

**FACTORS INFLUENCING CONTRACEPTIVE USE AMONG WOMEN
OF REPRODUCTIVE AGE IN OWERRI NORTH LOCAL GOVERNMENT
AREA, IMO STATE**

BY

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REG. NO.: 20164025238**

**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, FEDERAL
UNIVERSITY OF TECHNOLOGY OWERRI**

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF MASTER OF PUBLIC HEALTH (MPH)**

SEPTEMBER , 2021

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ENVIRONMENTAL HEALTH AND SAFETY**

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CERTIFICATION

This is to certify that this work "Factors Influencing Contraceptive Use Among Women of Reproductive Age (15-49 years) in Owerri North Local Government Area" was carried out by PAUL, TIEBET UFOT (Registration number 20164025238) in partial fulfilment for the award of master degree in Public Health, Federal University of Technology, Owerri.


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DEDICATION

This work is dedicated to Almighty God, the giver of life and my lovely parents Elder/Mrs Ufot Paul for their financial and moral support throughout the period of this program.

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Definition of terms

- **Contraceptives**

Contraceptives are methods, devices or drugs used among sexually active people to reduce or prevent unwanted pregnancy and space birth.

- **Contraceptive use**

It is the percentage of women who are currently using or whose sexual partner is currently using, at least one method of contraception, regardless of the method used.

- **Women of reproductive age**

Women of reproductive age group are women between menarche and menopause within the age bracket of 15-49

- **Family planning**

Family planning is the practice that helps individuals or couples to attain the objectives to avoid unwanted pregnancy, bring about wanted birth, regulate the interval between one pregnancy and another and determine the number of children in the family.

- **Family planning services**

These refers to “educational, comprehensive medical or social activities which enable individuals to determine freely the number and spacing of their children and to select the means by which this may be achieved.

- **Health facilities**

These are places that provide health care. They include hospitals, clinics, outpatient care centers, and specialized care centers, such as birthing centers and psychiatric care centers.

- **Health facilities factor**

These are physical characteristics , structural issues, operational issues , service provision issues and financial mangement issues of hospitals , clinics and medical care providers.

- **Socio-economic factors**

These are social and economic experiences and realities that help mold one’s personality, attitude and lifestyle. Socio-economic factors include income and occupation, place of residence, religion, parity, educational level etc.

- **Cultural factors**

These are set of believes, moral values, traditions, languages and laws (rule of behaviour) held in common by nation, community, or other defined group of people. Cultural factors include marriage customs, gender roles etc.

ABSTRACT

This study was carried out to determine factors influencing contraceptive use among women of reproductive age. This was a community based descriptive survey which took place in Owerri North, Imo State, Nigeria among women of reproductive age. Simple random sampling was used to select thirty percent of semi-urban and rural autonomous communities. A structured self-administered questionnaire which examined the socioeconomic characteristics, cultural factors, proportion of women on any method of contraceptive and health facility factors was administered to three hundred and ninety seven respondents. Data obtained was analyzed using Statistical Package for the social Sciences (SPSS) version 21. Frequencies were generated and Chi-square was used to test significance. Level of significance was set at 0.05. A total of three hundred and ninety six (396) questionnaires were retrieved. Findings of this study revealed that most respondents 72 (58.0%) who uses contraceptive method regularly were between the age range of 33-41 years and 69 (53.1%) in the age range of 24-32 compared to women in the age range of 15-23 who recorded low usage 129(20.3%). The commonest reason for 144(87.3%) respondents on low usage was that their husband/partner do not support them on any method of contraceptive. The study revealed that Condom (Female), prolonged breast feeding and periodic abstinence 126(61.8%) were the more commonly used current method of contraception compared to pills, intrauterine device and injectables which recorded 69 (33.8%). The findings revealed that a big portion 81(83.5%) of women don't get their contraceptive method as at when due while 50(89.35%) of women said the contraceptive methods were not affordable. Factors found to be significantly associated with contraceptive use were: age level, educational level, occupation, support from partners/husband, accessibility , availability of contraceptive methods and decision making by partners/husband . Re-education on the complications and benefits of contraceptive use should be carried out by health workers so as to improve contraceptive uptake. Female education and male involvement should also be advocated.

Key words: Family Planning, Contraceptives, Contraceptive Use, Women of Reproductive age, Demographics Characteristics, Cultural and Health Facility Factors

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Contraceptive use is part of a family planning package. A large and empirically verified demand for contraceptive methods to space or limit childbearing exist worldwide (WHO, 2009). Currently, over 200 million women have an unmet need for modern contraception, that is, they are sexually active, want to delay or stop childbearing, and are not using a modern contraceptive method (MacQuarrie, 2014). More than 80 million unintended (mistimed or unwanted) pregnancies occur each year worldwide, contributing to high rates of induced abortion, maternal morbidity and mortality, and infant mortality (Smith, Ashford, Crible and Clifton, 2009).

Population increase has always been a concern to public health analysts, economic planners, demographers and government agents. As world population rises to 7.6 billion, the per capita production of money basic commodities is falling, for instance the recent global food shortage is an evidence according to the Population Reference Bureau (PRB, 2018). The effort to raise incomes and living standard is falling in many countries like Nigeria, particularly where population is growing more rapidly and where family planning is not fully practiced. The survival of the human race is endangered if population growth is not checked adequately (Tsui, McDonald-Mosley and Burke, 2010).

According to Olaitan (2009), family planning is the practice that helps individuals or couples to attain the objectives to avoid unwanted pregnancy, bring about wanted birth, regulate the interval between one pregnancy and another and determine the number of children in the family. Family planning involves two concepts which are contraceptive use and other family planning services

used by couples to bring about healthy sexual relationship among them without fear of unwanted pregnancies (Isah and Nwobodo, 2009). Family planning services other than contraceptive use include counselling, providing basic infertility services, offering pregnancy testing, sexually transmitted disease screening and treatment services to prevent infertility and improve the health of women, men and infants (Gisaw and Regassa, 2011). Contraceptives are methods, devices or drugs used among sexually active people to reduce or prevent unwanted pregnancy and space birth. Contraceptive methods are either traditional or modern methods of family planning. The traditional method include prolonged breast feeding, post partum, the use of ring, waist band, wooden doll, the use of black soap and salt to be taken immediately after sex. On the other hand, modern method emphasized the use of temporary methods (pills, intrauterine contraceptive device, injectables, condom), permanent methods (vasectomy and tubectomy) and natural methods which involves withdrawal method and rhythm (Ayeni, 2002). Most women of reproductive age engage in some forms of contraceptive method, either modern or traditional, to ensure child spacing and prevent unwanted pregnancy. Contraceptive use is the percentage of women who are currently using or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. Contraceptive use is a key factor in controlling fertility rates as proper use can prevent unwanted pregnancy and high risk pregnancies that often lead to maternal and infant morbidity and mortality. It is also important for other reasons such as; reducing women's dependency on their husbands/partners by allowing them more opportunities to work, saving mothers and children lives, lightens the burden and responsibility of husbands/partners in supporting their families, enable parents/partners to give their children basic needs (food, shelter, education, and better future) and with a good political climate, it boosts economic development of women of reproductive age.

Women of reproductive age group are women between menarche and menopause within the age bracket of 15-49 (WHO, 2009). Women of reproductive age in Owerri North Local Government Area has a population projection of sixty one thousand one hundred and sixteen (61,116) as at March 2018 (National Bureau of Statistics, 2018) and with the craving for large families in this locality, high population increase may likely be sustained for a long time if active population control measures are not instituted. Owerri North Local Government Area of Imo State has experienced a phenomenal demographic transition over the last few decades despite the efforts of Government at all level to improve use of contraceptives among others. The census figures show that the total population of Owerri North grew from 95,105 in 1991 to 175,395 in 2006 (National Population Commission of Nigeria, 2006). Women of reproductive age in Owerri North prefer to go into marriage at early age rather than go to school which affect the level of literacy among them. Mothers of large families are at higher risk of several diseases such as anaemia, hypertension, mental health conditions among others which in most cases can lead to pregnancy complications. According to Isah and Nwobodo, (2009), factors that play a role in the choice of family sizes include demographic factors (parity, income, occupation, religion, income, education, age), cultural factors (early marriage, power relationship between partners, sex), facility factors (availability of contraceptive methods, affordability of contraceptive methods, accessibility of contraceptive methods, service provision, technical competence). This study intends therefore to ascertain the factors influencing contraceptive use among women of reproductive age in Owerri North as to devise decision strategies that will effectively increase acceptance and uptake of contraceptive methods. More specifically, reducing the rate of maternal and newborn mortality levels, improving the quality of family planning services and encouraging

proper and continuous use of contraceptives. The following research questions guided the study:

- i. What are the demographic characteristics influencing contraceptive use among women of reproductive age in Owerri North?
- ii. What are the cultural factors affecting contraceptive use among women of reproductive age in Owerri North?
- iii. What is the proportion of women of reproductive age on any method of contraceptive in Owerri North?
- iv. What are the health facility characteristics influencing contraceptive use among women of reproductive age in Owerri North?

1.2 Problem Statement

The world population is increasing in geometric rate; government can no longer meet up with the demand of their citizens as a result of increase in human reproduction. The effort to raise income and living standard is falling in many countries like Nigeria, particularly where contraceptive use is low. Imo State Ministry of Health (2005) has a Mission Statement on Family Planning and Reproductive Health, which is to provide satisfactory family planning services to promote proper and continuous use of contraceptives. However, the increasing population could be an indication of low or negligence of contraceptive methods. Women with more than four children and above 35 years are at higher risk of several diseases such as anaemia, hypertension, mental health conditions among others which in most cases leads to maternal and infant morbidity and mortality. Preliminary investigation on women revealed that most women of reproductive age still have more than four children, marry at young age and husbands/partners taking the lead in

decision making regarding contraceptive use. Unsatisfactory services retard the achievement of the desired aim of providing satisfactory family planning services to promote proper and continuous use by the State Ministry of Health.

The study was motivated by the researcher's observation of large family size and unspaced birth within the different communities in the Local Government. Large family size and unspaced birth resulting from low or negligence of contraceptive use has negative impact on the family, community and the nation at large. Despite the undesirable effect (e.g maternal and infant morbidity and mortality, higher risk of several diseases like anaemia, hypertension etc) of large family size, women of reproductive age still crave for large families, hence , the need to determine factors influencing contraceptive use among women of reproductive age in Owerri North with the view of using the findings as input to design appropriate family planning programmes which will improve choice and continued use.

1.3 Objectives of Study

The main objective of the study was to determine the factors influencing contraceptive use among women of reproductive age in Owerri North of Imo State while the specific objectives were:

- i. To determine influence of demographic characteristics on contraceptive use among women of reproductive age in Owerri North.
- ii. To determine cultural factors affecting contraceptive use among women of reproductive age in Owerri North.
- iii. To ascertain the proportion of women of reproductive age in Owerri North on any method of contraceptive

- iv. To ascertain influence of health facility factors on contraceptive use among women of reproductive age in Owerri North.

1.4 Hypothesis of Study

- i. There is no significant relationship between demographic characteristics of women of reproductive age in Owerri North and their contraceptive use
- ii. There is no significant relationship between cultural factors of women of reproductive age in Owerri North and their contraceptive use.
- iii. There is no significant relationship between the proportion on any method of contraceptive among women of reproductive age in Owerri North and their contraceptive use
- iv. There is no significant relationship between health facility factors among women of reproductive age in Owerri North and their contraceptive use

1.5 Justification of Study

The findings of this study will help health officers and nurses to develop a civic engagement strategy, and decide which messages to use in clinics to promote proper and continuous use of contraceptive.

Information gathered from this study will provide guidance to policy makers, government and development partners in strengthening health programs in areas of reproductive health and family planning in Owerri North Local Government Area.

The findings of this study will help women of reproductive age in particular to engage in continuous and proper use of contraceptives by addressing demographic, cultural and health facility issues to encourage and empower sexually active women make informed choices about their sexual and reproductive health.

The study will also help in opening up avenue for further research in areas that are related to family planning and contraceptive use.

1.6 Scope of the Study

This study will cover the entire communities of Owerri North Local Government Area of Imo State. Owerri North Local Government Area consists of twenty one autonomous communities which include: Agbala, Awaka , Amakohia, Azara-ubo, Emekuku, Emii, Ezimba, Egbu, Ihitaoha, Ihitta Ogada, Mbaoma, Naze, Obibiezena, Obibi Uratta, Obube, Orji, Owalla, Ulakwo, Umuakalikwu and Egbelu Obube (autonomous community). The variable of interest, dependent variable is contraceptive use while the independent variables in the study include demographic factors (parity, income, occupation, religion, income, education, age), cultural factors (early marriage, power relationship between partners, sex), facility factors (availability of contraceptive methods, affordability of contraceptive methods, accessibility of contraceptive methods, service provision, technical competence) and proportion of women of reproductive age on any method of contraceptive.

CHAPTER TWO

LITERATURE REVIEW

Literature review of this study was presented under the following headings: Conceptual Review, Theoretical Framework, Empirical Studies and Summary of literature Reviewed.

2.1 CONCEPTUAL FRAMEWORK

Contraceptives are methods, devices or drugs used among sexually active people to reduce or prevent unwanted pregnancy and space birth.

2.2 History of Family Planning

For quite some time in the past, the issue of family planning was observed secretly and not for public consumption, particularly in this part of the world where the too predominant religions tend to frown at its discussion in public. Today, however, opinions about this have changed. According to Nwangoro (1999), family planning started in the U.S.A with nurse, Margaret Sanger (1876- 1966), who fought a very courageous crusade against the legal system of America. She coined that phrase “Birth control” and set up a clinic for its propagation in 1916. The Family Planning Council of Nigeria (FPCN), later called Planned Parenthood Federation of Nigeria (PPFN), was established in 1964 by some concerned private individuals towards checking the rampant phenomenon of “child-ladies”. Such unwanted pregnancies resulted in criminal abortion that were of concern to the government. In 1957, the rampancy of abortion cases caught the attention of the Marriage Guidance Council in Lagos. Later development made the federal government to establish family planning services and clinics with funds coming from the Pathfinder fund, Population Council and the International Planned Parenthood Federation (IPPF) prior to the establishment of the clinics, records had it that Miss Edith Cate of the Pathfinder

fund of U.S.A visited Nigeria in 1962 and not with the Nation Council of Women's Societies (NOWS). A family planning committee was consequently set up charged with the responsibilities for family planning activities and marriage counseling. It was the committee that metamorphosed into (F.P.C.N) Family Planning Council of Nigeria and later Planned Parenthood Federation of Nigeria (P.P.F.N). Although, family planning appears to be a relatively young area of study, it had long existed since the discovery that many girls of school age were losing their lives through premature and unwanted pregnancies (Nwangoro, 1999). The phenomenon still remains till date; it has however stopped being news to anyone.; Today, the awareness that a large and uncontrolled population is a bane to socio-economic growth of the nation as well as the health of the citizenry has generated the quest for planned families and concerns of government to maintain it (Deleno, 1985).

