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Contraceptive Utilization and Factors Among Women of Reproductive Age in Two Senatorial District, Rivers State

INNIME RIGHTEOUS

HIGHSTONE GLOBAL UNIVERSITY
ND/HND KENPOLY, MPH UNIPORT, PGD/MSC/PhD IAUE, HGU2020091001PH

***Corresponding Author**: INNIME RIGHTEOUS
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Abstract

This study investigated contraceptive utilization and determinants among women of reproductive age in two Senatorial district, Rivers State. Ten research objectives with corresponding research questions and 5 hypotheses were formulated to guide the study with a descriptive research design. A multi-stage sampling procedure was used to select 1,250 respondents followed by a semi-structured questionnaire titled "contraceptive practice". Data collected were analyzed using frequency and percentage to answer research questions and Chi-square was used to test the Hypotheses at a 0.05 level of significance.

One thousand two hundred and fifty copies of the questionnaire were distributed, out of The findings of the study were as follows: level of utilization of contraceptive was 70.2%, condom method of contraceptive (22.4%), sources of contraceptive information are religious centers (27.6%), spousal support on contraceptive was 59.1%, contraceptive utilization was lowest between ages of 15-19 years (16.0%), contraceptive utilization was highest among respondents who had no formal education (78.2%), contraceptive utilization was lowest among single respondents (36.0%), Islamic religion utilized contraceptive more (73.8%), distance to family planning clinic was a major barrier to the utilization of contraceptive (65.7%). Following these findings, there was a significant association on the utilization of contraceptive based on age, marital status, religion and spousal support ($p<0.05$). However, there was no significant association on the utilization of contraceptive based on educational qualification ($p>0.05$). Conclusively, there is a need for continuous sensitization of women of reproductive age of contraceptive utilization which will in-turn help bring about a sustainable nation. Thus, the study recommends health workers and health educators should carry out community-based sensitization to make the prevalence optimal and in addition, partner with religious bodies on how to mainstream contraceptive and religious teaching to pass on accurate information to the religious communities and the society at large.

Keywords: *globalization, human resource management, talent management, workforce diversity, emerging economies*

A Thesis submitted to the School of Graduate Studies in partial fulfilment of the requirements for the award of Degree of Doctor of Philosophy in Public Health, Highstone Global University.

APRIL 28, 2023

DECLARATION

I, **Innime** Righteous with Registration Number **HGU2021091001PH** declare that the work in this thesis on **Contraceptive Utilization and Factors Among Women of Reproductive Age in Two Senatorial District, Rivers State** was carried out by me; that it is my original work and that it has not been submitted wholly or in part for the Award of a Degree in this or any other institution.

Innime Righteous: ---------- Signature/Date: ----------

Supervisor: Dr. C. N. Amadi-Ikpa ---------- Signature/Date: ----------

CERTIFICATION

HIGHSTONE GLOBAL UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Contraceptive Utilization and Factors Among Women of Reproductive Age in Two Senatorial District, Rivers State

BY

INNIME RIGHTEOUS

The Board of Examiners certifies that this theis is accepted in partial fulfilment of the requirements for the award of the Degree of Doctor of Philosophy in Public Health.

DESIGNATION	NAME	SIGNATURE	DATE
Supervisor:	**Dr. C. N. Amadi-Ikpa**	----------	----------
Director, HGU:	**Prof. I. Righteous**	----------	----------
External Examiner	**Dr.C. N Amadi-Ikpa**	----------	----------
Dean, School of Graduate Studies/Chairman, Board Of Examiners	: **Prof. I. Righteous**	----------	----------

DEDICATION

This Thesis is dedicated to God Almighty: The Father, the Son and the Holy Spirit who made all things possible.

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I want to immensely appreciate my very lovely **Mrs. Righteous, Glory Innime** for her ever-loving ways and support throughout the course of this work. I cannot forget my three adorable children**: Eleli-Oniso Righteous, Asuei-Oniso Righteous and Ujo-Oniso Righteous** for their love and understanding. To God be the Glory.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Contraceptive is a principal strategy in controlling population growth and promotion of maternal and child health through the adequate spacing of births as well as avoidance of unwanted pregnancy (Gebre, 2020) through the use of contraceptives (Essien et al., 2019). Contraceptive enables couples to plan when to have children in such a way that couples could either space in-between pregnancies or limit the number of children. The use of contraceptives invariably help reduce the incidence of unplanned/unwanted pregnancies (Amosu et al., 2006). A short inter-pregnancy interval is associated with adverse pregnancy outcomes such as preterm birth, low birth, small for gestational age, and prenatal death (Potts, 1990). To prevent these adverse pregnancy outcomes, birth spacing has been considered an effective intervention.

Modern contraceptive use has risen steadily over time in most of the developing world. In some countries specifically, in sub-Saharan Africa. However, the adoption of contraceptive has been slow (World statistics, 2008) or it has leveled off in recent years (Seltzer, 2002). Nearly everywhere, wealthier women are more likely to use modem contraceptives than poorer women. The disparities in use between rich and poor are most pronounced in countries with low contraceptive use such as Uganda (Abdullashi, 2020). In countries such as Honduras, contraceptive use overall may rise, but the poor still lag. The gap usually starts to close only when contraceptive use becomes widely accepted and available, such as in Colombia. Nonetheless, in Bangladesh, where contraceptive use is not universal, strong program efforts have reduced the rich-poor gap by making Contraceptive services accessible to all, including those in poor, rural communities. Roughly 20 percent of couples using contraceptive in both Africa and Europe use traditional methods (Adekunle, 2019). These methods are typically less effective than modem methods, so couples practicing traditional contraceptive are included in the estimation of unmet needs.

Nigeria is the populous nation in sub-Saharan Africa with a population of over 140 million (National Population Commission, 2009) and an estimated population of over 200 million with a growth rate of 2.68% (NPC, 2019). This population is likely going to double itself in the next 26years (NPC, 2019). This is a cause for concern and could imply that the nation if nothing is done could face tremendous challenges due to the present economic situation. Population explosion could be controlled with increased Contraceptive practices through the use of contraceptives.

However, information regarding contraceptive may be communicated through mass-media communication to boost the chance of contraceptive practice among the populace. The source of information could be from radio, television, seminars, health facility, friends, and print media among others. Contraceptive practices may vary in different areas as might be among women of reproductive age.

The uptake of contraceptive is achieved only using information, counseling, and education, provided by the contraceptive provider When knowledge is acquired through counseling and education, the couple or individual is empowered to make an informed choice. Because this decision is based on a proper understanding of the facts, the client takes actions that would enable him/her to adjust to the chosen method (responsible decision).

Contraceptive promotes the welfare of the family and group by fostering good inter-personnel relationships amongst family members. It increases the life expectancy of members of the family by reducing maternal mortality rate as a result of spacing child-bearing; contraceptive helps child-bearing women to space their pregnancies and childbirth, thus giving the organs of reproduction enough time to return to their pre-gravid state. It reduces infant or child mortality rate due to lack of care; when children are spaced, they are well cared for. The economic burden on the man as the head of the family is also less when childbirth is spaced and the number of children is planned.

