

**KNOWLEDGE AND DETERMINANTS OF CONTRACEPTIVE
USE AMONG WOMEN OF REPRODUCTIVE AGE IN NIGERIA**

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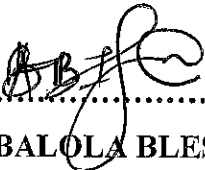
**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
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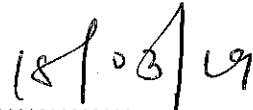
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CERTIFICATION

This is to certify that EDUN DEBORAH OLUWATOYIN of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the Topic "KNOWLEDGE AND DETERMINANTS OF CONTRACEPTIVES USE AMONG WOMEN OF REPRODUCTIVE AGE IN NIGERIA" in partial fulfillment of the award of Bachelor of Science (B.Sc) in Federal University Oye-Ekiti, Nigeria under my Supervision



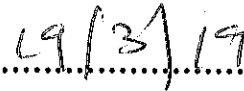
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DEDICATION

The project is dedicated to the almighty God who gave me the strength and good health towards the completion of my study in federal university Oye- Ekiti and to my parents Mr. And Mrs. EDUN for their spiritual, moral, and financial support throughout my academic years.

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Abstract

Lack of contraceptives use is major concerns not only in Sub-Saharan Africa but also in many other developing countries in the world especially in Nigeria.

Therefore, this study assess the factors that determines contraceptive use among couples in Nigeria, Data were obtained from 2013 NDHS, and weighted sample of 38,676. Univariate result showed that the socio demographic factor is significant with the contraceptive use.

The bivariate analysis revealed that there is a significant association between socio-demographic characteristics and contraceptive use.

Results of the multivariate analysis, From the binary logistic regression, the relationship between socio demographic characteristics and contraceptive use is statistically significant in ($P < 0.05$), showed that there is a significant relationship between socio-demographic characteristics (age of women, place of resident, level of education, ethnicity, region, religion, wealth index, occupation) and contraceptive use. In conclusion, without any doubt that there is significant influence of socio-demographic characteristics of women age 15-49 years on contraceptive use p-value less than 0.05. I recommend that there should be further studies on contraceptive use among women in Nigeria.

CHAPTER ONE

INTRODUCTION

1.0 Background of the study

World Health Organization(WHO) defined family planning as a conscious effort by persons in union or sexually active person not in union to use contraceptive methods or any means to limit their family size, control timing of pregnancy(birth spacing) and prevent pregnancy for never married.

Contraception is a method in family planning that is used for the prevention of unwanted pregnancy. Family planning use is the percentage of men or women that are using one method of contraception regardless of the method. According to (Nelson, 2001), he sees family planning as a system of limiting family size and the frequency of child bearing by the appropriate use of contraceptive techniques. On the issue of health, family planning as a health service that helps couples decide whether to have children and if so, when and how many children they want (Nelson, 2001).

Birth control is mostly used by married or sexually active and unmarried women age 15-49 years but when it is used by women ages 15-49, then it means they wants to give spacing to the number of their children or prevents pregnancy. Contraception allows individuals to anticipate and attain their desired spacing and timing of birth and prevention of unwanted pregnancy (Shaw, 2013).A study conducted to examine couples' characteristics and fertility preference in Nigeria by (Odusina, 2017) described that age, work status, wealth status, fertility desire, spousal communication/decision making and contraceptive use were characteristics of couples significantly predicting fertility behavior while work status, wealth status, contraceptive

knowledge and use were significant characteristics predicting fertility behavior of either of the couples. Contraception is the ability of individuals to attain their desired number and spacing of their children through contraceptive use. Family planning is one of the most cost-effective public health interventions and is pivotal to reducing the country's fertility. Nigeria's family planning program began in 1964 with the National Family Planning Council of Nigeria (NFPC, 1964), 214 million women of reproductive age in developing countries who want to avoid pregnancy are not using a modern contraceptive method. Some family planning methods, such as condoms, help prevent the transmission of HIV and other sexually transmitted infections.

The socio-demographic variables or factors that determine the knowledge, choice of contraceptive and the uses are: by age, marital status, educational level, environment or residence, income, religion. Between 1992-1993, an information, education and communications campaign was launched to change Nigerians' behavior towards family planning, and to also increase their contraceptive use. The campaign was based on evidence that family planning messages relayed through the mass media can influence contraceptive behavior. For example in Nigeria, one-quarter of new clients attending a family planning clinic identified a television campaign as their source of referral. One of the objectives of this study is to determine the knowledge of contraceptives among women in Nigeria (Church and Geller, 1989).

Rapid population growth constitutes a serious threat to national development efforts. To check the problem of high fertility and its attendant consequences, scholars and international organizations have advocated the adoption of population policies and programs by countries which consider their birth rates to be bad to their national goals and aspirations. Among many strategies that have been recommended for dealing with population, family planning had received much attention most especially in advanced countries of the world. In the developing

nations, family planning as a national concern is relatively recent. For example, though family planning has been practiced in one form or another through the ages in many African Countries, its recognition and the attempt to adopt it as a population and health policy only dates back to 1974. That marked the beginning of increased activities in the area of family planning as a result of awareness of the importance of demographic variables in the planning process (Olusanya, 1985).

Contraceptive knowledge and especially uses play principal role in fertility decline. To achieve a decline in desired fertility, effective behavioral attitudinal change to fertility regulation, practice and contraception are important. Increase in fertility regulation and usage of family planning methods are major components of the National Policy on Population for Sustainable Development and an essential indicator for tracking progress or the achievement levels to attaining the Millennium Development Goals(National Population Commission; 2009). According to (Mishra, 2013), timing of birth Studies have shown that by reducing unintended pregnancies and abortions, and facilitating family planning or spacing of births, effective practice of contraception provides both health and socio-economic benefits to the mother, the child, family, the society, nation and the world at large. In world-wide estimates, some 600,000 women die each year of pregnancy related causes and 75,000 die following unsafe abortion. At least 200,000 of these maternal deaths are attributable to failure, lack of formal education or knowledge about contraceptives (Kaunitz, 2013). A United Nations Fund for Population Activities (UNDP) fact sheet in the year 2012 documented that use of modern contraceptives in developing world will avert 218 million unwanted pregnancies which will in turn avert over 55 million unplanned births, 135 million abortion (40 million of them unsafe), 25 million miscarriages and 118,000 maternal deaths, 1.1 million neonatal deaths (Sing and Daroch, 2013).

In order to increase the use of contraceptives in Nigeria, some family planning units were created to help the people to know the reasons why contraceptive use is important. These units advise and encourage the people to use family planning method for their own benefits in terms of spacing the number of their children and also for their health purpose. The units include the SFH (society for family and health, Hospitals especially in different states in Nigeria. The services they render to the people are reliable and it also helps in making decision.

It has been estimated that meeting women's need for modern contraceptives would prevent about one-quarter to one-third of all maternal deaths, saving 140,000 to 150,000 lives per year. Family planning offers a host of additional health, social, and economic benefits; it can help slow the spread of HIV, promote gender equality, reduce poverty, accelerate socioeconomic development, and protect the environment. According to (Singh & Darroch,(2012), out of women of reproductive age in developing countries, 867 million (57%) are in need of contraception because they are sexually active but do not want a child in the next two years. Of these, about 222 million (26%) do not have access to modern methods of contraception, resulting in significant unmet need. Unmet need for contraceptive use stated by (Bernstein & Edouard,(2007) was added to the fifth Millennium Development in 2006 as an indicator for tracking progress on improving maternal health. The Nigerian Demographic and Health Survey (NDHS, 2013) reported that only 15.1 percent of married women of reproductive age were using any contraceptive. Ten percent of currently married women reported using a modern method, and 5 percent use other methods of contraception. In addition, there is a significant unmet need for family planning in Nigeria; 16 percent of married women have an unmet need for family planning (NDHS 2013).

1.1 STATEMENT OF THE PROBLEM

According to (Campbell,2014), many studies have identified misinformation, misperception and a fear of health side effects to be barriers to regular contraceptive use in Nigeria. (Ogunjuyigbe, 2009)said in his studies that lack of resources is one of the things that hinders men from allowing their wives to actively use contraceptives.

