

**FACTORS INFLUENCING MODERN CONTRACEPTIVE CHOICES
AMONG WOMEN ATTENDING THE FAMILY PLANNING CLINIC
UNIVERSITY COLLEGE HOSPITAL IBADAN**

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DEDICATION

This research work is dedicated to the Almighty God for His faithfulness upon my life and the good health he bestowed on me during my MPH programme and the successful completion.

It is dedicated to the loving memory of my late husband, Comptroller Olukunle Edward Makinde, my late father, Pa Moses Olatunde Ewumi and my sweet mother, Madam Alice Modupeola Ewumi.

I also dedicate it to my soulmate, Otonba Olatunde Olufemi and the chosen generation; Oluwaseyitan, Oluwayanmife and Oluwajomiloju for their tolerance, perseverance and support throughout the programme. May the good Lord bless and make you greater.

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ABSTRACT

Choices about childbearing and contraceptive use are important health decisions. Restriction of choices and lack of information on methods is a constraint for contraceptive users to obtain a method that suits their needs, thereby resulting in lower levels of contraceptive uptake. Hence, this study was designed to assess the factors influencing modern contraceptive choices among women attending the family planning clinic of University College Hospital, Ibadan.

A cross-sectional study using systematic random sampling technique to select 341 consenting women was conducted. A pre-tested interviewer-administered questionnaire which contained respondents' demographic characteristics, factors influencing the choice of modern contraceptives, factors responsible for continuation of chosen method of contraception, previous and current experiences relating to contraceptive use and level of satisfaction with modern contraceptive was adopted. Contraceptive continuation scores were categorised into unlikely (≤ 4), likely (5-6) and very likely (≥ 7). Satisfaction scores of ≤ 6 and > 6 were categorized as low and high respectively. Data were analysed using descriptive statistics, Chi-square and multinomial logistic regression at 5% level of significance.

Age of the respondents was 35.5 ± 6.4 years; 99.4% were married and 89.0% were in monogamous marriage. Forty-seven percent had tertiary education and 41.3% had senior secondary school certificate. Current method of contraception was influenced by perceived effectiveness (72.8%) and few side effects (56.1%). Implant was the commonest choice for women with secondary (48.2%) and tertiary education (42.9%) while IUCD (22.7%) and injectables (18.6%) was the least common respectively. Majority (78.5%) reported irregular menstruation, weight gain/loss (27.2%), breast tenderness (5.0%), stomach pain (4.1%) and frequent headache (1.7%). Of the 121 women that encountered problems, 85.0% were likely to continue, 6.1% likely to adopt traditional methods while 6.1% would rather opt out completely. However, among the 213 that had not encountered problems, 60.0% were likely to continue and 19.0% were very likely to continue their chosen methods even if they eventually encounter problem. A significant association was found between satisfaction with modern contraception and continuation. Factors influencing

continuation of chosen method included availability (95.9%), easy discontinuation of method (90.3%) and husband support (88.3%). A major reason for being satisfied with chosen method was adequate information before choice (98.2%). A significant association was found between the chosen modern contraceptive and higher level of education. Husbands with secondary and higher education had significant influence on the kind of contraceptive chosen by their wives. Women whose choice of a particular method was not because it had worked for their mothers were twice (OR=0.54, 95%: 0.39-0.94) less likely to have chosen IUCD over implant than women who said yes. Women who had secondary education were (OR=0.44, 95% CI: 0.24-0.82) less likely to have chosen IUCD over implant than women who had tertiary education.

Higher level of education and previous use of contraceptives by respondents' mothers are factors influencing modern contraceptive choices. More emphasis should be geared towards public awareness and sensitization on the availability of various modern contraceptive methods. Advocacy on girl child education should be intensified.

Keywords: Family planning, Childbearing women, Modern contraceptive choices

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Adedayo Olubunmi MAKINDE

CERTIFICATION

I hereby certify that this study was carried out by MAKINDE Adedayo Olubunmi in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria under my supervision.

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LIST OF ACRONYMS

AIDS	Acquired Immune deficiency syndrome
EC	Emergency Contraceptives
DHS	Demographic Health Survey
DMPA	Depo Medroxy Progesterone Acetate
FHI	Family Health International
FP	Family Planning
HIV	Human Immunodeficiency Virus
IUCD	Intrauterine Contraceptive Device
IUD	Intrauterine Device
IBHS	Integrated baseline Health Survey
LAM	Lactational Amenorrhoea
NDHS	Nigeria Demography Health Survey
NFP	Natural Family Planning
OCPs	Oral Contraceptive Pills
PPFN	Planned Parenthood Federation of Nigeria
RH	Reproductive Health
SDM	Standard Day Method
STIs	Sexually Transmitted Infections
UCH	University College Hospital
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Family planning programmes have yielded dramatically positive gains over the past 50 years. However, there are still 123 million women around the world, mostly in developing countries, who are not using contraception in spite of an expressed desire to space or limit the number of births.(Okunlola, 2010). Contraceptive use is still low and the need high in some of the world's poorest and most populous places. In the past three decades, Nigeria has made very bold efforts to achieve rapid economic development. However, amongst other factors, rapid population growth has affected the quality of life and made achievement of socio-economic development goals difficult(Adekunle, 2012).

All individual and couples have a basic human right to decide freely and responsibly the number, spacing and timing of their children. Fulfilling this right is an important intervention for improving maternal and child health, preventing HIV infections, and improving the overall well-being of entire families. Yet, only a small proportion of women in Africa (20%) who want to space or limit their pregnancies are using some form of contraceptives. Among those that are using contraception, most are using short-acting methods, such as oral contraceptives and injectables (FHI, 2007)

Choices about childbearing and contraceptive use are among the most important health decisions that many people make. Contraceptive use and choices vary widely in Nigeria according to type of health facility, geopolitical zone, and within urban or rural settings. Various factors, related to both supply and demand, account for these variations and contribute to the low levels of contraceptive use and choices in Nigeria. The use of safe and effective methods of contraception allows couples to determine the number and spacing of their pregnancies (Gertner, 2009). Access to such methods was deemed a fundamental human right by the 1994 International Conference on Population and Development (ICPD)—a forum in which countries committed to work toward achieving the goal of universal access to reproductive health services, including access to effective contraceptives. Improving the use of effective contraception contributes to reducing the

burden of reproductive ill health by decreasing mortality and morbidity of unwanted pregnancies. The widespread increase in the use of contraception is one of the most dramatic social transformations of the second half of the twentieth century. This increase is likely due to multiple factors including access to modern contraception. Such access, in turn, is likely related to micro and macro-economic factors, including women's education, household income, integration into the modern economy, and to the proactive efforts of governments and other health providers to make contraceptive services available.

According to NPC and ICF International, (2014), 7 in 10 women in Nigeria know at least one modern method of contraception and only 10% of the women are using modern contraceptive methods. Almost one-quarter (24%) of married women with more than secondary education were reported using a modern method compared to 3% of women with no education. The use of modern contraceptive methods translates into the prevention of unwanted pregnancy and subsequent abortions. If contraceptive use in the population increases among Nigerian men and women who are sexually active, there will be a significant reduction in unwanted pregnancies and abortions leading to reduced maternal mortality. Research in Nigeria indicates that more than 60% of women with an unplanned pregnancy are not using any form of contraception (Monjok et al, 2010).

Understanding the factors that influence contraceptive use is critical to the efforts of programmes to increase prevalence (Oyedokun, 2004). Much unmet need for family planning persists, even in settings where knowledge of contraceptive methods is high. Studies suggest that many potential users choose not to use more reliable methods due to misperceptions and concern about health-related risks. For example, a study in Maldives found that knowledge of family planning was universal, but only 30% of couples were using a contraceptive method. Several studies, including one from Malaysia, found that non-use of contraceptives was linked to fears about side effects (Oyedokun 2004).

Female education has been seen as a key determinant of contraceptive use (NPC and ORC Macro 2004). Better educated women are also argued to have more knowledge of contraceptive methods or of how to acquire them than are less educated women because of their literacy, greater familiarity with modern institutions, and greater likelihood of rejecting a fatalistic attitude towards life. Koc (2000) found a positive association between the educational level of both spouses and the use of contraceptive methods in Turkey. After all individual, cultural, fertility and contextual variables were controlled, a woman's

education was found to be a stronger predictor of method use and method choice than that of her husband. The study also shows that, to a great extent, contraceptive use and choice of modern method depend on the sex of a couple's living children, implying some preference for sons, although generally women prefer to have children of both sexes.

Recent observations in some centers and communities indicate staffs in health centers are becoming an important source of information, especially in southern Nigeria. This is probably because of the increased level of education among women and mothers in southern parts of Nigeria (Monjok et al, 2010.). Promoting family planning on radio or television can be an important means of raising awareness, improving knowledge and stimulating use of modern contraceptive methods (Parr, 2002). The contraceptive prevalence rate for modern methods has increased from 6 percent in 1990 to 13 percent in 2003 to 15 percent in 2008 and 2013 (NPC and ICF International, 2014) while results from the Integrated Baseline Health Survey (IBHS) indicate that contraceptive prevalence rate is still low in Nigeria and it varies by demographic and socio-economic characteristics (NPC and ORC Macro 2004).

Family planning clients should be informed about the side effects of the methods used what to do if they experience side effects, and told about other methods that could be used (NPC and ORC Macro, 2014). The concept of informed choice in family planning can be applied to a wide range of Sexual and Reproductive Health decision. It focuses on whether to seek to avoid pregnancy, whether to space and time one's childbearing, whether to use contraception, what family method to use, and whether and when to continue or switch methods. The principle of informed choice focuses on the individual (Diaz et al, 1999, Olaitan, 2011). Yet most people's family planning decisions also reflect a range of outside influences. Lack of informed choice and restricted choice of methods constrain contraceptive users the opportunity to obtain a method that suit their needs, resulting in lower levels of contraceptive prevalence. Informed choice may influence the choice of family planning methods as contraceptive users should be informed of the choices they have with respect to other methods (Ross & Williams, 2006, Frost, 2008).

Although there have been so many family planning programmes (disseminated through the media and through some other sources) in Nigeria, the level of use, especially of modern contraceptive methods is still very low. This low level of use in spite of various programmes points to the need for more research in that arena and understanding the

determinants of contraceptive use in Nigeria is still very crucial to the achievement of population and development goals. Hence, this paper aims at examining the determinants of contraceptive use by identifying the factors influencing the choice and use of modern contraceptives, and by investigating specifically whether respondents' level of education, sources of contraceptive information, availability of various contraceptive methods and exposure to family planning counseling has any impact on modern contraceptive choices in women attending family planning clinic at the University College Hospital, Ibadan.

1.2 Statement of problem

Awareness about family planning is high but utilization is still low. Lack of informed choice and restricted choice of methods constrain contraceptive users the opportunity to obtain a method that suits their needs, resulting in lower levels of contraceptive prevalence. Informed choice may influence the choice of family planning methods as contraceptive users should be informed of the choices they have with respect to other methods. On the supply side are issues such as limited availability, quality, and cost of family planning services (Ross & Williams, 2006). As a consequence of limited availability, many Nigerians (particularly in rural areas) lack access to modern contraceptive and family planning services. In areas where services do exist, their quality is often poor, with inadequate contraceptive supplies, insufficient numbers of trained service providers, poor interpersonal skills on the part of providers, and limited essential equipment (Monjok et al, 2010). It is required that family planning providers inform method users of the potential side effects and what they should do if they encounter such side effects. But this is not generally done in Nigeria especially in rural areas. This study investigated the factors determining the choice of contraceptive methods among the women attending family planning clinic at the University College Hospital.

1.3 Justification

There have been so many family planning programmes (disseminated through the media and through some other sources) in Nigeria. The level of use, especially of modern contraceptive methods is still very low in spite of various programmes. This points to the need for more research in order to understand the determinants of modern contraceptive choice in Nigeria. The principle of informed choice focuses on the individual. Yet most people's family planning decisions also reflect a range of outside influences. The study examined the factors influencing informed choice and choice of family planning methods.

A number of factors can explain why contraceptive choices may appear limited especially in developing countries like Nigeria. Provider bias and properties of the method are largely responsible. Hence, in Nigeria; there is a limited choice of methods. Informed choice is an important aspect of the delivery of family planning services. In view of the above problem and concern, this research investigated the factors influencing modern contraceptive choices among women attending Family planning Clinic, University College Hospital, Ibadan methods with the view of improving the quality of services rendered.

1.4 Research Questions

The following questions were answered by the study

1. What are the factors influencing the choice of modern contraceptive methods?
2. What are the factors responsible for continuation of chosen method?
3. What are the experiences of users of modern contraceptive methods?
4. What is the level of satisfaction of users on the chosen modern contraceptive?

1.5 Research Objectives

1.5.1 Broad objective

The broad objective of the study was to investigate the factors influencing modern contraceptive choices among women attending the family planning clinic at the University college Hospital, (UCH) Ibadan.

1.5.2 Specific objectives

The specific objectives were

1. To identify the factors influencing the choice of modern contraceptive methods.
2. To identify factors responsible for continuation of chosen modern contraceptive methods.
3. To document the experience of users of modern contraceptive methods.
4. To document the level of satisfaction of modern contraceptive users,

1.6 Hypotheses

The following hypothesis were tested by the study

1. There is no association between level of education and choice of contraceptive methods.
2. There is no association between availability of various family planning methods and the choice of contraceptive methods.
3. There is no association between experiences on modern contraceptive choice and continuation of chosen method.
4. There is no association between level of satisfaction and continuation of chosen method.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Historical Background

The desire of man to control his fertility is as old as humanity (Kolawole, 2004). In the Holy Bible, Onan used coitus interruptus (The Holy Bible, 2011) which earned him 'Onanism' (Ayodele, 2010).

Modern contraceptives came into limelight around the 1960s with the introduction of the steroidal oral contraceptive pills. From then on, a great deal of improvement and discoveries has taken place and today, quite a number of choices are available. The choice of contraceptive however depends on several variables such as parity, side effects, age, attitude of health workers, cost, medical history of diabetes mellitus, hypertension etc. (Ayodele, 2010). Reasons in support of modern Family Planning methods are to improve individual rights and welfare of women, to combat population explosion secondary to uncontrolled fertility and to tailor the population growth to the available resources improving societal welfare.

The term "Contraception" includes all measures of temporary and permanent methods to prevent pregnancy due to coital act and for spacing births, thus regulating fertility. Contraception refers to the mechanisms which are intended to reduce the likelihood of fertilization of an ovum by a spermatozoon (Grady et al, 2002). Contraceptive is the use of a substance or device to prevent conception. Modern techniques seek to interrupt the process of conception by impacting on the ovum, the sperm, the meeting of the sperm and ovum and implantation. Fecundity is the biological capacity to procreate which remains unchanged.

The World Health Organization(WHO)definition of Family Planning states that it is "a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitudes and responsible decisions by individuals and couples in order to promote health and welfare of the family group and thus contribute effectively to the social development of the country." (WHO, 1971).

Family Planning is also referred to as the practices that help individuals as well as couples to attain certain objectives; such as to avoid unwanted births, to bring about wanted births, to regulate the intervals between two pregnancies, to control the time at which births occur in relation to the ages of the parents and to determine the number of children in the family. Unplanned or unintended pregnancies are those, identified by a mother as unwanted or mistimed (occurring earlier than wanted) at the time of conception have to be avoided at all costs. It is possible only through the timely use of contraceptive methods (Park, 2007).

Family Planning is a primary health strategy with important benefits for both maternal and child health. It is an important component of the strategies adopted to combat rising maternal mortality to the safe Motherhood Conference. Family Planning, as direct obstetrics, causes maternal death in Nigeria, FP can save lives.

According to NDHS (2013), about 7 in 10 women in Nigeria know at least one modern method of contraception. Overall, 10% of married women currently use modern methods of Family Planning; an additional 5% are using a traditional method. Injectables (3%) are the most commonly used methods. More than 40% of sexually active, unmarried women are using a modern method of Family Planning – most commonly the male condom. Use of modern family planning varies by residence and zone. Modern methods are used by 17% of married women in urban areas compared with 7% in rural areas. Modern contraceptive use increases with women's education. (NPC and ICF International, 2014)

Due to a small increase in the use of injectables and male condoms, use of Family Planning has risen slightly since 2003 when 8% of currently married women used a modern method of family planning and has now increased to 10% (NDHS 2013). Private sources, primarily private hospitals and clinics, pharmacies, and chemists provide contraceptives. Nigeria has a large population of adolescents and eligible of reproductive age approximately 18 million. The NDHS of 2013 showed that 75% of Nigerian women of child bearing age are in union. Also Nigerians marry early, have the first pregnancy, have high fertility rate (5.7/woman) and desire many children. Knowledge of Nigerians and attitudes towards Family Planning has improved in the last two decades. Contraceptive use is generally poor. However, there is a wide gap between the north and the south. Accessibility to Family Planning services is very poor. In the rural areas, only 30% of married women are within 6 km of Service Delivery Points (SDPs). (NPC and ICF International, 2014)

Family planning methods refer to methods used to attain the desired number of children and ensure the desired timing of conceptions and spacing between births. Such methods may be classified into three categories, depending upon their actual and theoretical reliability. Types of Family Planning methods available in Nigeria are Hormonal methods, Intra-Uterine Contraceptive Devices (IUCD), Barrier methods, Natural family planning, Voluntary Surgical Contraception (VSC) and Emergency Contraception (EC).