Contraceptive contributes to the socio-economic development of the family and country: When the births are adequately spaced and the family size is completed, it gives the woman and other members of the family the opportunity for self-development. Self- development increases an individual's and family's economic power. This leads to increased productivity, increased income, and a long-run increase in the nation's gross domestic product and income. The last sentence in the definition states that contraceptive assists infertile couples in investigation and treatment. This implies that contraceptive, not only assists in the prevention of unwanted and unplanned pregnancy but also helps individuals and couples to fulfill their parenthood obligations, thereby giving them a sense of achievement.

Onyensoh (2011), simply puts it that, through contraceptive teachings, individuals and couples are assisted to decide the number of children they will have either by limiting or spacing birth and avoiding unwanted pregnancy. As proof of the importance of contraceptive, it was given the fourth position in the component of Primary Health Care as "Maternal and child health care, including contraceptive".

Thus the aims of contraceptive according to the National Population Commission (2004), including providing information to individuals and couples to enable them freely and responsibly decide the number and spacing of their children, provide affordable and accessible contraceptive services, make available a full range of safe and effective methods, provide information on child-bearing, support the institution of marriage and assist couples as well as individuals who desire to have children.

Contraceptive methods range from oral contraceptives, injectable contraceptives, barrier methods, intrauterine contraceptive devices, and voluntary surgical (permanent) methods. It also includes the natural methods which are based on the physiological functions of the reproductive and nervous systems. Contraceptive as defined and adopted by the expert committee of the World Health Organization in 1971 is a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitude, and responsible decisions by individuals and couples, to promote the health and welfare of the family group and thus effectively contributing to the social development of a country (World Health Organization, 1997).

Onokerhoraye (1997) defined contraceptive as the provision of birth control information services and appliances, that involve teaching men and women about their bodies and teaching them how to prevent births usually with contraceptives but sometimes also with abortion or sterilization. Sarwatay and Divatia (2016) operationalized contraceptive in their study as a program to regulate the number and spacing of children in a family through the practice of contraceptive or other methods of birth control.

Contraceptive according to Quereishi et al. (2017) refers to practices that aid individuals and couples to attain objectives such as to avoid unwanted births, bring about wanted births, regulates the intervals between the pregnancies, and control the time at which birth occurs and to determine the number of children in the family. Njotang et al. (2017) posited that contraceptive is any method that allows individuals and couples to anticipate and attain their desires number of children while helping then to space and limit births

Gonie et al. (2018) stressed that contraceptive is the ability of individuals and couples to anticipate and attain the desired number of children and the spacing and timing of births which is achieved through the use of contraceptives. The authors added that contraceptive lessens stress on the natural recourses and political environments at the national level. Operationally contraceptive is activities individuals and partners in a relationship engage in that aid the attainment of the desired number of children at the right timing.

1.1.2 Types of Contraceptives

Contraceptives are forms of drug, method, or object used for preventing a woman from becoming pregnant. Farlex (2012) defined contraceptive as a way of preventing "pregnancy by interfering with the normal process of ovulation, fertilization, and implantation." Contraceptive is a process or technique for the prevention of pregnancy using a medication, device or methods that blocks or alters one or more of the processes of reproduction in such a way that sexual union can occur without impregnation" (Mosby's Dental Dictionary. 2008). Types of contraceptive includes, birth control, condoms, Contraceptive Diaphragm, Vasectomy, Tubal sterilization, Norplant, Depo Provera, IUDs etc (Basavanthappa 2008); (NAC, 2011)

1.1.2 Women of Reproductive Age

Reproductive age is a mandatory transitory period of life for everyone who grows to either become a man or woman. It is a transitory phase of life experienced after childhood and before adulthood marked with distinct changes ranging from secondary sexual growth to changes in hormonal milieu to emotional, cognitive and psychological development" (Osakinle 2003; Chichetti & Beeghly, 1990). Women of reproductive age are a transitional stage of physical and psychological human development that occurs from puberty to legal adulthood (Macmillan Dictionary, 1981 & Merriann-Webster Dictionary, 1989). At this age, adolescents are not fully matured to take decisions on their own. They experience changes and growth physically, psychologically, emotionally, mentally, and socially (Goldenring, 1995) such can lead them into making rash decisions that impact negatively on them and their future.

They still depend on superiors, parents, guardians for directives to certain degrees. Some are full of themselves, thereby acting without the guidance of elders. Adolescence is a period of increased risk-taking and therefore susceptibility to behavioral problems at the time of puberty and new concerns about reproductive health" (UNFPA. 1995). Peer dependence and reliance sets in at this age. They rely on information from their peers maybe because they are closest to them; can easily relate or share information without guidance.

United Nations Population Fund, UNFPA (2010); National Population Commission (NPC) and International Classification Funding (ICF) Macro (2009) reported a low prevalence rate of contraceptives among teenagers in Nigeria. In Nigeria, women have low use of contraceptive, because they relied on unsafe abortion thereby resulting in many abortion-related complications (Okonofua et al., 2001). According to a report by the Population Reference Bureau (PRB) (2004), teenage women are less likely than their counterparts over 20 years of age to use contraceptives

because of limited knowledge, social and cultural limitations, limited or no funds, fear of side effect and barriers associated with access and use of contraceptive.

The use of contraceptives increases with education and literacy levels (UNFPA, 2010). Most adolescents are naïve about contraceptive use. Their knowledge of contraceptives is low, as their exposure to it might also be low. Information on the topic is gotten mostly from media, the internet, peers, and little from relations. Schools seldom treat the topic, as it is absent from some curricula. Some have the wrong perception about contraceptives. They experience a series of internal and external changes. Their curiosity about things leads them into a series of experimenting and risk-taking, thereby putting them at risk of behavioral problems and reproductive health issues (UNPFA, 2005).

1.2 Statement of the Problem

Nigeria's Population is growing geometrically with the population doubling itself. Young women of reproductive age often lack reproductive health information. They lack information on the consequences of unprotected sexual intercourse. In addition, the lack of knowledge on negotiating sexual relationships and confidential reproductive health services is becoming worrisom. Many do not feel comfortable discussing sexual issues with parents or other key adults with whom they can talk about their reproductive health concerns. Likewise, parents, health care workers, educators frequently are unwilling or unable to provide complete and accurate reproductive health information to young people.

This is often due to their discomfort in discussing the subject or the false belief that providing the information will encourage increased sexual activity. Thus, most young women enter into sexual relationship with very little knowledge of the consequences, either shared by their peers or from the media. Non-use of contraceptive commodities have been implicated for increased maternal morbidity and mortality, poor and prevailing economic hardship, population explosion, food insecurities to mention but a few. Access to contraceptive commodities could further prevent unwanted pregnancies and the sequel of unsafe abortion. The number of unintended pregnancies, risk of abortion, a large number of children, poverty, and even death is due to the negligence of contraceptive practice.

Though, efforts have been made by government to encourage the utilization of Contraceptive commodities yet, the rapid increase in population is un-pronounced, an indicative of poor utilization of family plaaning. In 2017 the Federal government of Nigeria made contraceptive commodities free to help increase better health indices. This gesture was also replicated by the Rivers State government to make contraceptive commodities free in all public health facilities. However, observation showed that contraceptive practices are still low as some women still come up with stories that their pregnancies were not planned.