Evidence from other studies in Nigeria supports that fear of side effects also include damage the womb and difficulties with future ability to have children (Zewdie, 2014). Also, most people in Nigerian do not think that introducing family planning is a blessing. Especially in the northern part of the country, they think contraceptive use is a product of infidel learning (western learning which they do not believe in) and therefore is forbidden. They also believe that females should avoid going to school and marry at an early age and also have a lot of children. It's also believed that contraceptive use or family planning is a means to stop the Muslims from increasing and multiply so therefore, it's forbidden for them to use either condom or pills to prevent pregnancy. This is a problem for the country especially because of lack of education and also because of their religious belief, financial predicament and the issue of unwanted pregnancy. The problem in the north made the government especially in Kaduna not to encourage people to have fewer children but it offers and provides free contraception and suggests to the women that they might pause between pregnancies. This also promotes girls education which has caused fertility level to fall drastically between 2008 and 2013. The expectation every year is 6.3 but the result was 4.1 which is below the average of 5.7 that year (Joseph Edegbo, 2018).

Over the years, family planning policy has helped tremendously to reduce poverty, as the number of destitute people in the world kept growing; the issue of population was actually having an increasing impact on poverty and development (WHO, 2005). As the task of

alleviating poverty got tougher, Nigeria governments had done a great job in improving women's reproductive health and eliminating poverty. However, statistics reveal that Africa's destitute population has dropped from 250 million in 1979 to 30 million at present (Cheng, 2004).

Therefore, encouragement must be given to citizens and households to adopt family planning policies and also spreading the concept of bearing healthier children rather than as many children as possible.

1.2 RESEARCH QUESTION

1. What are the socio-demographic characteristics of contraceptives use among women ages 15-49 in Nigeria?
2. What is the prevalence of contraceptives use in Nigeria?
3. What is the relationship between the socio-demographic determinants and contraceptives use among women in Nigeria?

1.3 RESEARCH OBJECTIVES

The general objective is to examine the knowledge and determinants of contraceptives use among women ages 15-49 in Nigeria.

The specific objectives are:

1. To profile the socio-demographic characteristics of women of reproductive age in Nigeria.
2. To examine the prevalence of contraceptives use in Nigeria
3. To examine the socio-demographic determinants of contraceptives use among women in Nigeria.

1.4 JUSTIFICATION OF THE STUDY

The importance of this study is to determine the factors that aid contraceptive use among women in Nigeria. This research will help the women age 15-49 to know the kind of family planning method that is available for them to use and also the implications of selecting for themselves instead of meeting a consultant.

It will help the government to educate the people especially the married couples on the importance of using contraceptives and also educate them on how to use it and the policy makers to plan and strategize towards promoting the use of contraceptive. The importance of using contraceptive according to world health organization (WHO) is to prevent pregnancy related health risks in women, to reduce infant mortality, help prevent HIV/AIDS, empowering people and enhancing education, reducing adolescent pregnancies and slowing population growth and this will in turn improve the knowledge of the researchers. The benefits of using contraceptives extend far beyond the individual. Access to a full range of contraceptive options will significantly reduce maternal and infant deaths and improve the overall health of families. This shift will only occur if countries pair their economic and social policies with strong voluntary family planning programs.

1.5 DEFINITION OF TERMS

The terms used in this study are defined within the context of the study. They include;

Contraceptives: the methods used to reduce fertility or prevent pregnancy

Child Bearing: An act of giving birth to children.

Child Spacing: Spacing the number of children a woman wants to give birth to.

Knowledge: refers to the idea an individual has concerning a particular thing.

Family Planning: Refers to measures that could be adopted in regulating occurrence of birth..

Unmet need: this is the percentage of women of reproductive ages 15-49 who is not using any method of family planning.

Determinants: refers to the variables that affect some other things.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Family planning is a conscious plan by persons in union and sexually active out of union and never married people to use contraception or other methods to limit their family size, control the timing of their births and to prevent pregnancy for the never married and those who do not want to have children. Globally, it is believed that contraceptives use reduces the number of children a woman is to have and determine the spacing of pregnancies, allows people to have the desired number of their children, this in turn aids development of a country. According to the central Intelligence Agency (CIA, 2017), a report was given in 2017 that the fertility rate (average number of children born per woman of ages 15-49 in a country) in Singapore was estimated to be at 0.83 children per woman which makes it the lowest fertility rate worldwide. The highest TFR (total fertility rate) is Niger 6.49 and the lowest TFR is Singapore 0.83 as at 2017. Nigeria has 5.07 TFR as at 2017.

Since the International Conference on Population and Development in 1994(ICPD, 1994), contraceptives use has increased among almost all countries with initially low levels. Over the past two decades, contraceptives use has increased in 46 of the 48 countries where prevalence was less than 25% among married women in 1994. The two exceptions were Gambia and Togo. Substantial increases averaging at least 1.5 percentage points per year occurred in seven countries (Bhutan, Cambodia, Ethiopia, Lao People's Democratic Republic, Malawi, Rwanda and Zambia). An additional seven countries experienced average annual increases of at least 1% point (Afghanistan, Haiti, Madagascar, Myanmar, Pakistan, United Republic of Tanzania and Yemen). The particularly rapid progress since the ICPD in both stimulating and

meeting demand for family planning in countries like Ethiopia, Malawi and Rwanda have served as instructive cases for the potential pace of change in other countries if investment and attention to family planning are increased (Brown and others, 2014); Fabric others, (2014). All but two of the 17 countries that experienced either no increase or slow increases since the ICPD in 1994 less than 0.5 percentage points per year are located in sub-Saharan Africa. Despite these gains, the minimal benchmark to close the gap in meeting demand for contraceptives by 2015 is still out of reach for most countries. Contraceptive offers a host of additional health, social, and economic benefits; it can help slow the spread of HIV, promote gender equality, reduce poverty, accelerate socio-economic development, and protect the environment. Among women of reproductive age in developing countries, 867 million (57%) are in need of contraception because they are sexually active but do not want a child in the next two years. Of these, about 222 million (26%) do not have access to modern methods of contraception, resulting in significant unmet need (Singh and Darroch, 2012). In 2006, unmet need for family planning was added to the fifth Millennium Development Goal as an indicator for tracking progress on improving maternal health Bernstein and (Edouard, 2007). The Nigerian Demographic and Health Survey (NDHS,2013) reported that only 15.1 percent of married women of reproductive age were using any contraceptive. Ten percent of currently married women reported using a modern method, and 5 percent use other methods of contraception. In addition, there is a significant unmet need for family planning in Nigeria. 16 percent of married women have an unmet need for family planning (NDHS, 2013).

The rate of contraceptive use by married women has risen especially in developing countries. The proportion of reproductive-age married women who use a modern or traditional contraceptive method rose from 55% to 63% between 1990 and 2010, according to a global

analysis. Most of the increase was due to a 10–percentage-point rise in contraceptive prevalence in the developing world, although contraceptive use also increased in developed countries. The proportion of married women with an unmet need for contraceptive use declined from 15% to 12% worldwide, but remained above 25% in 42 countries, most of them in Africa. A record number of women now use contraception. The latest figures from the UN's department of Economic and Social Affairs show 64% of married and cohabiting women used modern or traditional methods of contraception in 2015, a significant rise from 36% in 1970 (Alkema L,2013)

In a worldwide London Summit on Family Planning on July 11, 2012, The UK government, through its Department for International Development (DFID), and the Bill & Melinda Gates Foundation (BMGF) partnered with the United Nations Population Fund (UNFPA) to host a gathering of leaders from national governments, donors, civil society, the private sector, the research and development community, and other interest groups. The meeting deliberated on the renewal and revitalization of the global commitment to ensure that women and girls, particularly those living in low-resource settings, have access to contraceptive information, services, and supplies. The objective of the summit was to mobilize global policy, financing, commodity, and service delivery commitments to support the rights of an additional 120 million women and girls in the world's 69 poorest countries to use birth control information, services, and supplies without coercion or discrimination by 2020 (Dr Wapada & Balami, (2012).

2.1 CONTRACEPTIVE USE IN SUB-SAHARAN AFRICA

In Sub-Saharan Africa, there is an increased focus on strategies to reduce fertility rates, which has been incorporated in the Millennium Development Goals to improve maternal and child health. In many Sub-Saharan African countries, the goal of increasing contraceptive uptake remains difficult (Onwejekwe O E, 2012). Many programs throughout the area have received funding in an attempt to address the high levels of unmet needs in contraceptives use. However, despite these programs, uptake of contraceptives in Africa has remained relatively low (Cleland and Ali, 2006). According to Ojediran, (2006), Abiodun, (2009), the rates of maternal mortality is among the highest in the world in Sub-Saharan Africa, most times high as 1 maternal death per 100 births. Because of the low prevalence of contraceptives usage, rates of unintended pregnancies are high and as many as 50% result in elective abortions. Abortions in Sub-Saharan African are often performed under unsafe and secretive conditions, with approximately 25% resulting in serious complications which account for 20–40% of maternal death (Oye-Adediran, (2006) and WHO, (2004). Contraceptives use can protect women from unintended pregnancies, thus reducing the number of unsafe pregnancies and abortions that may result in untimely death. In fact, if high risk pregnancies were eliminated from Sub-Saharan Africa, maternal mortality rates could fall by 25% (Ojediran, 2006).