2.2 Rationale for and trends in contraceptive use

The subject of contraception readily brings to mind population growth and family planning. Rapid population growth and over population have become issues of great concern to both national governments and the international community. In order to forestall the dangers inherent in high population growth rates, countries such as Korea, Brazil, Columbia, China, India, Bangladesh and Malawi have used family planning successfully. However, the picture is different in most Sub-Saharan African countries. For example, Nigeria also adopted family planning as a strategy to curb the high rate of population growth that it is presently experiencing. (Nketiah-Amponsah et al, 2012)

However, the acceptance rate of this strategy or practice is still low. Paramount among the measures, was the formulation of a national policy on population, the primary objective of which was “to stem the continuing burden of high fertility and population growth rates in the health of families, their standard of living, the country’s agriculture and food availability, unemployment, dwindling educational opportunities and limited economic resources” Other strategies adopted include complementing facility-based delivery of contraceptives by community based distribution programme in order to reach more people, the participation of non-governmental organizations in the provision of family planning sensitization, education, counseling and delivery services and the integration of family planning and maternal and child health services under the primary health care system. (Nketiah-Amposah et al, 2012). However, other studies have revealed that in spite of the efforts made by the government in this direction, the adoption rate of modern birth-control facilities and services or family planning in Nigeria remains largely insignificant. The following socio-economic factors have been identified in some studies as determinants of contraceptive use in Nigeria: religion, female education, husband’s education, family size, spousal communication and media exposure) (Manjok et al, 2010).

2.3 Contraceptive use and choices

Contraceptive use and choices vary widely in Nigeria according to type of health facility, geopolitical zone, and within urban or rural settings. Various factors, related to both supply and demand, account for these variations and contribute to the low levels of contraceptive use and choices in Nigeria. On the supply side are issues such as limited availability, quality, and cost of family planning services. (Monjok et al, 2010).

Understanding why people prefer some contraceptive methods over others can be useful for strengthening family planning programs. Having a broad range of methods available is a key element of the quality of family planning services and raises the overall level of contraceptive use (John et al 2001; Tara et al, 2006). Family planning ideally should offer choices of methods for all stages of people's reproductive lives, so that they can have the number of children they want and at when they want them.

As a consequence of limited availability, many Nigerians (particularly in rural areas) lack access to modern contraceptive and family planning services. In areas where services do exist, their quality is often poor, with inadequate contraceptive supplies, insufficient numbers of trained service providers, poor interpersonal skills on the part of providers, and limited essential equipment (Askew et al, 1994, Faseyitan et al, 1996). Research on factors associated with demand for contraceptives and family planning services in Nigeria has identified the relative powerlessness of women (especially in northern Nigeria), household poverty, low level of education (especially in northern Nigeria), myths and rumors about modern contraceptive methods, parity, pronatalist attitudes, and widespread preference for male children, as key influences on contraceptive use (NPC and ORC, macro, 2004, Faseyitan et al, 1996).

The ability to decide freely and responsibly the number and spacing of one's children is recognized internationally as a human right (UN, 2008). There is no best method of family planning, because woman and couples may prefer different methods and may change their preferences over time according to their individual circumstances. Having choices and balanced information increases the likelihood that women and couples will choose a method, use it effectively and avoid unintended pregnancies (Sit, Pariana, Davis, Maurice, 1991)

Making a wide range of methods available improves quality of care in a way that benefits family planning programs. First, offering more choices increases the number of

contraceptive users, which can increase the cost-effectiveness of services (Ross et al, 2006). Second, some inexpensive methods are underused simply because people are not familiar with them. Increasing the use of these methods can lower average costs. There is a suitable contraceptive method for virtually everyone who wants one, but often people are not aware of their choices or do not have access to them. Broadening the range of available contraceptives requires greater program investments, including education and counseling, to ensure that women and couples can benefit from new or additional methods and can make informed choices.

In addition to these factors, and especially in northern Nigeria, early marriages and early initiation of sexual activity have contributed significantly to the high fertility and subsequent higher prevalence of maternal and fetal complications. The various modern contraceptive choices and related issues peculiar to Nigeria are outlined below.

Table 2.1 GROUPS OF MODERN CONTRACEPTIVES

Groups	Methods	The facts
Short-Acting	Pills:	<ul style="list-style-type: none"> ● Effective method that is taken everyday ● Safe for women of any age, including women who have never had a baby ● The mini pills is safe for breastfeeding mothers with a baby more than six weeks old
	Injectables	<ul style="list-style-type: none"> ● Effective method that lasts between 1-3 months ● Safe for women of any age, including women who have never had a baby ● Safe for breastfeeding mothers with a baby more than six weeks old
	Male condom	<ul style="list-style-type: none"> ● Effective method that is used at the time if sex ● Used correctly and every time it <ul style="list-style-type: none"> • Prevents pregnancy • Sexually Transmitted Infections (STIs) including HIV/AIDS
	Female condom	<ul style="list-style-type: none"> ● Effective method that is used at the time if sex ● Used correctly and every time it <ul style="list-style-type: none"> • Prevents pregnancy • Sexually Transmitted Infections (STIs) including HIV/AIDS ● Safe for breastfeeding mothers
	Exclusive breastfeeding method (LAM) Implants	<ul style="list-style-type: none"> ● Effective post-partum method when women meets all the following three criteria: <ul style="list-style-type: none"> • Are breastfeeding exclusively (day and night) • Have an infant younger than six months old • Do not have menstrual bleeding
Long-Acting	Implants	<ul style="list-style-type: none"> ● Effective method that last 3-5 years ● Safe for women of any age, including women who have never had a baby ● Safe for breastfeeding mothers with a baby more than six weeks old
	Intra-Uterine Contraceptive Device (IUCD)	<ul style="list-style-type: none"> ● Effective method that last for 5-10 years ● Can be used within w8 hours of childbirth ● Safe for breastfeeding mothers
Permanent Method	Tubal Ligation	<ul style="list-style-type: none"> ● Effective non-reversible method for women who do not wish to get pregnant again
	Vasectomy	<ul style="list-style-type: none"> ● Effective non-reversible method for men who do not want their partners to get pregnant again

2.4 Review of Modern Contraceptive Choices Available

2.4.1 Barrier Methods

Barrier methods act by preventing spermatozoa from entering the cervical os by chemical action or by mechanical action or combined. Condoms are mechanical barriers to the passage of sperms between genital tracts of sexual partners. They are divided into two types; male and female. According to NPC and ORC macro, 2004, the condom is reported to be the main contraceptive method known of and used by Nigerian women of reproductive age. The extensive marketing of condoms in response to the human immunodeficiency virus (HIV) epidemic, with the active involvement of both government and nongovernmental organizations, has been responsible for this increased awareness and subsequent increase in condom use. Condoms are also the preferred choice for post-partum contraception, especially among educated women with high parity. Studies in Nigeria have indicated that because patent medicine stores are common sources of contraceptives and because condoms are readily available over the counter at these stores, there is much less restriction on contraceptive purchases and use compared with the family planning clinics and health facilities where there are more restrictions (Oye-Adeniran et al, 2005, NRC and ORC, 2004). Other contraceptive methods majorly for women in this group include diaphragms, cervical caps, cervical rings, vaginal sponges, spermicides. Spermicides are chemicals placed in the vagina to immobilize or destroy sperms. They can be used alone or in combination with mechanical barriers such as condoms and diaphragms.

Barrier methods of contraception have many advantages which make them reasonable for both long-term and short-term contraception. Apart from the issues of STIs protection, the overall medical safety of these methods is appreciated as it does not cause systemic side effects nor alter a woman's hormone patterns. The emergence of the female condom offers the woman some control over her fertility and infection prevention.

2.4.2 Intrauterine Contraceptive Device

The IUCD is very popular and widely used in Nigeria, particularly by older married women. Studies carried out in the Nigerian cities of Lagos (Odegbola et al, 2008), Benin (Aisien, 2007), Ibadan (Okunlola et al, 2006), and Ilorin (Olatinwo et al, 2001) specifically concerning use of and reasons for discontinuation of the IUCD indicate that the majority of women in these areas are in the age range 31.7 ± 5.7 years with a mean

parity of 4.0. The most common reason for discontinuation of IUCD use was a desire for pregnancy, especially among those younger than 35 years. Other reasons for discontinuation were side effects (mainly heavy menstrual bleeding), spousal disapproval, fear of infertility, and menopause. Experiences of “having a foreign body” or a missing IUCD and expulsion were also reasons for discontinuation. In many of these instances, the levonorgestrel IUCD should be considered because it tends to reduce menstrual bleeding and has a longer duration of action which would ultimately lead to a reduction in the high IUCD discontinuation rate. Unfortunately, the levonorgestrel IUCD is not available in Nigeria (Abasiattai et al, 2008). It is envisaged that the introduction of this device in many centers in Nigeria would lead to an increased acceptance of this method by multiparous (Abasiattai et al, 2008) and grand multiparous women. IUCDs are also a common postpartum contraceptive choice, especially for older women of high parity (Adegbola et al, 2009).

2.4.3 Hormonal contraceptive methods

Hormonal contraceptives are some of the most widely used methods of contraception in Nigeria. As yet, there is no ideal method. However, hormonal contraceptives come very close to meeting all the criteria of an ideal method as they are safe, effective and reversible means of preventing unwanted pregnancies (Adekunle, 2012). Hormonal methods include oral pills, injectables and subdermal implants. These methods consist of synthetic female hormones, oestrogen and progesterone. Some contain progesterone only while others contain both oestrogen and progesterone. They act by suppressing ovulation, thickening of cervical mucus and alteration of endometrium. (Robert, 2010).

Oral Contraceptive Pills (OCPs), like the condom, are readily available over the counter at patent medicine and pharmacy shops in Nigeria. They are also available at the health facilities, and are the second contraceptive method of choice for women of reproductive age, particularly younger unmarried females and students. Pills are required to be taken daily at the same time in order to make most effective use of it (NPC and ORC, 2004). A significant problem in Nigeria is a general lack of adequate information about the OCP. The myth that prolonged use of the OCP leads to permanent sterility has limited its use in Nigeria and may explain why most young females in Nigeria, especially students, prefer to use abortion instead of contraception for unwanted pregnancy. Also, the protective effects

of OCPs are virtually unknown by the majority of women in the Nigerian population. (Manjok et al, 2010)

Emergency contraception also known as post coital or morning after pill is now possible using combined oral pills. However, emergency contraception is not a substitute for regular contraceptive methods. Knowledge and attitudes towards the use of emergency contraception (EC) have been reported by a national cross-sectional survey of the Nigerian population. The various groups surveyed included unmarried women in the community (Obi et al, 2008), female undergraduate students (Akani et al, 2008), health care providers (Adekunle et al, 2009), private medical practitioners(Okonofua et al, 2009), and men (Odu et al, 2000, Lawoyin et al, 2002).

All studies concluded that there is very poor knowledge of EC in Nigeria, even among private medical practitioners. (Adekunle et al, 2000). There are very few programs in Nigeria designed to increase the awareness of EC in spite of the very high maternal mortality rate associated with induced abortions which occur as a consequence of unwanted pregnancies (Ellerton et al, 2000). In a cross-sectional sample of potential providers of EC conducted by the Society for Family Health, 81% approved of EC. The reasons cited for disapproval of EC in this study included religion (5%), potential side effects (3%), and the belief that EC leads to permanent infertility (29%). In the same Society for Family Health survey, only 8% of the providers had training in EC, only two providers knew both the correct dose and correct timing of EC, and no provider knew both the correct dose and timing for Postinor®. Private medical practitioners provide a substantial proportion of family planning and reproductive health services in Nigeria, but the study by Okonofua et al, (2009) showed that while 79.9% of doctors correctly described EC methods, only 23% reported that they had EC products in their clinics, and only 13.8% used the correct brand and doses currently available in Nigeria. Similarly a large proportion of the doctors did not know the exact timing of EC in relation to sexual intercourse, while only a few gave correct names and dosages of administration. Traditional fertility methods for post-coital EC use in Nigeria include use of gin, codeine tablets, and potash mixed with blue and lime taken with pepper seeds.

There are few studies in Nigeria concerning the use of hormonal contraceptive injections and subdermal implants, probably because these are not common choices. In addition, women fear the side effects of these hormonal methods of contraception, probably because

of misinformation (Falase et al, 1988). A study was conducted in Ibadan (Falase et al, 1988) which followed 810 patients who used Depot Medroxy Progesterone Acetate (DMPA) as a contraceptive method over a period of 11 years. Amenorrhea, menorrhagia, and metrorrhagia were the major reasons for discontinuation of DMPA in only 11% of the patients. This low discontinuation rate is indicative of the effectiveness of this method in this population which should therefore be available for suitable women who demonstrate estrogen intolerance. (Monjok et al, 2010)

Available implants in Nigeria are progestin-only which is inserted under the skin of woman's upper arm by a minor surgical procedure. The levonorgestrel subdermal implant (Norplant®), introduced in 1985, and which is the most commonly available long-acting progestin-only subdermal implant then in Nigeria. During its first year of use, Norplant was shown to be highly effective and safe, and is considered an acceptable contraceptive method among Nigerian women of different ethnic groups (Ladipo et al, 2005). The pooled Norplant continuation rate was shown to be 90.1% after 12 months, 84.9% after 24 months, and 77.1% after 36 months of use (Ladipo et al, 2005). Other studies on Norplant acceptability, effectiveness, common side effects, and reasons for discontinuation among Nigerian women have been carried out in Benin City (Aisien, 2007), Zaria (Haggi, 2007), and Calabar (Ekabua & Itam, 2007). These studies showed a promising future for implant contraceptives in Nigeria, particularly in the Hausa and Muslim communities of northern Nigeria where contraceptive use has been generally low (Haggi, 2003). Another study in Enugu (Ezegwu et al, 2005), where the subdermal Norplant was inadvertently used by women for a prolonged period of time (up to 10 years) instead of the recommended five years, showed an effectiveness rate of 100%. The most common reason for not having the implant removed at five years was forgetting the date of removal and moving to another town where removal was not possible because of lack of trained health personnel. (Ladipo et al, (2005), Aisien ,(2007)

Subdermal implants are offered to women at family planning clinics in the tertiary/specialist hospitals, which are urban-based and staffed by gynecologists. A woman who migrates to a peripheral region or district after receiving the implant will not have access to trained health personnel at the local health center or rural hospital to remove the implant after five years (Ezegwu et al, 2005). Other reasons for prolonged use of implants included inability to afford the cost of removal (after five years), the belief that the implant was still working, and, in a few instances, unavailability of implants at the health facility

at the time of removal , so that women continue to use the implants after the recommended five years' duration. (Ladipo et al, (2005)

Lately, a two-rod implant named Jadelle was introduced. Jadelle is an improved version of Norplant. It contains the same amount of the active ingredient in Norplant but fewer numbers of rods. Also, Implanon which is just a rod and which is used for 3 years is now available as against Unilant which was been used for a year.

2.4.4 Female Surgical Method

Female surgical method by tubal ligation is not a common or acceptable contraceptive choice in Nigeria. However, this method is commonly used worldwide, especially in developed countries and in some developing countries in Asia and South America. Many factors can influence decision-making about sterilization in Nigeria, including religion, ignorance, and superstition based on ancient beliefs, even among more literate members of the community (Adesiyun, 2007). According to Adesiyun 2007, the acceptability of tubal ligation in Nigeria and other developing countries might be influenced by the high cost of the procedure, scarcity of skilled providers (especially in rural areas), and fear of surgical complications. Nigerian studies have shown that the demand for tubal ligation is low, but is commonly accepted in conjunction with another surgical procedure, such as a cesarean section or laparotomy for repair of uterine rupture (Adesiyun, 2007, Ezegwu et al, 2004). Possible surgical complications when using the Pomeroy's technique of tubal ligation via laparotomy or the mini-laparotomy route (the latter being the most common) include uterine perforation, bladder and intestinal injuries, and intra-abdominal bleeding, although the occurrence of these complications was found to be minimal. (Manjok et al, 2010)

2.5.5 Male Surgical Method

Male surgical method or vasectomy is a rarity among Nigerian men. There were only two cases of voluntary vasectomy performed over a 30-year period at University College Hospital in Ibadan. (Akinwuntan et al, 2008). In a study in Jos, northern Nigeria, only 10 cases of vasectomy were recorded over a 16-year period compared with 3,675 female sterilizations. Eighty percent of the men who underwent a vasectomy were well educated, with 20% of them being medical practitioners. Although the procedure is simple, safe, and effective, it is not readily accepted as a method of fertility control in Nigeria. This low incidence has been attributed to male attitudes, whereby men are perceived to be more

interested in proving their virility than in family planning. In addition, Nigerian men are afraid that vasectomy will hurt their sex drive, which they treasure for fertility reasons, especially in polygamous relationships. (Mutahir et al, 2004, Naz et al, 2009). For these reasons, very few men in Nigeria who know about this method would choose it as a contraceptive method.

2.5.6. Natural Family Planning Methods (NFP)

This involves the use of signs, symptoms and cycle data to determine when ovulation occurs. Some techniques may be used to help couples become pregnant by detecting ovulation. Couples using NFP abstain from intercourse during the at-risk fertile days. Methods of determining high-risk fertile days include cervical mucus billings method, ovulation method calendar (Rhythm method) sympto-thermal method, Lactational Amenorrhoea Method (LAM) and Standard Day Method (SDM). (National Training Manual, 2010, WHO, 2011).

2.5.6.1 Rhythm Method

The rhythm method is also known as the calendar method; it works by predicting the days in which a woman is most fertile. To use this technique, a woman must chart her menstrual history for several months in order to anticipate the dates in which she is ovulating. Women using this technique must abstain from unprotected sex on the days during which she is most fertile. The rhythm method can be somewhat effective, but it requires careful record-keeping and diligent adherence to the technique. (National Training Manual, 2010; WHO, 2011).