2.3 Methods of Family Planning

There are two well known methods of family planning. These include:

- (i) The traditional methods
- (ii) The modern methods

Traditional Methods of Family Planning

According to Izale et al (2020) , the traditional methods of controlling family size were practiced as far back as history could tell. This has been confirmed by the display of these methods side by side with modern methods. These traditional methods include prolonged breast feeding, post partum abstinence, the use of ring, waist band, "blue" (a chemical substance dissolved in water for drinking immediately after sex to prevent pregnancy and for abortion), hair pin (for women)

feather (attached to hair during sex), salt (to be dissolved and taken immediately after sex), padlock (which is opened and attached to the body during sex), broom (a small gourd with medicine inside, to be taken after sex) and the use of black soap. The use of various objects are sometimes accompanied by incantation and divination. These methods are also associated with some taboos. Any violation of the taboo associated to these methods will render them ineffective. Civilization and modernization have however helped in putting behind many of the traditional methods and replaced with modern methods (Olaitan, 2011).

Modern Contraceptive methods

According to National Research Council (2000) and Mathe (2018), they highlighted that the modern methods of family planning is categorized into three types.

They include:

- i. Temporary family planning methods
- ii. Permanent family planning methods
- iii. Natural family planning methods

i. Temporary family planning methods: These are methods that couples can use to delay pregnancy and space their children as they wish. They can stop using them when they want to have a child. Examples are:

Iucd (Intrauterine Contraceptive Device): This device is chosen by some women who want to avoid pregnancy. It is placed inside the uterus.

Pills: These are oral contraceptive which helps to reduce the fertility rate in women with ease and little upset. A women taking oral contraceptives is unlikely to have dysmenorrheal, her menstrual flow will reduce (which in turn helps to prevent anemia) and she is likely to have a reduce amount of premenstrual tension.

Injectable: Injectable is an injection of a hormone given to a woman to prevent her ovary from releasing an egg for some months. This prevents pregnancy. There are two commonly used injectable: DEPO-PROVERA (DOPA) given every three months and Noristerart (NE-EN) given every two months.

Implant: Implant system is a set of 6 small, plastic capsules. Each capsule is about the size of a small match stick. The capsules are placed under the skin of a woman's upper arm. A set of implant capsules can prevent pregnancy for at least 5 years. It may prove to be effective longer.

Condom: A condom is a close-fitting thin rubber that a man wears over his erect penis during sexual intercourse to hold sperm. Condoms help prevent both pregnancy and sexually transmitted disease (STD's) used correctly, they keep sperm and any disease organisms in semen out of the vagina. Condoms also stop any disease organisms in the vagina from entering the penis.

(ii). Permanent Family Planning Methods: These are methods that are used by men and women who do not want to have any more children but want to enjoy sex without fear of pregnancy. Examples are vasectomy and tubectomy.

Vasectomy: It is a permanent birth control methods for men who do not want to have any more children. It is a simple operation in which the doctor cuts and seals the vas deferens (a tube) in the scrotum. This prevents the sperm from traveling from testis to the penis when a man ejaculates (releases).

Tubectomy: it is a permanent birth control method for women who do not want to have more children. It is simply operation consists of cutting out a portion of the oviducts. These are the tubes which stretch from the upper corner of the uterus towards the ovaries.

(iii). Natural Family Planning Methods: These are methods that do not rely on any medication or device. Natural family planning requires that a woman should be aware of her fertile days so that she and her partner can plan sex to avoid or achieve pregnancy. Examples of such methods are withdrawal and Rhythm methods.

Withdrawal Methods: This is the methods that a man withdraws his penis from the vagina and ejaculates out. This requires great self control, as the man will often want to keep his penis in the woman's vagina for as long as possible to obtain the greatest amount of pleasure.

Rhythm: Contraception is based on the menstrual cycle of woman. Intercourse is avoided during period when fertilization might easily take place. No effect on sexual pleasure and no need for intervention by health personnel.

2.4 Contraceptive Use

Contraceptive use is part of a family planning package. A large and empirically verified demand for contraceptive methods to space or limit childbearing exists worldwide (WHO, 2009). Currently, over 200 million women have an unmet need for modern contraception, that is, they are sexually active, want to delay or stop childbearing, and are not using a modern contraceptives method (MacQuarrie, 2014). More than 80 million unintended (mistimed or unwanted) pregnancies occur each year worldwide, contributing to high rates of induced abortion, maternal morbidity and mortality, and infant mortality (Smith, Ashford, Crible and Clifton, 2009). Furthermore, family planning has been found to be an essential means by which countries can achieve the Millennium Development Goals (MDGs), particularly goals for improved child and maternal health outcomes. The cost of averting unwanted births is miniscule compared with the

costs of unwanted births at both the family and country level. Few public health interventions are as effective as family planning programs services and contraceptive methods at reducing the mortality and morbidity of mothers and infants and have such a breadth of positive impacts. Moreover, the need for contraceptive use is generally high in societies where poverty, illiteracy, and gender inequality are high (Frost, Singh and Finer, 2007) . In such societies, unintended and repeated pregnancies make it difficult for women to participate in economic development and self-development.

According to Ranjit and Forest (2009), contraceptive use vary widely across demographic subgroups of users, indicating that difficulties in using the available methods successfully are affected by personal characteristics. According to Olaitan (2011), socio-economic factors (age, educational background, marital status, occupation, parity, religion) influence the choice of family planning among women of reproductive age. Mathe and Maliro (2018), stressed the necessity of consistent and proper use of contraceptive. According to Mathe and Maliro , the major cause of increasing death of women at child birth seems to be “lack of self-discipline, poor spacing of birth and general disregard for simple health principles”. Women of reproductive age should be encouraged to make use of proper family planning methods to promote small family sizes and prevent unwanted pregnancies. All these come as an overall initiative to slow population growth and avoid some of the consequences of population growth. A combination of good access to family planning services and increased contraceptive use will lead to a decline in fertility rates. Access to good quality, voluntary family planning services and increasingly higher levels of family awareness are credited for supporting declines in family sizes (Olaitan, 2011).

The study, factors influencing contraceptive use among women of reproductive age in Owerri North local is motivated by the researcher’s observation of large family size within the different

communities in the Local Government. Belmont and Marolla (2005) writes that in the olden days, 12-16 children were normal family size. However, as poverty and population has increased, so the family size has decreased to 3-4. Large family size according to Belmont and Marolla (2005) is basically a family of above six siblings. Such family size comes with its attendant implications of poor health, inability to cater children's education, low standard of living and inability to fulfil one's dream.

According to world health organization (WHO, 2009), women between menarche and menopause are more fertile, hence the interest in women of reproductive age. The rate of modern contraceptive use will be on an increase and maternal mortality on a decrease if women have a good knowledge on family planning and its methods thereby attaining a balance on population growth.

2.5 Benefits of Contraceptive Use

Okech, Wawire and Mburu (2011), highlighted the following as some of the benefit derived from family planning:

Saving Women's Lives and Avoiding Unsafe Abortion

Contraceptive Use could avoid most of the estimated 78,000 maternal deaths that result from unsafe aborting, about 13% of the 588,000 maternal deaths each year. Worldwide, if all couples who do not currently want to have a child used effective contraception, most of the estimated 46 million induced abortions each year would not occur. As many as 20 million of the 46 million abortions annually, over 40% are unsafe. Expanding and improving family planning programs can increase use of effective contraceptive and this helps to reduce the number of unintended pregnancies and abortions. As studies have shown in many countries and at different times, abortion rates have fallen, often substantially, as use of modern contraceptive has become more

widespread. For national health systems, providing family planning widely is a sound investment. Preventing unintended pregnancies save health care resources that would be required for treating complication of unsafe abortion.

saving Children's Lives

Spacing birth helps protect children's health. A baby conceived more than two year after an older sibling is born is more likely to survive than a baby conceived sooner. Spacing pregnancies at least two years apart is particularly important in developing countries, where infant mortality rate are over 10 times higher than in developed countries 65 infant deaths per 1,000 live birth compared with 6 per 1,000. It helps ensure her infant's health when a woman avoid pregnancy for 24 months after previous birth. A baby born too soon is vulnerable because the mother has not yet recovered from vitamin depletion, blood loss, and reproductive system damage from the previous birth. The fetus may not get the nourishment it needs, and the baby's birth weight may be low, and the immune system, underdeveloped (Maine, 2008). United Nation Population Fund (UNFPA), suggested that if women used family planning to space all pregnancies at least two years apart, one of every four infant death would be avoided.

Having Fewer Births

Proper contraceptive use help women avoid giving birth more time than is good for their health. The risk of maternal complications rises dramatically after a woman's third or fourth birth. Regardless of a women's age, her risk of dying when giving birth the fourth time or more is an estimated 1.5 to 3 times higher than when having a second or third birth. Women who have had at least four births often develop complication during delivery (Akinyemi et al, 2020).

Offering women Choice

In a social environment that allows women to take roles other than motherhood, family planning empowers women by enabling them choose the number and timing of their births. For some women control over their own childbearing can open the door to more education, employment, and community involvement. At the ICPD in Cairo, countries agreed that assuring a woman's right to control her own fertility is important to resolving the gender inequality that exists at almost every level of society. In virtually every society women derive status from their role as mothers. Much needs to be done, however, to ensure that women get an equal share to other life choice and opportunities. Family planning can help, for instance with effective contraceptive women choose to be employed without the interruption of unintended childbearing inhibit women's educational and occupational decisions. Women who can choose contraceptive gain more control over their own bodies. Moreover, women who use contraceptive report that they make more decision for themselves and that their quality of life has improved. Merki (2006) reported that the benefits of contraceptive use included less stress, fewer worries over family matters husbands, and more time for work and community activities.

Helping People Avoid STDs

Family planning programs, along with other reproductive health programs, can play an important role in preventing STDs, including the human immunodeficiency virus (HIV), which causes Acquired Immune Deficiency Syndrome (AIDS). As HIV/AIDS spreads with devastating consequences, family planning programs and STDs prevention programs need more support for condom supplies and promotion, health education and community outreach.

(UNAIDS, 1999). Family planning programmes encourages young people to delay sexual initiation, advice couples to remain monogamous and promote condom more among unmarried

men. At the same time, condoms are also a method that an estimated 44 million married couples rely on for family planning. Today family planning communication and social marketing campaigns often promote the dual role of condom in pregnancy and avoiding STDs

Encouraging Healthier Sexual Behaviour

Most men, and particularly sexual active unmarried men, have a lot to learn to become responsible sex partners. Most need to know more about preventing pregnancy and about avoiding and preventing HIV/AIDS and other STDs. Other unmarried men are less able than married men to obtain information about safer sexual behaviour. Embarrassment and reluctant providers may stand in the way of obtaining condoms. Family planning programs can address many of the obstacles that men face when learning about and adopting safer sexual behaviour. For example, organizing meetings where men can discuss their concerns about sexual behaviour comfortably and openly. Family planning can help young people make responsible sexual decisions. For youths, these programs also can provide better access top reproductive health services, including contraception.

Slowing Population Growth

In any country population size helps determine demand for resources and level of pollution. Rapid increases in population, along with rising per capital demand for natural resources, can put tremendous pressures on the environment. Family planning program have played an important role in slowing population growth. Without access to modern contraception, most people are unable to space or limit their birth effectively. By providing good quality family planning information and services, program have helped people have the smaller families they prefer, fertility has fallen and population growth has slowed. (Ahmed et al , 2017).

2.6 Concept of Family Planning

The World Health Organization, WHO (2011) defined family planning as 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 the health and welfare of the family group and thus contribute effectively to the social development of a country. Multifarious definitions have been offered for the concept for instance, Hoberaft (2000), defined family planning as the practice of exercising choice about the arrival of the child into the family, taking into consideration, the mother's health, welfare of the children, family happiness and all other prevailing economic circumstances. Hoberaft (2000) explained further that such plans encourage couples to have only those children that they can properly and adequately cater for especially at such a time when family is ready for them, that is every child should be wanted by choice and not chance. According to Ahiburg (2002), many countries are today experiencing population explosion that makes the available social infrastructures very much deficient for the people. Food supplies to such population have become big and unsolvable problems to the indigenous government who mostly have resort to seeking foreign aids from international organizations such as UNICEF, UNO, etc. Nations like China, India and many more with the third world grapple with endemic problems. It is true that some other countries share their food shortage experience not because of their own self-styled overpopulation problem, but because of famine, drought, flooding and refugee influx from war-torn neighbouring countries such as Rwanda, Uganda, Liberia and Ethiopia. The Nigeria situation however, seems as varied since it bothers solely on the economic down-turn of the nation which relies mainly on proceeds from oil sales that presently face drastic price-cuts at the international market. The lack of money to finance capital projects also undermines the generation of employment opportunities for people. It also affects

all other facets of the Nigerian nation's life in the area of commerce, health, agriculture, education and others. On the face of this reality where the means of livelihood of the citizens continue to dwindle (dwindle) on daily basis, it is therefore no gain saying that caring for the living should be paramount and upper-most in the mind of parents rather than a further venturing into the baby-making engineering which will end the family in a one square mean per-day type of survival. Well-planned families therefore appear to be very plausible solution to the ugly development.

Family planning is a development phenomenon which improves health, reduces poverty and empowers women (Okech, Wawire and Mburu, 2011). Olaitan (2009) reported that family planning methods used in the old days include: abstinence, polygamy, menstruation, oral method, celibacy, douching, scarification, charms, spiritual power, local herbs in the vagina to stimulate contraction and dilation of the cervix (Olaitan, 2009). A number of contraceptive methods are available to prevent unwanted pregnancy. There are natural methods and various chemical based methods range of contraceptive methods, each with particular advantages and disadvantages. Traditional methods to avoid pregnancy that involve vaginal intercourse include the withdrawal and calendar-based methods, which have little upfront cost and are readily available. Long-acting reversible contraceptive methods, such as intrauterine device (IUD) and implant are highly effective and convenient, requiring little user action, but do come with risks. When cost of failure is included, IUDs and vasectomy are much less costly than other methods. In addition to providing birth control, male and/or female condoms protect against sexually transmitted diseases (STD). Condoms may be used alone, or in addition to other methods, as backup or to prevent STD. Surgical methods (tubal ligation, vasectomy) provide long-term contraception for those who have completed their families (Tsui, McDonald-Mosley and Burke, 2010). Modern

family planning helps women to avoid unwanted pregnancies, illegal abortions and child bearing that will threaten their own personal health and that of the children (Isah and Nwobodo, 2009)

According to Isah and Nwobodo (2009), Family planning involves two concepts --contraceptive use and family planning services which is normally used by the couples to bring about healthy sexual relationships among them without fears of unwanted pregnancies and sexually transmitted infections. Despite the popular attention family planning has gained and its importance to the society, Bongaarts, Cleland, Townsend, Bertrand and Gupta (2012) noted that more than 200 million women in the world fail to plan their families. Nigeria as one of the developing countries had a population of 170,507,539 in July 2013 of which Imo State is one and an annual growth rate of 2.5 percent with only 10 percent of women using modern contraceptive methods (World Fact Book, 2013). Family planning practice in Imo State particularly in Owerri North is still backward. Therefore, the main thrust of this study is to determine the factors influencing contraceptive use among reproductive age women in Owerri North.