1.3 Aim and Objectives of the Study

This study investigated contraceptive utilization and factors among women of reproductive age in two Senatorial district, Rivers State. The study investigated:

1) the level of utilization of contraceptive among women of reproductive age in two Senatorial district, Rivers State.
2) the most preferred method of contraceptive utilized among women of reproductive age in two Senatorial district, Rivers State.
3) the sources of information on contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State.
4) the extent of spousal support on contraceptive among women of reproductive age in two Senatorial district, Rivers State.
5) the age of women as a factor of contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State.
6) the educational status of women as a factor of contraceptive utililization among women of reproductive age in two Senatorial district, Rivers State.
7) the marital status of women as a factor of contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State.
8) the religious affiliation of women as a factor of contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State.
9) the extent to which spousal support determine contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State
10) the barriers to contraceptive utilization among women of reproductive age in two senatorial district, Rivers State.

1.4 Research Questions

The following research questions were formulated to guide the study;

1. What is the level of utilization of contraceptive among women of reproductive age in two Senatorial district, Rivers State?

2. What is the most preferred method of contraceptive utilized among women of reproductive age in two Senatorial district, Rivers State?
3. What are the sources of information on contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
4. What is the extent of spousal support on family planning among women of reproductive age in two Senatorial districts, Rivers State?
5. To what extent does maternal age determine contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
6. What is the extent to which educational status of women determine contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
7. What is the extent to which marital status of women determine contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
8. What is the extent to which religious affiliation of women determine contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
9. What is the extent to which spousal support determine contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
10. What are the barriers to contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?

1.5 Hypotheses

The following null hypotheses are to guide the study and were tested at a 0.5 level of significance.

1. There is no significant association between age and contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?
2. There is no significant association between educational status and contraceptive utilization among women of reproductive age in two Senatorial district, Rivers West Senatorial district, Rivers State?
3. There is no significant association between marital status and contraceptive utilization among women of reproductive age in two Senatorial district, Rivers West Senatorial district, Rivers State?
4. There is no significant association between religious affiliation and contraceptive utilization among women of reproductive age in two Senatorial district, Rivers West Senatorial district, Rivers State?
5. There is no significant association between spousal support and contraceptive utilization among women of reproductive age in two Senatorial district, Rivers State?

1.6 Significance of the Study

The findings of this study might be beneficial to the general population, Health agencies, inter-governmental organizations, educators, and researchers. This study would be significant in a different dimension. It is hoped that this study would go a long way to prevent unplanned pregnancy among women because it will provide prerequisite knowledge and positive decision-making regarding contraceptive practices.

This may ameliorate the high risk of abortion through the good encouragement of individuals, families, and even the community to engage in different contraceptive practices. This study might be advantageous to the general public as it would serve as a source of information to boost their knowledge regarding the use of contraceptive and choices, control population or growth rate of the community thereby create the chance of individual empowerment (women inclusive) and eliminate poverty also enlightened the community and families on contraceptive methods that have a dual function like a condom which prevent pregnancy and sexually transmitted infections (STIs).

This work could be beneficial to health agencies, inter-governmental organizations, and voluntary organizations whenever they intend to embark on any campaign and enlightenment programs, to improve the fertility educational status of families and individually towards the practices of contraceptive. It will also carry information concerning the importance of contraceptive practice to the grass root.

It is hoped that educators, scholars, research students would benefit from this study. This study could serve as a floodgate and literature to future studies in a related field. The recommendations that would be gathered from this work might form part of the benefits.

1.7 Scope of the Study

This study focused on contraceptive practices among women of reproductive age in Rivers State. A multi-stage sampling procedure was employed to select the respondents for the study. The location of this study is Rivers West and East senatorial district. The socio-demographic variables of this study included age, marital status, educational status, religion, and spousal support, whereas, the dependent variables include contraceptive utilization among women of reproductive age.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Conceptual framework

The conceptual framework is like a map for guiding data collection, organization, and pertinent data analysis. It represents interrelatedness between variables and how they influence the phenomenon under study. Extensive literature review helped the researcher to formulate a framework for this study titled "Contraceptive practices", Fig.2.1 Illustrate the framework for this study based on a set of variables that are associated with contraceptive practices.

It showed that spousal support could influence contraceptive practices. For instance, the study of Abraham et al. (2010) showed that, spousal approval of contraceptive influence the use of contraceptive and that respondents whose spouses approve of contraceptive more likely to use contraceptives compared to those with no approval.

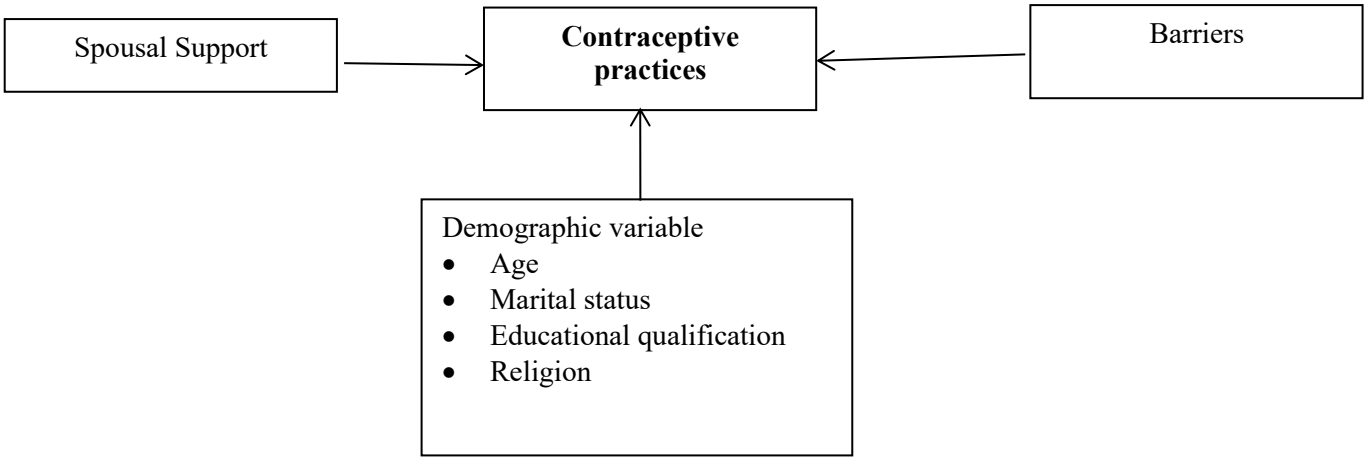

Fig.2.1: Conceptual Framework on Contraceptive practices

Other socio-demographic variables (such as the age of women, educational qualification, marital status, and religion) can influence contraceptive practice. Age has been implicated to affect contraceptive practice. The study by Tolassa (2004) showed that age was significantly associated with contraceptive practices. Tolassa (2004) stressed that older age will influence more on contraceptive practice. Haile and Enqueselassie (2006) stressed that respondents who are older than 30years of age are more likely to practice contraceptive. Other studies by Jabeen et al. (2011) also showed that younger age-connected with contraceptive practice. Ogunjuyigbe et al. (2009) also added that age was significantly associated with contraceptive practice although in the study the result showed that the younger had higher odds of contraceptive practice. Similarly, Megabiaw's (2012) study showed that younger age predicts contraceptive practice more.