Many studies have identified misinformation, misperceptions, and fear of health side effects to be barriers to regular contraceptive use in Sub-Saharan Africa. Research also reports severe misconceptions about women's own fertility and reproductive system. For instance, some female adolescents in Ghana did not believe they were old enough to get pregnant, though were at least 15 years of age (Campbell, 2014). Others believed that it was not possible to get pregnant during first intercourse. Also in Ghana, between 2003 and 2008, contraceptive use fell from 26 to

18% in large part due to fear of side effects from modern contraceptives. Hindin, (2014) found that women felt that contraceptives caused illness and made them gain weight. Others were concerned that contraceptive use would cause a change in the menstrual patterns that could result in infertility later in life. In Nigeria, reasons for nonuse have included fear of side effects, partner objection, and religious conflicts, with the fear of side effects largely fueled by misinformation (Balogun and Abiodun,2009). Evidence from other studies in Nigeria support that feared side effects also include damage the womb and difficulties with future ability to have children, and in fact, women who are older and have had children are more likely to being accepting of, and use contraceptives (Zewdie T,2014).

A study conducted to examine the role of Couples' Characteristics in Contraceptive use in Nigeria and Zambia (Ntoimo and Chirwa-Banda, 2017). The study revealed that Prevalence of contraceptive use among couples in Nigeria was 27% and 63% in Zambia. Couples 'educational attainment, religious affiliation, the frequency of listening to the radio, reported number of children, fertility preference, region of residence and household wealth index were significant predictors of contraceptive use among couples in Nigeria and Zambia. The role of men in women's contraceptive choices cannot be ignored either. Because of the patriarchal society present in many Sub-Saharan African countries, men's perceptions regarding contraceptive are the primary influences over women's' behaviors (Nwachukwu and Akinyemi, 2011). Studies have noted that women identify their fear of partner's reaction or disclosure as a barrier to contraceptive uptake and use (Teye J, 2013). One study found that male partners' disapproval for contraceptive use was as high as 84%, and another study concluded that as many as 50% of women said that they would immediately discontinue use of a family planning method if their husband disapproved. The societal importance of large families also poses an extreme challenge

to regular uptake and use of modern contraceptives (Eaton, 2003). African men play important roles in the decisions about family life, including fertility and family planning. However, fertility and family planning research and programs have ignored their roles in the past, focusing only on women's behaviors. Since the 1994 International Conference on Population and Development (ICPD), interest in men's involvement in reproductive health has increased.

Nigeria in particular remains a focus for increasing contraceptive use, as it is one of the most populous countries in Sub-Saharan Africa. Nigeria has a high total fertility rate (TFR), estimated to be between 5.5 and 5.7 for women of reproductive age (15–49). Low rates of contraceptive use are also pervasive in Nigeria (NDHS, 2013). Approximately 15% of married women report using contraceptives and 16% report an unmet need for family planning service.

2.1.1 CONTRACEPTIVES USE IN NIGERIA

There are approximately 35 million women of reproductive age in Nigeria, and the country had nearly 7 million births in 2012 alone (Family planning summit; 2012). According to the 2013 NDHS, 15.1 percent of married women of reproductive age (15-49) are using any contraceptive method; However, only 9.8 percent of these women are using modern FP methods. This national rate has largely remained at this level in the late 1990s. The modern method mix predominantly comprises condoms, pills, and Injectables. The current contraceptives prevalence (CPR) as at 2013 is 15% and the modern CPR is 10%, however, little progress has been made over past five years because the goal announced at the London family planning summit was to increase CPR to 36% in 2018(Onyebuchu ckukwu,2014).

The knowledge of Contraceptive use, prevalence and fertility has increased worldwide due to the development and introduction of modern contraceptives and the establishment of

organized family planning programs. Family planning programs also ensures that resources are available to raise a child in significant amount which includes time, finance and social information, education and communication strategies to reach men in every part of the federation on the need to actively participate and allow their wives to use contraceptives (Ogunjuyigbe, 2009).

The low rate of contraceptive use in Nigeria results in high fertility rates, particularly in the rural areas and the northern part of the country. This high fertility rate accounts for Nigeria's high maternal, infant, and neonatal mortalities, and the use of modern contraceptive methods has been reported to be very limited in the northern part of Nigeria with only 9% of Nigerian women reported to be using these in 2003.

Contraceptive use particularly the modern contraceptive use remains prominent in demographic and health literature because of its numerous health benefits to women and families such as preventing unintended pregnancies, promoting healthy birth spacing, reducing life time risk of maternal deaths, and enhancing attainment of development goals (Catesw, 2010; Tsui, 2012). In addition, contraceptive use remains a dominant population and health issue because of its important role in the demographic transitions in different countries with varying degrees of demographic situations (Lesthaeghe, 2016).

2.1.2 PURPOSE OF CONTRACEPTIVES USE

In 2006, a recommendation was issued out by the US Centers for Disease Control (CDC) to encourage men and women to formulate a reproductive life plan, to help them in avoiding unintended pregnancies and to improve the health of women and also reduce adverse pregnancy outcomes (CDC, 2006). Raising a child requires significant amounts of resources: time, social,

financial and environmental (Wynes and Kimberly, (2017). Planning, and planning well can help assure that resources are available.

The choice of a contraceptive method is a complex task. When choosing a method of contraception you should take into account woman's age, peculiarities of sexual life, presence of gynecological and somatic diseases. Selection of a contraceptive method should be done by a doctor. For a correct choice of contraceptive methods, an individual consultation with a family planning unit like Hospitals or specialists is needed. Independent selection of contraceptives is dangerous or bad because it often leads to their low efficiency. It is important that contraceptives are widely available and easily accessible through midwives and other trained health workers to anyone who is sexually active. Midwives are trained to provide locally available and culturally acceptable methods. Other trained workers, for example community health workers also provide counseling and some contraceptives like pills and condoms. For methods such as sterilization, women and men need to be referred to a clinician.

2.1.3 DIFFERENT TYPES OF CONTRACEPTIVES

The different types of contraceptives that are mainly used by couples especially in Nigeria are:

MORDERN METHOD AND TRADITIONAL METHOD

Condom, IUCD (intrauterine device), Injectable, oral Pills, Emergencies, Implants are classified as Modern Method.

Natural, Withdrawal, Calendar method are classified as Traditional Method

CONDOM

It prevents STDs and also pregnancy. According to the 2003 and 2013 Demographic and Health Survey (DHS), 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 (NDHS, 2013). 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 Abiodun, Balogun, (2009) and Oye-Adeniran, (2005). There are different kinds of condom, these are: Latex, Specialty, Non-latex and Female condom.

IUCD (Intrauterine contraceptive device)

IUCD is a type of family planning method (contraceptive) in which a flexible device is inserted into the womb through the vaginal into the uterine cavity by a trained service provider. It is a safe highly effective and long lasting type of contraceptive method

There are two broad categories of intrauterine contraceptive devices (IUCDs): they are Copper-based IUCDs and Hormone-releasing devices (IUCDs).

The IUCD is very popular and widely used in Nigeria, particularly by older married women. Studies carried out in the Nigerian cities of Lagos (Ogedengbe, 2007), Benin, Ibadan, and Ilorin

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 plus or minus 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 (Olatinwo and Balogun, 2001). Other reasons for discontinuation were side effects “mainly heavy menstrual bleeding”, spousal disapproval, fear of infertility, and menopause. 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 and grand multiparous women (Abasiattai and Bassey, 2008). IUCDs are also a common post-partum contraceptive choice, especially for older women of high parity (Okunowo, 2009). IUCD do not affect ovulation, do not have abortive consequences. Currently, it is believed that the main mechanism of action is the development of intrauterine bacterial environment with spermicidal properties.

The method is used by women of any reproductive age regardless of the number of pregnancies, this type of contraceptive is suitable for those who want an effective long-term contraception and are not at risk of contracting reproductive tract infections and sexually transmitted diseases. You do not need to visit a doctor after installation, except in case occurring of some problems. Fertility returns immediately after removal. A woman can't stop using these spirals without doctor's help.

INJECTABLES

Injectable contraceptives are artificial hormonal preparations administered by a deep intramuscular injection into the muscle of the arm or buttock, to be effective immediately. From the injection site they are slowly absorbed into the bloodstream and the body gets sufficient

levels of hormone to provide contraception for one to three months, depending on the type of injectable contraceptive used. Injectable contraceptives can consist of progesterone-only preparations, or combined estrogen and progesterone preparations.