2.7 Knowledge of family planning

According to Choudhary, Gau, Pandey, 2011 and Eddy, 2013, knowledge is a familiarity, awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. It can be implicit (as with practical skill) or explicit (as with the theoretical understanding of the subject); it can be more or less formal or systematic. However, several definitions of knowledge and theories to explain it exist. According to Eddy (2013), Knowledge acquisition involves complex cognition processes: perception, communication, and reasoning; and it is also said to be related to the capacity of acknowledgement in human beings. According to Olaitan (2009),

knowledge refers to the fact or condition of knowing something with familiarity gained through experience or association. Olaitan noted that knowledge is an important component for effective contraceptive use. People do not practice family planning because they do not know how, when and what to do use. Olaitan further attested that knowledge about a health related behavior can be disseminated through different sources of information.

2.8 Practice of family planning

Practices of a group mean their ways of life. According to Isah and Nwobodo (2009), practice is repeated, habitual or standard act or course of action. Family planning practice endures as long as the social influences remain the same over a period of time. They considered practice as the actual performance or application of knowledge; it is repeated customary action. Isah and Nwobodo (2009) stated that the ultimate goal of health education is practice or action. To reinforce the above statement, they further stated that the goal of health education is to develop positive health-practice and not mere health-knowledge. Positive health practices are usually encouraged to continue and reinforced while negative ones are discouraged. Attitudes have the tendency to determine practices in some cases.

When practices are related to family planning, they are termed family planning practices. Such practices could be related to non-appliance, appliance and surgical methods of family planning. Olugbenga, Abodunrin and Adeomi (2011) defined family planning practice as a habit of using family planning methods regularly. Okoye and Okoye (2007) referred to modern family planning practice as a habitual way of applying modern contraceptives consistently. Okoye and Okoye further observed that practice may be influenced by knowledge and attitude, although the

possession of the accurate health knowledge and attitude does not guarantee the right behavior, knowing the right thing to do may lead to positive attitude and appropriate behavior

2.9 Attitude of family planning

Okech, et al. (2011) report that attitudes about health-related behavior help to determine what an individual does in a given situation. He also viewed attitude as a feeling tone directed towards a person, object or ideas. Okech, et al. further observed that attitude is concerned with ones feeling towards an object, person or thing. Odimegwu (2009) considered attitude as a predisposition to classify objects or events, and to reach to them with some degree of evaluative consistency. Odimegwu also perceived attitude as an organized predisposition to think, feel, perceive and behave towards a referent or cognitive object. Attitude refers to the people's inclinations and feelings, prejudices or bias, preconceived notions, fears, threats and convictions. Odimegwu (2009) further observed that positive attitude leads to greater interest and performance.

Attitude has the tendency to determine practices in some cases (Utoo, et al. 2010). Utoo, et al. further stated attitude that are positive are usually encouraged to continue and are reinforced while negative ones are usually discouraged. Attitude as used in this study means believe, feeling, thinking, ideas or emotion that predisposes an individual to respond either positively or negatively when faced with a particular object, in this case of family planning. When attitude are related to modern family planning, they are termed modern family planning attitudes. Such attitudes could be attitudes related to non-appliance, appliance and surgical methods of family planning. The type of attitude women have to modern family planning may positively or

negatively influence their practice of these family planning methods. Olaitan (2009) defined attitude to modern contraception, as the sum total of our habits and ideas, our likes and dislikes and our practices of choosing and using modern contraceptive methods. He observed that attitude to modern contraceptive is positive when we have likings and are willing to use the natural family planning methods (NFPM) or, no method at all. Utoo, et al. commented that if positive attitude to modern contraception are adopted and put to practice, morbidity and mortality associated with pregnancy and sexually transmitted infections (STIs) including human immune-deficiency virus (HIV) and acquired immune-deficiency syndrome (AIDS) will be greatly minimized. In the context of this study, family planning attitudes are conceptualized as habits, behavior, feelings, the likes and dislikes of a particular method of family planning. It is generally assumed that attitude influences behavior or practice.

2.9.1 FACTORS INFLUENCING CONTRACEPTIVE USE

Demographic factors:

These are experiences and realities that help mold one's personality, attitude and lifestyle. Demographic factors include occupation, age, place of residence, religion, parity, educational level etc.

Age

Age has been identified as one of the strong factors that influence attitude to and practice of modern family planning. Okoye and Okoye (2007) noted that ages of women were found to have an impact on contraceptive use. Contraceptive use is lowest among young women, reaches a peak among women in their thirties and declines among older women (Okech, et al. 2011). This is indicative of a high desire for child bearing among young women, and high growing interest of spacing births among women in their thirties. Percentages of users declines at older ages of reproduction due to the fact that older women not at a high risk of pregnancy.

Educational level

Studies conducted in different parts of the world, including Nigeria, have indicated that level of education has strong influence on attitude and practice of modern family planning. Fadhala (2012) pointed out that educational status of women was found to have an influence on attitude and contraceptive use. Those women, who have some level of education, were found to have had better knowledge and tend to use contraceptives. Okech, et al. (2011) revealed that women with an elementary school education were more likely than those with more education or with none at all to want no more children and thus tend to use modern contraception. Olaitan (2009) found a positive association between the educational level of women and the use of contraceptive methods. A woman's education was found to be a stronger predictor of methods-use and methods-choice than other factors. Okech, et al (2011) posit that contraceptive use is also believed to be directly associated with the educational status. This was the case in their study as those in the urban areas were significantly more educated and had higher contraceptive use than those in the rural areas. Piotrow (2011) asserted that better educated women are argued to have

more knowledge of modern methods of family planning and how to acquire and use 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.

Parity

Parity means the number of children born and kept by a person. This may influence a woman's chances of using modern family planning. Choudhary, Gau and Pandey (2011) viewed parity as a woman with regard to the number of children she has born. Choudhary, et al noted that contraceptive practice was highest among women with three children and lowest among women with none. Utoo, et al (2010) found out that the number of living sons a woman has greatly influences her attitude and use of modern contraception. According to Utoo, et al. women with 1-3 children were more likely to report contraceptive practice than those with no children.

Occupation

The work status of women has been linked to knowledge and use of contraceptives. Women who work outside the home have higher rate of use than women who do not work outside home (housewives). Choudhary, et al (2011) noted that working women, particularly, those who earn cash incomes are assumed to have greater control over household decisions and increased awareness of the world outside home. Consequently, they have more control over reproductive decisions. Choudhary, et al also added that paid work also provides alternative satisfactions for women, which may compete with bearing and rearing children and may promote contraceptive use.

Religion

Handout (2009) indicated that religion could sometimes hamper the effective use of contraceptives. Islamic women tend to let men decide on the number of children required (such women are unlikely to use contraceptives). The Roman Catholic Church is opposed to many birth control methods, favouring the rhythm method which is not very reliable. Handout (2009) noted that because religious values oppose contraceptives, women tend to use methods with high failure rates such as the rhythm method. Handout further opines that protestant churches have been less harsh on family planning.

Institute of reproductive health (2011) noted that whether a Muslim is liberal or conservative, their core values come from the Koran and religious teaching. Islam supports the health of the mother. If it can be shown that the mother's health is improved by timing and spacing (of pregnancies), then family planning is important.

Cultural Barriers to Family Planning

These are set of believes, moral values, traditions, languages and laws (rule of behaviour) held in common by nation, community, or other defined group of people. Cultural factors include marriage customs, gender roles etc. According to Mamdani, 1999 general cultural barriers to family planning include: Rumors and myths about contraceptives i.e. that condoms are only used to prevent STI transmission, lack of male involvement in family planning, family pressure, fear of side effects of services, early marriage, domestic violence and decision-making positions being fully or mainly controlled by men within the community

It can be difficult to convince people, both women and men, to use health services that are not familiar to them or that are different from their traditional approaches to medicine – cultural beliefs or folk methods may trump doctor’s orders. For example, in rural parts of Mexico some women give birth in a cement dome called a *temazcal*. *Atemazcal* is a heated “sweat lodge” or steam room used for giving birth, healing the sick, and purifying the body (Mamdani, 1999). Often, individuals go without life saving treatment not only because of a lack of access, but sometimes because of a fear of the unfamiliar. In the case of family planning, the difficult part is not convincing an individual that the service will be beneficial to them – in most communities women want to be able to plan their families. The difficulty lies in changing structures and systems that currently hinder women’s ability to access family planning services, and eliminating social stigma. Cultural beliefs that prevent women from making their own decisions negatively impact the implementation of family planning services. Overcoming these barriers requires innovative approaches that are different from those implemented for other health care services.

Health Facility factors

Health Facility Factors is significantly associated with quality of care, categorized into factors related to the client, provider, structure, and process. These factors were related to the demographics of clients, the provider involved in the provision of family planning methods, and the general characteristics of the health facilities in terms of locations, ownership. In addition, those factors related to the infrastructure, equipment, and provider-client interaction are also classified as structural and process related factors.

Health facility's structural factors such as staffing levels, management , availability of materials and equipment are associated with the quality of family planning services which in turn result to low usage of contraceptives (Olaitan, 2011). The range of methods available plays a particularly important role in women's acceptance of contraception and their continuation of use. The ability to choose from among a variety of contraceptive methods is essential for increasing the prevalence of use, and should be a part of family planning programs (Izale et al., 2018).

Access and service quality are important factors for contraceptive acceptance and continuation (Bertrand, 1994). Service quality also affects contraceptive prevalence (Bongaarts and Elof 2002) and, ultimately, fertility (Lasswell and Lasswell , 1991). The distinction between access and quality in evaluating the planning supply environment is analytically useful in identifying problems that demand different program management responses. The concept of access is linked to "getting clients to the clinic"; quality is linked to "keeping them wanting to come back" (Bertrand, 1994; Bertrand, 1995). Access to services includes physical access, such as distance to health posts, travel time, and the quantity and density of existing "facilities (Mathe and Maliro, 2018) . It also includes other dimensions of accessibility, such as economic, administrative, cognitive Several authors have pointed to a lack of consideration for the client's perspective (Bertrand, 1995; Land, 2002; Law, 2000).

2.9.2 Theoretical Framework

Theories are significant in any health education research. According to DeBarr (2004), a scholarly grouping of concepts and principles creates a theory. The purpose of any theory is to explain and predict the phenomena in question; theories allow the researcher to deduce logical

propositions or hypothesis that can be tested by acceptable designs. DeBarr (2004) argued that theories and models are among the most useful tools utilized by health educators in their quest to tackle challenges of health problems. There are many behavioral theories applicable to health promotion. Those reviewed in this study are the Health Belief Model and the Theory of Reasoned action.

The Health Belief Model

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviour. This is done by focusing on the attitudes and beliefs of individuals. The Health Belief Model was first developed in the 1950s by social psychologist Hochbaum, Rosenstock and Kegels working in the U.S. public Health Services. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. Since then, the Health Belief Model has been adapted to explore a variety of long-and short-term health behaviours, including sexual risk behaviours and reproductive health behaviour. The Health Belief Model on the understanding that a person will take a health-related action (i.e use contraceptive) if that person:

1. Feels that a negative health condition (i.e material mortality and other reproductive related problem) can be avoided.
2. Has a positive expectation that by taking a recommended health action couples will avoid negative health condition (i.e using contraceptive and other family planning method that will prevent unwanted pregnancy and risk associated with child bearing.
3. Believes that couples can successfully take a recommended health action (i.e any recommended family method comfortably and with confidence).

The Health Belief Model was spelled out in term of four constructs representing the perceived threat and net benefits: perceived susceptibility, perceived severity, perceived benefits and perceived barriers. These concepts were proposed as accounting for people's "readiness to act". An added concept, cues to action, would activate that readiness and stimulate overt behaviour. A recent addition to the Health Belief Model is the concept of self-efficacy, or one's confidence in the ability to successfully perform an action. This concept was added by Rosen stock and others in 1998 to help the Health Belief Model better fit the challenges of changing habitual unhealthy behaviours, such as reproductive health behavior that involves risk. The prediction of the model is the likelihood of the individual concerned to undertake recommended health action (such as preventive and curative health action). The health belief of women of reproductive age are thus shaped by the social framework of the individual, hence the culture of the women must be considered when planning proper and continuous use of contraceptive method.

Theory of reasoned action

The theory of Reasoned Action (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, intension, and behaviours of individuals. According to this model, a person's attitudes are determined by its behavioural intention to perform it. This intention is itself determined by the person's attitudes and his subjective norms towards the behaviour. Fishbein and 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 behaviour in question".

According to Theory of Reasoned Action, the attitude of a person towards behaviour is determined by his beliefs on the consequences of this beliefs on the consequences of this

behaviour, multiplied by his evaluation of these consequences. Beliefs are defined by the person's subjective probability that performing a particular behaviour will produce specific result. This model therefore suggests that external stimuli influence attitudes by modifying the structure of the person's beliefs. Moreover, behaviour 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 behaviour. 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 social environment usually has more influence on family planning decision than the attribute of specific contraceptive. In many countries family planning programs are part of national economic and social development efforts. Effort to foster equity in decision making and raise awareness about the reproductive right in the family, community and society also promote choice of family planning. As women gain more autonomy, they are better able to claim their right as individuals, including the right to act to protect their own reproductive health. Everybody belongs to informed social networks that influence their behaviour to some degree. Some network includes the extended family, friends, neighbours, political groups and other formal and informal associations. During the course of the day people often speak to other people about family

planning and experience with contraceptive use. For many people's 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 behaviour to please others or to meet others expectations. Individual health behaviour is influenced by how a person thinks that others view their behaviour. 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. (Hoberaft, 2000). 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. For some, decisions about family planning may reflect pressures from family members-to use a particular method, or not to use any method., Where women have little autonomy, their husbands, mother-in-law, or other family members often make family planning decision for them. From above discussion, it implies that if people are well informed about family planning and probably see other family who are doing well due to their involvement in family planning. They will imitate them and embrace the idea. Because behaviour is shaped by group and individual norm and attitude, it is helpful for people to identify social pressure and then to develop individual and group values that support health and appropriate behaviour. The theory of reasoned action is a helpful framework for this study since this study also focuses on changing behaviour, religious belief, community norms by determining the factors influencing contraceptive use among women of reproductive age in Owerri North of Imo State.