2.5.6.1 Cervical Mucus Method

Like the rhythm method, the cervical mucus method of family planning works by predicting the days in which a woman is most fertile. During ovulation, the consistency of cervical secretions will change to accommodate conception. A woman can determine her level of fertility by consistently documenting the color, texture and consistency of her vaginal mucus. The cervical mucus method is reliable only if a woman is intimately familiar with her own body and if the couple consistently uses other contraceptive techniques during fertile days. (National Training Manual, 2010, WHO 2011).

In general, breastfeeding delays the return of fertility at postpartum. However, LAM is a contraceptive methods based on exclusive breastfeeding. LAM is an effective method only

under specific conditions which include woman breastfeeding exclusively, woman is amenorrhoeic and the infant is less than 6 months old.

Cycle beads also called standard day method is a natural FP method. It is based on the knowledge that the menstrual cycle is made up of a fertile phase preceded and followed by infertile days. The cycle beads helps users of the SDM to identify the fertile and infertile days of their cycle and also monitors cycle length. Based on physiological evidence that a woman's fertile phase starts five days before ovulation and lasts through the day of ovulation, the SDM allows women with cycles 26 - 32 days long to prevent pregnancy by avoiding unprotected intercourse during their fertile window – days 8 through 19 of their menstrual cycle. The couple uses cycle beads, a colour – coded string of beads that indicates fertile and non-fertile days of a cycle, as a memory aid. Cycle beads has 32 beads, each bead represents a day of the menstrual cycle. The red bead represents the first day of menstruation and of the cycle and white beads represent days when a woman can get pregnant.

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Table 2.2: Most widely used Modern Methods in Family planning; Brief description, effectiveness, advantages and disadvantages

Method	Description	Advantages	Disadvantages
Pill: Combined Oral Contraception	Contains the hormones estrogen and progestogen. Inhibits ovulation. Regular daily intake essential for reliable contraceptive protection.	Very high contraceptive reliability Safe for women of any age including women who have never had a baby. Serious side effects are rare.	Side effects may include no menses, headache, weight gain etc. Impaired efficacy if pills have been missed. Vomiting, diarrhea and intake of certain medication can have a negative impact on the contraceptive protection.
Pill: Progesterone- only	Contains only the hormone progestogen Thickensthe cervical mucus	Can be taken during lactation without having negative impact. Suitable for women who cannot tolerate estrogen, breastfeeding women who want hormonal contraception.	Irregular bleedings possible.
Injectable: 1-monthly Injection	Depot injection containing the combination of oestrogen and progesteron. Primarily inhibits ovulation and thickening of the cervical mucus.	Very high reliability Discreet method of contraception Prevention of risk of oral intake failures. Continuous and highly reliable contraceptive protection over a period of 1 month. Suitable for women who cannot follow the oral intake schedule with the required discipline	Requires frequent visit to the clinic Irregular menstrual bleeding Return of fertility may be delayed Weight gain is possible Does not protect against STIs/HIV/AIDS

Method	Description	Advantages	Disadvantages
Injectable: 2-monthly Injection	<p>Depot injection containing the hormone progestogen only.</p> <p>Inhibits ovulation during the first week and thickening of the cervical mucus.</p>	<p>Highly reliable,</p> <p>Discreet method of contraception.</p> <p>Prevention of risk of oral intake failures</p> <p>Continuous protection over a period of 2 months.</p> <p>Does not contain oestrogen, it can be given during lactation</p> <p>Suitable for women who cannot follow the oral intake schedule with the required discipline or cannot tolerate oestrogen</p>	<p>Requires injection by health care professional every 2 months (12 weeks)</p> <p>Irregular menstrual bleeding</p> <p>Weight gain is possible</p> <p>Does not protect against STIs/HIV/AIDS</p>
Injectable: 3-monthly Injection	<p>Depot injection containing the hormone progestogen only.</p> <p>Inhibits ovulation during the first week and thickening of the cervical mucus.</p>	<p>Discreet method of contraception.</p> <p>Prevention of risk of oral intake failures</p> <p>Continuous and highly reliable contraceptive protection over a period of 3 months.</p> <p>Does not contain oestrogen, it can be given during lactation</p> <p>Suitable for women who cannot follow the oral intake schedule with the required discipline, who cannot tolerate oestrogen</p>	<p>Requires injection by health care professional every 3 months (12 weeks)</p> <p>Irregular bleedings and weight gain possible.</p> <p>Return of fertility may be delayed</p> <p>Does not protect against STIs/HIV/AIDS</p>

Method	Description	Advantages	Disadvantages
Intra-Uterine Contraceptive Devices (IUCD)	<p>Small T-shaped plastic device with copper wire or impregnated with progestin (levonogestrel).</p> <p>Inhibits motility of sperm and prevents fertilization.</p>	<p>High contraceptive reliability and long acting.</p> <p>Prevention of risk of oral intake failures or regular injections.</p> <p>Continuous and highly reliable contraceptive protection over a period of 10-12 years.</p> <p>Suitable for women seeking long term contraception and cannot tolerate hormonal contraceptive methods.</p>	<p>Device needs to be inserted into the uterus by medical professional</p> <p>Requires regular checks on IUD being in correct position.</p> <p>Side effects include longer and painful menstrual bleedings.</p>
Implants	<p>Plastic rod (s) being implanted in the upper arm.</p> <p>Plastic rod (s) releases the hormone progestogen over a period of 3-5 years</p> <p>Prevention of ovulation and thickening of the cervical mucus.</p>	<p>Very high reliability and long acting protection over a period of 3-5 years.</p> <p>Discreet method of contraception.</p> <p>Prevention of risk of oral intake failures or regular injection.</p> <p>Suitable for women who cannot follow the oral intake schedule with the required discipline, who cannot tolerate oestrogen</p> <p>Return to fertility is immediate</p>	<p>Implant needs to be inserted and removed by medical professional</p> <p>Irregular bleedings, skin problems and</p> <p>Weight gain is possible side effects.</p>
<p>Natural Methods:</p> <p>a)Rythm (Calendar)</p> <p>b)Cervical Mucus (Billings)</p> <p>c)Sympto-thermal</p>	<p>They are based on the woman's ability to identify the most fertile days in the menstrual cycle.</p>	<p>Free of side effects.</p> <p>Cheap.</p> <p>Encourages union and marital dialog</p>	<p>High failure rate</p>

Source: Social Health care programmes on family Planning: A poster for family planning Education, Bayer Health Care, Bayer's Schering Pharma. (2003)

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Methods	Description	Advantages	Disadvantages
Condoms	<p>Rubber (latex) protection applied over the erect penis.</p> <p>Prevention of sperm being released into the vagina/uterus (womb).</p>	<p>Reliable prevention of HIV/AIDS and other sexually transmitted diseases.</p> <p>Can be combined with other contraceptive methods for 'double security'.</p> <p>Suitable for women /men without regular or a new partner to primarily protect from HIV/AIDS and other sexually transmitted infections.</p>	<p>Proper handling and correct application is necessary. Hence, it may rupture or slip off.</p> <p>Expiry dates need to be observed to ensure reliable protection</p>
Lactational Amenorrhoea Method (LAM)	<p>A family planning method based on breastfeeding.</p> <p>A breast feeding woman uses LAM when; Her baby gets little or no food or drink except breast milk, and she breastfeeds often both day and night AND Her menstrual periods have not returned, AND Her baby is less than 6 months old.</p>	<p>Effective up to 6 months after childbirth.</p>	<p>The woman should be planning for another method when she no longer uses LAM</p>

Method	Description	Advantages	Disadvantages
Female Surgical Method (tubal ligation)	Effective permanent methods for women who are sure they will not want more children.	<p>Safe, simple surgery, usually done without putting the woman to sleep.</p> <p>Local anesthetic agent is used to block pain.</p> <p>No known long-term side effects. Brief discomfort after procedure.</p> <p>Serious Complications of the procedure are rare.</p> <p>No effect on sexual ability.</p>	Requires careful thinking before decision.
Male Surgical Method (Vasectomy)	<p>Effective permanent methods for men who are sure they will not want more children.</p> <p>Local anesthetic agent is used to block pain.</p>	<p>Safe, simple surgery, usually done without putting the man to sleep.</p> <p>No known long-term side effects.</p> <p>Serious complications of the procedure are rare.</p> <p>No effect on sexual ability.</p>	<p>Requires careful thinking before decision.</p> <p>Brief discomfort after procedure.</p>

Source: The Essential Contraceptive Technology: A handbook for clinic staff. Health Care Providers. Robert A. Hatcher, (2003)

Table 2.3: Traditional contraceptive methods

Method	Description	Advantages	Disadvantages
Abstinence	most effective method of contraception	<p>It is ultimately 100 percent effective</p> <p>It offers additional protection against sexually transmitted infections</p> <p>Free of side effects</p>	<p>Couples using this family planning technique may engage in other forms of sexual contact,</p> <p>Most couples find it challenging to abstain from intercourse entirely.</p>
Withdrawal method (coitus interruptus)	<p>It is also known as coitus interruptus or "pulling out,"</p> <p>It is one of the world's oldest family planning techniques.</p>	<p>Free of side effects</p> <p>Cheap</p> <p>Encourages union and marital dialogue</p>	<p>The man must fully withdraw his penis from his partner's vagina before he ejaculates.</p> <p>It requires diligence and careful planning</p> <p>High failure rate</p>

2.7 Contraceptive Advances

More than 100 million women in less developed countries, or about 17 percent of all married women, would prefer to avoid a pregnancy but are not using any form of family planning. Demographers and health specialists refer to these women as having an “unmet need” for family planning—a concept that has influenced the development of family planning programs for more than 20 years, (Ashford, 2003). The unmet need for family planning has remained high in most parts of the world. Contraceptive methods currently available provide an effective protection against pregnancy, but they do not always suit every individual and couple (Omu, 2011, John A. Ross et al, 2003). The most ideal contraceptive method as characterized by women all over the world should be highly effective, have prolonged duration of action and still be rapidly reversible, should not have any side effects and complications, also easily accessible and provide privacy of use, and offer protection against HIV/AIDS and sexually transmitted infections. The most ideal method of contraception with all these characteristics is yet to be developed, and so the search continues for a method that will suit the needs of every individual and couple. (Robert, 2010).

2.7.1 Contraceptive Methods Recently Introduced

Many new methods have been approved by the US Food and Drug Administration in recent years for use in the United States. Some are improved versions of existing methods and some are being introduced for the first time. Some methods have been available in other countries for many years but were approved by the US Food and Drug Administration very recently.

All these methods can be grouped under the following categories:

- Combined Hormonal Contraceptives,
 - ✓ Yasmin – a combined oral contraceptive pill with a newer progestin, Drospirenone
 - ✓ Nuva Ring – a contraceptive vaginal ring;
 - ✓ Ortho Evra – a transdermal contraceptive patch.
- Intrauterine Devices,
 - ✓ Levonogestrel Intrauterine System (Mirena)
 - ✓ New Copper IUDs

- Barrier methods,
 - ✓ Lea Shield
 - ✓ Panty Condom
- Female sterilization,
 - ✓ Essure
- Natural methods,
 - ✓ Standard Days Methods
- Male Methods.
 - ✓ Testosterone Undecanoate (Robert, 2010)

The development of new and improved methods of contraception for both women and men is a key component of the strategy to improve the quality of FP programs (Szarewski, 2000).

2.8 Benefits of family planning methods

According to Planned Parenthood of Nigeria (PPFN), there are four basic reasons for promoting family planning. Family planning is perceived by most people as fundamental human right which should be exercised by all voluntarily. By this rationale, the right of the couples and individuals, especially women to freely and voluntarily decide on and regulate their reproductive behavior is being directly promoted through family planning. Therefore family planning information and practices become very necessary to enable individuals and couples to choose the right way of reproductive conduct (Singh et al 2003).

In addition, family planning practices promote the health of the mother, child, the father and therefore the community and nation (Singh et al 2003) absence of family planning will imply high maternal and child mortality and morbidity from malnutrition to communicable diseases e.g. measles and reduce life expectancy of the father. According to Planfed Newsletter (1991) family planning practice help to ensure that childbirths do not occur among women too early, too close, too many, too late and too costly to their lives, all of which carry tremendous amount of health risk to the mother and child.

Family planning also help by ensuring adequate regulation of birth, and saving women from excessive child bearing, family planning g practices gives women time to pursue their education, careers and other legitimate aspirations (Singh et al 2003). It also gives

women more time to be involved in the socio-economic activities of their communities and the nation. According to the Planned Parenthood federation Nigeria newsletter (1991) effective family planning practices enables women to share their time meaningfully between their primary roles pursuit of socio-economic reproductive life.

Rapid population growth has been identified as one of the factors slowing down family and nation development and reducing the living standard of people. Therefore, for sustainable national development to take place, the rate of economic growth (which is rate of generating new resources) must remain consistently higher than the rate of growth of the population so that there is surplus resources to invest in infrastructure, social and economic development and vice versa (Planfed newsletter, 1991). Therefore family planning will promote demographic and socio-economic harmony and national development.

Using family planning to meet the need for spacing and limiting births has the potential to prevent thousands of maternal mortality over the next decade. The risk that a woman will die as a result of pregnancy, childbirth or unsafe abortion is approximately one in 16 in sub-Saharan Africa. The country-specific risk of maternal death is as high as one in seven women in Angola, Malawi and Niger (Abouzahr and Wardlaw, 2003). Spacing and limiting birth also has the potential to prevent hundreds of thousands of child deaths. In each of 16 sub-Saharan countries studied between 72,000 and 1.1 million child death are expected to be averted over the next decade if all women who want to space or limit their births succeed (USAID). The use of family planning is already preventing the birth of an estimated 173,000 HIV-Infected infants each year in sub-Saharan Africa (Reynolds, Steiner and Cates, 2005) providing women and couples access to a range of contraceptive choices protects their human rights and benefits public health. Strengthening LAPM services in Africa will also meet individual needs while contributing to more sustainable national programs for reproductive health and family planning.

2.9 Counseling

Counseling is a form of interpersonal communication in which the counselor helps the counselee to identify, clarify, resolve problem and makes an informed decision and act on that decision. It can also be described as a person to person interaction in which the counselor provides adequate information to enable the client to make an informed choice.

Family planning counseling is a process by which a family planning provider uses appropriate communication skills to provide correct, adequate and unbiased information on available option to an individual, couple, or group to help them understand family planning/child spacing. The information provided will enable the client to voluntarily accept family planning and adopt a method of their choice. (National Training Manual, 2010).

Family planning service provider plays an important role in FP counseling by educating clients about their options, supporting clients' choices, encouraging clients to speak, discussing clients, concerns and helping clients solve any problems they experience. Clients also play an important role in family planning by explaining their situation, preference and needs, in addition clients ask questions and participate in problems-solving and methods choice. Good FP counseling help clients make better choices about contraceptive methods, use their methods well and continue to use their methods.

2.10 Medical Eligibility Criteria (MEC)

The WHO Medical Eligibility Criteria is a document that reviews the medical eligibility criteria for use of contraception, offering guidance on the safety of use of different methods for women and men with specific characteristics or known medical conditions (WHO, 2004, 2008 and 2011). Medical eligibility criteria for each contraceptive method, with the exception of female and male surgical sterilization, were classified using four categories:

Table 2.4: Medical Eligibility Criteria (MEC) Table

Category	Description	When clinical judgment is available
1	No restriction to use	Use the method under any circumstance
2	Benefits generally outweigh risk	Generally use the method
3	Risks generally outweigh benefit	Use of the method not generally except if other methods are unavailable/unacceptable
4	Unacceptable health risk	Method not to be used

2.11 Review of empirical study relating to the research topic

Since the 1970s, family planning has been emphasized as a way to reduce fertility levels for many developing countries throughout the world (DESA, 2006). The 1994 International Conference on Population and Development (ICPD) provided a forum for countries to commit to making efforts to decrease fertility rates by focusing on women's reproductive health, particularly the need for family planning programs (Gakidou & Vayena, 2007; DESA, 2006). Six years later, the UN established the Millennium Development Goals (MDGs) in 2000 for development and eradication of poverty. The MDGs are intimately linked with family planning as population and fertility rates greatly impact countries' ability to meet multiple MDGs, including the goals to improve maternal health, combat HIV/AIDS, increase gender equality and women's empowerment and reduce child mortality (Singh et al, 2009; Campbell et al., 2007). Family planning is especially relevant to MDG 5 to improve maternal health, which calls for the reduction of the maternal mortality ratio by three quarters and for the achievement of universal access to reproductive health by 2015. There is strong evidence that effective family planning programs result in decreased maternal and infant morbidity and mortality (Singh et al, 2009; Smith et al., 2009;). By allowing women to delay motherhood, space births, and cease childbearing, family planning reduces unwanted pregnancies and the demand for abortion (Marston & Cleland, 2003; Singh et al., 2009). An estimated one-third of maternal deaths and nearly one-tenth of child deaths worldwide could be prevented annually with the help of family planning (Cleland et al., 2006).

In many populations, women are expected to find a solution for contraception, so they have anxiety about becoming pregnant from puberty to the post-menopause period (Stubblefield et al., 2007). The choice of contraception is one of the most important decisions to be made by couples and many factors may affect this, such as the couples' concordance, religion, socioeconomic condition, knowledge and physician counselling (Grewal and Burkman, 2003, Kurtogul et al, 2011). Contraceptive methods can be classified into hormonal and non-hormonal methods. Hormonal methods include oestrogen and progesterone combinations, progesterone on its own containing preparations and levonorgestrel-releasing intrauterine devices (Stubblefield et al., 2007). Non-hormonal methods consist of barrier methods such as condoms, intrauterine devices and traditional methods like lactation and coitus interruptus (Stubblefield et al., 2007). Sterilisation, as its contraception effect is too high, seems to be more popular today especially among middle-

aged couples as the induced abortion is another method used to terminate pregnancies by medical and surgical means, but it carries high risks of morbidity and mortality for women. In previous studies of contraceptive methods and the factors affecting women's choices, there were different results according to the region where the women lived, the working conditions, educational status and age groups (Alpu and Fidan, 2006; Topsevar et al., 2006; Mosher and Jones, 2010, Kurtoglu, 2011).