Educational qualification might also be associated with contraceptive practices among women of reproductive age, as the more educated a person is the more readily that person will adopt behaviors that can positively impact life. Tolassa (2004) stressed that educational qualification predicts contraceptive practice. The study indicated that respondents with higher education were more likely to use contraceptive compared to those with no formal education. Duze and Mohammed (2006) emphasized that educational qualification explains 39.1% of the variance in the contraceptive practice, Moreover the Authors added that the variance significantly determines the contraceptive practice. Haile and Enqueselassie (2006) also showed that respondents with higher education were more likely to use the contraceptive method compared to those with no formal education. Ogunjuyigbe et al. (2009) emphasized that educational qualification determines the use of contraceptives and that respondents with post-secondary education are more likely to practice contraceptive compared to those with no formal education. Nasir et al. (2010) also emphasized that education influence the use of contraceptive and that the odds of using contraceptive methods are higher among those with higher education. In the same vein, Mekonnen and Worku's (2011) study showed that respondents with higher education had higher odds of using contraceptive methods compared to those with no formal education. Jabeen et al. (2011) also showed that the education of participants predicts the use of contraceptives, specifical respondents with higher education having higher odds of practicing contraceptives.

The framework also showed the link between available barriers to contraceptive which include among others distance, long waiting hours, and attitude of service providers as that could impede on contraceptive practice. The more these barriers the less likely contraceptive commodities and services will be utilized.

Contraceptive Prevalence Rate (CPR) is still embarrassingly low in Nigeria, according to the report released by the international women's health coalition; the CPR among married women aged 15-49 years was 8% for modem methods and 12% for all methods. Also, other studies have reported a similarly low adoption rate of Modern Birth Control Methods (MBCM) (Ahmed et al., 2007).

The current prevalence rate of contraceptive use in Nigeria is approximately 11% - 13% (Aigbirernoten et al., 2014). According to the National Demography and Health Survey 2008, only 10% of married women of reproductive age use contraceptives in Nigeria (UNFPA, 2010). This is lower than the current Sub-Saharan Africa average of 17%. Further analysis of the Total Contraceptive Prevalence rate (CPR) indicates wide state variations, ranging from 0.3 in Jigawa to 41.6 in Lagos state, as well as zonal variations ranging from 2.7 in the North West to 28.5 in the South West (UNFPA, 2010). Contraceptive prevalence (% of women ages 15-49) in Nigeria was 14.60 as of 2008. Its highest value over the past 26 years was 15.30 in 1999, while its lowest value was 6.00 in 1990 (Nigerian Demography Health Survey, 2008). A recent study carried out in a rural community in Osun state recorded a high prevalence of contraceptive usage of about 66.3% among women of reproductive age with cost and availability being the predominant reason for the choice of contraceptive method (Alan Guthmacher Institute, 1994). In contrast, Ankoma et al. (2013) in their study recorded a low contraceptive prevalence rate of 11.1% among young women between 15-24 years of age. However, there is ample research evidence identifying the various factors that contribute to the low prevalence of modem contraceptives use in Nigeria, with the most common factor being the myth about the side effects of modem contraceptives.

In 1983 United Nations analysis of contraceptive prevalence estimates for the world by region, given low, medium, and high assumptions, confirms a global trend toward rising contraceptive use and declining fertility. Given medium assumptions, the percentage of married women of reproductive age who were using a contraceptive method in late 1983 was 51% for the entire world, 45% in developing regions (33% when China was excluded), and 70% in developed regions. This rate was 14% for Africa, 74% for East Asia, 34% for South Asia, and 56% for Latin America. On a global level, the most widely used forms of fertility control are sexual sterilization (36%), the IUD (19%), oral contraceptive (15%), condoms (10%), withdrawal (8%), and periodic abstinence (7%). Contraceptive use is also shown to improve child survival through optimal child spacing, lengthening birth intervals, and reducing sibling competition for scarce family and maternal resources (Ankomah et al. (2013) and Applegate, 1998). According to a new study led by researchers at the Johns Hopkins Bloomberg School of Public Health, contraceptive use would likely prevent more than 272,000 maternal deaths from childbirth each year. Ankomah et al. (2013) estimated that the global unmet need for contraceptive could reduce maternal deaths by an additional 30 percent. According to the United Nations in 2016, 63 percent of partnered, reproductive-age women worldwide, representing about 740 million couples practice some form of contraceptive. Almost 90 percent of them employ modern methods, which include oral contraceptive ("the pill"), condoms, injections, intrauterine devices (IUDs), and sterilization. Contraceptive prevalence was increasing until 2000, but growth has stalled since then. Contraceptive practices have reduced the pregnancy rate, the number of unintended pregnancies, and related induced abortion especially in developing nations like Nigeria.

However, Contraceptive has a clear benefit to eliminate or subside the rate of maternal and infant mortality, reducing poverty to boost maternal and child health, economic growth, and the overall well-being of individuals, families, and communities. Studies of BanGour (2009) have estimated that Contraceptive programs have raised the level of contraceptive use from 19% to 62% mostly in developing countries and reported about 75% declination in their fertility because effective Contraceptive practice among the populace will increase the prevalence of using contraceptive methods.

The prevalence of modern contraceptive use is likely to be high among women who are married as compared with the unmarried ones. Studies by Barnet et al. (1999) reported that contraceptives use was high (38.7%) among married women as compared to the 2013 Nigerian Health and Demographic Survey, but is low among young women who had not given birth. The prevalence of contraceptive use seems to be high but differs among a family type. Studies by Black et al. (2009) showed that a 27% prevalence rate was found among those who are currently married and cohabiting. Certain factors are likely to predict the use of contraceptives among women of reproductive age. Studies by CREHPA (2004) showed that the prevalence of contraceptive use was higher among Yoruba's (41.8%) than the Hausa (3.6%).

Furthermore, one of the demographic variables influencing the Contraceptive practices among women of reproductive age between 15 - 49 years is age. The age of women and how it is likely to affect their Contraceptive practices. Younger women who are unmarried may likely use Contraceptive methods as compared with older women who are married, for example, condom use. Studies by Cortez et al. (2015) pointed that sexually active unmarried women

were more likely to use contraceptives than married women with a strong significance. Evidence showed that the use of contraceptive method increases with women's age, from 4% at age 15-19 to 17% at age 40-49, also, women who were older than or the same age as their spouses had a statistically significantly higher rate than with a lower level of use among women whose husbands are older by 10 years (p <0.0O0), (Dangat & Njau, 2013). There could be a variation in the Contraceptive practices regarding age among women. Contraceptive practices depend largely on their knowledge of contraceptive.

The level of knowledge of women could predict the practice of contraceptive. There may be a clear relationship between women's education, mostly those with primary, secondary, and tertiary status, and fertility education level. Several studies depict that women's education has a positive influence on Contraceptive use. Studies by Gebremeskel et al. (2013) showed that women who are more educated than their spouses tend to use Contraceptive methods as compared with women that are educated like their spouses. Therefor, educational status plays a significant role in Contraceptive practices mostly among reproductive-aged women.

Earms et al. (2015) reported that in Nigeria, women with tertiary educational status are one and a half times more likely to have ever used contraceptive than women who has mere secondary educational status. Earms et al. (2015) revealed that the educational status of women and spouses were found to be significantly associated with contraceptives use and the prevalence of using Contraceptive became higher with an increase in the level of education of women and their spouses. The use of contraceptives could be predicted by age of the individual. The younger adult who is sexually active is likely to experience their sexual debut without any form of contraceptives as compare with the older ones. Studies by Ernuveyan and Dixon (2017) reported that women aged 45 years and above were more likely to use Long-Acting Reversible Contraceptive (LARC) because they have already attained good or reasonable family size. The use of contraceptives has a variation with age group where the younger age (15-19) are14% while the age group 35-49 had 26.6% (Rasoly etal., 2015). Since the first sex debut with a new partner is likely unprotected, the younger women who are more sexually active may likely use a contraceptive. Evidence shows that the use of contraceptives was positively linked with age and increases rapidly with the age of the women approaching 40-44 and a slight declination in age ranged 45-49 years (Farlex, 2012).