2.9.3 Empirical Studies

In this section, a review of relevant literature will be carried out. The essence is to have a critical look at how other researchers have approached the issue of family planning and contraceptive use not only in Nigeria but also in other countries.

Study on factors influencing contraceptive use among women in rural communities in Southern Western Nigeria wa carried out by Olugbenga-Bello, Abodunrin and Adeomi (2011) in Ladoke Akintola University of Technology (LAUTECH) Teaching Hospital in Osun State, Nigeria. Descriptive cross-sectional survey design was used and the study involved 612 women of reproductive age group, and multi-stage sampling technique was used. Majority of the respondents 538(87.8%) were within the age group 20 years and above and married (86.3%). More than half 406(66.3%) were currently using a modern contraceptive method, 41(6.7%) and 4(0.7%) were using natural and traditional methods respectively. However, 161 (26.3%) were not using any method, main reasons being affordability, availability, accessibility, service provision 184(41.2%) and reliability (20.1%). The point prevalence rate of contraception among the rural women was 66.3%, with fear of side effect and husbands disapproval among other reasons being the main reasons for non use.

Olaitan (2011) conducted a research on family planning at Ilora in Oyo state. 12 items questionnaire was designed to elicit information from one hundred respondents from selected villages of Ilora in Oyo state based on the implication of family planning techniques in a traditional rural population. The findings of the study showed that the rural population embraces family planning techniques of modern times than the old ones. Out of the total number of

respondents, seventy-six (76) of them practice and prefer family planning of modern time to the old form of family planning methods. The remaining twenty-four (24) were quite against the assertion. The entire five selected rural villages maintain almost the same level of agreement at this findings. For instance, 18 respondents (90%) out of 20 agreed and confirm this in Liu-Aje alone. Other villages with their corresponding agreed and confirmed with percentage stand at 55% with Alaga village, 85% with Ayetoro, 70% with Onifa and 80% with Idi-Araba. Although the percentage of the respondents who believed in many advantages accruable to family planning techniques was relatively small, the above average percentage level is 55. Many of them believed that traditional method of birth control measures have the same advantages as the modern ways of birth control. Also on the same study, the researcher found that a minority (only 26%) of the total respondents believes in the use of condom and pills while the remaining 64% strongly believe in any other means of family planning techniques. In fact the rural dwellers hate using condom or any insertion on their sexual organ, they believe that using this will not stimulate the sexual urge and would not give natural gratification derivable from sexuality.

David (2006) carried out a study on factors that influence the decision of women in fertility age to go for family planning services in Talensi district in the Upper East Region of Ghana. This was a descriptive cross-sectional study conducted in Talensi district in the Upper East Region of Ghana. Systematic random sampling was used to recruit 280 residents aged 15-49 years and data was analyzed using SPSS version 21.0. The result of the study revealed that 89% (249/280), of respondents crave for male children, 18% (50/280) of respondents had used family planning services in the past. Parity and educational level of respondents were positively associated with usage of family planning services ($P < 0.05$). Major motivating factors to the usage of family

planning service were to space children, 94% (47/50) and to prevent pregnancy and sexual transmitted infections 84% (42/50). Major reasons for not accessing family planning services were opposition from husbands, 90% (207/230) and misconceptions about family planning, 83% (191/230). David concluded in his study that although most women were aware of family planning services in the Talensi district, the uptake of the service was low. Thus, there is the need for the office of the district health directorate to intensify health education on the benefits of family planning with male involvement. The government should also scale up family planning services in the district to make it more accessible.

2.9.4 Summary of Literature Reviewed

From the various literatures in this study, it is found that family planning is an important tool that brings about positive changes and development to families, communities and a nation at large. It is designed to help families or couples to decide when to have children or not. Spacing children, number of children to have and prevent unwanted pregnancies. A healthy planned family is the pride of the nation because, family planning help to reduce maternal and infant mortality and morbidity, poverty, over population and to give adequate care and education to our children. Also it helps to reduce the rate of unemployment and to improve health of men and women to live longer.

Nigeria Demographic and Health Survey, NDHS (2013) conceived family planning as the use of modern contraceptive or natural techniques to limit or space out pregnancies. Wikipedia (2008) viewed family planning as a regimen of one or more actions, devices, or medications followed in order to deliberately prevent or reduce the likelihood of pregnancy or childbirth. Modern family

method refers to contraceptive methods of family planning other than traditional or natural family planning methods.

Factors influencing contraceptive use as used in this study are characteristics that prevent women from engaging in family planning or using any form of contraceptive method to avoid unwanted pregnancy and space birth. Women of reproductive age as used in this context are women in the age bracket of 15-49 years who are either married, single or separated (WHO, 2009). Some theories have also been reviewed. Theories reviewed are; Health Belief Model and Theory of Reasoned Action. Health Belief Model posits that an individual will take action to alter his/her behaviour if he/she can visualize that a bad health consequences can be avoided, if the changed behaviour has a potential to avoid the disease, and if he/she has the confidence as to whether he/she will be able to do it not. If women of reproductive age believe that practicing contraceptive methods would benefit them, they will certainly practice such methods. The Theory of Reasoned Action according to Fishbein and Ajzen (1975) defines the links between beliefs, attitudes, norms, intension, and behaviours of individuals. According to this model, a person's attitudes are determined by its behavioural intention to perform it. This intention is itself determined by the person's attitudes and his subjective norms towards the behaviour. If women of reproductive age believe that proper and continuous use of contraceptive methods would benefit them, they will certainly practice such methods.

Literature was further reviewed on traditional and modern methods of contraceptive methods, benefits of contraceptive methods and factors influencing contraceptive use. Specifically, literature revealed that demographic factors (parity, occupation, religion, educational level, age),

cultural factors (early marriage, power imbalance between couples/partners, preference for boys; 'pro-birth' tradition), facility factors (availability of methods, accessibility, service provision, technical competence, family planning clinics, informational materials) have been identified as some of the factors that influence contraceptive use among women of reproductive age. Literature was reviewed on studies conducted by various researchers on factors influencing contraceptive use among women of reproductive age in different part of the world including Nigeria. The result show low usage on contraceptive methods. The practice of modern contraceptive methods in Nigeria particularly was low. These studies will provide baseline data for those areas of study. However, no such studies have been found related to Owerri North Local Government Area of Imo State. There is therefore need to promote continuous and proper use of contraceptives to improve reproductive behaviour of parents in the community, reduce large family size, limit maternal and infant morbidity and mortality including avoiding unsafe abortion, limiting childbearing to the healthiest ages etc. Hence, the researcher's study in Owerri North Local Government Area of Imo State will be helpful to parents, health workers and most specifically guidance counselors to know steps to take in creating awareness on the appropriate method of family planning that is good for different individuals and society at large.

CHAPTER THREE

MATERIALS AND METHOD

This chapter describes the methods and procedures that were employed by the researcher in carrying out this study. It specifically describes: the design of the study, area of study, population of the study, sample size and sampling technique, instrument for data collection, validation of instrument, reliability of instrument, procedure for data collection, method of data analysis and ethical consideration.

3.1 Design of Study

This study employed descriptive survey design. Descriptive survey studies are aimed at collecting data and describing in a systematic manner the characteristic features or facts about a given population (Ali, 1996). It provides information about the naturally occurring health status, behaviour, attitudes or other characteristics of a particular group. The design is useful in this study because it will describe the characteristics of women of reproductive age with the aim of determining the proportion of women on any method of contraceptive and other factors influencing contraceptive use among women of reproductive age in Owerri North, Imo State. This design was used successfully by Olugbenga-Bello, Abodunrin and Adeomi (2011) to study factors influencing contraceptive use among women in rural communities in Southern Western Nigeria. Olaitan (2011) used similar design to conduct a research on family planning at Ilora in Oyo State.

3.2 Area of the study

This study was carried out in Owerri North Local Government Area of Imo State. Imo state was created on 3rd February 1976 with the split of the former East Central State into Anambra and old Imo State (Imo State Government, 2005). Thereafter, in 1992 there was another split of the old Imo State into two, which resulted in the creation of another new state known as Abia State and the present Imo State. The State is otherwise known as Eastern Heartland with Owerri as the Capital with a population of 4.8 million (National Bureau of statistics of Nigeria, 2007). Imo state has three geopolitical zones and 27 local Government Areas. Owerri as the capital of Imo State has three local Government Areas, Owerri Municipal, Owerri West and Owerri North.

Owerri North is a Local Government Area of Imo State, Nigeria with headquarters at Uratta. It has an area of 198 square km with a population of 93,093 males and 82,302 females at the 2006 census. The postal code of the area is 460. Six major roads that lead out of the municipal cuts across Owerri North Communities. Some of the communities are semi-urban while others are rural. In the North, Orlu road leads to Amakaohia and Akwakuma communities. In the East, Okigwe road leads to Orji Community. In the West, MCC road off Wetheral to Obibi Uratta and Ihitaoha communities. In the South, Mbaise road leads to Egbu and Emekuku communities, while Aba road leads to Nazi, Agbala and Ulakwo communities. Owerri North is made up of twenty one autonomous communities which include: Agbala, Awaka , Amakohia, Azara-ubo, Emekuku, Emii, Ezimba, Egbu, Ihitaoha, Ihitta Ogada, mbaoma, Naze, Obibiezena, Obibi uratta, Obube, Orji, Owalla, Ulakwo, Umuakalikwu and Egbelu Obube autonomous community. Some of these communities are semi-urban while others are rural.

The people of Owerri North Council are peace loving, hospitable, accommodating, hardworking and places a lot of value on life and relaxation. A rising number of women of reproductive age in Owerri North are in paid employment, cottage industries of weaving, dyeing and pottery. Women in Owerri North are known for their hardwork as majority tend to depend on subsistence agriculture and livestock rearing making them the backbone of agriculture. They are also faced with childcare, household, production and consumption and this make their domestic chores strenuous and time consuming that they have little or no time left. Most women of reproductive age prefer to go into marriage at early age rather than go to school which affect the level of literacy among them. Also, greater number of sexually active women give birth to more than four children which is associated with large family size in the area. The Local council is a predominantly Igbo speaking inhabitants called the Ibos, and this people constitutes a majority of 98%, majorly Christians and worship officially on Sundays.

3.3 Population of the Study

The population of the study is sixty one thousand one hundred and sixteen (61,116). The target population comprised of women of reproductive age in Owerri North Local Government Area of Imo State. The total population of females in Owerri North Local Government Area is Eighty-nine thousand two hundred and forty (82,302) at 2006 census and the population projection of women of reproductive age (15-49 years) as at March 2018 is sixty one thousand one hundred and sixteen (61,116) (National Bureau of statistics, 2018).

3.4 Sample size and Sampling Techniques

Sample size

The sample size was three hundred and ninety seven (397). The sample size was determined using Taro Yamane's (1967:886) formula for determination of sample size which states that in a finite population, when the original sample collected is more than 5% of the population size, the corrected sample size is determined by using the Yamane's formula. (See appendix A)

Sampling Techniques

A multistage sampling technique was used to select the study sample. In stage one, the Local Government was clustered into existing autonomous communities. The autonomous communities is made up of rural (Awaka, Agbala, Azara-ubo, Emii, Ezimba, Ihitaoha, Ihitta Ogada, Mbaoma, Obibiezena, Obube, Owalla, Ulakwo, Umuakalikwu and Egbelu Obube) and semi-urban (Amakohia, Egbu, Emekuku, Naze, Obibi Uratta and Orji) autonomous communities. Simple random sampling was used to select thirty percent of semi-urban and rural autonomous communities. The rural autonomous communities selected include Agbala, Awaka, Emii, Obibiezena and Ulakwo, while the semi-urban autonomous communities are Egbu and Naze. Proportional sample size from each of the selected autonomous communities using proportional stratified sampling technique was as follows: Agbala autonomous community, 47 women of reproductive age (11.8%); Awaka autonomous community, 54 women of reproductive age (13.6%); Emii autonomous community, 42 women of reproductive age (10.6%); Egbu autonomous community, 84 women of reproductive age (21.2%); Obibiezena autonomous community, 47 women of reproductive age (11.8%); Naze autonomous community, 88 women

of reproductive age (22.2%); Ulakwo autonomous community, 35 women of reproductive age (8.8%). (Appendix B)

The second stage was determination of the section of the autonomous community to commence the selection of the households. The autonomous community was divided into four sectors and the first sector was selected by simple random sampling. After which, a bottle was spinned to select the direction to move.

The third stage was selection of respondents from the households by systematic random sampling technique. The determined sampling interval for each of the selected autonomous communities was employed. The first household that was selected was chosen through simple random sampling (balloting) and thereafter, the sampling interval was maintained until the desired number of respondents was gotten.

3.5 Instrument for Data Collection

The instrument that was employed for data collection in this study was a structured questionnaire. The instrument consisted of four sections (A-D). Section A sought information on demographic factors of the respondents (age, occupation, educational level, parity). Section B contained seven items which sought information on cultural factors of the respondents (early marriage, power relationship between partners, sex). Section C comprised of six items meant to elicit information on the proportion of women on any method of contraceptive, while section D contained eight items, which sought information on health facility factors (availability of contraceptive methods, affordability of contraceptive methods, accessibility of contraceptive methods, service provision,

technical competence) influencing contraceptive use among women of reproductive age in Owerri North Local Government Area of Imo State.

3.6 Validity

To ensure the validity of the instruments, the questionnaire was submitted to the supervisor and two other experts in the field of Public Health. The instrument was vetted to ensure its appropriateness in relation to language, clarity, adequacy of content and ability to elicit accurate information in relation to the purpose of the study. Based on the criticisms and suggestions made by the experts, the initial drafts of the instrument were modified.

3.7 Reliability of Instrument

A pre-test was carried out in Owerri West Local Government Area which is outside the area of study but has the same characteristics with the study. Copies of the instrument will be administered to 20 respondents. The result obtained was compared for consistency test via Crombach Alpha test. A reliability coefficient of 0.68 was obtained.