There have been many studies about the contraceptive choices of women and the factors affecting this and the results differed according to the prevailing socioeconomic and sociocultural conditions. Emel et al (2011) in their study concluded that women were affected by many factors in choosing contraceptive methods. Their husbands had a significant effect in all groups independent of educational status, working conditions and age groups. The neighbourhood seemed to have an effect especially in the less educated women and in housewives. (Emel et al, 2011).

The decision on pregnancy and childbearing which include decision on contraceptive use is one of the key areas that men are expected to have the final say as the 'head of household'. Women resistance to this cultural practice through autonomous use of contraceptives may lead to conflicts and violence in marital unions. In many parts of the country women are not likely to use or sustain use of contraceptive without the consent of the male partner. This provides the need to address the cultural practices that hinder women reproductive autonomy in the country (Solanke et al, 2014).

It is known that the acceptability of contraceptive method is fundamental to correct and consistent use and to continue utilization. If a woman is unhappy with the contraceptive method for whatever reason, she is likely to discontinue the method. Thus acceptance determines effective use and continuity of the chosen contraceptive method. The study carried out in Ethiopia on acceptance of Long Acting Reversible Contraceptives (LARC) revealed that majority of women did not accept LARC because of fear of Side effects and infertility after use (Hailay et al, 2014). There have been many studies supporting this in the literature. Alpu and Fidan (2006) studied the factors affecting the contraceptive choice of married women and they found that religion was the most effective factor, followed by living region and educational status. They indicated that the use of modern methods increased in those who were higher educated and who lived in urban areas. Furthermore,

Topsever et al. (2006) showed that higher educated women had more information about their contraceptive methods and physicians' counselling did not affect this. Increasing the educational level of women may be the most effective means of advancing family planning acceptance and increasing the demand for contraceptive services in Nigeria.

CONCEPTUAL FRAMEWORK OF THE STUDY

The PRECEDE model was adopted for this study. PRECEDE model is a framework put together to identify problems. It is used to yield information which is needed to plan intervention. It is called a Planning Model. The model was developed by Green et al. (1980). It has served as a conceptual framework in health education plans aimed at diagnosing the health problems of a community. Green classified the factors that influence human behaviour into three:

1. **The predisposing factors:** This refers to the factors that influence people's motivation to change. These include level of knowledge, attitudes, perceptions, beliefs, and values.
2. **Enabling factors:** These are the skills and resources that make it possible for the desired behaviour to take place. For example income, accessibility to health services, personal skills, and time.
3. **Reinforcing factors:** This refers to the influences that the significant others have on people's behaviour. They include friends, peers, neighbours, and family members. Among the contributions of the PRECEDE model is that it has encouraged and facilitated more systematic and comprehensive planning of public health programs. Sometimes practitioners and researchers attempt to address a specific health or quality of life issue in a particular group of people without knowing whether these people consider the issue to be important.

Using this model as a conceptual framework, this study was able to tease out the followings;

Predisposing factors included respondents' good knowledge of modern contraceptive methods including the benefits and higher educational level.

Enabling factors included the right of every woman to access reproductive health services and good source of income.

Reinforcing factors included previous use of contraceptives by respondents' mothers and husbands' support.

CONCEPTUAL FRAMEWORK (PRECEDE MODEL)

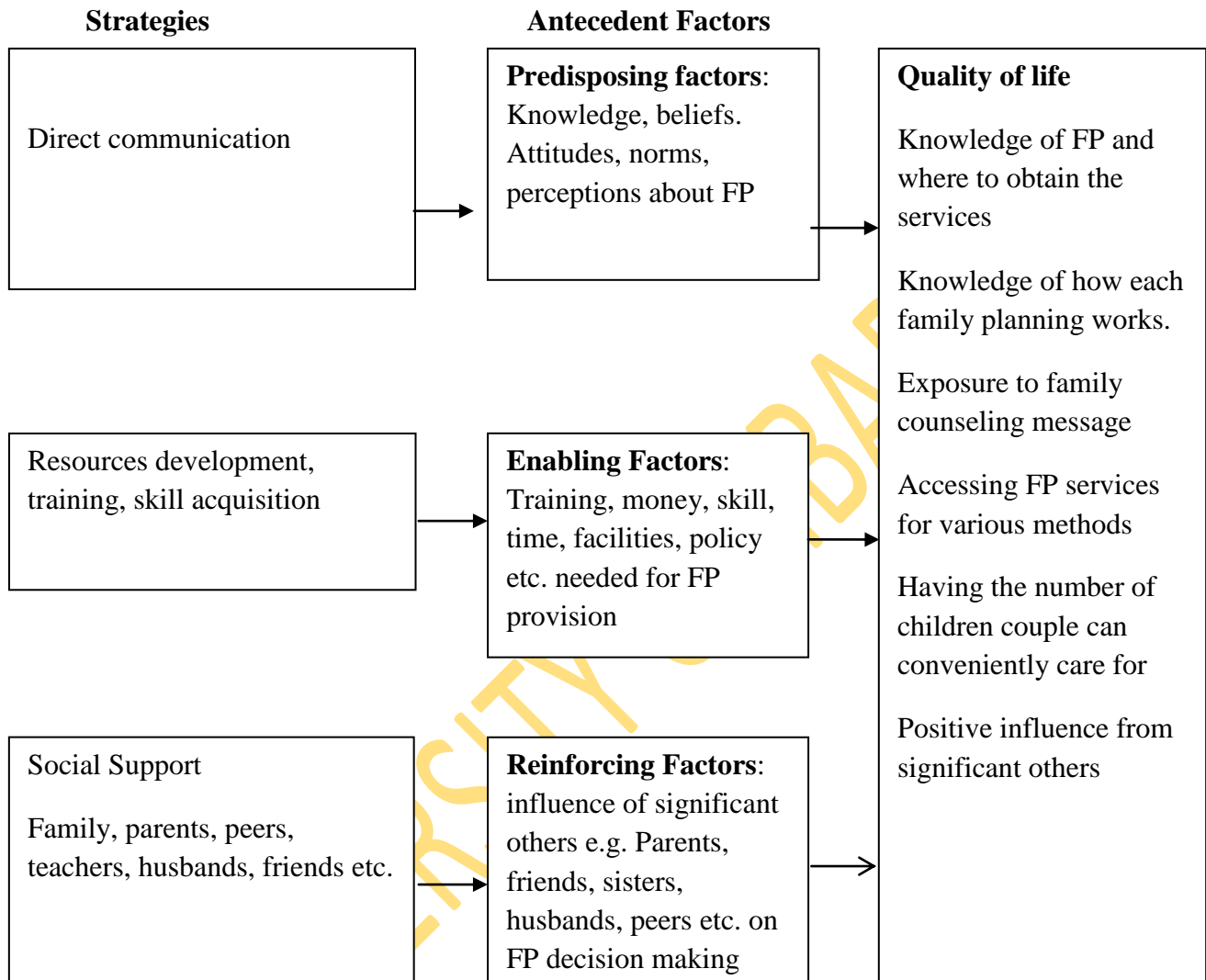


Figure 2.1: Application of the PRECEDE model to the factors that influence modern contraceptive choices

CHAPTER THREE

METHODOLOGY

3.1 Study design

This is a descriptive cross-sectional survey designed to investigate the factors influencing modern contraceptive choices among women attending the family planning clinic at the University College hospital, (UCH) Ibadan.

3.2 Study area

This study was conducted at the Fertility Research Unit (FRU), also called Family Planning Clinic, University College Hospital (UCH), in Ibadan North Local Government area of Oyo state. The Clinic is in the Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan. Family planning program started in UCH in 1965 by late Professor Adewole Ojo with the assistance of two nurses. The College of Medicine, University of Ibadan took over the unit in 1975 and since then, the unit has been under the Department of Obstetrics and Gynaecology and known as Fertility Research and Endocrinology Unit (FR&EU) till date. Fertility Research Unit opens Monday to Friday between the hours of 8am and 4pm to the community members. The clinic functions majorly in 3 different areas: Research, Training and Services in Reproductive Health (RH) and Family Planning (FP). The clinic provides various modern methods of contraception to clients. Clients come into this unit from all nooks and crannies of Ibadan city. The clinic welcomes old and young, literate and illiterate as clients. Averagely, about 357 clients attend the clinic every month. There are five seasoned Research Nurses/Trainers, one Community Health Extension Worker (CHEW), one Health Assistant/Records clerk and one Cashier working in this unit. The research nurses work together with the consultants in the unit to carry out research and training of all cadres of health workers.

3.3 Study population:

The target population for this study was women currently using one form of modern contraceptive methods and attending Family Planning Clinic at the University College Hospital, Ibadan.

3.4 Sample Size Calculation

The sample size was calculated using Leslie Kish formula

$$n = \frac{Z^2 p (1 - p)}{d^2}$$

Prevalence of contraceptive use = 15% (ICF MACRO/NPC, 2008)

Where; $p = 0.15$,

$$q = 1 - p = 1 - 0.15 = 0.85$$

$$n = \frac{(1.96)^2 \times 0.15 \times 0.85}{(0.04)^2}$$

$$n = \frac{3.8416 \times 0.15 \times 0.85}{0.0016}$$

$$n = \frac{0.489804}{0.0016}$$

$$n = 306.13$$

$$10\% \text{ non-response} = 30.61$$

$$n = 306.13 + 30.61$$

$$n = 336.74$$

$n = 337$ women on modern contraceptive methods attending family planning clinic, UCH, Ibadan, Oyo State.

3.5 Sampling technique:

Systematic random sampling technique was used to select respondents for this study. From records of attendance at the unit, an average of 11 to 12 women visited the clinic per day.

3.6 Methods and instrument for data collection

3.6.1 Semi Structured questionnaire (Quantitative data)

The only instrument used for quantitative data collection was pretested questionnaire. The questionnaire was designed using the research objectives. The questionnaire contained a combination of open and closed ended questions. Clinic card and relevant literatures were used to develop the questionnaire. The questionnaire contained five sections requiring information on respondent's demographic characteristics, factors influencing the choice of modern contraceptives, factors responsible for continuation of chosen method of

contraception, personal experience on previous and current use of contraceptive methods and level of satisfaction of modern contraceptive choice(See Appendix I)

3.6.2 Validity of instrument:

The researcher ensured the validity by consulting relevant literature. The draft of the instrument was given to the experts in the field of population and reproductive health independently and afterwards, the instruments were reviewed by experts in Health Promotion and Education, Faculty of Public Health, University of Ibadan to ensure relevance, appropriateness and adequacy of the items in each of the sub-text. The feedback was used to improve the draft.

3.6.3 Reliability of instrument:

In other to ensure the instrument measured what it was intended to measure the questionnaires were pre-tested on 10% of the sample size (thirty-fourwomen) currently using one form of modern contraceptives methods at Adeoyo Maternity Family Planning clinic. Cronbach's Alpha reliability test was used to assess the result of the pretest. The outcome of the pretest was used to correct and modify the question the women found difficult to understand. A coefficient of 0.86 was obtained for the questionnaire that was used for data collection. This is adjudged reliable as this is greater than 0.5. Based on the pre-test, the time needed for the completion of interview was estimated, questions were revised, edited, and those found to be unclear or confusing were modified.

Similarly, to ensure validity and reliability of the study instruments, well-trained field assistants were used in the administration of the questionnaires. Training was conducted for the hired field assistants to intimate them with the questions in the instrument ensuring adequate understanding of the instrument prior to the commencement of data collection. The training focused on the goal, objectives and importance of the study, study population and sampling process, how to obtain respondent informed consent and how to review questionnaires daily to ensure completeness. The field assistants were also involved in pre-testing of questionnaires. On daily basis, the researcher ensured checking of questionnaires to rule out mistakes. Every mistake discovered was corrected immediately.

3.7 Training of field Assistants

Two field assistants were trained and employed to administer the questionnaire. The 6-hour training of the field assistants included intimating them with research objectives, sampling technique and sample size and ways of eliciting information from the respondents as some of the questions were sensitive and private.

3.8 Data Collection Process

The only instrument used for this study was questionnaire. The questionnaire consisted of five sections: the first section focused on the socio-demographics characteristics of the respondents, second section on obstetrics and contraceptive history, third section on the contraceptive practices of the respondents, the fourth section was on the experience of respondents on previous and current use of contraceptive methods, while the fifth section focused on the level of satisfaction of users. Closed and open-ended questions were included in the questionnaire, and data were collected through face-to-face structured interviews. Questionnaire was prepared first in English then translated to a local language (Yoruba) by language expert. To ensure consistency of the translation with the English version; the questionnaire was translated back to English by another language expert. Data were collected using structured and pretested interviewer administered English and Yoruba version questionnaire. The data were collected between July and November, 2013. The respondents willingly participated in the study. Written consents were obtained from the respondents. The confidentiality of the respondents was maintained because the interviews were done either in private rooms or places so that other people could not overhear the discussion.

Systematic sampling technique was used to select 341 women who were on one form of modern contraceptive. Every third (3rd) client that attended the clinic was selected for this study. For example if client A is selected for the study, then client D would be the next client to be selected. However, only willing and consenting clients were included in the study. Participants were interviewed as they came into the clinic. This process continued until more than the required number of sample size (341) was obtained.

3.9 Data Management and Analysis

The completed copies of the questionnaire were numbered serially for easy identification and recall purposes. Data was checked on daily basis for completeness and accuracy. Data

obtained was entered using SPSS (Statistical Package for Social Sciences Version 15). Data was edited, and coded manually by the researcher using developed coding guide. Analysis was done using descriptive statistics, Chi-square, and multinomial logistics. Results were discussed and presented in tables and figures.

Positive questionnaire items about continuation factors were assigned '1' for a 'yes' response and '0' for a 'no' response and the responses for the eight questions were summed for each respondent to give a continuation score. Continuation scores were categorized into Unlikely (≤ 4), Likely (5-6) and Very Likely (7+). Positive questionnaire items about satisfaction factors were assigned '2' for a 'yes' response and '0' for a 'no' response while negative questions were coded vice versa. The responses for the five questions were summed for each respondent to give a satisfaction score. Satisfaction scores were categorized into low (≤ 6) and high (> 6).

3.8 Ethical consideration

Ethical approval was obtained from UI/UCH Ethics Review committee. (See Appendix v). Written informed consent was taken from each respondent to ensure voluntary participation (See pages 95-96). The research was at no cost to the subject as the researcher bore the cost. Respondents were assured of confidentiality and same was maintained during and after the interview. Confidentiality of the data collected was ensured as any identifier was not included on the questionnaire.

3.9 Limitation of the study

The researcher relied on the responses from the respondents. The respondents were expected to report on their experiences as far as their choices of contraceptives are concerned and some of the questions were sensitive. There was no way of ascertaining whether their claims were true or not. However, the findings of the study were based on the information gathered from the respondents.

CHAPTER FOUR

RESULTS

This chapter presents the result of quantitative data. The results were presented under the following sections: Demographic characteristics, factors influencing the choice of modern contraceptive methods, factors responsible for continuation of chosen method of contraception, experience on previous and current use of contraceptive methods.

4.1 Socio-demographic Information

Three hundred and forty-one (341) women with mean age of 35.5 years \pm 6.4 and median age of 35 years (22-53 years) responded to the survey as shown on Table 4.1 below. Seventy-five percent of the women were aged 40 years and below (see Table 4.1). Almost all (99.6%) were married and 89% were of monogamous marriages while 11% had polygamous marriages.

Most of the women (41%) had secondary education; 10.6% of women had basic education (junior secondary and primary education) and no formal education, while 47% had tertiary education as shown on Table 4.1. Thirty-eight percent of the women were traders/businesswomen, one in four is civil servants and about 12% were artisans. Eighty-two percent (82%) of the respondents were Yoruba, 11% were Igbo; and other tribes included Hausa (2%), Edo (3%), Itsekiri and Ebira (0.3% each), and Cross-River (1.2%). Thirty-two percent of the respondents' husbands had secondary education; 62.7% had higher education and only 2.1% had no formal education. Majority (97.7%) was employed into government, private or self-employment. Most respondents are also engaged in other business/jobs. Level of income of respondents' husbands ranged between ₦96,000.00 and ₦6,000,000.00 per annum.