ORAL PILLS

According to the Centers for Disease Control and Prevention, the birth control pill is the leading birth control method used by women under the age of thirty. Birth control pills today are designed to improve safety and reduce side effects. Lower doses of estrogen are associated with a decrease in side effects such as weight gain, breast tenderness, and nausea.

As already stated above, OCPs (oral contraceptive pills), 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 (NPC & NDHS, 2004). Oral pills are recommended for those below 35 years of age because of the complications associated with them at older ages.

NATURAL

It is called natural because it does not involve use of drug or device, it is purely natural. the following are the available natural contraceptives; Withdrawal method (coitus interrupters), Safe period (rhythm method), Breastfeeding amenorrhea method, Cervical mucus membrane, Basal body temperature (BBT) method, Symptoms thermal method (Elizabeth J.Mason 2010). Such a method also involves dependence on your calendar of fertility and infertility days. You just follow your menstruation and ovulation days for choosing safe days for intercourse. The

natural/traditional family planning in Nigeria and other African countries is favored by most women because of religious (especially the Catholics) or cultural reasons.

Cycle beads can also be said to be a natural contraceptive that is available for use (Cycle-Beads 2007). The Standard Days Method works best for women who have menstrual cycles lasting between 26 and 32 days. Cycle-Beads consist of a color-coded string of beads that represents a woman's menstrual cycle. Each bead represents a day within a woman's cycle which in theory, would increase her awareness of which days she and her partner should abstain from unprotected sex to prevent pregnancy. To use Cycle-Beads, a woman would place the black ring on the red bead the day she starts her cycle. As she progresses daily through her menstrual cycle, the ring would be moved to the next bead which represents a new day within the cycle. When the ring is on the red and dark brown beads, there is a very low likelihood of pregnancy if unprotected intercourse is initiated. When the ring is on the white beads, a high likelihood of pregnancy exists if she has unprotected intercourse. Like most contraceptive methods, there are limitations. Cycle-Beads could also be used to encourage men to fulfill a supportive role and help them to understand the importance of family planning methods. Cycle-Beads (2007), Maynard-Tucker (1996) suggests that informal education and teaching practical skills to women in a mother's club setting would give women the opportunity to seek economic dependence so they would no longer have to rely on their partner or their fertility to survive. This may be an effective way to boost the education levels among women in rural parts of Nigeria. Another is the "Rhythmic calendar method" which is based on periodic abstinence from sexual activity during ovulation. The method can be used only for women with regular cycles. Before using this method the woman should maintain a menstrual calendar for at least 8 months.

WITHDRAWAL

It is also known as the pull-out method or coitus interruptus. The traditional method consists in the fact that the man removes his penis from the vagina before ejaculation, which is produced outside of vagina and other outer female genitals. This is done in order to prevent insemination from taking place. Considering withdrawal to be a legitimate form of birth control is the subject of some debate. However, it does function in lowering the likelihood of impregnation to some extent. Removing the penis removes the source of sperm from the site of impregnation. The sperm can instead be deposited virtually anywhere else without the risk of pregnancy. Withdrawal will result in pregnancy in 4 out of 100 women who use this as their only form of birth control for one year. This is assuming perfect technique is employed. Assuming the technique is sometimes poorly employed, it will result in pregnancy in 27 out of 100 women who use this as their only form of birth control for one year.

IMPLANTS (Hormonal contraceptive injection).

Implants are long acting progestin alone rods which are inserted into the inner aspect of the upper arm. They are effective and can be used by almost all categories of women with few side effects. The duration of action is about 5 years. it is a reversible method of contraception for a long period of exposure that is not associated directly with sexual intercourse. There are few studies in Nigeria concerning the use of hormonal contraceptive injections and sub-dermal implants, probably because these are not common choices. A study was conducted in Ibadan (Falase, Olorin and Ladipo,1998) which followed 810 patients who used depot-medroxyprogesterone acetate (DMPA) as a contraceptive method over a period of 11 years. 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 and Akinsosa;2005). 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.

2.1.4 CONTRACEPTIVES USE AND DETERMINANTS

RELIGION AND CONTRACEPTIVES USE

Some religions, such as Catholicism, have restrictions on contraception based on the belief that it is God's will to bring children into the world. According to Dixon-Muller (1999), religious believers or observers might choose to avoid certain methods of family planning, such as birth control pill, in an effort to live their lives according to the teachings of their religion. Family planning choice depends on the religion of the couple. It may be Islam or Christianity that calls for raising and bearing of more children in the society.

EDUCATIONAL STATUS AND CONTRACEPTIVES USE

Contraceptives use slows unsustainable population growth which drains resources from the environment, and national and regional development efforts (Wynes and Kimberly, 2012; WHO 2018).

Education level of the women has a highly significant effect on the contraceptive use and it is expected that the better educated women may delay to marry and freely discuss about family planning with their partners or spouses. Meanwhile, a husband's education had no significant effect on his wife's current contraceptive use (Tawiah E O, 1997). Women's education also played an important role in relation to contraceptive use, as literate women were more likely to use contraceptives than illiterate women (Khan, 2007 and Iyer 2002). They have more awareness

and opportunities to have information about the contraception in order to have birth control. Increase in the education raised the likelihood to use contraception than did those without education because low education level associate with lack of awareness and acceptability of using contraceptives (Jamie, 2006 & Helweldery S, 2004).

WEALTH INDEX AND CONTRACEPTIVES USE

Some forms of contraception, such as minor surgery (like vasectomy), carry a fairly significant amount of one's time and is very cost as compared to other options, such as condom or the calendar cycle methods which are less expensive and these may hinder people from using it (Olaitan, 2009).

ENVIRONMENT AND CONTRACEPTIVES USE

A person's social environment usually has more influence on family planning decisions that influence the attributes of specific contraceptives. In Kenya, for example, when new clients were asked to give a single reason for their choice of a specific contraceptive, most cited the attitudes of their spouse or their peers, or their religious value (Kim et al., 1998). Efforts to foster equity in decision making and raise awareness about reproductive right of the family, community and society also promote informed choice of family planning (Jaconson, 2000). People chose contraceptive methods that are commonly used in their community because they know that it is socially acceptable to do so, and they tend to know more about these methods (Rogers and Kincaid, 2004; Valente, (1995). Many women use the same family planning methods that others in their social network use (Godley, 2001). A study in urban Nigeria found that the more widely used method was the one that was popular in other cities and villages (Entwisle et al., 1999). The

entire community may be encouraged to one type of contraceptive based on the choices of early contraceptive users, rather than individual needs (Potter, 1999).

AGE AND CONTRACEPTIVE USE

In the process of using contraceptive, age of a woman for child birth is a great importance. Women who give birth to children before being in their 20ies have the risk for complications during pregnancy, childbirth and after childbirth. For women after 35 years, the risk of having a child with genetic abnormalities (e.g. Down syndrome) is much common, so, a woman must use contraceptives in order to reduce complications during childbirth. Studies have shown that if a 16 year old woman's first pregnancy ended in abortion, then later she will come across high percentage of failed second pregnancies (spontaneous abortions, premature labor.)

Children's health and child mortality are also closely linked to mother's age and intervals between births. The mortality rate among children born at intervals of less than one year, is twice higher than among children born at intervals of 2 years or more.

HOUSEHOLD INFLUENCE AND CONTRACEPTIVES

Household and community influences can be so powerful that they can obscure the line between individual desires and community norms. For instance, in some culture, many women reject contraception because bearing and raising children is the path to respect and dignity in the society (Cherkaoui, 2000 and Stein, 2001). In either country, most women use contraception because having small families is the norm (Mkangi, 2001 & Lutz, 2003). People are often unaware that such norms influence their choices.

2.1.5 CONTRACEPTIVES USE, CHOICES, KNOWLEDGE

Knowledge of contraceptives use is very high in Sub Saharan Africa generally. Despite the high level of knowledge, the uptake of contraceptive use is not corresponding. For example, the national contraceptive prevalence rates (CPR) in Ghana, Ethiopia, Rwanda and Malawi are 19.0, 27.3, 45.0 and 42.2% respectively (African bureau,2012 and USAID, 2016). In Nigeria, the acceptance and contraceptives use have been consistently low. The present national contraceptive prevalence rate is 15% with only 10% of women using modern contraceptive methods. This represents an improvement of only 2% compared to the reports of the 2003 and 2008 Nigeria Demographic and Health Survey (Umoh, 2014 and ICF, 2014). It is pertinent to note that even among women who accept and access family planning services there are many variations both in their socio-demographic characteristics and in the methods which they accept. In other to further promote the use of contraceptives, it is important to know the characteristics and the contraceptive preferences of these women.