Married women and spouses with secondary educational backgrounds and above are eight and six times more likely to use contraceptives as compared with their counterparts without formal educational status (Earns et al., 2015). Promoting maternal education and fertility education will go a long way to strengthen contraceptive practices.

The socio-demographic factors that could determine contraceptive practice among women of reproductive age are socio-economic status. The wealth of an individual or family would affect their contraceptive practices through ideation.

Studies by Harrison (2011) reported that simple family (98.80%) accepted the contraceptive practices as compare with complex family type. The use of contraceptive is higher in nuclear families more than in polygamous families. Also, women that have jobs show more probability of using contraceptive methods than those without a job. The women with higher socioeconomic status may boost their sense of freedom and decision-making process regarding contraceptive. Women with little or no income status may not have an interest in contraceptive practices when compared with some of them with quality salaries or wages, good businesses, or self-employed.

Studies by Fergusson et al. (2013) revealed that women who don't have children are 12.20 times fewer chances to use contraceptives as compared with women who have 5 or more children. Also, contraceptive practices could be influenced by their work status. Women without job or work status have 1.26 times fewer chances to practice contraceptive than working-class women. The chances of contraceptive practices may be improved if their socio-economic status increases.

Spousal support or approval influenced good contraceptive among women within the age of fertility. Husbands or spouses are fully expected to support their wives either by involving in decision-making, or approve the use of contraceptive methods, and or aid their finances which will go a long way to improve their well-being. Studies by Ferguson et al. (2013) spouses or husbands disapprove or do not support contraceptive use are 3.05 times fewer chances to contraceptive use as compared with women with husband support or approval.

In the same vein, women who never deliberated contraceptive practice are 3.98 times less chance to use contraceptive methods as compared with those who discussed with their husbands. Studies by Godeau et al. (2018) reported that husband's agreement (84.4%) boost the use of contraceptive with variation in their educational level. There should be joint positive decision making between both couples regarding the use of contraceptives because of its huge benefit on the family's economic growth. Evidence shown by Renjhan et al. (2010) shows that the use of contraceptive recommended by husbands

improves the prevalence rate of contraceptive. Studies illustrated by Guttmacher et al. (20l3) showed that there is a rapid increase in contraceptive use (43%) among women whose spouses had to approve of contraceptive, and it is directly related to a joint discussion with the partner. There is an increased use of contraceptives among those who had their husband support more than others who do not seek spousal support. Therefore, spousal support may likely predict the use of modern contraceptives among women. The study by Gupta and Mahy (2016) revealed that women whose spouses are involved in contraceptive practices are 26 times more chances or likely to utilize contraceptive services. Although their non-usage of contraceptive is due to spousal non-approvals or fear. The spousal agreement will promote contraceptive practices. In the same vein, the use of modem contraceptives is linked with religious affiliation as well as cultural background. Certain religions and cultures do not permit the use of contraceptive methods whereas others do so since Nigeria is an ethno religious society. Studies by Hagan (2017) showed more than half of the Yoruba ethnic group (41.8%) had increased use of contraceptive use ($P<0.05$). studies by Henry and Medicare (2017) showed a statistically significant difference between religion (Muslim and Christian) and contraceptive use.

The use of contraceptive which ranged from 49.7% in 2008 to 54.92% in 2014 among Christians than the Muslim faithful (Idonije et al., 2018). Furthermore, religious belief may predict the use of contraceptives. Those who consider their religious beliefs while deciding on the use have fewer chances to use modern contraceptive (Kabir et al., 2018) that women who are religious minded may hardly use modern contraceptives as may likely compare with those who do not have a religious or cultural background.

The educational status of women of reproductive age is one of the educational socio-demographic factors that may predict the use of modem contraceptives. However, most women with secondary educational status and below are less likely to use any form of contraceptives when compared with the more educated ones. The educational status of women would determine their knowledge of contraceptive use and its benefit. (Jam et al., 2014) depicted that the higher level of education the greater contraceptive use is expected to be especially among both couples. Studies by Kanku and Masha (2019), reported that women with college educational background are less likely to discontinue contraceptive use ($P = 0.000$) women who were mostly educated up to secondary level and above have the chance of using contraceptive due to the level of awareness.

The more women are educated, the more chances to use contraceptives (Karim et al., 2017). Katz (2016) observed that women with tertiary education were three times likely to use contraceptives than those with below status. The educational background of the individual and family would go a long way to improve the requisite knowledge of contraceptive use thereby will likely serve as a strong predictor. The contraceptive practices among women differ due to their source of information of contraceptive method that is likely to be practiced includes condom, oral contraceptive, female sterilization vasectomy, cervical cap, diaphragm among others. Studies by Kim et al. (2016) reported that 78.9% of women received information concerning contraceptive from healthcare providers, more than average 53.2% got information from radio. The source of information likely to determine how they know about contraceptive and practice it. Kirby (2011) showed that about 50% of women received information regarding contraceptives use mainly from mass media while over 95% had heard about oral contraceptive pills and 74% heard of condom use. The majority of women (74%) gathered information concerning contraceptive by radio while their spouses contributed only 4.8% to the information (Lawrency et al., 2018).

In the same vein, a study by Hagan et al., (2017) reported that 90.9% of women heard about contraceptive, and only 59.1% heard about it from the clinic workers whereas, only a few 9.1% receives information from radio/television.

2.1.1 Concept of Contraceptives

The importance of having a controlled and manageable family size cannot be contested. All over the world, right from creation; it has been the desire of man to control his family size. Thus so many means have been applied to prevent unwanted pregnancy. Some of these means or methods have proven dangerous to health; ranging from infection, infertility, and outright death. To this end, individuals and organizations have attempted to find the most suitable means of preventing pregnancy without posing any health risk to the individual or couple and to enable individuals to make voluntary decisions to adopt these means to meet the family's objectives. The choice of child-bearing should be voluntary, every pregnancy should be wanted, which calls for proper planning. WHO (2010) defined contraceptive as "a way of thinking and living that is adopted voluntarily upon the bases of knowledge, attitude and a responsible decision by individuals and couples to promote the health and welfare of the family and group, thus contributing to the socio-economic development of the family and country. It also assists the infertile couple in investigation and treatment".

The key terms in this definition are 'thinking and living', 'adopted voluntarily upon the bases of knowledge attitude and responsible decision', 'promote the welfare of the family and group', and - socio-economic development of the family and country'. Thinking is a mental process that involves the analysis of information to make the right

decisions. When the right decisions are taken, they are adopted or implemented to become the individual's way of 'life or way of living. This way of living is adopted voluntarily because the individual is not coerced or unduly influenced by any means to practice contraceptive.

2.1.4 Educational qualification and family planning practices

Reproductive age between age 15-49 consists of one-fifth of the world's population with more than four/fifth in developing nations (Gottschalk et al., 20l4; Onyenson, 2011). Nigeria has about 150 million dwellers in the country (National Population Commission Census Figures, 2006), as the largest populated country in Africa (with 174,507,539 people) and placed as the tenth-largest country in the world (Ogbaje & Igharo, 2009; CIA World Fact Book, 2013). Only 17.5% of women have completed their secondary level of education (Demographic and Health Surveys, 2008).