Table 4.1: Socio-demographic characteristics of the respondents

Characteristics	Frequency	Percentage
Age (in years)		
20 – 29	58	17.0
30 – 39	193	56.6
40 – 49	79	23.2
50+	11	3.2
Total	341	100.0
Marital status		
Married	339	99.4
Single	2	0.2
Total	341	100.0
Highest Level of Education		
Non-formal	1	0.3
Primary	28	8.2
JSS	7	2.1
SSS	141	41.3
NCE/Poly	86	25.2
University degree	53	15.5
Post graduate	22	6.5
No response	3	0.9
Total	341	100.0
Occupation		
Trading	130	38.1
Civil servant	86	25.2
Housewife/unemployed	41	12.0
Artisans	40	11.7
Private sector/company	31	9.1
Caterer	5	1.5
No response	8	2.3
Total	341	100.0
Religion		
Islam	82	24.0
Christianity	252	73.9
Others	7	2.1
Total	341	100.0

Table 4.2: Demographic characteristics of husbands of respondents

Characteristics	Frequency	Percentage
Husbands highest level of education		
Non-formal	7	2.1
Primary	8	2.3
SSS	109	32.0
NCE/Poly	58	17.0
University degree	101	29.6
Postgraduate	55	16.1
No response	3	0.9
Total	341	100.0
Husbands occupation		
Trading/business	57	16.7
Artisans	60	17.6
Civil servant	117	34.3
Private sectors/company	82	24.0
Self-employed	19	5.6
Clergy	5	1.5
No response	1	0.3
Total	341	100.0

Table 4.3: Income of the respondents and their husbands

Income /Annum	Respondents Income per annum	Percentage	Husbands’ Income per annum	Percentage
No response	14	4.1	34	10.0
Housewives/unemployed	30	8.8	N/A	-
Can’t say/disclose/Don’t know	42	12.3	157	46.0
Less than ₦100,000	22	6.5	3	0.9
₦100,000 - ₦499,000	146	42.8	33	9.6
₦500,000 - ₦999,000	40	11.7	46	13.5
₦1,000,000 - ₦1,499,000	23	6.7	22	6.5
₦1,500,000 - ₦1,999,000	11	3.2	15	4.4
₦2,000,000 - ₦2,499,000	4	1.2	11	4.1
₦2,500,000 - ₦2,999,000	6	1.7	7	2.1
₦3,000,000 - ₦3,499,000	1	0.3	6	1.7
₦3,500,000 - ₦3,999,000	-	-	1	0.3
₦4,000,000 - ₦4,499,000	1	0.3	2	0.6
₦4,500,000 - ₦4,999,000	-	-	-	-
₦5,000,000 - ₦5,499,000	-	-	-	-
₦5,500,000 - ₦5,999,000	-	-	-	-
₦6,000,000 and above	1	0.3	4	1.2
Total	341	100.0	341	100.1

4.2 Factors influencing the choice of modern contraceptives

4.2.1 Respondents parity and pregnancy outcome

All (100%) the women interviewed had been pregnant before. Twenty-six percent (26.1%) had been pregnant three times while 24.3% had been pregnant five times and above. About thirty percent (29.6%) had delivered three times and 30.8% had two living children. More than half of respondents (51%) still wished to have more children while 44.6% did not wish to have more children. Decision on desired number of children was jointly made by the respondent and spouse in 75.5% of cases. Almost all (95.9%) the last pregnancy resulted in live birth (see Table 4.4)

Table 4.4 showed that 46.0% of the respondents jointly decided with their husbands to use modern contraception while 23.4% and 20.0% were the sole decisions of husbands and respondents respectively. It also showed that 48.4% of the husbands paid for family planning services rendered to their wives. Forty-nine percent (49.0%) of the respondents were using family planning methods to limit births while 40.2% and 1.8% use them for spacing and delaying birth respectively.

Results clearly showed that 88.3% of the respondents were influenced to use contraceptives due to the support given by their husbands while 57.2% were influenced by their friends who had used a particular method before.

4.2.2 Contraceptive history of respondents

Most common type of contraceptives used by the respondents was implant (43.4%) followed by IUCD (32.0%) and injectables (25.0%). The respondents jointly decided with their husbands on the type of contraceptive to be used. Cost implication for contraceptive service was jointly borne by both of them. It was shown that factors influencing choice of modern contraceptives included higher level of education (44.0%) and the type of contraceptive used by the respondents' mother.

Table 4.5: Distribution of respondents' uptake of modern contraceptives

Characteristics		
Frequency	Frequency	Percentage
Decision maker on the use of modern contraceptive method		
Joint	157	46.0
Husband	79	23.2
Self	70	20.5
Provider	29	8.5
No response	6	1.8
Total	341	100.0
Persons/s responsible for the payment of FP services		
Husband	165	48.4
Self	88	25.8
Joint	73	21.4
In-laws	14	4.1
Provider	10	3.3
Total	341	100.0
Reasons for FP practice		
Limiting births	167	48.9
Child spacing	137	40.1
Delaying pregnancy	123	35.5
Guard against mistake	7	2.1
Satisfy husband	6	1.8
To give children better education	61	18.8
No response	6	1.8
Total	341	100.0

Table 4.6: Factors influencing the choice of modern contraceptives

Factor influencing the choice of modern contraceptives	Responses	Percent of Cases
I am knowledgeable about the benefits of modern contraceptives	332	97.4
My husband supports the use of modern contraceptives	301	88.3
I have friends that use modern contraceptives	195	57.2
Use of modern contraceptives worked for my mother/mother-in-law	75	22.0
Tried traditional and pregnancy resulted	9	2.6

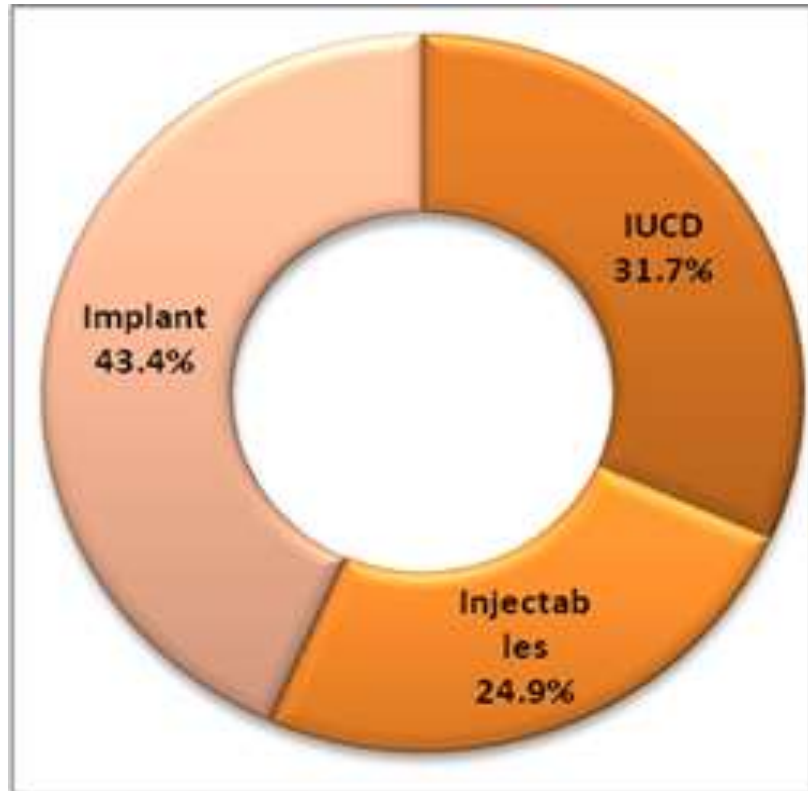
*Multiple responses

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4.2.3 Type of Modern Contraceptive in Use

Figure 4.1 showed the type of modern contraceptives used by the women and the time period they have been using the chosen methods. Most common was Implant (43%) followed by IUCD (32%) and Injectables (25%) was the least used. Forty-four percent (44%) have been using their chosen method for 1-11 months, little less than three in ten (28%) have been using it for 1-5 years and 28% have been using it for six years or more.

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Type of contraceptive used ($n = 341$)

Figure 4.1: Most commonly used modern contraceptives

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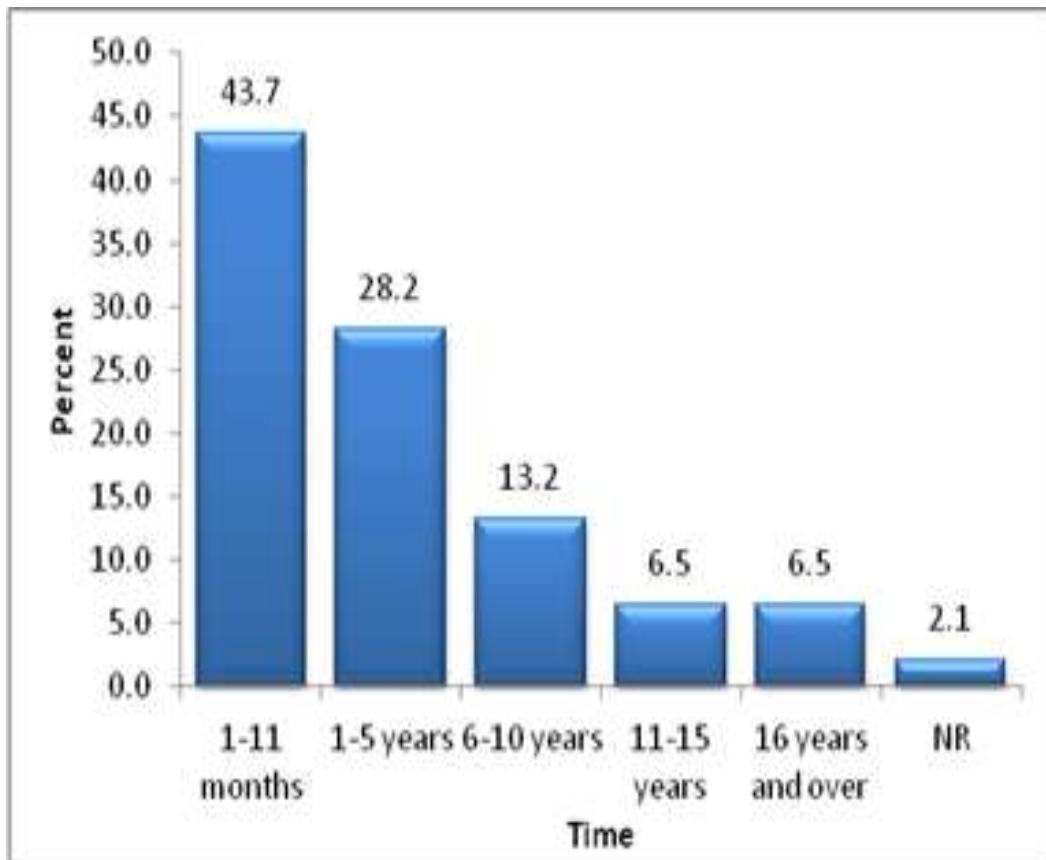


Figure 4.2: Duration of use of chosen contraceptives ($n = 341$)

4.3 Factors responsible for continuation of chosen method of contraception

Almost 49.0% of the women chose their methods because of the safety it offers them, 34.6% for effectiveness (ability to prevent pregnancy), 8.5% for its availability and others such as weight gain (4%); personal preference (4%), others have done it (4%) while 2% each because of reversibility, reliability, less stress and 1% because of long-term usability (See Table 4.7)).

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Table 4.7: Factors influencing continuation of chosen contraceptive method by respondents

Factors influencing continuation of chosen method	Res ponses	Percent of Cases
My method is available all the time	327	95.9
It is easy to discontinue my method	308	90.3
My husband prefers/support this method	301	88.3
The method I am using has minimal side effects	286	83.9
Cost of the chosen method is more affordable than the other methods	270	79.2
Use of my method does not disturb sexual intercourse	211	61.9
I do not have to see a provider before using my method	56	16.4
My friend/mother-in-law influenced the sustenance of the method I am using	55	16.1

**Multiple responses*

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4.4 Experience on previous and current use of contraceptive method

All the respondents (100%) had used one form of modern method at one time or the other. Majority (91%) were still using the same method first chosen till the period of the study while some others had changed theirs for one reason or the other. Previously used methods were implants (53.8%) and IUD (35.5%) while 90.2% are still in use of the same methods respectively. Some of the reasons for current choice of modern contraceptives included highly effective (72.8%), few side effects (56.1%) and long acting (13.7%). Most commonly used method by respondents was implants and the reasons for choosing it were for its effectiveness and few side effects.

For those who had changed methods, reasons for change included preference for long term method (50.0%), menstrual irregularities (50.0%), desire for another baby (31.8%), advised to change by provider (27.3%), husband disliked it (25.0%) and method unreliable (10.1%) (Table4.8)

All the respondents were counseled either by a nurse (86.2%), a doctor (7.9%) or a student midwife (4.1%) before choosing their methods. Majority (72.0%) chose their methods because of high effectiveness, fewer side effects (56.1%) and others (41.2%).

Results clearly showed that the chosen methods of respondents were not the only methods available when each of them went to seek family planning services.

Table 4.8: Percentage distribution on experience on use of contraceptives

FP Method	Ever used		Still in use		Have changed method		Reason for change	
	N	%	N	%	N	%	Reasons	N %
Abstinence								
Yes	4011.7		2357.5		1742.5		Marriage 1	5.9
No	30188.3		1742.5		2357.5		Unreliable	1 5.9
Total	341100.0		40 100.0		40 100.0		NR 15	88.2
Withdrawal								
Yes	339.7		927.3		2472.7		Unreliable	1 4.2
No	30890.3		2472.7		9 27.3		NR 23	95.8
Total	341100.0		33 100.0		33 100.0		Total 24	100.0
Pills								
Yes	24 7.0		24 100.0		24 100.0		NA	341 100.0
No	31793.0		24 100.0		24 100.0			
Total	341100.0							
Intra-uterine device								
Yes	12135.5		93 76.9		28 23.1		Husband disliked it7	25.0
No	220 64.5		2823.1		93 76.9		Heavy bleeding 8	28.6
Total	341 100.0		121100.0		121100.0		Prolonged menses 6	21.4
							No response 7	25.0
							Total 25	100.0
Injectables								
Yes	9828.7		76 77.6		22 22.4		To have another baby 7	31.8
No	24371.3		22 22.4		76 77.6		Advised to change by provider 6	27.3
Total	341 100.0		98 100.0		98 100.0		No menses	1 4.5
							No response	8 36.4
							Total 22	100.0
Implant								
Yes	12235.8		110 90.2		12 9.8		Preference for long term type 6	50.0
No	21964.2		12 9.8		11090.2		No response	6 50.0
Total	341 100.0		122 100.0		122100.0		Total	12 100.0
Others								
Yes	72.1		7100.0		7100.0		Not applicable	341 100.0
No	33497.9							
Total	341100.0							

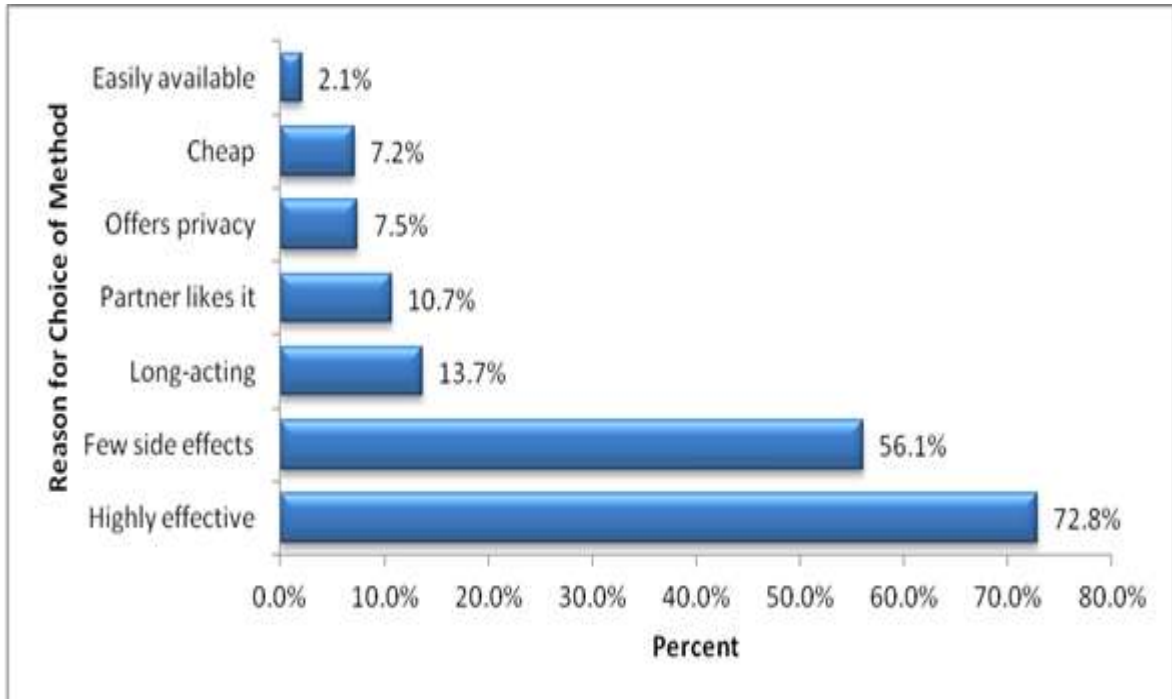


Figure 4.3: Reason for current choice of contraceptive method

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Table 4.9: Method of contraception used by respondents and reason for choice

Reasons for choice	Modern methods			Total
	IUCD	Injectables	Lmplants	
Cheap	8 (33.3)	5 (20.8)	11 (45.8)	24 (7.2)
Easily available	2 (28.6)	2 (28.6)	3 (42.9)	7 (2.1)
Highly effective	77 (31.6)	63 (25.8)	104 (42.6)	244 (72.8)
Few side effects	62 (33.0)	50 (26.6)	76 (40.5)	188 (56.1)
Partner likes it	11 (30.6)	12 (33.3)	13 (36.1)	36 (10.8)
Long-acting	12 (26.1)	8 (17.4)	26 (56.5)	46 (13.7)
Offers privacy	7 (28.0)	5 (20.0)	13 (52.0)	25 (7.5)

*Multiple responses

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Table 4.10: Percentage distribution of problems encountered using contraceptives

Response	Frequency	Percent
Ever encountered any problem since start of current method		
Yes	121	35.5
No	213	62.5
NR	7	2.1
Total	341	100.0
Problems with current method		
No menses	19	15.7
Scanty menses	27	22.3
Heavy menses	26	21.4
Weight gain	20	16.5
Weight loss	13	10.7
Prolonged menses	23	19.0
Breast pain	6	4.9
Stomach pain	5	4.1
Frequent headache	2	1.7
Total*		
Suggestions on how to overcome the problems		
Change Method	33	27.0
Seek for solution from the providers	75	61.5
Opt out of use of modern contraceptive methods	7	5.7
Adopt traditional methods of contraception	7	5.7
Total*		

**Multiple responses.*

4.5 Level of satisfaction of modern contraceptive users

Almost all (95.6%) the respondents claimed that the current methods of choice satisfied the reasons for use. Table 4.11 shows the details of how the current methods satisfied the reason for use. Factors responsible for satisfaction included adequate information received about different methods prior to choice (98.2%), getting help for problems and side effects is easy (97.9%) and methods did not affect any part of their lives negatively (95.8%).

