigbowo
(e) Mo nwa ara mi
(f) Oko mi io ngbe mi wa sibe
(g) Iru miran (iru - wo)

37. Awon osise ile ifeto somo bibi nhan wipe nwon mo ise na

(a) Daradara
(b) Niwonba
(c) Nwon ko mo ise rara
(d) Nko mo

38. Awon osise ile ifeto somo bibi ma nbu tabi kigbe mo awon obirin ti o nwa fun iraniowo

(a) Pupopupo
(b) Niwonba
(c) Nwon ki hu iru iwa be rara
(d) Nko mo

39. Ile lse lfeto somo blbl na ko fl aye gba oblrin fun asirl ifarapamo

(a) Pupopupo
(b) Niwonba
(c) Ko faye slle rara
(d) Nko mo

40. Kini iwo ro pe o le je idena ti ko ni jeki obirin wa fun ayewo dede tabi tele ase ti a pa fun nipa lfeto somo bibi

.....

.....

41. Kini iwo ro pe a le se tabi mu itesiwaju ba eto feto somo bibi ni agbegbe re

.....

.....

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African Regional Health
Education Centre

Department of Preventive and Social Medicine
University College Hospital
Ibadan, Nigeria

8th February, 19X
Date

TO WHOM IT MAY CONCERN

LETTER OF INTRODUCTION AND APPEAL FOR ASSISTANCE

This is to introduce Mrs. A. Olotu, a Master of Public Health (M.P.H.) student to you and your staff. She is to carry out her research work on "Contraceptive experience among women contraceptive users in Akure Local Government Area of Ondo State: Implications for subsequent choice and compliance".

As the programme will involve detailed observation and interview, we shall be grateful if you will give her maximum assistance in her programme.

Thanks for your cooperation.

With best wishes,

Yours sincerely,

Prof. J.D. Adeniyi,
Project Leader, ARHEC.