Nigeria's population is dominated by younger people with approximately 44 percent of the population younger than 25 years of age (Ogbaje & Igharo, 2009). This population calls for a defensive education of the population on contraceptives issues as the nation's population may be partly hinged on the proper sex education of the youth. About six million unwanted pregnancies occur each year and 90% of these occurs in adolescent women who are not using contraceptives in developing nations, 90% of which occur in adolescent women that are either not using contraceptives or relying on traditional and natural contraceptive methods (Guttmacher, Institute, 2010). Nigeria, a region in the sub-Saharan countries has a larger proportion of adolescents than other regions of the continent (Okonofua, 2000). According to the Nigeria Demographic and Health Survey, NDHS, (2003), Nigeria has a high fertility rate of 5.7 children per woman with low use of contraceptives (Ogbaje & lgharo, 2009).

2.1.5 Reproductive age and Contraceptives practice

Men in developing nations like Nigeria depend on a male condom as the most used contraceptives (Osakinle, 2019) as 80% of socially marketed brands of condoms are sold in Nigeria and mainly gotten from pharmacies National Demographic and Health Survey (NDHS, 2018). It is affordable to all populations, simple to use with little or no guidelines, and easily accessible. Condoms use is high as the usage rate peaks at six to nine billion per year worldwide (Crooks & Baur, 2002). Oral contraceptives use is on the increase as national consumption rates climb to two-thirds of production (NDHS, 2003). The use of other forms of contraceptives like IUCD, injectable, and other modern methods of contraceptives may be rare in the adolescent population. Access to these forms of contraceptives and affordability in terms of finance might be constraints to youth's use of them.

Reasons abound for the non-use of contraceptives among populations of all nature. Among these reasons include lack of knowledge and fear of side effects (UNFPA, 2010). Lack of knowledge about various contraceptives and their functions might abound in the populace of developing, less developed, and underdeveloped nations. Lack of adequate awareness can also breed fear thereby reducing peoples' dependence on it. Some women are not sexually active, thereby not requiring the use of contraceptives. Some do not have enough money to go for it. Contraceptive use is also reported to increase with wealth (UNFPA, 2010). Contraceptives are purchased with money.

The poor have limited or no resources to sustain their livelihoods. Adolescents are dependent on their parents, guardians, or sponsors for livelihood thereby keeping them in a state of limited or no resources to cater to their individual needs. This economic factor also affects their use of contraceptives. Contraceptive use especially condom use among youths was found to be difficult because of fear of destroying relationships, contracting diseases, doubt and mistrust reduced pleasure alongside the loss of libido (Ekstrand, 2019).

Religion and Contraceptive practices

Women in Africa report high unmet needs for both information about and access to contraceptive. Unmet need for family planning defined as lack of modern contraceptive use by a woman who is fecund, sexually active, and does not want a child for at least 2 years as reported by 61% of women within the first two years postpartum in Africa.

Contraceptive information is not uniformly provided to patients seeking health care in Africa. A recently published cross-sectional study shows that women are less likely to receive contraceptive information if they have not discussed this topic with a partner. Other studies show that joint decision-making about family contraceptive is rare; men are considered primary decision-makers regarding household matters, including the number of children, and spacing of births. African men also report fear that uses contraceptives will promote promiscuity among their female partners. These factors may explain or engage with contraceptives resources: less than one-third of men accompany their partners to health facilities to receive information about contraceptives. In the absence of spousal support and lack of information, African women have low utilization of contraceptives methods. Less than 10% of women who sought healthcare over four months in rural Western Africa reported utilizing a contraceptives method. Further, data demonstrate that women who regularly attend

religious services are unlikely to receive contraceptives information at their health visits (AAPF, 2018). The relationship between religious faith and contraceptives are complex and variable. While contraceptive use is prohibited by the Roman Catholic Church, many protesters and traditions permit the use of contraceptives methods. Christian scripture has been a site of conflicting and contested interpretations of passages to support or oppose the use of contraceptives. Diverse perspectives on contraceptives among Muslims are shipped not only by the Quran and prophetic traditions-sources that do not offer unambiguous instructions regarding contraceptives but also by political (including post-colonial) context in which contraceptives is often perceived as 'colonial or imperial and ambition'of the West. While Quranic text and traditions do not specifically forbid the use of contraceptive, the meaning and relevance of this source of fertility have also been variably interpreted. Quranic texts have been used to support contraceptives practices by promoting reproductive strategies that mitigate against circumstances that would prevent parents from properly raising their current children. The same text has been cited to oppose contraceptives by valuing high-fertility and positioning contraceptive use against family interest (BBC, 2018).

Prior studies in sub-Saharan Africa demonstrate that stances on the religious acceptability of contraceptives vary widely both between religious groups and between individuals within groups, but the desire to access reproductive health care are present across groups. To our knowledge, no focus group discussions about contraceptives and Faith among people groups by the same faith have been conducted. The capacity for religious leaders to influence health behavior was recently confirmed in a large cluster-randomized trial, where religious leaders were provided with knowledge and skills to discuss male circumcision in the congregations. This intervention led to a major increase in the uptake of male circumcision (Bennett, 2008).

Prior work has described how gender roles impact uptake on contraceptives but have not considered how the influence of religion and gender intersect. To address this gap, we conducted a focus group among Muslim and Christian men and women in rural northwest Africa to explore knowledge, religious beliefs, and current practice regarding contraceptives. The authors hypothesized that a major reason for the poor uptake of contraceptives would be that women and their partners are uncertain about whether pregnancy prevention is compatible with their religious beliefs.

2.1.6 Ethnicity and Contraceptives practice in Nigeria

Globally, each year nearly 350,000 women die while another 50 million suffered illness and disability from complications of pregnancy and childbirth, and Nigeria is listed among the top six countries that contribute to about 50% of maternal deaths annually (Yihuine et al., 2013).

Contraceptive help to prevent an estimated 2.7 million infant deaths and the loss of 60 million of healthy life in a year. It helps prevent incidents of unwanted pregnancy, abortion, and enhances adequate child spacing. For instance, in the United States of America (USA), around 43 million (representing 70%) of the 62 million women of child-bearing age were at risk of unintended pregnancy. Report for 2014, shows that some 62% of all women of reproductive age are currently using a contraceptive method and only about 11% of women at risk are not currently using a contraceptive method. In Nigeria, the contraceptive prevalence rate for currently married women is now 15%, though it has increased by 2% since 2013 NDHS. But for modern method use, it declined from 9% to 8% in 2003 and slightly increased to 9.7% in 2008 (Jones & Dreweke, 2011).

Nigeria is geographically, culturally, religiously, and ethnically heterogeneous with a major ethnic group (68%) made up of Hausa-Fulani in the North, Yoruba in the West, and Igbo/Ibo in the east; and 27% are comprised of the various minority groups. This statistic differently affects the way of life of the people and the women in particular. Different ethnic factors such as seeking medical treatment a serious barrier to timely healthcare utilization. It is evidenced by the fact that health care utilization is lowest for the women of reproductive age among the (HFKS) Hausa/Fulani/Kanuri/Seriberi than anyone in any other group. Religion describes the belief system of the people and affects the number of health-related outcomes. Most people in northern Nigerian practice Islam and those in southern Nigeria practice Christianity (Catholics and Protestants). Contraceptive use is also common among women of all religious denominations (Gbenga et al., 2012).