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Table 4.11: Respondent's satisfaction with chosen contraception

	Frequency	Valid Percent
Satisfaction with reason for contraception use		
Yes	326	95.6
No Response	15	4.4
Total	341	100.0
If yes, how		
Improved mutual love between husband and wife	47	14.4
Effective in preventing unwanted pregnancy	37	11.3
Keeps my mind at rest	34	10.4
Very reliable	28	8.6
No side effects	27	8.3
Free to have sex anytime	26	8.0
Simple and easy to use	26	8.0
Works quite efficiently	20	6.1
Can plan children	14	4.3
Keeps me in good health	13	4.0
Gives no room for abortion	7	2.1
Gives me confidence	7	2.1
It brings about enjoyment between the couples	7	2.1
It is reliable when using it	7	2.1
Not stressful at all if not for scanty menses	7	2.1
Enjoy my family	6	1.8
Less risky	6	1.8
Very good and convenient to use	6	1.8
No response	1	0.3

***Multiple responses**

Table 4.12: Factors responsible for satisfaction with modern contraception

Satisfaction with chosen method	Responses	Percent of Cases
I am satisfied with my method because I had adequate information before choosing my method	328	98.2
Getting help for problems/side effects is easy	327	97.9
I do not have to wait for a long time before I am attended to at the clinic	266	79.6
The clinic is close to my house	96	28.7

*Multiple responses

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4.6 Test of Hypotheses

Hypothesis 1

There is no association between level of education and the choice of contraceptive methods.

Table 4.13 shows the association between type of contraceptive used and the level of education of the women. For easy comparison, basic education refers to primary or junior secondary education, secondary education refers to completion of senior secondary education, and tertiary education refers to all post-secondary formal education. One of the respondents had no formal education but she was added to the categories of basic education in order to avoid empty cells in the contingency table.

Thirty-nine percent of the women with basic education used Injectables and this was more than the proportion that used IUCD (33%) and Implant (28%). Among women with secondary and tertiary education, Implant was most common – 48% and 43% respectively while IUCD was least common among women with secondary education (23%) and Injectables was least common among women with tertiary education (19%). Hence women with higher education are more likely to use implant than other forms of modern contraception. Pearson chi-square statistic shows that there is a significant association ($\chi^2 = 15.116, p=0.004$) between the type of modern contraceptive chosen by a woman and the woman's level of education. Hence, variation in the proportion of choice of modern contraception observed was not due to chance but influenced by the woman's level of education

It was observed that there is a significant relationship between the level of education and type of contraceptive used when the husband's level of education is secondary or tertiary ($p<0.05$) but the association is not significant among husbands with basic education ($p>0.05$). Husbands with higher level of education have an underlying influence on the kind of contraceptive chosen by their wives. Type of contraceptive used did not vary significantly among the women with husbands that had basic education. Among husbands with secondary education, half of the women with basic education chose Injectables and half among the women with secondary education chose Implant and little more than half of women with tertiary education chose Injectables.

Table 4.13: Relationship between type of contraceptive used and education level

Type of Modern Contraceptive Used	Highest Level of Education				Chi-square test	
	Basic Education	Secondary Education	Tertiary Education	Total	Pearson Chi square	p-value
IUCD	12	32	62	106	15.116	0.004
	33.3	22.7	38.5	31.4		
Injectables	14	41	30	85		
	38.9	29.1	18.6	25.1		
Implant	10	68	69	147		
	27.8	48.2	42.9	43.5		
Total	36	141	161	338		
	100.0	100.0	100.0	100.0		

4.6.1 Factors influencing choice of modern contraceptives

Table 4.14 shows the relationship between factors that could influence choice of modern methods. It was observed that husband's support, influence of friends, and failed traditional methods were not significantly related to the choice of modern contraceptives by the women ($p>0.05$) while the type of contraceptive previously used by respondents' mothers and knowledge of contraceptive types had significant relationship ($p<0.05$) with the chosen methods.

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Table 4.14: Factors influencing choice of modern contraception

Factors	Response	Statistics	Modern contraceptive are you currently used				Chi-Square	P-value
			IUCD	Injectables	Implant	Total		
Husband's support of modern contraceptives	No	Count	10	13	17	40	1.688	0.430
		Row %	25.0%	32.5%	42.5%	100.0%		
	Yes	Count	98	72	131	301		
		Row %	32.6%	23.9%	43.5%	100.0%		
	Total	Count	108	85	148	341		
		Row %	31.7%	24.9%	43.4%	100.0%		
Friends that use modern contraceptives	No	Count	44	35	67	146	0.647	0.723
		Row %	30.1%	24.0%	45.9%	100.0%		
	Yes	Count	64	50	81	195		
		Row %	32.8%	25.6%	41.5%	100.0%		
	Total	Count	108	85	148	341		
		Row %	31.7%	24.9%	43.4%	100.0%		
Failed traditional methods	No	Count	104	83	145	332	0.806*	0.696
		Row %	31.3%	25.0%	43.7%	100.0%		
	Yes	Count	4	2	3	9		
		Row %	44.4%	22.2%	33.3%	100.0%		
	Total	Count	108	85	148	341		
		Row %	31.7%	24.9%	43.4%	100.0%		
Modern contraceptives worked mother/mother-in-law	No	Count	76	65	125	266	7.380	0.025
		Row %	28.6%	24.4%	47.0%	100.0%		
	Yes	Count	32	20	23	75		
		Row %	42.7%	26.7%	30.7%	100.0%		
	Total	Count	108	85	148	341		
		Row %	31.7%	24.9%	43.4%	100.0%		
Knowledgeable about the benefits of modern contraceptives	No	Count	9	0	0	9	16.524*	0.000
		Row %	100.0%	0.0%	0.0%	100.0%		
	Yes	Count	99	85	148	332		
		Row %	29.8%	25.6%	44.6%	100.0%		
	Total	Count	108	85	148	341		
		Row %	31.7%	24.9%	43.4%	100.0%		

*Fisher's exact test is reported here because contingency table has less than 80% expected count above than 5.

4.6.2 Multinomial Logistic Regression

Table 4.15 shows the outcome of the multinomial logistic regression used to determine how much each of the factors that were significantly related with contraceptive method of choice contributed to the choices that the women made. The table shows the Odds-ratios (Exp(B)) and the respective confidence intervals as well as the p-values. The model's goodness-of-fit ($\chi^2 = 4.717$, $p > 0.05$) shows that the model significantly represents the data. Implant was used as the reference group in the logistic model and intercept was shown in the model. Only significant results are reported here. Level of education of the women and use of contraceptive by mothers are the two variables included in the model because they are the only ones that had significant association with methods of choice in the chi-square analysis. Knowledge of benefit of contraception are not used in the model because it violates one of the assumptions of the nominal regression model which required no cell count to be empty and two of the cell categories were empty. The result shows that women who said that their choice of a particular method was not because it had worked for their mothers are twice [$2.26 = 1/0.442$] less likely to have chosen IUCD over implant than women who had said yes ($p < 0.05$) and women who had secondary education were almost twice [$1.84 = 1/0.543$] less likely to have chosen IUCD over implant than women who had tertiary education ($p < 0.05$). Also, women who had basic education were three times [3.28] more likely to have chosen injectables over implant than women who had tertiary education ($p < 0.05$).

Table 4.15: Multinomial Logistics Regression

Modern contraceptive currently in used	Exp(B)	95% Confidence Interval for Exp(B)		P-value	Goodness of fit Pearson Chi-square	
		Lower Bound	Upper Bound			
IUCD	Intercept			0.086	4.717 [#]	
	Modern contraceptives worked for my mother					
	No	0.442	0.239	0.817		0.009
	Yes					
	Education Level					
	Basic	1.375	0.551	3.431		0.495
Secondary	0.543	0.314	0.94	0.029		
Tertiary						
Injectables	Intercept			0.229	4.717 [#]	
	Modern contraceptives worked for my mother					
	No	0.587	0.298	1.155		0.123
	Yes					
	Education Level					
	Basic	3.277	1.304	8.231		0.012
Secondary	1.417	0.793	2.533	0.239		
Tertiary						

^aReference category is implant

[#]p-value>0.05

Hypothesis 2

There is no association between availability of various family planning methods and choice of contraceptive methods

All the women indicated that their current choice of modern contraceptive was not the only one available at the time of their choice. Hence, availability did not of necessity determine choice.

Hypothesis 3

There is no association between experiences on modern contraceptive choice and continuation of chosen method.

Forty percent of the respondents had a continuation score of 5 and about 60% of the respondents had a continuation score of 5 or more. Mean continuation score was 5.3 ± 1.26 coefficients of skewness and kurtosis were -0.44 ± 0.132 and 0.711 ± 0.263 respectively implying that most of the respondents, as observed, had very large scores. Continuation scores were categorized into Unlikely (≤ 4), Likely (5-6) and Very Likely (7). Figure 8 shows the distribution of the categorised continuation score. About 19% are unlikely to continue, 63% are likely to continue and about 18% are very likely to continue.

Table 4.17 shows the relationship between experiences with modern contraceptives and continuation. Of the 121 women that have encountered a problem with modern contraceptive, about 70% likely to continue and 18% are very likely to continue while among the 213 that had not encountered a problem with their modern contraceptive 60% are likely to continue and 19% are very likely to continue. About 15% and 21%, respectively, among those that have and have not encountered any problem with modern contraceptives are not likely to continue. Pearson chi-square statistics shows that there is no significant association between experiences with modern contraceptive and continuation ($p > 0.05$). Hence, continuation with the chosen modern contraceptive does not necessarily imply that the women would discontinue. This is also due to the fact that 75% of the women that had a problem with their contraceptives would seek for solution from the providers (see Table 4.16).

Table4.16:Relationship between experiences of modern contraceptive and continuation

Ever encountered any problem in the use of modern contraceptive?	Continuation Category			Total	Pearson Chi-square Statistic	p-value
	Not likely	Likely	Very Likely			
Yes	18 14.9	81 66.9	22 18.2	121 100.0	2.308	0.315
No	45 21.1	127 59.6	41 19.2	213 100.0		
Total	63 18.9	208 62.3	63 18.9	334 100.0		

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Hypothesis 4

There is no association between level of satisfaction and continuation of chosen method

Most of the women had a satisfaction score of 8 (63%) and 16.5% had score of 6 or less. Hence, mean satisfaction score was 8.0 ± 1.4 and skewness and kurtosis coefficients of -0.69 ± 0.13 and 1.06 ± 0.27 respectively, which shows that the data has a long tail towards the lower scores. Satisfaction scores were categorized into low (≤ 6) and high (> 6).

Table 4.18 shows the relationship between satisfaction with modern contraceptive and continuation. Among those that have low satisfaction score, about 25% are not likely to continue with the modern contraceptives while among those with high satisfaction scores, about 18% are not likely to continue. About 74% of those with low satisfaction and 82% of those with high satisfaction scores are quite likely to continue with the modern contraceptive methods. Chi-square test shows that there is a significant association between satisfaction with modern contraception and continuation ($p < 0.05$). This implies that the respondents with high satisfaction score are more likely to continue and those with low satisfaction are less likely to continue.

Table 4.17: Relationship between satisfaction and continuation of modern Contraceptive among the women

Satisfaction Index	Statistic	Continuation Category			Total	Pearson Chi square value	p-value
		Not likely	Likely	Very Likely			
Low	Count	14	26	15	55	6.366	0.0414
	Percentage	(25.5%)	(47.3%)	(27.3%)	100.0		
High	Count	49	182	48	279		
	Percentage	(17.6%)	(65.2%)	(17.2%)	100.0		
Total	Count	63	208	63	334		
	Percentage	(18.9%)	(62.3%)	(18.9%)	100.0		

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CHAPTER FIVE

DISCUSSIONS, CONCLUSION AND RECOMMENDATION

This chapter is organized into five sub-sections as follow: Socio-demographic information; factors influencing the choice of modern contraceptive methods, factors responsible for continuation of chosen methods of contraception; experience on previous and current use of contraceptive methods and level of satisfaction of modern contraceptive users.

5.1 Socio-demographic characteristics of the respondents

All the respondents were females and currently using a form of modern contraceptive methods. This was so because women currently using a form of modern contraceptive methods were targeted for the study. The mean age of the respondents was 35.5 ± 0.05 while the average family size was 3.5; this was slightly lower than that of the national figure which stood at 5.5 in 2013 (NPC/ICF MACRO, 2014). Findings of this study revealed that a large proportion of the respondents aged between 22 and 49 and which is still in conformity with the reproductive age group 15-49 years.

Large number of the respondents (99.4%) were married and in monogamous union. This is expected because majority of married women adopt family planning to prevent unwanted pregnancy and to space births. According to Maharaj and Cleland (2004), married women are more likely to use modern contraceptives than their unmarried counterparts. This claim has, however, been challenged by Teye (2004) who argued that in some societies the level of contraceptive use among young unmarried women may be as high as that among married women. It is advisable for anyone who cannot avoid having sex to marry than having extra marital affairs. Majority of them were also in monogamous union (89.4%), possibly because they are well read. It is not surprising that majority of the respondents were Yoruba (81.8%) This is possible because the clinic is situated in a Yoruba community. If this study was conducted in the eastern part of Nigeria, there is high possibility that majority of the respondents will be Ibos.

The overall attainment of the respondents' level of education showed that majority had tertiary education (47.2%) followed by secondary education (41.3%) and primary education (8.2%). This must be as a result of the hospital being tertiary and majority of the people patronizing the clinic will be elites. It is also worthy to know that the level of their education is the same with their husbands'. This may be so because most men with higher education will want to marry female in the same categories. Despite the general agreement that level of education positively influences modern contraceptive use and choice. Some studies have shown that this relationship is by no means universal. For instance, a study in Jordan (Teye, 2013) showed that the rate of modern contraceptive use among women with primary education is not significantly different from that of their counterparts with secondary education. Similarly, a recent study in Mali (Kaggwa et al, 2008) did not show any relationship between level of education and modern contraceptive use. Information on the type of modern contraception methods being used in any society is important not only for marketing purposes, but also for addressing the factors that make some methods unpopular. In this research, therefore, the women who were using modern contraceptives at the time of the survey were asked to state the methods that they were using.

Large numbers of the respondents and their husbands are gainfully employed, have some other jobs they do and make good income per annum. This may be due to the fact that they have good and quality education and which gave them good job opportunities.

5.2 Factors influencing the choice of contraceptive methods

One of the eight Millennium Development Goals (MDGs) is improving maternal health through reducing maternal mortality by two-third. This could be achieved by quality reproductive health and family planning service. Family planning improves community health by helping both men and women to have children when they are physically, emotionally and financially prepared to take up the child's responsibilities. (Weyzer et al, 2013).

All the respondents (100%) had been previously pregnant. Majority of them had two living children (30.8%). Almost half (44.6%) did not wish to have more children while a little above Half (51%) wished to have more. Number of surviving children has a positive and significant relationship with modern and any contraceptive methods. Having more or no more children was a joint decision (74.5%) by the couples according to the respondents.

Uptake of modern contraceptives was a joint decision by the couples (46.0%) and almost half of the respondents claimed that their husbands pay for the family planning service (48.4%). This result is corroborated by studies elsewhere in the literature including Okech et al (2011) who in a more recent study among women in the reproductive ages in Kenya found that, income level, proximity to the provider, religious affiliation of the woman, partner's approval are some of the key factors driving contraceptive use in Kenya. Other studies elsewhere, using proxies for husband's approval or woman's autonomy has shown a strong effect on use of contraceptives among women (Shrestha, 2000). This indicates that partner's or husband's approval of contraceptive usage is crucial to the success of family planning policies (Nketiah-Amponsah et al, 2012).

Majority of the respondents claimed they had sexual intercourse infrequently (36.0%); this may not be the real picture of the situation as this is a private question and which majority of people may not want to respond to or give adequate information about but it is believed that if women are not active sexually, they would not have come for Family planning services.

The reason for using family planning methods was shown to be high (49.0%) for limiting childbirth, followed by spacing (40.2%). This finding is consistent with Varea *et al*, 1996, who found that the utilization of modern contraceptives intensifies with the number of surviving children in Morocco. This results stems from the fact that women tend to use more contraceptives when they attain their ideal family size, barring other circumstances. With the ever increasing medical knowledge and more assurance of surviving offspring, there is the tendency for partners to reduce the number pregnancies to achieve the desired number of surviving children. This may also reduce the pressure on women to start childbearing at an early age, which will give them the opportunity for increased educational attainment and higher future family income.