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. 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 (Askew and Ainsworth, 1996).

2.1.6 SOURCES OF CONTRACEPTIVES SUPPLY

Various studies in the six geopolitical zones of Nigeria have indicated that the main sources of contraceptives, in decreasing order of frequency, are patent medicine stores, pharmacy shops, friends/siblings/partners, and health facilities (Oye-Adeniran, 2005). Among the health facility sources, the availability of contraceptives is higher at private clinics than at government family planning and maternal health clinics or hospitals (Okpani A, 2000). In addition, more married than single women receive contraceptives from the government-run health facilities, including hospitals. The trend of the patent medicine shop being the most important source of contraceptive commodities in Nigeria is worrisome. The type of information obtained on contraception from a patent medicine shop is likely to be incorrect because these shops are managed by traders who themselves may have little or no knowledge of contraceptives. Religion and Christian denomination have also been shown to have an influence on contraceptive usage. Research by Oye-Adeniran et al, (2005) has shown that while the Roman Catholics get their contraceptives mostly from patent medicine shops, the majority of Christians get theirs from general hospitals. Catholic patronage of patent medicine shops and market places may be connected with a religious objection to the use of modern contraceptive methods. Muslims in the same study also patronized the patent medicine shops more often because of the reported high disapproval by Muslims of contraceptive use (Oye-Adeniran & Umoh et al, 2005).

2.2 THEORETICAL FRAMEWORK

2.2.1 SOCIAL ECOLOGICAL THEORY

According to this theory, to identify factors affecting women's' contraceptive use behavior, it is imperative that we utilize an easily comprehensible, inclusive, and relevant theory.

One such theory, the Social Ecological Theory, examines the effects of multiple levels and contexts on an individual's behavior towards contraceptives (Bronfenbrenner,1977;1979). This theory suggests that a person's behavior is associated with at least three spheres of influence: individual features, inter-personal features and environmental factors. Religion and Education plays an important role and they are both on the other hand the most dynamic and influential tool for bringing about a positive attitude among women towards the methods and measures of family planning. Several demographic studies have identified individual traits or socio-demographic characteristics that affect contraceptive use, most especially formal education (Islam and Padmadass, 2010). However, the findings on the relative importance of the husband's versus the wife's education are inconsistent (Hossain, 2007).

Understanding why people do not use family planning is critical to address unmet needs and to increase contraceptive use. Although, most men and women especially in the rural areas have an idea of what family planning is and they have a passive attitude towards it.

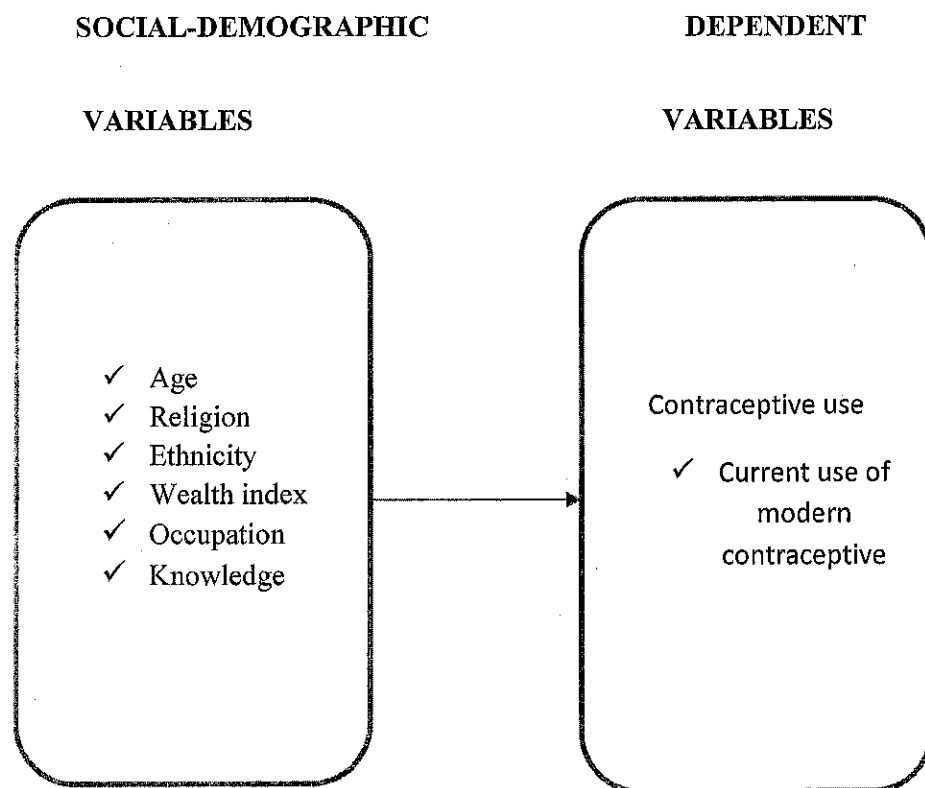
2.2.2 THEORY OF REASONED ACTION

This theory (TRA) is a model that finds its origins in the field of social psychology. This model developed by Fishbein and Ajzen (1975) defines the links between beliefs, attitudes, norms, intention, and behaviors of individuals towards contraceptives. According to this model, a person's attitudes are determined by its behavioral intention to perform it. This intention is itself determined by the person's attitudes and his subjective norms towards the behavior. (Fishbein & Ajzen, () define the subjective norms as "the person's perception that most people who are important to him think he should or should not perform the behavior in question".

According to Theory of Reasoned Action, the attitude of a person towards behavior is determined by his beliefs, on the consequences of these beliefs, on the consequences of this behavior, multiplied by his evaluation of these consequences. Beliefs are defined by the person's subjective probability that performing a particular behavior will produce specific result. This model therefore suggests that external stimuli influence attitudes by modifying the structure of the person's beliefs. Moreover, behavior intention is also determined by the subjective norms that are themselves determined by the normative beliefs of an individual and by his motivation to comply to the norms. In relating this theory to family planning decision, social and cultural norms, gender roles, social networks, religion and local beliefs influence people's choice. To a large extent, these community norms determine individual childbearing preferences and sexual and reproductive behavior. Community and culture affect a person's attitudes toward family planning, desired sex of children, preferences about family size, family pressures to have children, and whether family planning accord with customs and religious belief. Community norms also prescribe how much autonomy individuals have in making family planning decisions. The larger the differences in reproductive intentions within a community, the more likely that community norms support individual decision. A person's environment usually has more influence on contraceptive decision than does the attribute of specific contraceptive. For many people, informed communications is a primary source of family planning information. The influence of social network is crucial to educate others. Most people seek the approval of others and modify their own behavior to please others or to meet others expectations. People choose contraceptive methods that are commonly used in their community because they know that it is socially acceptable to do so, and they tend to know more than these methods. Many women use the same family planning method that others in their community uses (McCauley, 1995). Household

influence a person's marital status, the stability of the marriage, communication with the person's partner and status within the family influence family planning decisions. Some women say that contraceptive use is not an individual decision but one made by the couple or the family.

2.3 CONCEPTUAL FRAMEWORK



Source: Author's Construct, 2018

2.6 Hypothesis

1. H_0 : There is no significant relationship between socio-demographic determinants and the use of contraceptives among women in Nigeria.
 H_1 : There is a significant relationship between socio-demographic factors and the use of contraceptives among women in Nigeria.
2. H_0 : There is no significant relationship between women's knowledge and contraceptives use in Nigeria.

H₁: There is a significant relationship between women's knowledge and contraceptives use in Nigeria.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter discusses the source of data and methods of data analysis. It covers the description of the study area, target population, source of data, sampling design, sample size, method of data collection; variables used in the analysis are also presented together with their respective definitions and method of data analysis.

3.1 SAMPLE DESIGN FOR THE 2013 NDHS

The study would use secondary data from the 2013 Nigeria Demographic and Health Survey (NDHS). Nigeria Demographic and Health Survey (NDHS) 2013 is the fourth survey of its kind to be implemented by the National Population Commission (NPC). As the agency charged with the responsibility of collecting, collating, and analyzing demographic data, the Commission has been unrelenting in its efforts to provide reliable, accurate, and up-to-date data for the country. The information contained the report assist policymakers and programme managers in monitoring and designing programmes and strategies for improving health and family planning services in Nigeria. The 2013 NDHS is a national sample survey that provides up-to-date information on background characteristics of the respondents. Specifically, information is collected on knowledge of contraceptive method, Age, Wealth index, Place of residence, Occupation, Religion and Ethnicity. The target groups were women and men age 15-49 in randomly selected households across Nigeria. Information was also collected on contraceptive use. In addition to presenting national estimates, the report provides estimates of key indicators for both the rural and urban areas in Nigeria, the six geo-political zones, the 36

states, and the Federal Capital Territory (FCT). This report summarizes the findings of the 2013 Nigeria Demographic and Health Survey (NDHS), implemented by the National Population Commission (NPC). ICF International provided financial and technical assistance for the survey through the USAID-funded MEASURE DHS program, which is designed to assist developing countries to collect data on fertility, family planning, and maternal and child health. Financial support for the survey was provided by USAID, the United Kingdom Department for International Development (DFID) through PATHS2, and the United Nations Population Fund (UNFPA).