The heterogeneity of the Nigerian status forms the basis for potential linkages in ethnicity and religion. The contraceptive prevalence rate (CPR) is usually defined as a percentage of currently married women who are currently using a method of contraceptive. It is the level of the current use of contraceptive that is a measure of actual contraceptive practice at the time of the survey. In recent times, many studies have been carried out to investigate the socio-demographic characteristics associated with contraceptive use among women of reproductive age. These include the examination of such factors as women's autonomy; area of residence (whether urban or rural). Women's schooling level; household wealth status and

work status of the woman. However, studies on the variations in ethnicity and religion as well as their interaction between the two variables on the current use of contraceptive among the women of productive age in Nigeria are Sparse. This study is designed to address this knowledge gap. Therefore, we hypothesized that ethnicity, religion, and the linkages between them are important factors associated with the current use of contraceptive among women of productive age 15 to 49 years in Nigeria. The main research question for this study was whether women of productive age 15 to 49 years in Nigeria who are of HFKS ethnicity and Muslim where at disadvantage in terms of the current use of contraceptive (CUC) compared with reproductive-age women from other ethnic and religious groups in Nigeria (Okonofua, 2003).

2.1.7 Types of modern Contraceptives methods

Modern contraceptives as birth control methods are classified into barrier methods, hormonal birth control, intrauterine devices (IUDs), sterilization, and behavioral methods as well as emergency contraceptives, most of them are used before or during sex while emergency contraceptives are effective for up to five days after sex. Effectiveness is generally expressed as the percentage of women who become pregnant using a given method during the first year (Edlin, Golantry & Brown, 2000), and sometimes like a lifetime failure rate among methods with high effectiveness, such as tubal ligation (Keith, 2012). The most effective methods are those that are long-acting and do not require ongoing health care visits. Hormonal contraceptive pills, patches or vaginal rings, and the lactational amenorrhea method (LAM), if adhered to strictly, can also have first year (or for Lam, first 6 months) failure rates of less than 1%. Other methods such as condoms, diaphragms, and spermicides have higher first-year failure rates even with perfect usage. (Cunningham & Stuart, 2012) The American Academy of Pediatrics recommends long-acting reversible birth control as the first line for young individuals (American Academy of Pediatrics, 2014).

While all methods of birth control have some potential adverse effects, the risk is less than that of pregnancy. (Cunningham & Stuart, 2012). After stopping or removing many methods of birth control, including oral contraceptives, IUDs, implants, and injections, the rate of pregnancy during the subsequent year is the same as for those who used no birth control (Mansour et al., 2011). For individuals with specific health problems, a certain form of birth control may require further investigations. And the World Health Organization (WHO) had in 2009, published a detailed list of medical eligibility criteria for each type of birth control method (WHO, 2009). For otherwise healthy women, many methods of birth control should not require a medical exam-including birth control pills, injection or implantable birth control, and condoms (WHO, 2004). For example, a pelvic exam, breast exam, or blood test before starting birth control pills does not appear to affect outcomes (Tepper et al., 2013; WHO, 2011; American Academy of Family Physicians, 2018).

Hormonal Contraceptives are available in several different forms, including oral pills, implants under the skin, injections, patches, IUDs, and a vaginal ring. They are currently available only for women; although hormonal contraceptives for men have been and are being clinically tested (Mackenzie, 2013). There are two types of oral birth control pills, the combined oral contraceptive pills (which contain both estrogen and a progestin) and the progestogen-only pills (sometimes called minipills). (Ammer, 2009) if either is taken before pregnancy, they do not increase the risk of miscarriage nor cause birth defects (WHO, 2011). Both types of birth control pills prevent fertilization mainly by inhibiting ovulation and thickening cervical mucus. They may also change the lining of the uterus and thus decrease implantation. Nelson & Cwiak, 2011). Their effectiveness depends on the user's adherence to taking the pills (WHO, 2011).

Combined hormonal contraceptives are associated with a slightly increased risk of venous and arterial thrombosis. Venous clots, on the average increase from 2.8 to 9.8 per 10,000 women which is still less than that associated with pregnancy. (Brito et al., 2011; Stegeman et al., 2013). Due to this risk, they are included in decision tools such as the DASH score and PERC rule used to prevent the risk of blood clots (Tosetto, 2012).

The effect on sexual desire is varied, with an increase or decrease in some but with no effect in most (Burrows, Basha & Goldstein, 2012). Combined oral contraceptives reduce the risk of ovarian cancer and endometrial cancer and do not change the risk of breast cancer (Shulman, 2011; Havrilesky et al., 2013) they often reduce menstrual bleeding and painful menstruation cramps (WHO, 2011). The lower doses of estrogen released from the vaginal ring may reduce the risk of breast tenderness, nausea, and headache associated with higher dose estrogen products.

Progestin-only pills, injections, and intrauterine devices are not associated with an increased risk of blood clots and may be used by women with a history of blood clots in their veins. In those with a history of arterial blood clots, non-hormonal birth control or a progestin-only pill may improve menstrual symptoms and can be used by breastfeeding women as they do not affect milk production. Irregular bleeding may occur with progestin-only methods, with some users reporting no periods. (Brito et al., 2011; Mantha et al., 2012). The progestin drospirenone and desogestrel minimize the androgenic side effects but increase the risks

of blood clots and are thus not first line (Rott, 2012). The perfect use first-year failure rate of injectable progestin is 0.2%; the typical use first failure rate is 6% (Trusssel, 2011).

Barrier contraceptives are the device that attempts to prevent pregnancy by physically preventing sperm from entering the uterus. They include male condoms, female condoms, cervical caps, diaphragms, and contraceptive sponges with spermicide. (Neinstein, 2008).

Globally, condoms are the most common method of birth control (Chaudhuri, 2007). Male condoms are put on a man's erect penis and physically block ejaculated sperm from entering the body of a sexual partner. Modern condoms are most often made from latex, but some are made from other materials such as polyurethane, or lamb's intestine. (Hamilton, 2012) female condoms are also available, most often made of nitrile, latex, or polyurethane (UNICEF, 2010). Male condoms have the advantage of being inexpensive, easy to use, and have few adverse effects (Pray 2005). Making condoms available to teenagers does not appear to affect the age of onset of sexual activity or its frequency (American Academy of Pediatrics, 2013). In Japan, about 80% of couples who are using birth control use condoms, while in Germany this number is about 25% and in the united state, it is 18% (Eberhard, 2010; Barbieri, 2009).

Male condoms and diaphragm with spermicide have typical use first-year failure rates of 18% and 12% respectively. With perfect use condoms are more effective with a 2% first-year failure rate versus a 6% first-year rate with the diaphragm. (Trussel, 2011) Condoms have the additional benefit of helping to prevent the spread of some sexually transmitted infections such as HIV/AIDS, however, condoms made from animal intestines do not (WHO, 2011; British Columbia Health Link, 2017).

Contraceptive sponges combine a barrier with a spermicide. Like diaphragms, they are inserted vaginally before intercourse and must be placed over the cervix to be effective. Typical failure rates during the first year depending on whether or not a woman has previously given birth, being 24% in those who have and 12% in those who have not. The sponge can be inserted up to 24 hours before intercourse and must be left in place for at least six hours afterward. (Cunningham and Stuart, 2012; Trusell, 2011) Allergic reactions and more severe adverse effects such as toxic shock syndrome have been reported (Kuyoh et al., 2003; WHO, 2009).