The good knowledge 332 (97.4%) of the respondents about family planning methods and their benefits including the supports given by their husbands 301 (88.3%) to use family planning were noticed to influence the choice of method. This is similar to the observations made by Onwasigwe and Onwuzurike, (2001) in Enugu. Efforts should be made by the government and non-governmental organizations to involve men in family

planning activities in Nigeria. This finding has been consistent with that of other studies within the country. (Oyedokun, 2007; Olaitan, 2009)

5.3 Factors responsible for continuation of chosen method of contraception

An ideal contraceptive method is one which is safe, effective, acceptable, inexpensive, reliable, reversible, simple, long lasting, independent of coitus and requires less medical supervision. A method suitable for one group may not be suitable for another group because of different cultural background, religious beliefs and socio-economic status. Thus there can never be an ideal contraceptive method.

Information on the type of modern contraception methods being used in any society is important not only for marketing purposes, but also for addressing the factors that make some methods unpopular. In this research, therefore, the women who were using modern contraceptives at the time of the survey were asked to state the methods that they were using. The most commonly preferred modern contraceptive method was Implant, the second was IUCD and the third was Injectables.

The study showed that the respondents liked and preferred their chosen method to others because of the safety, effectiveness (34.6%) among others. The respondents also claimed that there are some things they found in their respective choices that are not present in others and which also influence the continuation of such chosen method. Cost effectiveness of a particular choice (60.3%) was found to be the highest, followed by long term use (15.5%) and fewer side effects (10.1%). This is similar to the findings of Duru et al(2011).

The study showed that some of the factors responsible for continuation of the chosen methods included availability of the method all the time, easy discontinuation, husbands' preference and support, minimal side effects, independent of coitus. These findings are closely related with Shahidul findings in Bangladesh (2013). Shahidul found out that male knowledge, attitude and approval of family planning are important for contraceptive method choice and continuation.

5.4 Experience on use of contraceptive methods

Majority of respondents had used different types of contraceptive methods in the past. Some of them are still in use of the same methods while some have changed to some other ones for reason or the other. All the respondents were counselled before making decision on the choice of modern contraceptive. Based on the knowledge and understanding of the information given to the respondents, informed decision was made with respect to the effectiveness of the methods and expected side effects. All the respondents claimed there were other methods available in the facility when they came for the services as evident by being able to mention some of the methods. They had used their chosen methods for minimum of two years and maximum of ten years because majority of the women are using contraceptives to limit births.

5.5 Level of satisfaction of modern contraceptive users

Satisfaction is a very good key to continuation of a chosen method of contraception. Respondents in this study claimed that the chosen methods had satisfied the reasons for use. This is in line with findings from study carried out by Pam (2002) who revealed the link between informed choice, satisfaction on chosen method and continuation with chosen method. Decisions about childbearing and contraceptive use are most likely to meet a person's needs when they reflect individual desires and values, are based on accurate, relevant information are medically appropriate- that is when they have informed choices. To make informed choices people need to know about FP, to have support for individual choice from social policies and community norms. Informed choice offers many benefits because people use FP longer if they choose methods for themselves.

5.6 Implication of findings to Reproductive Health Education

Findings of the study revealed that educational level of the respondents played a key role in making decision about contraceptive method choice. This shows that the second Millennium Development Goal will further strengthen women empowerment. Advocacy on girl child education should be intensified. So also the knowledge and experience of respondents' mothers influenced the choice of method. Significant others have been found to be important in health decision. Mothers with married children and that are knowledgeable about family planning and its benefits have a role to play in improving maternal and child health by encouraging their children to practice family planning.

Men as heads of the family have critical role to play in women's reproductive health. Male involvement has been a huge challenge in RH and family planning but a lot of improvement has been recorded lately. This study revealed that men took part in the decision to use modern contraceptive and choice of method. Involving men in RH decisions and concern about equity will make both men and women to communicate with each other, make joint decisions about contraceptive use and choice. The study also showed that various modern contraceptive methods were available at the time they visited the clinic. The counselling session was on all the methods. The good method mix and adequate information given on all the methods helped them in making informed choices. Access to a range of methods makes it easier for people to choose a method they like and to switching when they want. People's ability to make informed choices invites a trusting partnership between clients and providers and encourages people to be more responsible for their own health. Therefore, service provider as key component in RH service provision should be knowledgeable and skilful. They ought to have good mastery of all FP methods, mode of action, advantages, disadvantages, possible side effects including treatment and management.

5.6 Conclusion

Higher level of education and previous use of contraceptives by respondents' mothers have been found to be factors influencing modern contraceptive choices. It could be inferred that empowering women with good education will help them make rightful decision especially on health matters when the need arises and also be responsible for their action and decision. Higher level of education of respondents' husbands also played a supportive role in choosing methods of contraception. More emphasis on male involvement in family planning programme and reproductive health must be ensured.

5.7 Recommendation

This study showed that the commonest reason for choice of a particular type of contraceptive was the good knowledge about the benefits of modern contraceptives 332 (97.4%) followed closely by husbands approval 301 (88.3%). Level of education of the woman and contraceptives previously used by their mothers also had significant effect on choice. Hence, the followings are recommended:

1. Every woman should be encouraged to visit family planning clinic to be educated and counseled on various contraceptive choices, its effectiveness and benefits.

2. Experienced women should encourage others on various contraceptive methods they know as change will always begin at home and especially the ones they have benefited from during their own time.
3. Periodic training for clinical service providers (CSPs) should be organized and centered round counselling techniques and communication skills. Clinical Service Providers should inform every potential user that there is management for contraceptive side effects.
4. Advocacy for girl child education should be intensified especially at the grassroots. Information about contraceptive use should reach students at all levels. All opportunities, the school system, youth association, religious organization, traditional leaders, communities and families should be sensitized and educated about contraception.
5. Improving the educational and economic status of women, educating men and planning programmes that will improve discussions at the family level on fertility related issues will likely improve the level of use of modern contraceptive in Nigeria.

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UNIVERSITY OF IBADAN

APPENDIX I

**FACTORS INFLUENCING MODERN CONTRACEPTIVE CHOICES AMONG
WOMEN ATTENDING FAMILY PLANNING CLINIC, UNIVERSITY COLLEGE
HOSPITAL, IBADAN.**

QUESTIONNAIRE

Dear Respondent, I am a postgraduate student in the Department of Health Promotion and Education, Population and Reproduction Health Education track, Faculty of Public Health at the University of Ibadan. I am carrying out a research on the above topic with the view to improving the quality of Family Planning (FP) services. If you concede to participate in this research, please answer the following question as truly as possible. All the information provided will be treated with utmost confidentiality. In this regard, your name or any identifier is not required. Your participation in this study is voluntary. Failure to participate will not affect the quality of service you are receiving.

Thank you.

Date: Day..... Month..... Year.....

ID NO.....

SECTION 1 SOCIO-DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Tick the most appropriate answers

1. Age: []

2. Marital Status: (1) Married [], (2) Single [], (3) Separated [], (4) Divorced []
(5) Widowed []

If single, skip question 3

3. Type of marriage: (1) Monogamy [], (2) Polygamy []

4. Highest level of educational: (1) Non formal [], (2) Primary [], (3) JSS [], (4) SSS [], (5) NCE/Poly [], (6) University Degree [], (7) Post Graduate [], (8) Others (specify).....

5. Highest level educational of Husband: (1) Non formal [], (2) Primary [], (3) JSS [], (4) SSS [], (5) NCE/Poly [], (6) University Degree [], (7) Post Graduate [], (8) Others (specify)

6. Occupation: (1) Trading [], (2) Artisans [], (3) Private sector/company worker [], (4) Housewife [], (5) Civil Servant [], (6) others (specify).....

7. Husband occupation: (1) Trading [], (2) Artisans [], (3) Unemployed [], (4) Civil servant [], (5) Private sector/ company worker [], (6) Others (specify).....

8. What other job/work/business do you do? Mention
9. What other job/work/business does your husband do? Mention.....
10. What is your income per annum?
11. What is your husband's income per annum?
12. Tribe: (1) Yoruba [], (2) Hausa [], (3) Igbo [], (4) Others (specify)
13. Religion: (1) Islam [], (2) Christianity [], (3) Traditional [],
(4) Others (specify).....

SECTION 2: FACTORS INFLUENCING THE CHOICE OF MODERN CONTRACEPTIVES METHODS

14. Number of previous pregnancies: (1) None [], (2) One [], (3) Two [], (4) Three [], (5) Four [], (6) Five and over []
15. Number of previous deliveries: (1) None [], (2) One [], (3) Two [], (4) Three [], (5) Four [], (6) Five and over []
16. Number of children alive: (1) None [], (2) One [], (3) Two [], (4) Three [], (5) Four [], (6) Five and over []
17. How many children do you wish to have more? (1) None [], (2) 1 – 2 [], (3) 3 – 4 [], (4) 5 – 6 []
18. Whose decision is your desired number of children? (1) Self [], (2) Husband [], (3) Joint [], (4) In-law [], (5) Family/Relation [], (6) Friend []
19. Outcome of last pregnancy: (1) Live birth [], (2) Induced abortion [], (3) Still birth [], (4) Ectopic pregnancy [], (5) Spontaneous abortion [], (6) Molar pregnancy []
20. Complication of last pregnancy: (1) Yes [], (2) No [], if yes specify.....
21. Who influenced your decision of using modern contraceptive methods? (1) Self [], (2) Husband [], (3) Joint [], (4) in-law [], (5) Family/Relation [], (6) Friend [], (7) Provider []
22. Who pays for the family planning services? (1) Self [], (2) Husband [], (3) Joint [], (4) In-law [], (5) Family / relation [], (6) others (specify).....
23. How often do you have intercourse weekly? (1) Daily [], (2) Once [], (3) Twice [], (4) Thrice [], (5) Four times [], (6) Five times and over [], (7) Infrequent []
24. Why are you using family planning? (1) Contraception: (a) Limiting [], (b) Spacing [], (c) delaying [], (2) Infertility [], (3) Others (specify)

Tick the most appropriate

S/N	Statements on factors influencing the choice of modern contraceptives	Yes	No
25	My husband supports the use of modern contraceptives		
26	I have friends who use modern contraceptive		
27	Tried a traditional method and pregnancy resulted		
28	Use of modern contraceptives worked for my mother/mother-in-law		
29	I am knowledgeable about the benefits of modern contraceptive		

SECTION 3: FACTORS RESPONSIBLE FOR CONTINUATION OF CHOSEN METHOD OF CONTRACEPTION

30. What modern contraceptive are you on currently?

31. How long have you been using this method? (1) 1-11 months [], (2) 1 – 5 years [], (3) 6 – 10 years [], (4) 11 – 15 years [], (5) 16 years and over [].

32. What do you like about your chosen method? (1) Availability [],(2) Affordability[], (3) Safety [], (4) Reversibility [], (5) Effectiveness [], (6) No weight gain [], (7) Others (specify).....

33. What do you find in **this method** and it is not present in other methods?

(1) Availability [], (2) Cost effective/cheap [], (2) Fewer side effects [], (3) Privacy [],(4) Independence of coitus [], (5) Infrequent of appointment [], (6) Others (specify).....

Tick the most appropriate.

S/N	Statements on factors influencing continuation of chosen modern method of contraception	Yes	No
34.	Cost of the chosen method is more affordable than others		
35	My husband prefers/supports this method		
36	My friend/mother/in-law influenced the sustenance of method I am using		
37	The method I am using has minimal side effects		
38	My method is available all the time		

39	It is easy to discontinue my method		
40	I do not have to see a provider before using my method		
41	Use of my method does not disturb sexual intercourse		

SECTION 4: EXPERIENCE ON EVER AND CURRENTLY USE OF CONTRACEPTIVE METHODS

42. What are the Family Planning methods you have ever used? Tick as appropriate.

FP METHODS	EVER USE	STILL IN USE	HAVE CHANGED METHOD	REASON FOR CHANGE
Abstinence				
Withdrawal				
Pills				
Intrauterine device				
Injectables				
Implant				
Others				
None				

43. Were you counseled before making decision on the choice of modern contraceptive?

1. Yes [], 2. No []

44. Who counseled you?

(1) Nurse [], (2) Doctor [], (3) Student Nurse [], (4) Medical student []

45. Why did you choose the method in use? (1). It is cheap [], (2). It is easily available [],

(3.) It is highly effective [], (4.) Has few side effects [], (5.) My partner likes it [],

6. It is long acting [], 7. It offers privacy []

46. Was your choice of method the only method available when you came for the service?

(1) Yes [], (2) No []

47. If No, which other methods were available? Mention them.....

48. How long have you been using current method?

49. Have you ever encountered any problem since you started using this method?

1. Yes [] 2. No [] (If yes go to question 50)

50. If yes, what are these problems? (Tick below options as appropriate)
- (1) Failure [], (2) Infection [], (3) No menses [], (4) Scanty menses [],
 (5) Heavy menses [], (6) Inconvenience [], (7) Forgetfulness [], (8) Weight gain [],
 (9) Weight loss [], (10) Partner does not like it [], (11) Headache [],
 (12) Others (Specify.....)

51. How do you intend to overcome any problem you are having with you current method?

- (1) Change the method [], (2) Seek for solution from the providers [],
 (3) Opt out from use of modern contraceptive methods [], (4) Adopt traditional methods of contraception [], (5) Abstinence [], (6) Don't know []

SECTION 5: LEVEL OF SATISFACTION OF MODERN CONTRACEPTIVEUSERS

52. Has the current method satisfied your reason for contraceptive use? Yes [], No []

53(a) If yes, how?.....

54(b) If no, why?.....

55. Mention one benefit you derive from using modern contraceptive method?

Tick the most appropriate.

S/N	Statements on factors responsible for satisfaction on chosen modern method of contraception.	Yes	No
56.	I am satisfied with my method because I had adequate information before choosing my method		
57.	I do not have to wait for a long time before I am attended to at the clinic		
58.	The clinic is close to my house, so distance is not a problem		
59.	Use of family planning has negatively affected every part of my life		
60.	Getting help for problems/ side effect is easy		

APPENDIX II

IWE IBEERE

AWON OHUN TO NSE ATOKUN IRUFE FETOSOMOBIBI TODE ONI LAARIN AWON OBIRIN TI O NWA SI ILE IFETOSOMOBIBI TO WA NI ILE IWOSAN ORITAMEFA, IBADAN

Olukopa owon, mo jeakeeko agba ni ile-iwe giga fafiti ti Ibadan. mo n se agbeyewo lori akole to wa loke iwe yi lati mu ki ifetosomobibi loorin sii. Ti o ba rorun fun yin lati kopa ninu agbeyewo yi, e jowo dahun awon ibeere wonyi tokantokan. Gbogbo esi ti eba fun wa ki yio han si elomiran. Nipase eyi a ko ni beere oruko yin tabi awon nkan miran ti a fi ledanimu. Kikopa ninu agbeyewo yi kopon dandan ati wipe aikopa yin ko le je ki e padanu tabi mu ki idinku wa ninu itoju lori fetosomobibi.

E se.

Igba:Ojo Osu..... Odun Nomba.....

Ipele akoko: Awon ibeere Pataki nipa olukopa

Fa ila si idi idahun to dara julo

- 1 Ojo ori: []
2. Ipo Igbeyawo: (1) Mo ti se igbeyawo [], (2) Mo da wa [], (3) Mo ngbe loto [], (4) ati fi ara wa sile [] (5) O ti ku [] Ti o ba da wa, ma se dahun ibeere keta
3. Iru idile wo: (1) Oniyawo kan [], (2) Oniyawo pupo []
4. Ipele eko: (1) Eko ile [], (2) Alakobere [], (3) Iwe girama keta [], (4) Iwe girama kefa [], (5) Iwe awon oluko/Iwe giga poly [], (6) Iwe giga [], (7) Iwe giga agba [], (8) awon miran (so ni koko).....
5. Ipele eko fun Oko:) Eko ile [], (2) Alakobere [], (3) Iwe girama keta [], (4) Iwe girama kefa [], (5) Iwe awon oluko/Iwe giga poly [], (6) Iwe giga [], (7) Iwe giga agba [], (8) awon miran (so ni koko).....
6. iru ise wo le nse?: (1) oja tita [], (2) Owo sise [], (3) Ise adani/Ile ise [], (4) Iyawo Ile [], (5) Osise ijoba [], (6) Awon miran (so ni koko).....
7. Kini ise oko yin?: (1) Oja tita [], (2) Ise owo [], (3) Ko ni se [], (4) Osise ijoba [], (5) Ise adani/Ise labe eniyan [], (6) awon miran (so ni koko).....
8. Awon ise tabi owo miran wo le nse? Darukowon?
9. Awon ise tabi owo miran wo ni oko yin nse? Daruko won?

10. Elo lo nwole fun yin lodun?
11. Elo lo nwole fun oko yin lodun?
12. Eya: (1) Yoruba [], (2) Hausa [], (3) Igbo [], (4) awon miran (so ni koko)
.....
13. Esin: (1) Imale [], (2) igbagbo [], (3) Ibile [], (4) Awon miran (so ni koko).....