3.8 Method for Data Collection

Copies of the questionnaire was administered by the researcher to the respondents in the various communities for study in Owerri North Local Area. Every respondent who receive the questionnaire for completion was given instruction on how to do so. An appeal was made to respondents to complete the questionnaire on the spot and return to the researcher and to be honest with their responses. Particular attention was paid to the uneducated women of reproductive age. The items in the questionnaire was read and interpreted to them and their

responses were ticked as it corresponds with the options. The administration and collection of the questionnaire spanned through a period of 3 months.

3.9 Method of Data Analysis

Data analysis was performed using Statistical Package for the Social Sciences (SPSS) version 21 and Microsoft Excel 2010. Analysis of data was done using simple percentages and hypothesis tested using chi square. Also, Statistical Package for the Social Sciences (SPSS) version 16.0 was employed for the analysis of data. The level of significance for accepting or rejecting the hypothesis was set at 0.05. Chi square test was performed at 5% level to test for significant association between demographic, cultural, facility, and other intervening factors influencing contraceptive use. Probability value (p value) was used to interpret the results and p value less than 0.05 was considered significant.

3.9.1 Ethical consideration/informed Consent and ethical approval

Prior to the study, the research protocol was submitted to the Institutional Review Board (IRB) of School of Health Technology, Federal University of Technology, Owerri for review and approval. Also, a letter of consent to carry out the study was obtained from the Head of Public Health Department in the school to the Local Government Chairman of Owerri North for approval. Verbal informed consent was obtained from respondents that participated in the study after the purpose; content and significance of the study has been adequately explained to them. They were informed that participation is voluntary and they will not suffer any consequences if they chose not to participate. The questionnaire was coded to ensure confidentiality.

CHAPTER FOUR

RESULTS AND DISCUSSION

In this chapter, the data from the field survey and results of the analysis were presented in line with research questions and hypothesis.

4.1 Demographic profile of the respondents

Similarities in contraceptive use were observed in age group of the respondents for instance, 14.9% of the women were between the age range of 15-23, 32.8% were between the range of 24-32, 31.3% were between the range of 33-41 and 21.0% were between the range of 42-49. The data shows that 0.6% of the women had no formal education, 20.2% had primary education, 51.3% had secondary education and 28.0 had tertiary education. The data shows that 2.0% of the respondents were housewife, 11.9% were farmers, 29.3% were civil servants, 25.3% were petty traders and 22.0% were students. The data on the table also showed that 49.0% of the respondents were married, 27.3% were single, 7.8% divorced, 6.3% separated and 8.8% widows. The data further shows that 7.9% of the respondents have 1-2 children, 38.6% have 3-4 children, 41.7% have more than 5 children and 11.9% have no child. The data on the table revealed that 98.0% of the respondents are Christians, 1.8% were Muslims while 0.2% were traditional worshippers.

Table 1: Distribution of women of reproductive age by demographic profile

S/n	Variables	Use of contraceptive method		Total(%)
		Yes (%)	No (%)	
1	Age group			
	15-23	12(20.3)	47(79.7)	59(14.9)
	24-32	69(53.1)	61(46.9)	130(32.8)
	33-41	72(58.0)	52(41.9)	124(31.3)
	42 - 49	37(44.6)	46(55.4)	83(21.0)
	Total	190	206	396
2	Highest level of education			
	No Formal education	0(0)	2(100)	2(0.5)
	Primary education	30(37.5)	50(62.5)	80(20.2)
	Secondary education	83(40.9)	120(59.1)	203(51.3)
	Tertiary education	35(31.5)	76(68.5)	111(28.0)
	Total	148	248	396
3	Occupation			
	House Wife	2(25.0)	6(75.0)	8(2.0)
	Farmer	15(31.9)	32(68.1)	47(11.9)
	Civil Servant	76(65.5)	40(34.5)	116(29.3)
	Petty Trader	16(16.0)	84(84.0)	100(25.3)
	Student	18(20.7)	69(79.3)	87(22.0)
	Others (specify)	6 (15.8)	32(84.2)	38(9.6)
	Total	133	263	396
4	Marital Status			
	Married	121(62.4)	73(37.6)	194(49.0)
	Single	38(35.2)	70(64.8)	108(27.3)
	Divorced	15(48.4)	16(51.6)	31(7.8)
	Separated	6(24)	19(76.0)	25(6.3)
	Widow	13(37.1)	22(62.9)	35(8.8)
	Others (specify)	0(0)	3(100.0)	3(0.8)
	Total	196	200	396
5	Number of Children			
	1-2 children	20(64.5)	11(35.5)	31(7.9)
	3-4 children	85(55.6)	68(44.4)	153(38.6)
	> 5 children	29(17.6)	136(82.4)	165(41.7)
	No child	4(14.9)	43(91.5)	47(11.9)
	Total	138	253	396
6	Religion			
	Christianity	243(62.6)	145(37.4)	388(98.0)
	Islam	0(0)	7(100.0)	7(1.8)
	Traditional	0(0)	1(100)	1(0.2)
	Total	243	153	396

4.2 Cultural factors affecting contraceptive use among Respondents

The result of the respondents for cultural factors on contraceptive use is presented on table 2. The data shows that 32.6% of the respondents said yes that their husband/partner support them on any method of contraceptive, 41.7% said no while 25.8% said sometimes their husbands/partners do. The data on the table revealed that 46.0% agreed that their traditional/religious belief allow contraceptive practice, 24.5% disagreed while 29.5% said they do not know about that. The data shows that 15.4% of the respondents believed that family pressure makes women marry early in their autonomous community, 35.9% believed it is peer group influence, 31.8% said they do not know while 16.9% believed it is other reasons. The data shows that 20.5% of the respondents think it is the refusal by their husband/partner that hinder them from contraceptive practice, 24.7% thinks it is religious belief, 32.8% thinks it is the need for male children while 22.0% thinks it is the rumour and myth about contraceptives. The data also revealed that about 48.5% of the respondents agreed that decision making by their husband/partner can hinder them from using contraceptive method while 51.5% do not agree to that. The data shows that 46.7% of the respondents think craving for male children can make their husband/partner prevent them from contraceptives while 53.3% do not think so.

Table 2: Distribution of women of reproductive age in Owerri North by cultural factors affecting contraceptive use

S/N	Variables	Use of contraceptive methods		Frequency (%)
		Yes (%)	No (%)	
1	Husband/partner support on any method of contraceptive			
	Yes	50(38.8)	79(61.2)	129(32.6)
	No	21(12.7)	144(87.3)	165(41.7)
	sometimes	29(28.4)	73(71.6)	102(25.8)
	Total	100	296	396
2	Traditional/religious belief on contraceptive practice			
	Yes	96(52.7)	86(47.2)	182(46.0)
	No	17(17.5)	80(82.5)	97(24.5)
	I don't know	13(11.1)	104(88.9)	117(29.5)
	Total	126	270	396
3	Cause of early marriage in your autonomous community			
	Family pressure	22(36.1)	39(63.9)	61(15.4)
	Peer group influence	41(29.1)	101(71.1)	142(35.9)
	I don't know	11(8.7)	115(91.3)	126(31.8)
	other reason (specify)	13(19.4)	54(80.6)	67(16.9)
	Total	87	309	396
4	Hindrance from contraceptive practice			
	Refusal by husband/partner	10(12.3)	71(87.7)	81(20.5)
	Religious belief	57(58.2)	41(41.8)	98(24.7)
	Need for male children	29(22.3)	101(77.7)	130(32.8)
	Rumours and Myths about contraceptives	14(16.1)	73(83.9)	87(22.0)
	Total	110	286	396
5	Decision making by husband/partner hindrance from contraceptive use			
	Yes	27(14.1)	164(85.9)	191(48.5)
	No	61(29.9)	143(70.1)	204(51.5)
	Total	89	307	395
6	Need for male children			
	Yes	45(24.3)	140(75.8)	185(46.7)
	No	31(14.7)	180(85.3)	211(53.3)
	Total	76	320	396
7.	Give reason why you choose yes as your option			
	Men place much value on male children	45(24.3)	42(48.3)	87(47.2)
	It is believed that male children will be the one to take over their fathers properties after death, hence the need for male child	28(34.4)	51(64.6)	79(42.7)
	Others	5(26.3)	14(73.7)	19(10.3)
	Total	78	107	185

4.3 proportion of women on any method of contraceptive Data presented in Table 3 shows the proportion of women on any method of contraceptive among women of reproductive age in Owerri North. The data shows that 51.5% of the respondents have used any method of contraceptive while 48.5% have not. The data revealed that 33.8% of the respondents use pills, Intrauterine device (IUCD), Injectable (Depo-provera) as method of contraceptive, 61.8 % use Condom (Female), prolonged breast feeding and Periodic abstinence, 4.4% use other methods. The data shows that 43.9% attest that their husband/partner made the choice of these contraceptive methods for them, 20.8% said they made the choice themselves while 24.7% of the respondents choice was made by health worker. The data on the table further revealed that 13.9% of the respondents attest that their partner/husband use male condom as method of contraceptive, 28.3% use withdrawal method, 1.5% use Vasectomy/male sterilization, 1.8% use other methods while 54.5% do not use any method of contraceptive. The data revealed that 54.8% of the respondents were given information on the type of contraceptive methods of choice before selection while 45.2% were not given information on the type of contraceptive methods of choice before selection. The data shows that the factors that made the respondents to choose a particular choice of contraceptive methods were low cost (43.3%), low risks of complications (27.5%), husband/partner choice (18.7%) and others (10.4%).

Table 3: Frequency and Percentage Count of the proportion of women on any method of contraceptive among women of reproductive age in Owerri North

S/N	VARIABLES	FREQUENCY	PERCENTAGE
1.	Contraceptive method used or presently using		
	Yes	204	51.5
	No	192	48.5
	Total	396	100
2	Method of contraceptive used/using		
	Pills, Intrauterine device (IUCD), Injectable (Depo-provera)	69	33.8
	Condom (Female), prolonged breast feeding, periodic abstinence	126	61.8
	Tubal ligation, Others	9	4.4
	Total	204	100
3	Choice of contraceptive method		
	Partner/husband	174	43.9
	Myself	82	20.8
	Health worker	98	24.7
	Others	42	10.6
	Total	396	100
4	Partners method of contraceptive		
	Male condom	55	13.9
	Withdrawal method	112	28.3
	Vasectomy/male sterilization	6	1.5
	None	216	54.5
	Others	7	1.8
	Total	396	100
5	Information on any contraceptive method		
	Yes	217	54.8
	No	179	45.2
	Total	396	100
6	Reason for chosen a particular contraceptive method		
	Low cost	172	43.4
	Low risk of complications	109	27.5
	My husbands/partners choice	74	18.7
	Others	41	10.4
	Total	396	100

4.4 Influence of health facility factors on contraceptive use

Data presented in Table 4 shows the association between health facility factors of contraceptive methods and its use among women of reproductive age in Owerri North North. The data shows that 30.6% of the respondents get contraceptives as at when due while 24.5% do not. The data revealed that 48.8% of the respondents that get contraceptives as at when due get it from hospital and health institutions, 21.5% get it from drug vendor/pharmacy, 12.4% get it from community based distributor, 9.9% get it from agents (CBDs) while 7.4% get it from other places. The data further showed that the reasons some of the women do not get contraceptives as at when due are; Out of stock (5.2%), Bus fair to travel to clinic (9.3%), Always busy (11.3%), Not affordable (57.7%) and others (16.5%). The data revealed that 27.0% of the respondents like the services of health personnel regarding contraceptives while 73% of the respondents do not like it. The result revealed that the respondents that do not like the services of the health workers said it is as a result of the inconsistencies of the health workers (33.9%), incompetency (18.3%), unfriendly nature (30.2%) and others (17.6%). The results show that the respondents that like the services of the health workers do so because; the health workers offer satisfactory services (48.6%), they have competent staff (29.9%), they are friendly (17.8%) and others (3.6%). The result further revealed that 17.2% of the respondents think contraceptives are accessible to everyone in their area while 82.8% do not.

Table 4: Distribution of women of reproductive age in owerri North by Health facility factors affecting contraceptive use

S/n	Variables	Use of contraceptive method		Frequency (%)
		Yes (%)	No (%)	
1	If you get your contraceptive as at when due			
	Yes	27(22.3)	94(77.7)	121(30.6)
	No	16(16.5)	81(83.5)	97(24.5)
	Sometimes	14(13.3)	91(86.7.)	105(26.5)
	Others	13(17.8)	60(82.2)	73(18.4)
	Total	70	326	396
2	where you get your contraceptive from if you answer yes			
	Hospital/health institutions	39(66.1)	20(33.9)	59(48.8)
	Drug vendor/pharmacy	16(61.3)	10(38.5)	26(21.5)
	Community Based Distributors	7(46.7)	8(53.3)	15(12.4)
	Agents (CBDs)	5(41.7)	7(58.3)	12(9.9)
	Others	4(44.4)	5(55.6)	9(7.4)
	Total	74	50	121
3	If you don't get your contraceptive when due			
	Out of stock	0(0)	5(100)	5(5.2)
	Bus fair to travel to clinic	2(22.2)	7(77.8)	9(9.3)
	Always busy	3(27.3)	8(72.7)	11(11.3)
	Not affordable	6(10.7)	50(89.3)	56(57.7)
	Others	2(12.5)	14(87.5)	16(16.5)
	Total	13	84	97
4	If you like the services of health personnel regarding contraceptives			
	Yes	27(25.2)	80(74.8)	107(27.0)
	No	19(6.6)	270(93.4)	289(73.0)
	Total	46	250	396
5	If your response is No to question four			
	They are not consistent	18(18.4)	80(81.6)	98(33.9)
	They are not competent	7(13.2)	46(86.8)	53(18.3)
	They are not friendly	27(31.0)	60(69.0)	87(30.2)
	Others	6(11.8)	45(88.2)	51(17.6)
	Total	33	231	289
6	If your response is Yes to question four			
	They offer satisfactory services	45(86.5)	7(13.5)	52(48.6)
	They have competent staff	25(78.1)	7(21.9)	32(29.9)
	They are friendly	15(78.9)	4(21.0)	19(17.6)
	Others	3(75.0)	1(25.0)	4(3.7)
	Total	88	19	107
7	If contraceptives are available to everyone in your area			
	Yes	55(80.9)	13(19.11)	68(17.2)
	No	18(5.5)	310(94.5)	328(82.8)
	Total	73	324	396
8	If your response to question seven is No			
	High cost	15(19.7)	61(80.3)	76(23.2)
	Long distance to clinic	25(38.5)	40(61.5)	65(19.8)
	preferential treatments by staffs	65(36.9)	111(63.1)	176(53.7)
	Others	2(18.2)	9(81.8)	11(3.4)
	Total	107	221	328

Test of Hypothesis

Hypothesis 1, 2, 3 and 4 are tested using chi-square. The Statistical Package for the Social Sciences (SPSS) computer software package (version 21.0) is employed for the analysis. Level of significance is set at 0.05 for decision making. Hypothesis are in null form and accepted if p-value is greater than the level of significance (0.05) indicating statistically significant value, and rejected when if p-value is less than 0.05.