The 2013 NDHS sample was selected using a stratified three-stage cluster design consisting of 904 clusters, 372 in urban areas and 532 in rural areas. A representative sample of 30,327 households was selected for the survey, with a minimum target of 943 completed interviews per state. A fixed sample take of 45 households were selected per cluster.

All women who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed (NPC&ICF MACRO).

3.2 DESCRIPTION OF THE STUDY AREA

Nigeria lies on the west coast of Africa between latitudes 4°16' and 13°53' north and longitudes 2°40' and 14°41' east. It occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic coast in the south to the fringes of the Sahara Desert in the north. The territorial boundaries are defined by the republics of Niger and Chad in the north, the Republic of Cameroon on the east, and the Republic of Benin on the west. Nigeria

is the most populous country in Africa and the 14th largest in land mass. The country's 2006 Population and Housing Census placed the country's population at 140,431,790. Nigeria has great geographical diversity, with its topography characterized by two main landforms: lowlands and highlands. The uplands stretch from 600 to 1,300 metres in the North Central and the east highlands, with lowlands of less than 20 metres in the coastal areas. The lowlands extend from the Sokoto plains to the Borno plains in the North, the coastal lowlands of western Nigeria, and the Cross-River basin in the east. The highland areas include the Jos Plateau and the Adamawa Highlands in the north, extending to the Obudu Plateau and the Oban Hills in the southeast. Other topographic features include the Niger-Benue Trough and the Chad Basin. Nigeria has a tropical climate with wet and dry seasons associated with the movement of the inter-tropical convergence zone north and south of the equator. Its climate is influenced by the rain-bearing south-westerly winds and the cold, dry, and dusty north-easterly winds, commonly referred to as the Harmattan. The dry season occurs from October to March with a spell of cool, dry, and dusty Harmattan wind felt mostly in the north in December and January. The wet season occurs from April to September. The temperature in Nigeria oscillates between 25°C and 40°C, and rainfall ranges from 2,650 millimetres in the southeast to less than 600 millimetres in some parts of the north, mainly on the fringes of the Sahara Desert. The vegetation that results from these climatic differences consists of mangrove swamp forest in the Niger Delta and Sahel grassland in the north. With its variety of climatic, vegetation, and soil conditions, Nigeria possesses the potential for growing a wide range of agricultural produce.

The 2006 Population and Housing Census reported Nigeria's population to be 140,431,790, with a national growth rate estimated at 3.2 percent per annum. With this population, Nigeria is the most populous nation in Africa, as noted, and the seventh most

populous in the world (Population Reference Bureau, 2013). Nigeria's population is unevenly distributed across the country. Large areas in the Chad Basin, the middle Niger Valley, and the grassland plains, among others, are sparsely populated. The average population density for the country in 2006 was estimated at 150 people per square kilometre. The most densely populated states are Lagos (2,607 people per square kilometre), Anambra (868 people per square kilometre), and Imo (758 people per square kilometre). Most of the densely populated states are found in the southern part of the country. Kano, with an average density of 442 people per square kilometre, is the most densely populated state in the north (National Population Commission [NPC], 2010).

3.3 TARGET POPULATION

The category of eligible respondents in this study focus currently on women, which was collected by the Nigeria Demographic Health Survey (NDHS) 2013.

3.4 SAMPLE SIZE

All women age 15-49 years who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed. The sample sizes of women age 15-49 years that will be used are 38,676.

3.5 QUANTITATIVE DATA SOURCE

This study analyses data from women recode of Nigeria Demographic and Health Survey (NDHS) 2013 dataset.

3.5.1 DEPENDENT VARIABLE: CONTRACEPTIVES USE

This study use the NDHS concepts of contraceptives use to denote the use of contraceptive. The criteria of contraceptive are current use of contraceptive method.

The current use of modern contraceptive method is coded by no and yes and the types of modern contraceptives method as explained by the NHDS were pills, condoms, injectable, IUD, diaphragm, Female sterilization, Female condom, implants, Lactational Amenorrhea Method (LAM) and other modern methods. Women who are not using modern contraceptives method are coded as No = 0, and those who are currently using modern contraceptive method are coded Yes = 1

NAME OF VARIABLE	VARIABLE MEASUREMENT AND CODES	DATA RECORDED AND MANIPULATION
Dependent Variable: <ul style="list-style-type: none"> Contraceptive use 	MV 312, V312 (Categorical)	No Yes
INDEPENDENT VARIABLE: <ul style="list-style-type: none"> Knowledge of contraceptive method 	MV301, V301(Categorical)	Knows no method Knows only traditional method Knows modern method

<p>Socio economic factors:</p> <ul style="list-style-type: none"> • Age 	<p>MV013, V013(categorical)</p> <p>15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49.</p>	<p>The same categories</p>
<ul style="list-style-type: none"> • Wealth index 	<p>MV190, V190(categorical)</p> <p>Poorest, Poorer, Middle, richer, richest.</p>	<p>Poor</p> <p>Middle</p> <p>Rich</p>
<ul style="list-style-type: none"> • Place of residence 	<p>MV 025, V025(Categorical)</p> <p>Urban</p> <p>Rural</p>	<p>The same categories</p>
<ul style="list-style-type: none"> • Occupation 	<p>MV717, V717(categorical)</p> <p>not working, sales, professional/technical/managerial, agricultural, household and domestic service, manual, clerical</p>	<p>Not employed</p> <p>Employed</p>

Demographic factors: <ul style="list-style-type: none"> Religion 	MV130, V130 (Categorical) Catholic, Other Christian, Islam, Tradition, Others	Three main ethnic group: Yoruba, Hausa, Igbo and other Minority ethnic groups
<ul style="list-style-type: none"> Ethnicity 	MV131, V131 (categorical) Fulani, Hausa, Ibibio, Igala, Igbo, Ijaw/izon, Kanuri/beriberi, tiv, Yoruba, Others.	Three main ethnic group: Yoruba, Hausa, Igbo and other Minority ethnic groups

3.6 DATA PROCESSING AND ANALYSIS

The NDHS datasets from 2013 Birth recode will be processed and analyzed. Also descriptive and inferential statistics were employed in the data analysis using Stata application package (STATA 13.0). The data processing will be necessary before the proper analysis in order to measure the variables in this study accurately as well as to make the analysis well presentable and easily interpretable. The tools for data manipulation were employed on the STATA application package to achieve this task. To ensure reliable data, sample weights and STATA survey command (SVY) were applied to adjust for stratified sample design and the effect of over-sampling or under-sampling of some regions or areas.

3.6.1 MEASUREMENT OF VARIABLES

The general binary logistic regression model used for the multivariate analysis is:

$$\log \left(\frac{p}{1-p} \right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n$$

Where p = probability of exposure to contraceptives use

x1-xn = predictor variables

$\beta_0, \beta_1 - \beta_n$ = regression coefficients

Univariate analysis will be carried out using tables of frequency distribution to describe the background characteristics of the respondents and the bivariate analysis will be done using the Pearson Chi-square (χ^2) test to establish level of significance and degree of association between contraceptives use and socio-demographic determinants that are categorical variables in the datasets. Furthermore, logistic regression is used in the multivariate analysis to identify the strength of association and examine the effect of socio-demographic determinant on contraceptives use in the study area.