IPELE KEJI: AWON OHUN TO MU NI YAN IRU FETOSOMOBIBI

14. Oyun di melo?: (1) Kosi [], (2) Eyokan [], (3) Meji [], (4) Meta [], (5) Merin [], (6) Marun soke []
15. Ikunle melo? (1) Kosi [], (2) Eyokan [], (3) Meji [], (4) Meta [], (5) Merin [], (6) Marun soke []
16. Omo melo?: (1) Kosi [], (2) Eyokan [], (3) Meji [], (4) Meta [], (5) Merin [], (6) Marun soke []
17. Omo melo le fe bisii? (1) Kosi [], (2) Eyokan si meji [], (3) Meta si merin [], (4) Marun si mefa []
18. Talo pinnu iye omo ti e maa bi? (1) Emi [], (2) Oko [], (3) awa mejeeji [], (4) Ana [], (5) Ebi [], (6) Ore []
19. Abajade oyun to gbeyin: (1) Omo [], (2) Oyun sise [], (3) Abiku [], (4) Oyun ti ko si ninu ile omo [], (5) Oyun bibaje [], (6) Oyun ti ko dara []
20. Wahala ninu oyun to gbeyin: (1) Beenii [], (2) Beeko [], (3) Bi beenii, so koko.....
21. Talo ru ipinu yin soke lori lilo fetosi igbalode? (1) Emi [], (2) Oko [], (3) awa mejeeji [], (4) Ana [], (5) Ebi [], (6) Ore [], Eleto []
22. Talo nna owo lori fetosomobibi? (1) Emi [], (2) Oko [], (3) awa mejeeji [], (4) Ana [], (5) Ebi [], (6) Ore [], Elomiran []
23. Igba melo ni e nsunmo oko yin lose? (1) Ojoojumo [], (2) Eekan [], (3) Eemeji [], (4) Eemeta [], (5) Eemerin [], (6) Eemarun soke [], (7) Leekokan []
24. Kini idi ti e fin lo fetosi? (1) Idena oyun nini: (a) Fifopinsi [], (b) Fifi aaye sile [], (c) Sisun oyun siwaju [], (2) Airomobi [], (3) Awon miran (so ni koko).....

Fa ila si eyi to dara ju

S/N	Oro lori awon ohun to nse atokun yiyan fetosomombibi igabalode	Yes	No
25	Oko mi fowo si fetosomobibi igabalode		
26	Mo ni awon ore to nlo fetosomobibi		
27	Mo ti lo ti ibile o yiwo		
28	Fetosomobibi igabalode sise fun iya oko mi		
29	Mo ni oye lori anfaani to wa ninu lilo fetosomobibi igabalode		

IPELE KETA: AWON OHUN TI O NSOKUNFA TITESIWAJU LORI FETOSOMOBIBI TI A YAN FUN ARA ENI

30. Iru fetosi wo ni a nlo lowolowo?
31. Igba wo ni a ti nlo? (1) Osu kan si mokonla [], (2) Odun kan si marun [], (3) Odun mefa si mewa [], (4) Odun mokanla si meedogun [], (5) Odun merindinlogun soke [].
32. Kini e feran nipa fetosomobibi ti e yan? (1) O wa larowoto [], (2) Ko ga jara [], (3) idaabobo [], (4) O see yipada [], (5) Ise to peye [], (6) Ko mu ni sanra [], (7) Awon miran (so ni koko)
33. Kini ohun ti e ri ninu fetosi ti e nlo ti ko si ninu awon to ku? (1) O wa larowoto [], (2) Ko won [], (2) Iyonu re ko po [], (3) O bo ni lasiri [], (4) Ko di ibalopo lowo [], (5) Wiwa fun ayewo kii se gbogbo igba [], awon miran (so ni koko)

Tick the most appropriate.

S/N	Oro lori awon ohun to nse atokun titesiwaju lori fetosomobibi ti a yan fun ara eni.	Beeni	Beeko
34.	Owo fetosi ti mo nlo kere si tawon to ku		
35	Oko mi fowo si fetosi lilo		
36	Ore mi/Ana mi se atokun diduro lori iru fetosi ti mo nlo		
37	Fetosi ti mo nlo ko ni iyonu pupo		
38	Fetosi ti mo nlo wa larowoto ni gbogbo igba		
39	O ro run lati da fetosi ti mo nlo duro		
40	Mi ko ni lati ri onifetosi ki nto lo fetosi ti mo nlo		
41	Fetosi ti mo nlo ko di ibalopo		

SECTION 4: IRIRI LORI FETOSOMOBI TI A TI LO ATI EYI TI A NLO

LOWOLOWO

42. Iru awon fetosi wo lo ti ri? Fa ila sibi ti o ye.

FETOSOMOBIBI	LOORI	NLO LOWOLOWO	MO TI PAARO FETOSI	IDI TI MO FI PAARO FETOSI
Imaraduro				
Fifayol				
Onikoro				
Onififisi				
Alabere				
Onigbre				
Awon miran				
Rara				

43. Nje e gba idanileko ki e to se ipinnu lori fetosi ti e yan? Beeni [], 2. Beeko []

44. Talo fun yin ni idanileko?

(1) Noosi [], (2) Dokita [], (3) Akeko Noosi [], (4) Akeko isegun [].

45. Kini idi ti e fi mu fetosi ti e nlo (1). Ko won [], (2). O wa larowoto [],

(3) O nsise daradara [], (4.) Ko ni yonu pupo [], (5.) Oko mi feran e [],

(6.) O nsise fun ojo pipe [], 7. O Fara pamo [].

46. Se fetosi ti e yan nikan lo wa larowoto nigbati e wa fun ifetosomobibi?

(1) Beeni [], (2) Beeko [].

47. Bi beeko, iru awon fetosi si miran wo lo wa larowoto? Daruko won.

48. igba wo ni e ti nlo fetosi ti e nlo lowolowo?

49. Nje e ti se alabapade awon isoro Kankan lati igba ti e yin lo fetosi yi?

1. Beeni [] 2. Beeko [] (Ti o ba je beeni, e lo si ibeere aadota)

50. Ti o ba je beeni, awon isoro wo? (Fa igi si esi ti o ye)

(1) Ijakule [], (2) Kiko kokoro [], (3) Ko si nkan osu [], (4) Nkan osu teretere [],

(5) Nkan osu pupo [], (6) Inira [], (7) Igbagbe [], (8) Sisanra si [],

(9) Siso iwon nu [], (10) Oko mi ko feran re [], (11) Ori fifo [],

(12) awon miran (so ni koko)

51. Bawo le se ro pe e le bori awon isoro to le dojuko yin lori fetosi ti e nlo

- (1) Paaro fetosi [], (2) Beere ona abayo lowo eleto [], (3) Kuro ninu lilo etosomobibi igbalode [], (4) Gba fetosi ibile [], (5) Imaraduro [], (6) Nko mo []

IPELE KARUN: IWON ITELORUN AWON TI O NLO FETOSOMOBIBI

IGBALODE

52. Nje fetosi ti e nlo lowolowo fun yin ni itelorun lori idi ti e fi nlo?

- (1) Beeni [], (2) Beeko []

53 (a) Bi beeni, bawo?

54. Bi beeko, ki ni idi?

55. So anfaani kan ti o nje nipa lilofetosomobibi?

Fa igi si eyi to ye.

S/N	Oro lori awon ohun to nmu itelorun wa lori fetosomobibi igbalode ti a yan.	Yes	No
56.	Mo ni itelorun lori fetosi ti mo yan nitori mo gba ekurere alaye ki nto yan		
57.	Ko si idaniduro ki a to danilohun		
58.	Ile fetosi sunmo ile mi nitorinaa ko si isoro ona jijin		
59.	Lilo fetosi je ipalara fun mi ni gbogbo ona		
60.	Irorun wa lati gba iranlowo lori isoro tabi wahala to ba jeyo		

APPENDIX III

INFORM CONSENT FORM

IRB Research approval number: _____

This approval will elapse on: / / 2013

Title of the research:

Determinants of use of modern contraceptive methods among women attending family planning clinic, University College Hospital, Ibadan

Name of researcher:

This study is going to be conducted by MAKINDE ADEDAYO OLUBUNMI of Faculty of Public Health, College of Medicine University of Ibadan.

Purpose of research:

The purpose of this research is to assess the determinants of modern contraceptive choices among women attending family planning clinic at the University college Hospital, (UCH) Ibadan

Procedure of the research:

This study is a descriptive cross-sectional survey, which will utilize an interviewer administered structured questionnaire to women on one form of modern contraceptive methods attending family planning clinic, UCH, Ibadan.

The study entails to use as part of its inclusion criteria; every consenting woman. An estimated number of 337 women attending family planning clinic, UCH, Ibadan will be used in this study.

Expected duration of research and of participants' involvement:

You should not be interviewed for more than 10 minutes.

Risk:

There is no risk or harm involved in participating in this research. It is voluntarily.

Cost to the participants:

Your participation in this research will not cost you anything.

Benefit (s):

Participants will benefit in the following ways:

- Incentives (detergents) will be given to participants after the interview in appreciation of their time and energy.

- The research will provide information that may be useful in improving contraceptive services.

Confidentiality:

All information collected in this study will be given code numbers and no name will be recorded. This cannot be linked to you in anyway and your name or any identifier will not be used in any publication or reports from this study.

Voluntariness:

Your participation in this research is entirely voluntary.

Alternative to participation:

If you choose not to participate in this research, this will not affect you or service you require in any way.

Due inducement(s):

You will not be compensated for participating in this research and you will not pay to participate in the research.

Statement of person obtaining informed consent:

I have fully explained this research to _____

And have given sufficient information, including about risks and benefits, to make an informed decision.

Date _____ Signature _____

Name _____

–

Statement of person giving consent:

I have read the description of the research or have had it translated into language I understand. I understand that my participation is voluntary. I know enough about the purpose, methods, risks and benefits of the research study to judge that I want to take part in it. I understand that I may freely stop being part of this study at any time. I have received a copy of this consent form and additional part information sheet to keep for myself.

Date _____ Signature _____

Name _____

Witness Signature (if applicable) _____

Witness Name (if applicable) _____

Detailed contact information:

This research has been approved by the Ethics Committee of the University of Ibadan and the chairman of this committee can be contacted at Biode Building, Room T10, 2nd floor, Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, telephone: 08032397993. E-mail: uiuchirc@yahoo.com. In addition, if you have any question about your participation in this research, you can contact the principal investigator, Makinde Adedayo Olubunmi of the Department of Health Promotion and Education, faculty of public health, College of Medicine University of Ibadan. Phone: 08037195810. E-mail: adomakjj@yahoo.com

UNIVERSITY OF IBADAN

APPENDIX IV

Iwe Gbigba Ase

Nomba ifontelu alaga ajo: _____

Ifontelu yi yio pari ni : / / 2013

Akole Iwadi:

Awon ohun to nse atokun lilo fetosomobibi tode oni laarin awon obirin ti o nwa si ile ifetosomobibi to wa ni ile iwosan oritamefa, ibadan

Oruko Olu gbeyewo: Oruko eni ti yo se iwadi yi ni MAKINDE ADEDAYO OLUBUNMI, akeko ni ile eko giga yunifasiti ti Ile Ibadan (Department of HPE, Faculty of Public Health, College of Medicine).

Idi agbeyewo: Iwadi yi wa lati wo awon ohun to romo ipinnu ati lo fetosomobibi igbalode laarin awon eniyan ti o nlo ti won si nwa si ile ifetosomobibi ti o wa ni ile iwosan nla oritamefa, ni ilu Ibadan.

Eto Iwadi: Iwadi yi je eyi ti yio awon onibeere yio lo iwe ibeere (Questionnaire) lati lati beere ibeere lowo awon obirin ti o wa lori irufe fetosomobibi igbalodeti won si nwa si ile fetosomobibi ni ile iwosan nla oritamefa, ni ilu Ibadan

Lowo awon obirin ti o nlo fetosomobibi ti o si ti gba lati kopa nikan ni oluwadi yo bere ibere. Awon ti yo kopa lapapo je eniyan odunrun le metadinlogoji ti o nwa si ile ifetosomobibi ti o wa ni ile iwosan nla oritamefa, Ibadan.

Akoko ti iwadi yi le gba olukopa ati ohun ti o le na a

Iwadi yi ko ni gba akopa kookan ju iseju mewa lo.

Ipanilara:

Ko si ipanilara, ewu abi ijamba kankan fun olukopa ninu iwadi yii ati wipe kikopa je ati inu wa.

Owo ti yio naa akopa

Ko si oro owo nina lati je olukopa ninu iwadi yii, lati ibere titi di ipari iwadi.

Anfaani

Olukopa yi o je anfaani ti a la kale yii:

- Nkan amoriya bi ose ifoso, ni olukopa yi o gba leyin iforowanilenuwo lati fi dupe fun akoko ti won fi sile.
- Iwadi yi yoo pese amoran pataki ti yio mu ki idagbasoke ati itesiwaji wa lori ifetosomobibi

Pipa asiri mo

A ko ni gba oruko olukopa kankan sile ati wipe ko ni seese ki a mo olukopa lati ara iwadi ti a se. Bee si ni a ko ni lo oruko olukopa ninu atejade ti a ba se sita lati ara iwadi ti a se.

Kikopa la ti Okan wa

Kikopa ninu iwadi yi je a ti okan wa.

Ifipa mu ni lati ko pa ninu ayewo yi:

Kikopa ninu ise iwadi yi kise dandan.Eni ti o ba nife lati kopa nikan lo le kopa ninu ise yi. Igba ku gba ti olukopa ba fe ni o le dekun ati kopa ninu iwadi yi.

Gbigba eku ise:

A ki yio san owo fun eniken ti o ba kopa ninu ise iwadi yi. A ko se ileri wipe awa yio fun eniken ni ebun kankan fun kikopa ninu ise yi.

Oro oluwadi lati gba ase lowo olukopa ki o to maa ba ise lo:

Mo ti ka gbogbo ohun ti o romo ise yi ati wipe mo ti se alaye kikun lori ewu, ijamba, tabi anfani tabi ire ti o wa ninu kikopa ninu iwadi yi fun_____

_____ lati le pinu pelu imo to peye lati kopa ninu ise yi.

Ojo _____ Iteka/ifowo si Iwe _____

Oruko mi: _____

Oro olukopa lori fifun oluwadi lase lati kopa ninu iwadi yi:

Mo ti ka nipa ise iwadi yi/nwon si ti se alaye kikun fun mi nipa ise iwadi yi ni ede ti o ye mi yekeyeke ati ni ona ti o te mi lorun. Imo mi lori idi ti n’won fe fi se ise yi, ewu ti o le wa nipa kikopa ninu ise yi, ona ti won fe gba lati se ise yi ati wipe kikopa mi ninu iwadi yi kii se tipatipa tabi dandan sugbon lati okan mi wa. Nwon fi ye mi, emi na si ti gba wipe igbakugba ti mo ba fe ni mo le dawo ati kopa ninu ise yi duro. Mo si ti gba eda iwe yi ti mo fi owo si lati kopa ninu ise yi.

Ojo:_____ Iteka/ifowosiIwe:_____

Orukomi:_____

Ifowo si Iwe/Iteka eleri:_____

Oruko eleri: _____

Adiresi lekunrere:

Iwadi yi ni ajo ti o n ri si eto iwadi ti ile eko giga Ibadan ti fi onte lu, e le kan si alaga ajo na ni Ile Biode, Yara T10, Aaja keji, Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ero ibanisoro won ni: **08032397993**, adiresi lori ero ayelujara won ni: uiuchirc@yahoo.com.Ni afikun, ti a ba ni ibeere nipa

kikopa ninu iwadi yi, e le kan si Oniwadi agba, Makinde Adedayo Olubunmi ti Department of Health Promotion and Education(HPE) Faculty of Public Health, College of Medicine University of Ibadan. Ero ibanisoro: **08037195810** adiresi lori ero ayelujara: adomakjj@yahoo.com.

OLUKOPA NI LATI NI EDA IWE YI LOWO.

UNIVERSITY OF IBADAN

APPENDIX VI

ETHICAL APPROVAL



INSTITUTE FOR ADVANCED MEDICAL RESEARCH AND TRAINING (IAMRAT)
COLLEGE OF MEDICINE, UNIVERSITY OF IBADAN. IBADAN, NIGERIA.

Director: Prof. A. Ogunniyi, B.Sc(Hons), MBChB, FMCP, FWACP, FRCP (Edin), FRCP (Lond)
Tel: 08023038583, 08038094173
E-mail: aogunniyi@comui.edu.ng



UI/UCH EC Registration Number: NHR&C/05/01/2008a

NOTICE OF FULL APPROVAL AFTER FULL COMMITTEE REVIEW

Re: Determinants of Modern Contraceptive Choices among Women Attending the Family Planning Clinic University College Hospital Ibadan

UI/UCH Ethics Committee assigned number: UI/EC/13/0040

Name of Principal Investigator: **Adedayo O. Makinde**

Address of Principal Investigator: Department of Health Promotion & Education,
College of Medicine,
University of Ibadan, Ibadan

Date of receipt of valid application: 06/02/2013

Date of meeting when final determination on ethical approval was made: **20/06/2013**

This is to inform you that the research described in the submitted protocol, the consent forms, and other participant information materials have been reviewed and *given full approval by the UI/UCH Ethics Committee.*

This approval dates from 20/06/2013 to 19/06/2014. If there is delay in starting the research, please inform the UI/UCH Ethics Committee so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. *All informed consent forms used in this study must carry the UI/UCH EC assigned number and duration of UI/UCH EC approval of the study.* It is expected that you submit your annual report as well as an annual request for the project renewal to the UI/UCH EC early in order to obtain renewal of your approval to avoid disruption of your research.

The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code including ensuring that all adverse events are reported promptly to the UI/UCH EC. No changes are permitted in the research without prior approval by the UI/UCH EC except in circumstances outlined in the Code. The UI/UCH EC reserves the right to conduct compliance visit to your research site without previous notification.



Professor A. Ogunniyi
Director, IAMRAT
Chairman, UI/UCH Ethics Committee
E-mail: uiuchirc@yahoo.com

▪ Drug and Cancer Research Unit Environmental Sciences & Toxicology ▪ Genetics & Cancer Research ▪ Molecular Entomology
▪ Malaria Research ▪ Pharmaceutical Research ▪ Environmental Health ▪ Bioethics ▪ Epidemiological Research Services
▪ Neurodegenerative Unit ▪ Palliative Care ▪ HIV/AIDS