4.5 Hypothesis 1 : Demographic characteristics of women of reproductive age in Owerri North have no significant influence on their contraceptive use

Table 5: Influence of demographic characteristics of women of reproductive age in Owerri North on their contraceptive use.

s/n	Variables	Use of contraceptive method		Total(%)	df	sig.	decision
		Yes (%)	No (%)				
1	Age group				39	0.607	Accepted
	15-23	12(20.3)	47(79.7)	59(14.9)			
	24-32	69(53.1)	61(46.9)	130(32.8)			
	33-41	72(58.0)	52(41.9)	124(31.3)			
	42 - 49	37(44.6)	46(55.4)	83(21.0)			
	Total	190	206	396			
2	Highest level of education				52	0.364	Accepted
	No Formal education	0(0)	2(100)	2(0.5)			
	Primary education	30(37.5)	50(62.5)	80(20.2)			
	Secondary education	83(40.9)	120(59.1)	203(51.3)			
	Tertiary education	35(31.5)	76(68.5)	111(28.0)			
	Total	148	248	396			
3	Occupation				65	0.711	Accepted
	House Wife	2(25.0)	6(75.0)	8(2.0)			
	Farmer	15(31.9)	32(68.1)	47(11.9)			
	Civil Servant	76(65.5)	40(34.5)	116(29.3)			
	Petty Trader	16(16.0)	84(84.0)	100(25.3)			
	Student	18(20.7)	69(79.3)	87(22.0)			
	Others (specify)	6 (15.8)	32(84.2)	38(9.6)			
	Total	133	263	396			
4	Marital Status				65	0.021	Rejected
	Married	121(62.4)	73(37.6)	194(49.0)			
	Single	38(35.2)	70(64.8)	108(27.3)			
	Divorced	15(48.4)	16(51.6)	31(7.8)			
	Separated	6(24)	19(76.0)	25(6.3)			
	Widow	13(37.1)	22(62.9)	35(8.8)			
	Others (specify)	0(0)	3(100.0)	3(0.8)			
	Total	196	200				
5	Number of Children				52	0.000	Rejected
	1-2 children	20(64.5)	11(35.5)	31(7.9)			
	3-4 children	85(55.6)	68(44.4)	153(38.6)			
	> 5 children	29(17.6)	136(82.4)	165(41.7)			
	No child	4(14.9)	43(91.5)	47(11.9)			
	Total	138	253	396			
6	Religion				26	0.696	Accepted
	Christianity	243(62.6)	145(37.4)	388(98.0)			
	Islam	0(0)	7(100.0)	7(1.8)			
	Traditional	0(0)	1(100)	1(0.2)			
	Total	243	153	396			

Age Group of women of reproductive age and their contraceptive use

Test of hypothesis using chi-square reveals that the different age groups of women of reproductive age has significant relationship with contraceptive use. (df 39, p-value .607). p-value is greater than .05 significant level.

Decision: Hypothesis 1 in relation to women of reproductive age is accepted

Education of women of reproductive age and contraceptive use

Highest educational attainment of women of reproductive age is significant with contraceptive use (df 52, p-value .364). p value is greater than .05 significant level.

Decision: Hypothesis 1 in relation to educational level among women of reproductive age is accepted.

Occupation of women of reproductive age and contraceptive use

Occupation of Women of reproductive age has significant relationship with contraceptive use (df 65, p-value .711). p-value is greater than .05 significant level

Decision: Hypothesis 1 in relation to occupation of women of reproductive age is accepted.

Marital status of women of reproductive age and contraceptive use

Marital status of women of reproductive age is not significantly related with contraceptive use (df 65, p-value .021). p-value is less than .05 significant level.

Decision: Hypothesis 1 in relation to occupation of women of reproductive age is rejected.

Number of children of women of reproductive age and contraceptive use

Test of hypothesis using chi square reveals that the number of children is not significantly related with contraceptive use (df 52, p-value 0.000). p-value is less than than .05 level of significance.

Decision: Hypothesis 1 in relation to occupation of women of reproductive age is rejected

Religion of women of reproductive age and contraceptive use

Chi square result shows significant relationship between traditional/religious belief and contraceptive use (df 26, p-value .696). p-value is higher than .05 significant level.

Decision: Hypothesis 1 in relation to religion of women of reproductive age is accepted.

4.6 Hypothesis 2

Cultural factors of women of reproductive age in Owerri North have no significant influence on their contraceptive use.

Table 6: Influence of Cultural factors of women of reproductive age in Owerri North on their contraceptive use

	Df	$\chi^2\alpha$	Sig.	Alpha Level	Remark
Pearson Chi-square	11	187.2	0.000	0.05	S, R
Number of Valid Cases	395				

Df = degree of freedom, $\chi^2\alpha$ = chi-square calculated, Sig. = P-value; P < .05, S= Significant, R= rejected

Table 6 shows a chi-square significant value of 0.000 which is less than the 0.05 level of significance at 11 degree of freedom. This indicates that cultural factors of women of reproductive age in Owerri North have significant influence on their contraceptive use. Therefore, the hypothesis which states that cultural factors of women of reproductive age in Owerri North have no significant influence on their contraceptive use is rejected.

4.7 Hypothesis 3

Proportion of women on any method of contraceptive among women of reproductive age in Owerri North has no significant influence on their contraceptive use

Table 7: Chi-Square Test of the proportion of women on any method of contraceptive among women of reproductive age in Owerri North on their contraceptive use

	Df	$\chi^2\alpha$	Sig.	Alpha Level	Remark
Pearson Chi-square	13	727.0	0.000	0.05	S, R
Number of Valid Cases	395				

Df = degree of freedom, $\chi^2\alpha$ = chi-square calculated, Sig. = P-value; $P < .05$, S= Significant, R= rejected

Table 7 shows a chi-square significant value of 0.000 which is less than the 0.05 level of significance at 13 degree of freedom. This indicates that the proportion of women on any method of contraceptive among women of reproductive age in Owerri North have significant influence on their contraceptive use. Therefore, the hypothesis which states that the proportion of women on any method of contraceptive among women of reproductive age in Owerri North have no significant influence on their contraceptive use is rejected.

4.8 Hypothesis 4

Health facility factors of women of reproductive age in Owerri North has no significant influence on their contraceptive use

Table 8: Influence of Health facility factors of women of reproductive age in Owerri North on their contraceptive use

	Df	$\chi^2\alpha$	Sig.	Alpha Level	Remark
Pearson Chi-square	15	262.8	0.000	0.05	S, R
Number of Valid Cases	395				

Df = degree of freedom, $\chi^2\alpha$ = chi-square calculated, Sig. = P-value; $P < .05$, S= Significant, R= rejected

Table 7 shows a chi-square significant value of 0.000 which is less than the 0.05 level of significance at 15 degree of freedom. This indicates that the health facility factors of women of reproductive age in Owerri North have significant influence on their contraceptive use. Therefore, the hypothesis which states that health facility factors of women of reproductive age in Owerri North has no significant influence on their contraceptive use is rejected.

4.9 DISCUSSION

This study was primarily aimed at determining the factors influencing contraceptive use among women of reproductive age in Owerri North Local Government of Imo State. The findings of this study is discussed under four major concepts- demographic characteristics, cultural factors, proportion of women on any method of contraceptive and health facility factors influencing contraceptive use.

4.9.1 Demographic characteristics

Findings of this study revealed that most respondents 72 (58.0%) who uses contraceptive method regularly were in the age range of 33-41 years and 69 (53.1%) in the age range of 24-32. The study revealed that women between the age range of 15-23 recorded 129(20.3%) usage. This is in accordance with findings by Okeh, et al (2011) where contraceptive use is lowest among young women and reaches a peak among women from their e thirties. This is an indication of high desire for child bearing among young women and a high growing interest of spacing births among women in their thirties. Findings of this study indicated that most 121 (62.4%) women who uses contraceptive methods had 1-2 (20(64.5%) and 3-4 (85(55.6) children compared to non users who had more than five children 136(82.4%). The present study is in accordance with the findings carried out by Choudhary , et al (2011) where contraceptive practice was highest among women with three children and lowest among women with none. Utoo, et al (2010) found out that the number of living sons a woman has greatly influences her attitude and use of modern contraception. According to Utoo, et al. (2010) women with 1-3 children were more likely to report contraceptive practice than those with none. Also, Christians were the major populace of

the study area constituting 388 (98.0%) and recorded 243(62.6%) users. Handout (2009) opined that protestant churches had been less harsh on family planning. Most 76(65.5%) respondents who were Civil Servants showed they had adequate knowledge of contraceptive methods. This could have been due to the increased awareness of family planning and contraceptive use over the years. This study therefore shows a significant association between demographic characteristics and contraceptive use among women of reproductive age.

4.9.2 Cultural factors

The findings of this study showed that majority 79 (61.2%) women stated partner opposition and need for male children 140(75.8%) as a reason for not using contraceptive methods compared to 50(38.8%) of women who said that partner/husband support them and 45(24.3%) saying male children cannot prevent them from using contraceptive methods. Partner opposition being the reason of not using contraceptive in this study ties with similar studies carried out by Olugbenga-Bello et al (2011) in which 66.3% of the women reported husbands/partners disapproval for non use. Study by David (2006) also agree that low support from husbands/partners constitutes 90% of why women don't use contraceptive methods while majority 80% of women stated that their main reason was the need for male children. The findings revealed that peer group influence 101(71.1%) is the major reason why women marry early and not engage in contraceptive use while majority 57 (58.2%) of the women agree that their traditional/religious belief allow contraceptive practice. The reason for traditional/religious belief acceptance of contraception might have been that the study populace was dominated by Christians. This is in accordance to similar study by Handout (2009), who opined that protestant churches are less harsh on

contraceptive use. The study found that the cultural factors of women of reproductive age in Owerri North have significant influence on their contraceptive use.

4.9.3 Proportion of women on any method of contraceptive

Findings shows that the proportion of women that has used atleast one method of contraception is higher 204(51.5%) while 192(48.5%) said they have not used any of the method. The study revealed that Condom (Female) ,prolonged breast feeding and periodic abstinence 126(61.8%) were the more commonly used current method of contraception compared to pills, intrauterine device and injectables which recorded 69 (33.8%). This is in conformity with findings by Bongart and Elof (2002) where Condom (Female), prolonged breast feeding and periodic abstinence were the most commonly used method of family planning. A possible reason could be the convenience of use compared to other methods as it does not involve elaborate procedures. Overwhelming number 216 (54.5%) of women said their partner don't use any method of contraception. Also, low cost was stated by majority 172(43.4%) of women as reason for choosing a particular method of contraception. Studies reported by Frost et al (2007) shows that the cost of contraceptive methods influence use and non-use.

4.9.4 Health facility factors

Source of information, availability, structural issues, service provision, affordability and medial care providers was significantly associated with contraceptive use acceptance. Most 39(66.1%) of the users of contraceptive methods got information from hospital/health institutions and drug vendor (16(61.3%). Findings revealed that a big portion 81(83.5%) of women don't get their

contraceptive method as at when due. The findings of the study also revealed that majority 50(89.35%) of women said the contraceptive methods were not affordable while a large portion 270 (93.4%) said they don't like the services of health personnel regarding contraception. Their main reason being that they are not consistent 80(81.6%) and 60%) agree they are not friendly. This is in conformity to the study by Olugbenga-Bello where 161(26.3%) were not using any method , main reasons being affordability, availability, accessibility and service provision 184(41.2%)

CHAPTER FIVE

CONCLUSION, RECOMMENDATIONS AND CONTRIBUTION TO KNOWLEDGE

5.1 CONCLUSION

This study has been useful in identifying some of the factors influencing contraceptive use among women of reproductive age. Demographic characteristics like education level and occupation were found to influence the use of contraceptive methods among women of reproductive age. Also, cultural factors like religious beliefs and husband/partner support were crucial in influencing the use of contraceptive methods. Moreover, health facility factors like accessibility of methods, staff competence and service provision were found to influence contraceptive use. However, regarding proportion of women on any method of contraceptive, there was a large portion of those who were not using contraceptive methods. These were all indications of unmet need of contraceptive methods and low usage of contraceptives among women of reproductive age in Owerri North.

5.2 RECOMMENDATIONS

On the basis of the findings of this study, the discussion and conclusions thereof, the following recommendations were made;

- (i) Seminars and workshop concerning reproductive issues should be regularly conducted for women of reproductive age. This will enable them effectively put into practice various family planning methods that are within their reach.

- (ii) Re-education on the complications and benefits of contraceptive use should be carried out by health workers so as to improve contraceptive uptake

(iii) Non-Governmental organizations (NGOs), Community based Organizations (CBOs) and government should embark on behavior change programmes by utilizing various sources and communication channels to educate women of reproductive age on modern family planning methods in Owerri North Local Government Area.

(iv) The community approach should be used in integrating family planning education in various communities to motivate the people as well as to generate social support for family planning. To do this effectively in our rural environment, there is need to know something about the community such as its structure, its channels of communication, its attitude to government agencies as well as its attitudes to health and family planning.

(v) Family planning services clinics and multipurpose community centers should be opened by the government in rural and semi-urban areas.

(vi) Government should create methods of reaching women of reproductive age at their door steps to boost contraceptive intake

(vii) Health workers should endeavour to be friendly so as to encourage women of reproductive age on continuous and proper use of contraceptive

(viii) Since this study did not involve men, further studies are needed to determine the extent of use of contraceptive methods among men and associated factors in Owerri North.