3.6.2 VARIABLE DESCRIPTION, DEFINITION AND METHODS

NAME OF VARIABLE	VARIABLE MEASUREMENT AND CODES	DATA RECORDED AND MANIPULATION
Dependent Variable: <ul style="list-style-type: none"> • Contraceptive use 	This is the contraceptives that will be used and it will be answered by either Yes or No	No Yes

<p>INDEPENDENT VARIABLE:</p> <ul style="list-style-type: none"> • Knowledge of contraceptive method 	<p>This means if the respondents have the knowledge of contraceptive and it is categorized into four.</p>	<p>Knows no method Knows only traditional method Knows modern method</p>
<p>Socio economic factors:</p> <ul style="list-style-type: none"> • Age 	<p>Age is the length of an existence extending from the beginning to any given time.</p> <p>15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49.</p>	<p>The same categories</p>
<ul style="list-style-type: none"> • Wealth index 	<p>This describes the income level of respondents income</p>	<p>Poor Middle Rich</p>

<ul style="list-style-type: none"> Place of residence 	<p>This refers to the place of residents of the respondents.</p> <p>Urban</p> <p>Rural</p>	The same categories
<ul style="list-style-type: none"> Occupation 	<p>This refers to the occupation of the respondents.</p> <p>not working, sales, professional/technical/managerial, agricultural, household and domestic service, manual, clerical</p>	<p>Not employed</p> <p>Employed</p>
<p>Demographic factors:</p> <ul style="list-style-type: none"> Religion 	<p>This indicates the religion of the respondents.</p> <p>Catholic, Other Christian, Islam, Tradition, Others</p>	<p>Three main ethnic group:</p> <p>Yoruba, Hausa, Igbo and other Minority ethnic groups</p>
<ul style="list-style-type: none"> Ethnicity 	<p>This refers to the ethnic group of the women in the study area</p>	<p>Three main ethnic group:</p> <p>Yoruba, Hausa, Igbo and other Minority ethnic groups</p>

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

This chapter deals with presentation, analysis and interpretation of the data collected from secondary sources Nigeria Demographic and Health Survey (NDHS, 2013) to show the socio-demographic influence of contraceptive use among women in Nigeria. For the purpose of analysis, this study makes use of descriptive analysis and inferential analysis.

The descriptive analysis describes the relevant aspects of the phenomena under consideration and provide detailed information about these variables such as; knowledge, socio-economic and demographic determinants and contraceptive use. However, in supportive of descriptive statistics, inferential analysis, Pearson Chi-square test was used to ascertain relationship while logistic regression analysis was used in testing the study hypothesis.

4.1. Respondents by Socio-Demographic Characteristics by Weighted Percentage.

Table 4.1 below showed the socio-demographic characteristics and use of contraceptive among women. Women age 15-19 years had the highest percent (20.1%), followed by 25-29 years (18.4%), 20-24 years (17.4%), least reported was 40-44 years (9.3%) and 45-49 years (8.7%). Rural women (57.6%) and urban women (42.4%). Women with no formal education was reported more (37.4%), secondary education (36%), primary education (17.4%) and least reported was higher education (9.2%). Hausa women was highly reported (33.7%), Igbo women

(14.6%) and least was Yoruba women (14.2%). North-west women was more (30.2%), south-west (16.3%), north east (14.7%), north central (14.4%), least reported was south-south (12.8%) and south-east (11.6%). Muslim was highly reported (51.7%), Christian (47.3%) and least was traditional religion (1%). Rich women was more (43.7%), poor women (37%) and middle women (19.3%). Contraceptive use by women was reported to be (84.0%), Not using (16.0%). Employed women were highly reported (63.3%) and not employed (36.7%). Knows modern methods (84.4%), knows no method (14.9%) and knows only traditional method (0.7%).

Table 4.1: Distribution of Respondents by Socio-Demographic Characteristics by Weighted Percentage.

Variables	Frequency	Percent
Age		
15-19	7,791	20.1
20-24	6,712	17.4
25-29	7,114	18.4
30-34	5,439	14.01
35-39	4,676	12.1
40-44	3,584	9.3
45-49	3,361	8.7
Place of residence		
Urban	16,389	42.4
Rural	22,287	57.6
Level of education		
No formal education	14,475	37.4

Primary	6,720	17.4
Secondary	13,923	36.0
Higher	3,558	9.2
Ethnicity		
Yoruba	5,482	14.2
Hausa	13,046	33.7
Igbo	5,635	14.6
Others	14,514	37.5
Region		
North Central	5,556	14.4
North East	5,696	14.7
North West	11,693	30.2
South East	4,476	11.6
South-South	4,941	12.8
South West	6,314	16.3
Religion		
Christian	18,227	47.3
Islam	19,893	51.7
Traditional	366	1.0
Wealth Index		
Poor	14,313	37.0
Middle	7,471	19.3
Rich	16,892	43.7
Occupation		

Not employed	14,145	36.7
Employed	24,359	63.3
Contraceptive use		
Not using	6,218	16.0
Using	32,641	84.0
Knowledge of any contraceptive method		
Knows no method	5,779	14.9
Knows only traditional method	255	0.7
Knows modern method	32,642	84.4
Total	38,676	100.0

4.2.: Respondents by Socio-demographic Characteristics and Contraceptive use.

Result from table 4.2 below revealed that there is significant association between socio-demographic characteristics and contraceptive use among women ($P < 0.05$). There is significant association between age and contraceptive use ($X^2 = 864.89$, $Pr = 0.0000$), women of age 25-29 years use more contraceptives (21.1%), 20-24 years (18.6%), 30-34 years (17.9%), least reported was 15-19 years (7.7%) and 45-49 years (6.8%). There is significant association between place of resident and contraceptive use ($X^2 = 1371.27$, $Pr = 0.0000$) Urban women use more contraceptive (63.6%) and rural women (36.4). There is significant association between level of education and contraceptive use ($X^2 = 3712.24$, $Pr = 0.0000$), secondary education (52.7%), higher education (21.3%), least reported was primary education (19.8%) and no formal education (6.23%). There is significant association between ethnicity and contraceptive use ($X^2 = 4088.44$,

Pr=0.0000), Yoruba women use more contraceptive method (30.8%), Igbo (25.6%) and Hausa (3.5%).

Also, there is significant association between region and contraceptive use ($X^2= 4138.91$, Pr=0.0000), south-west women use more contraceptive (33.6%), south-south (22.7%), south east (19.1%), least reported was north-central (12.8%), north-west (8.8%) and north-east (2.9%). There is significant association religion and contraceptive use ($X^2= 3079.77$, Pr=0.0000), Christian women was highly using contraceptive (79.6%), Muslim women (19.9%) and least reported was traditional religion (0.5%). There is significant association between wealth index and contraceptive use ($X^2= 3178.92$, Pr=0.0000), rich women use more contraceptive (74.2%), followed by middle women (16.8%) and least was poor women (8.9%). There is significant association between occupation and contraceptive use ($X^2= 561.35$, Pr=0.0000), employed women use more contraceptive (76.6%) and unemployed (23.5%). There is significant association between knowledge of contraceptive methods and contraceptive use ($X^2= 1338.33$, Pr=0.0000), women knows modern method use more contraceptive (99.8%) and only traditional methods (0.2%).

Table 4.2.: Distribution of Respondents by Socio-demographic Characteristics and Contraceptive use among women.

Variables	Contraceptive Use		Statistics
	Not Using	Using	
Age			
15-19	22.5	7.7	

20-24	17.1	18.6	X ² =864.89 Pr=0.0000
25-29	17.9	21.1	
30-34	13.3	17.9	
35-39	11.4	15.7	
40-44	8.7	12.3	
45-49	9.1	6.8	
Place of residence			
Urban	38.3	63.6	X ² =1371.27 Pr=0.0000
Rural	61.7	36.4	
Level of education			
No education	43.4	6.23	X ² =3712.24 Pr=0.0000
Primary	16.9	19.8	
Secondary	32.8	52.7	
Higher	6.9	21.3	
Ethnicity			
Yoruba	10.9	30.8	X ² =4088.44 Pr=0.0000
Hausa	39.5	3.5	
Igbo	12.5	25.6	
Others	37.0	40.2	
Region			
North Central	14.7	12.8	X ² =4138.91 Pr=0.0000
North East	16.9	2.9	
North West	34.3	8.8	
South East	10.1	19.1	

South-South	10.9	22.7	
South West	13.0	33.6	
Religion		79.6	
Christian	41.2	19.9	$X^2=3079.77$
Islam	57.8	0.5	Pr=0.0000
Traditional	1.0		
Wealth Index			
Poor	42.4	8.9	$X^2=3178.92$
Middle	19.8	16.8	Pr=0.0000
Rich	37.8	74.2	
Occupation			
Not employed	39.3	23.5	$X^2=561.35$
Employed	60.7	76.6	Pr=0.0000
Knowledge of any contraceptive method			
Knows no method	17.8	0.0	$X^2=1338.33$
Knows only traditional method	0.7	0.2	Pr=0.0000
Knows modern method	81.5	99.8	

4.3: Odds Ratio Based on Logistic Regression Analysis of Socio-demographic Characteristics and contraceptives use.