(ix) Further research in areas that are related to family planning and contraceptive use should be encouraged

5.3 Contributions to knowledge

- i. Demographic characteristics such as age, educational level and occupation has great influence on contraceptive use .
- ii. A greater portion of women of reproductive age were not using any method of contraceptive

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APPENDIX A

Sample Size Determination Using Taro Yamane (1967:886)

Taro Yamane formula was used in determining the sample size

$$n = \frac{N}{(1 + N(e^2))}$$

Where n = Sample size

N = Study Population

E = Confidence Margin (0.05) at 95% confidence

Total population of women of reproductive age = 61,116

Therefore, using the formula Taro Yamane's formula

$$= \frac{61,116}{1 + 61,116(0.05)^2}$$

Total sample size = 397

APPENDIX B

Table showing population of selected communities, sample size and sample proportion

Communities	Population size (N)	Sample size (n)	Sample Proportion
Agbala	2710	47	11.8%
Awaka	3150	54	13.6%
Egbu	4887	84	21.2%
Emii	2431	42	10.6%
Obibiezena	2757	47	11.8%
Naze	5120	88	22.2%
Ulakwo	2065	35	8.8%
Total	23,120	397	100%

Where N = Total population of the selected communities

$$\text{Sample size} = \frac{\text{Total population of each community}}{\text{Total population of selected communities}} \times \text{sample size}$$

$$\text{Sample proportion} = \frac{\text{sample size of each selected community}}{\text{Sample size}} \times \frac{100}{1}$$

Table showing number of households and interval of selection

Communities	Population size (N)	Number of households	Sampling Interval (k)
Agbala	2710	678	6.8 ≈ 7
Awaka	3150	789	7.9 ≈ 8
Egbu	4887	1222	12
Emii	2431	608	6
Obibiezena	2757	689	6.9 ≈ 7
Naze	5120	1280	12.9 ≈ 13
Ulakwo	2065	516	5
Total	23,120	5782	58

Where N = total population of the selected communities

$$\text{Number of households} = \frac{\text{Population size (N)}}{\text{Average size of household}}$$

Average size of households in Owerri North LGA is 3.7 ≈ 4 (National Bureau of Statistics, 2010)

$$\text{Sampling interval (k)} = \frac{\text{Population size (N)}}{\text{Sample size (n)}}$$

APPENDIX C

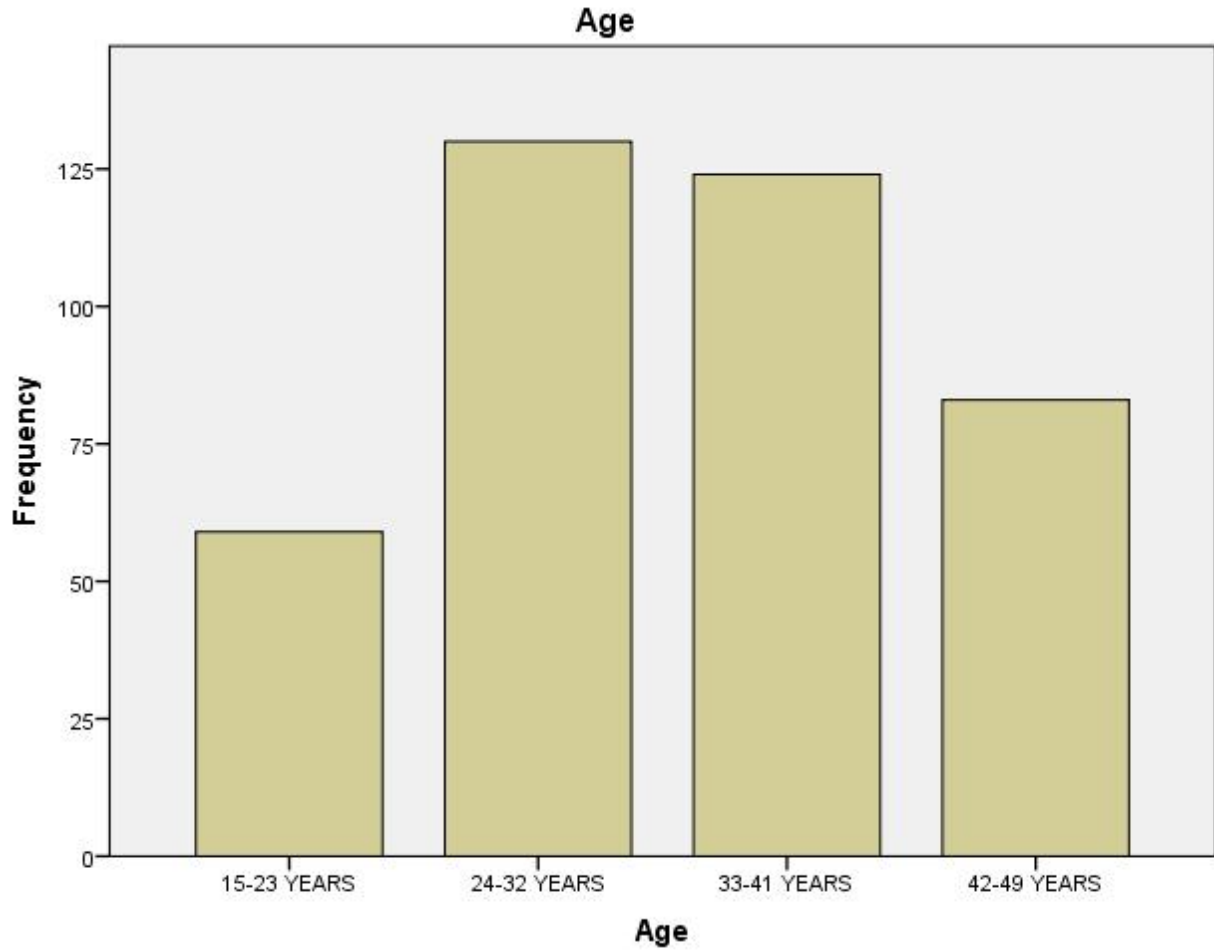


Figure 1: Distribution of women of reproductive age in selected autonomous communities in Owerri North by age groups (in years)

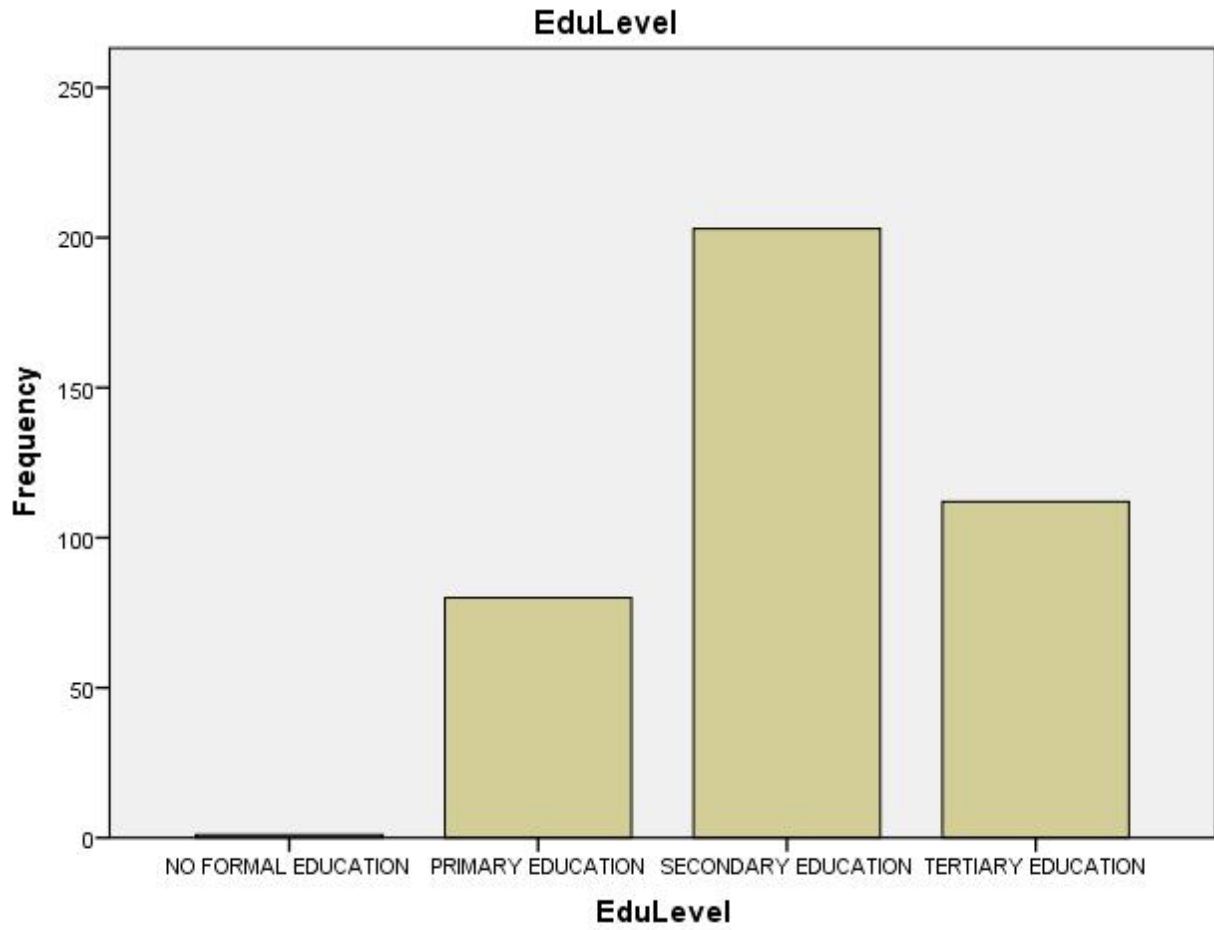


Figure 2: Distribution of women of reproductive age in selected autonomous communities in Owerri North by education level

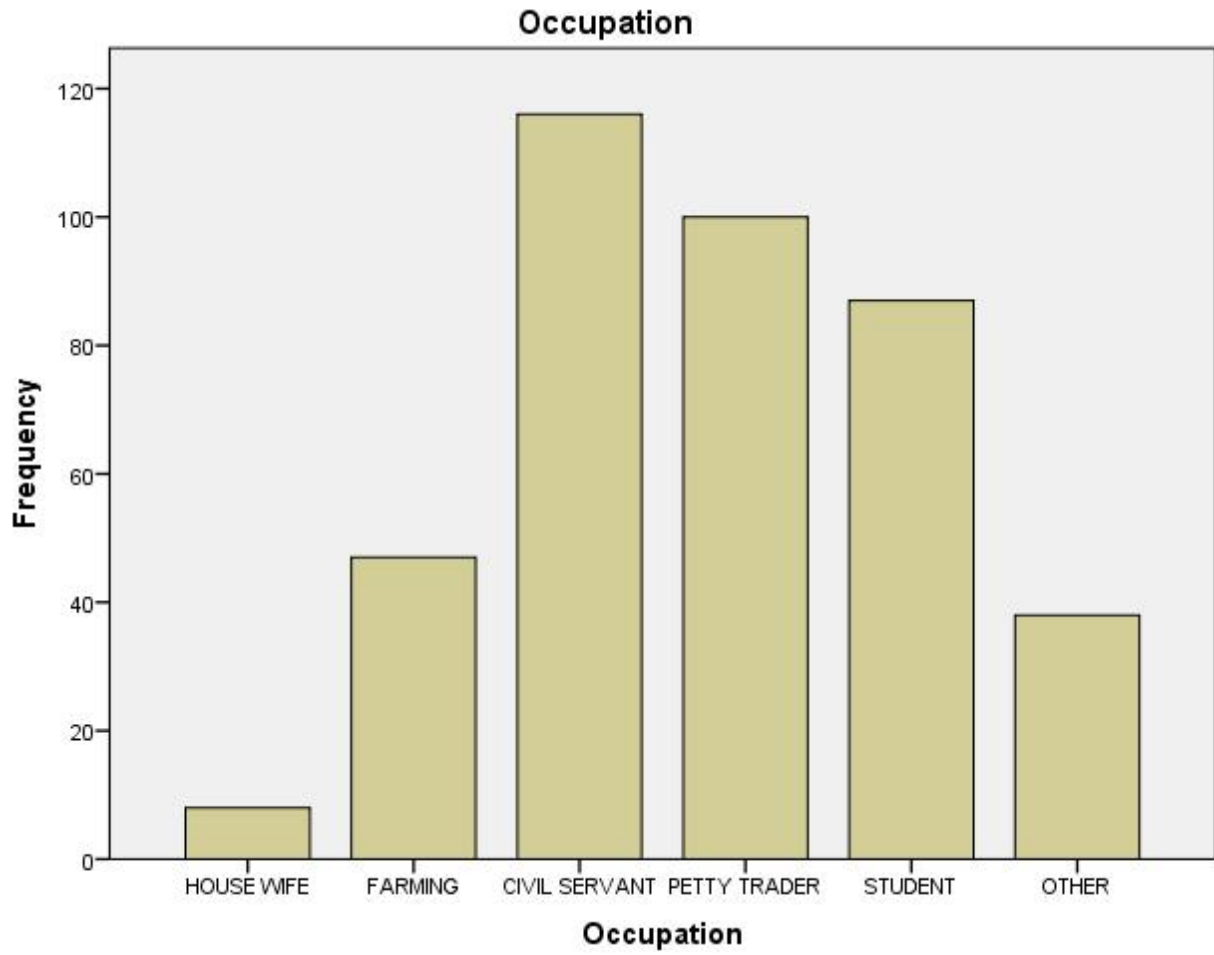


Figure 3: Distribution of women of reproductive age in selected autonomous communities in Owerri North by occupation

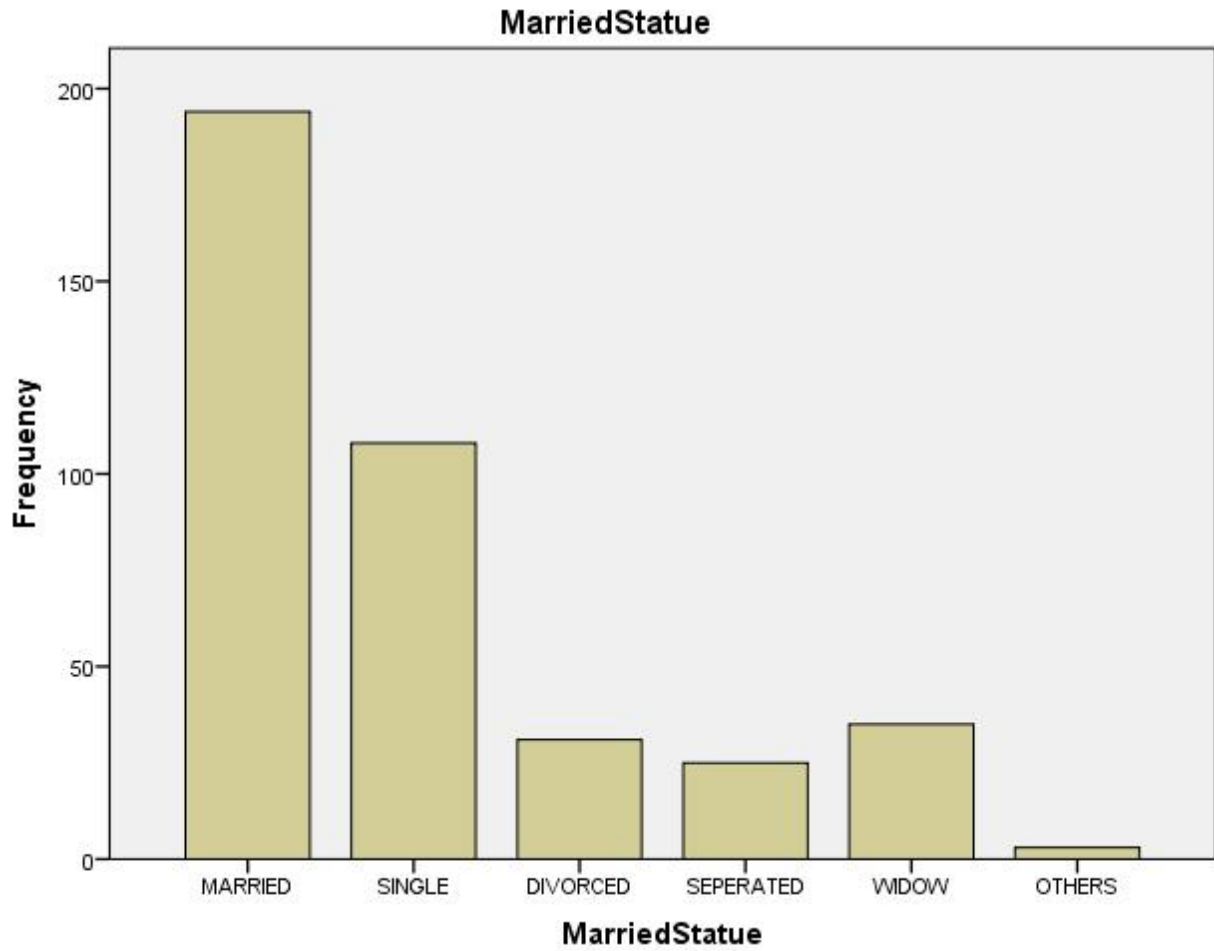


Figure 4: Distribution of women of reproductive age in selected autonomous communities in Owerri North by marital status

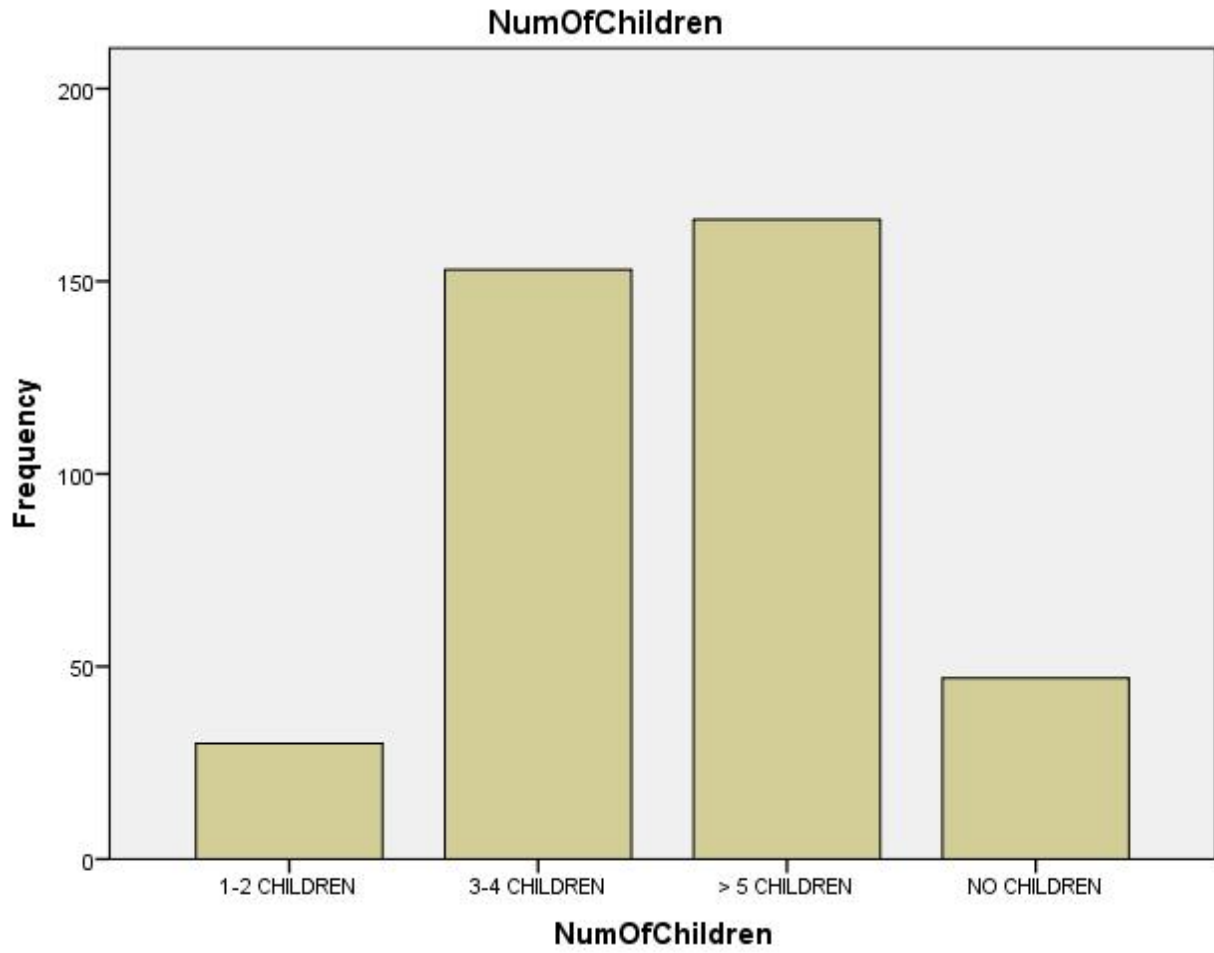


Figure 5: Distribution of women of reproductive age in selected autonomous communities in Owerri North by number of children

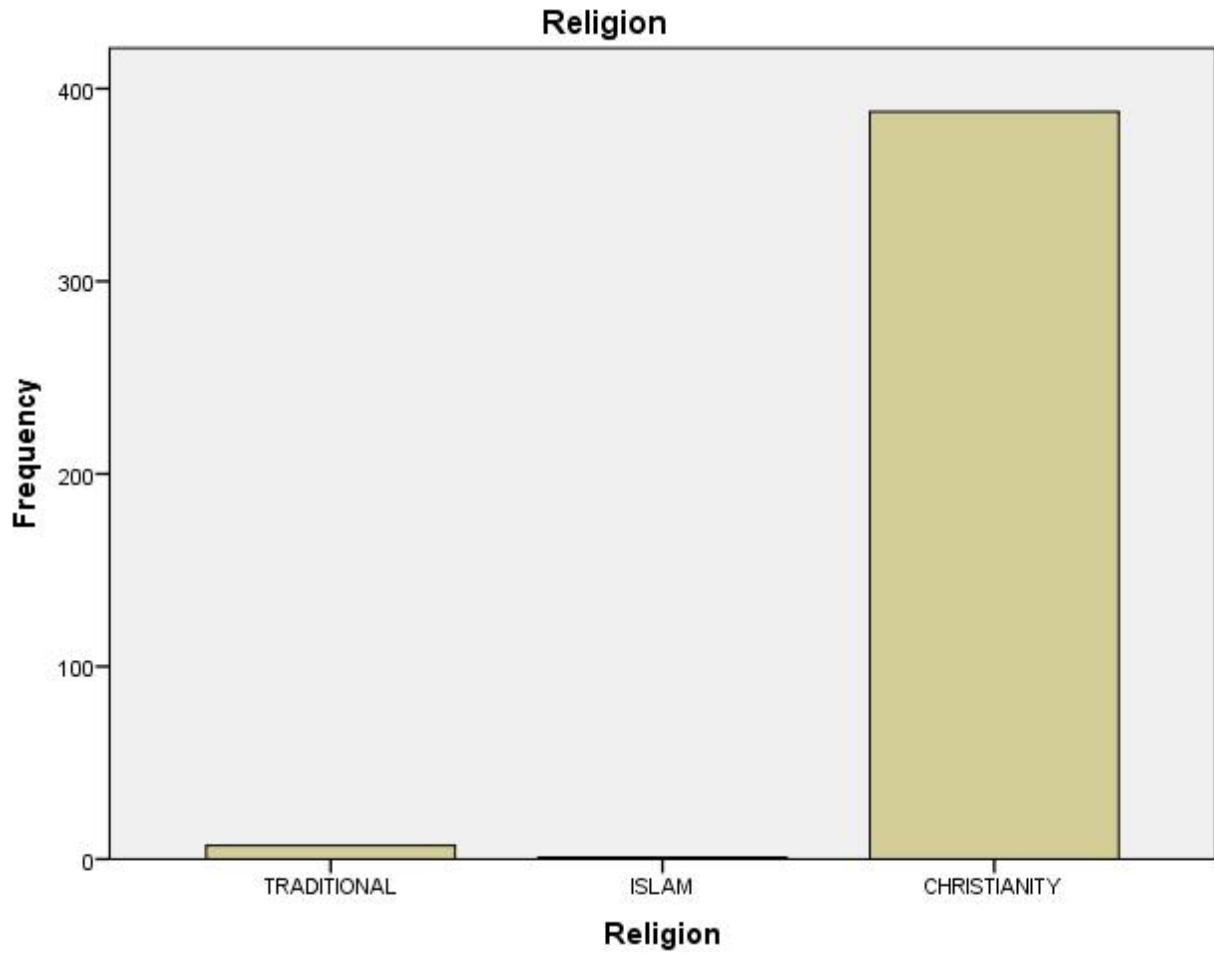


Figure 6: Distribution of women of reproductive age in selected autonomous communities in Owerri North by religion

APPENDIX D

Department of Public Health Technology,
Faculty of Health Technology,
School of Post Graduate Studies,
Federal University of Technology,
Owerri, Imo State.
2nd June, 2018.

Dear Respondent,

I am a post graduate student in the above mentioned Institution. I am carrying out a study on “**Factors Influencing Contraceptive Use Among Women Of Reproductive Age in Owerri North**” as part of requirement for graduation. Attached herewith is a questionnaire designed for gathering information for the study. Your response will be used only for academic purpose. The questionnaire has four sections A,B,C and D. You are expected to answer all the items in all sections.

Thanks for your co-operation

Yours faithfully,

Paul, Tiebet U.
(RESEARCHER)

APPENDIX E

QUESTIONNAIRE

SECTION A : Demographic characteristics

Please tick (✓) the option that corresponds with the view. Please tick the selected option for each item

1. What is your age group? (a) 15-23 [] (b) 24-32 [] (c) 33-41 [] (d) 42 - 49 []
2. What is the highest level of your education? (a) No Formal education [] (b) primary education [] (c) secondary education [] (d) Tertiary education []
3. What is your Occupation? (a) House wife [] (b) Farmer [] (c) Civil servant [] (d) Petty Trader (e) student [] (f) others (specify).....
4. What is your Marital Status ? (a) Married [] (b) Single [] (c) Divorced [] (d) separated [] (e) Widow [] (f) Others (specify).....
5. How many children do you have or plan having? (a) 1-2 children [] (b) 3-4 children [] (c) > 5 children [] (d) No child []
6. What is your Religion? (a) Christianity [] (b) Islam [] (c) Traditional Religion [] (d) others (specify).....

SECTION B : Cultural Factors

Please circle the option that corresponds with the view

1. Does your husband/partner support you on any method of contraceptive?
(a) Yes (b) No (c) Sometimes
2. Does your traditional/religious belief allow contraceptive practice?
(a) Yes (b) No (c) I don't know

3. What do you think makes women marry early in your autonomous community?
 (a) Family pressure (b) Peer group influence (c) I don't know (d) other reason
 (specify).....
4. what do you think will hinder you from contraceptive practice ?
 (a) Refusal by husband/partner (b) Religious belief (c) Need for male children (d)
 Rumours and Myths about contraceptives
5. Do you think decision making by your husband/partner can hinder you from using
 contraceptive method? (a) Yes (b) No
6. Do you think craving for male children can make your husband/partner prevent you from
 contraceptives? (a) Yes (b) No
7. If your answer to question six is "Yes", why do you think so? (a) Men place much value
 on male children (b) It is believed that male children will be the one to take over their
 fathers properties after death, hence the need for a male child (c) others (specify)....

SECTION C: Proportion of women on any method of contraceptive

Please circle the option that corresponds with the view.

1. Have you ever used any method of contraceptive ? (a) Yes (b) No
2. If yes is your answer to question number one (1) above , which contraceptive method
 are you currently using or use before ?
 (a) Pills, intrauterine device (IUCD), Injectable (Depoprovera) (b) Condom (female),
 Prolonged breast feeding, Periodic abstinence (c) Tubal ligation/female sterilization,
 Others (specify).....
3. Who made the choice of these contraceptive methods for you?

- (a) My partner/husband (b) myself (c) Health worker (d) Others (specify).....
4. Which method of contraceptive is your partner currently using?
- (a) Male condom (b) Withdrawal method (c) Vasectomy/male sterilization (d) None (e) others (specify)
5. Were you given information on the type of contraceptive methods of choice before selection ? (a) Yes (b) No
6. What made you to choose a particular choice of contraceptive methods?
- (a) Low cost (b) low risk of complications (c) my husband's/partner's choice (d) others (specify).....

SECTION D: Health Facility Factors

Circle the option that corresponds with the view

1. Do you get your contraceptives as at when due? (a) Yes (b) No (c) sometimes (d) others (specify).....
2. If your question to question one above is “yes”, where do you always get your contraceptives? (a) Hospital/Health institutions (b) Drug vendor/pharmacy (c) Community Based Distributors Agents (CBDs) (d) Others (specify)
3. If your response to question one above is “No”, why? (a) out of stock (b) Bus fair to travel to clinic (c) Always busy (d) Not affordable (e) Others (specify)
4. Do you like the services of health personnel regarding contraceptives? (a) Yes (b) No
5. If your response to question four above is “No” why? (a) They are not consistent (b) They are not competent (c) They are not friendly (d) Others (specify).....

6. If your response to question four above is “yes”, why? (a) They offer satisfactory services (b) They have competent staff (c) They are friendly (d) Others (specify)....
7. Do you think contraceptives is accessible to everyone in your area? (a) Yes (b) No
8. If your response to question seven above is “No”, why do you think so? (a) High cost (b) Long distance to clinic (c) Preferential treatment by staffs (d) Others (specify).....]