Table 4.3 below showed the result of binary logistic regression of socio-demographic factors affecting contraceptive use among women. There is significant relationship between age of women and contraceptives at p-value less than 0.001. Women age 20-24 years use more contraceptive by 3.32 than age 15-19 years (RC). Women age 25-29 years use more contraceptive by 3.52 than age 15-19 years (RC). Women age 30-34 years use more contraceptive by 3.84 than age 15-19 years (RC). Women age 35-39 years use more contraceptive by 4.07 than age 15-19 years (RC). Women age 40-44 years use more contraceptive by 4.44 than age 15-19 years (RC). Women age 45-49 years use more contraceptive by 2.47 than age 15-19 years (RC).

There is significant relationship between ethnicity and contraceptive use p-value less than 0.01 level of significant. Hausa women were 0.11 less likely to use contraceptive to Yoruba women (RC). Igbo women were 0.72 less likely to use contraceptive to Yoruba women (RC).

There is significant relationship between region and contraceptive use p-value less than 0.05 level of significant. Women from north-east were 0.47 less likely to use contraceptives to women from north-central (RC). Women from north-west were 1.50 more likely to use contraceptive than women from north-central (RC). Women from south-east were 1.33 more likely to use contraceptive than women from north-central (RC). Women from south-south were 1.57 more likely to use contraceptive than women from north-central (RC). Women from south-west were 1.41 more likely to use contraceptive than women from north-central (RC).

There is significant relationship between religion and contraceptive use p-value less than 0.05 level of significant. Muslim women were 0.72 less likely to use contraceptive to Christian women (RC). Women with traditional religion were 0.52 less likely to use contraceptive to Christian women (RC).

There is significant relationship between wealth index and contraceptive use p-value less than 0.001 level of significant. Women in the middle wealth status were 1.48 more likely to use contraceptive than poor women (RC). Rich women were 1.89 more likely to use contraceptive than poor women (RC).

There is significant relationship between occupation and contraceptive use p-value less than 0.001 level of significant. Employed women were 1.23 more likely to use contraceptive than unemployed women (RC).

Table 4.3: Odds Ratio Based on Logistic Regression Analysis of Socio-demographic Characteristics and Contraceptive use.

Variables	Odd Ratio	Lower Confident Interval	Upper Confident Interval
Age			
15-19 (RC)	1.00		
20-24	3.32***	2.88	3.83
25-29	3.52***	2.99	4.15
30-34	3.84***	3.28	4.49
35-39	4.07***	3.43	4.82

40-44	4.44***	3.76	5.23
45-49	2.47***	2.01	3.04
Place of residence			
Urban (RC)	1.00		
Rural	0.91	0.82	1.02
Level of education			
No education (RC)	1.00		
Primary	2.26	1.86	2.75
Secondary	2.79	2.32	3.38
Higher	3.44	2.79	4.25
Ethnicity			
Yoruba (RC)	1.00		
Hausa	0.11***	0.08	0.17
Igbo	0.72**	0.59	0.87
Others	0.66***	0.56	0.77
Region			
North Central (RC)	1.00		
North East	0.47***	0.37	0.59
North West	1.50*	1.08	2.07
South East	1.33*	1.06	1.67
South-South	1.57***	1.32	1.85
South West	1.41***	1.18	1.68
Religion			
Christian (RC)	1.00		

Islam	0.72***	0.64	0.81
Traditional	0.52*	0.27	0.99
Wealth Index			
Poor (RC)	1.00		
Middle	1.48***	1.29	1.71
Rich	1.89***	1.63	2.21
Occupation			
Not employed (RC)	1.00		
Employed	1.23***	1.11	1.36

RC means the reference categories *P<0.05 **p<0.01 ***p<0.001

HYPOTHESIS TESTING

1. H₀: There is no significant relationship between socio-demographic determinants and the use of contraceptives among women in Nigeria.

H₁: There is a significant relationship between socio-demographic factors and the use of contraceptives among women in Nigeria.

2. H₀: There is no significant relationship between women knowledge and contraceptives use in Nigeria.

H₁: There is a significant relationship between women knowledge and contraceptives use in Nigeria

Decision

From the binary logistic regression, the relationship between socio demographic determinants and contraceptive use among women statistically significant in ($P < 0.05$), from this, we can conclude that there is a significant relationship between socio-demographic characteristics among women (Age of women, ethnicity, region and religion, wealth index and occupation) and contraceptive use. There is no significant relationship between socio-demographic characteristics and contraceptive use. Therefore we accept the null hypothesis.

Discussion of the study

This study highlights women socio-demographics characteristics are useful predictors affecting contraceptive use among women.

Moreover better educated women are more likely to desire for fewer children who they can adequately provide for as compared to lesser educated women hence more desire to control the number of children (Anguko, 2014).

Catholics and other Fundamental Protestants view sexual activity as solely meant for procreation and therefore use of contraception goes against God's purpose of sex (Schenker & Rabenou, 1993 & LoPresti, 2005). Muslims also believe that using contraceptives goes against God's as He is the one who determines the number of children a woman gives birth to. On the other hand other Protestants do not forbid use of contraception once a couple has a child. Several studies have documented the influence of religion on contraceptive use with different results (Gyimah, et al., 2006; Agadjanian, et al., 2009; Browne & Eloundou, 2012).

Limitations

This study has a number of limitations. First, use of contraception was dichotomous, so we were unable to determine the depth or accuracy of the knowledge women reported they had on contraceptives. There are limitations due to the study design. Because of the cross-sectional nature of this study, the results should be interpreted with caution as causality assumptions cannot be made. Furthermore, as the data were collected retrospectively there is a risk of recall bias, as well as other types of biases present in survey data collection including social desirability bias and response bias. Despite these limitations, these data provide a nationally representative sample of Nigerian women to inform the literature on factors influencing contraceptive use.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECCOMENDATIONS

5.0 INTRODUCTION

This chapter is devoted to the presentation of the summary of findings, conclusion and recommendations drawn from the analysis of the research study. The overall objective of this study is to explore the influence of socio demographic characteristics and contraceptive use among women of reproductive age in Nigeria. The study was based on the sample size of 38, 676 women of reproductive ages in the study area.

5.1 SUMMARY OF THE FINDINGS

The finding showed frequency distribution of women socio-demographic, economic and cultural characteristics and contraceptive use. Women age 15-19 years had the highest percent, followed by 25-29 years, 20-24 years, least reported was 40-44 years and 45-49 years. Rural women were more reported than urban women. Women with no formal education were reported more, followed by secondary education, primary education and least reported was higher education. Hausa women were highly reported followed by Igbo women, and least was Yoruba women. North-west women was more, south-west, north east, north central, least reported was south-south and south-east. Muslim was highly reported, Christian and least was traditional religion. Rich women were more, followed by poor women and middle women. Employed women were highly reported than not employed. Women that use contraceptive were more reported than women of not using. Women that knows modern methods was highly reported followed by those that knows no method and knows only traditional method.

The bivariate analysis showed the significant association between women socio-demographic, economic and cultural characteristics and contraceptive use at p-value less than 0.05 level of significant. There is significant association between women socio-demographic, economic and cultural characteristics (age of women, place of resident, level of education, ethnicity, region, religion, wealth index, occupation and knowledge of contraceptive methods) and contraceptive use.

The multivariate analysis using binary logistic regression test for the significant relationship of factors affect contraceptive use among women in Nigeria, at p-value less than 0.05 level of significant. There is significant relationship between age of women and contraceptives at p-value less than 0.001. There is significant relationship between ethnicity and contraceptive use p-value less than 0.01 level of significant. There is significant relationship between region and contraceptive use p-value less than 0.05 level of significant. There is significant relationship between religion and contraceptive use p-value less than 0.05 level of significant. There is significant relationship between wealth index and contraceptive use p-value less than 0.001 level of significant. There is significant relationship between occupation and contraceptive use p-value less than 0.001 level of significant.

5.2 CONCLUSION

Without any doubt that there is significant influence of socio-demographic characteristics of women age 15-49 years on contraceptive use, p-value less than 0.05. Thus this study conclude that base on the facts from the result that some factors such Age of women, ethnicity, region and

religion, wealth index and occupation affects contraceptive use among women where p-value less than five percent level of significant.

5.3 RECOMMENDATION

The findings review that there should more attention on contraceptive use among women considering these socio-demographic, economic and cultural factors affecting contraceptive use such as Age of women, ethnicity, region and religion, wealth index and occupation. The increase in contraceptive use among women will enable them to space and timing the number of birth to have, which will improve the health of children and mothers.

More so, different partners in partnership with the Government to address the issue of contraceptive use among women, to improve their health status and health of child. To conduct a qualitative study in the community especially rural settings in or them to have an in depth discussion with regard to contraceptive use and in order to compliment the findings from this study. Health care providers should provide information, education; communication programs and improvements in counseling are needed to have knowledge on contraceptive use.

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