The current intrauterine devices (IUD) are small, often T shaped, containing either copper or levonorgestrel, which are inserted into the uterus. They are one form of long-acting reversible contraceptive which are the most effective types of reversible birth control. (Winner et al, 2012) failure rates with the copper IUD are about 0.8% while the levonorgestrel IUD has a failure rate of 0.2% in the first year of use (Hurt et al., 2012). Among types of birth control, they along with birth control implants, result in the greatest satisfaction among users (American College of Obstetricians and Gynecology, 2012). As of 2007, IUDs are the most widely used form of reversible contraceptive, with more than 180 million users worldwide (Darnet & Speroff, 2010).

Evidence supports effectiveness and safety in adolescents and those who have not previously had children. Intrauterine contraceptive for Nulliparous women translating research into action (INTRA) group has affirmed this fact (American College of Obstetricians and Gynecology, 2012; Black, Lotke, Buhling, Zite & INTRA Group, 2012) IUDs do not affect breastfeeding and can be inserted immediately after delivery (Gabbe, 2012). They may also be used immediately after an abortion (Steenland, Tepper, Curtis, & Kapp, 2011). Once removed, even after long term use, fertility returns to normal immediately (Falcone & Hurd, 2007).

While copper IUDs may increase menstrual bleeding and result in more painful cramps (Grimes, 2007), hormonal IUDs may reduce menstrual bleeding or stop menstruation altogether (Gabbe, 2012). Cramping can be treated with painkillers like non-steroidal anti-inflammatory drugs. Other potential complications include explosion (2-5%) and rarely perforation of the uterus (less than 0.7%). (Marnach et al., 2012) A previous model of the intrauterine device (the Dalkon shield) was associated with an increased risk of pelvic inflammatory disease, however, the risk is not affected with current models in those without sexually transmitted infections around the time of insertion (Guttmacher Policy Review, 2007).

Surgical sterilization is available in the form of tubal ligation for women and vasectomy for men. There are no significant long-term side effects, and tubal ligation decreases the risk of ovarian cancer. Short-term complications are twenty times less likely from a vasectomy than tubal ligation. (After a vasectomy, there may be swelling and pain of the scrotum which usually resolves in one or two weeks. With tubal ligation, complications occur in 1 to 2 percent of procedures with serious complications usually due to the anesthesia. Neither method offers protection from sexually transmitted infections (Hanson & Burke, 2010; Adams & Wald, 2009; Hillard, 2008).

The decision may cause regret in some men and women. Of women aged over 30 who have undergone tubal ligation, about 5% regret their decision, as compared with 20% of women aged under 30. (Hanson & Burke, 2010) by

contrast, less than 5% of men are likely to regret sterilization. Men who are more likely to regret sterilization are younger, have young or no children or have an unstable marriage (Hatcher, 2008). In a survey of biologicals parents, 9% stated they would not have had children if they were able to do it over again (Moore, 2010).

Although sterilization is considered a permanent procedure, it is possible to attempt reversal to reconnect the fallopian tubes or a vasectomy reversal to reconnect the vasa deferentia. In women, the desire for a reversal is often associated with a change in a spouse. Pregnancy success rates after tubal reversal are between 31 and 88 percent, with complications including an increased risk of ectopic pregnancy. (Defieux et al., 2011). The number of males who requested reversal is between 2 and 6 percent. Rates of success in fathering another child after reversal are between 38 and 88 percent; with success being lower the longer the period between the vasectomy and the reversal. Sperm extraction followed by in vitro fertilization may also be an option in men (Shridharani & Sandlow, 2010).

Behavioral methods involve regulating the timing or method of intercourse to prevent the introduction of sperm into the female reproductive tract, either altogether or when an egg may be present (Grimes et al., 2004). If used perfectly the first-year failure rate maybe around 3.4%, however, if used poorly first-year failure rates may approach 85% (Lawrence, 2010).

Fertility awareness methods involve determining the most fertile days of the menstrual cycle and avoiding unprotected intercourse. Techniques for determining fertility include monitoring basal body temperature, cervical secretions, or the day of the cycle. They have a typical first-year failure rate of 24%; perfect use first-year failure rates depend on which method is used and range from 0.4% to 5% (Trussel, 2011). The evidence, on which these estimates are based, however, is poor as the majority of people in trials stop their use early. (Grimes et al., 2004) globally, they are used by about 3.6% of couples (Freundi et al., 2010). If based on both basal body temperature and another primary sign, the method is referred to as symptothermal. First-year failure rates of 20% overall and 0.4% for perfect use have been reported in clinical studies of the symptothermal method (Jennings & Burke 2011; Trussel, 2011) Several fertility tracking applications are available as of 2016, but they are more commonly designed to assist those trying to get pregnant rather than prevent than present pregnancy (Mangone et al., 2016).

The withdrawal method (also known as coitus interruptus) is the practice of ending intercourse ("pulling out") before ejaculation. The main risk of the withdrawal method is that the man may not perform the maneuver correctly or on time. (WHO, 2009) first-year failure rates vary from 4% with perfect usage to 22% with typical usage (Trussel. 2011). It is not considered birth control by some medical professionals (Cunningham & Stuart, 2012). There is little data regarding the sperm of pre-ejaculatory fluid. While some tentative research did not find sperm, one trial found sperm present in 10 out of 27 volunteers. (Jones et al., 2009; Killick et al., 2011) the withdrawal method is used as birth control by about 3% of couples (Freundi et al., 2010).

Sexual abstinence may be used as a form of birth control, meaning either not engaging in any type of sexual activity, or specifically not engaging in vaginal intercourse, while engaging in other forms of non-vaginal sex (Murthy & Harwood, 2007). Complete sexual abstinence is 100% effective in preventing pregnancy (Alters & Schif 2009; Greenberg et al., 2016). However, among those who take a pledge to abstain from premarital sex, as many as 88% who engage in sex, do so before marriage (Fortenberry, 2005). The choice to abstain from sex cannot protect against pregnancy as a result of rape and public health efforts emphasizing abstinence to reduce unwanted pregnancy may have limited effectiveness, especially in developing countries and among disadvantaged groups (Kim, 2005; Francis, 2017).

Deliberate non-penetrative sex without sex or deliberate oral sex without vaginal sex are also sometimes considered birth control (Planned Parenthood Foundation, 2009) while this generally avoids pregnancy, pregnancy can still occur with intercrural sex and other forms of penis-near-vagina sex (genital rubbing, and exiting from anal intercourse) where sperm, can be deposited near the entrance to the vagina's lubricating fluids (Thomas, 2009; Edlin, 2012).

Abstinence-only sex education does not reduce teenage pregnancy. Teen pregnancy rates and STI rates are generally the same or higher in states where students are given abstinence-only education, as compared with comprehensive sex education. Some authorities recommend that those using abstinence as a primary method have backup methods available (such as condoms or emergency contraceptive pills). (Chin et al., 2012; Santeli et al., 2017; Kowal, 2007).

The Lactational amenorrhea method involves the use of a woman's natural postpartum infertility which occurs after delivery and may be extended by breastfeeding (Blackburn, 2007). This usually requires the presence of no periods exclusively breastfeeding the infant, and a child younger than six months (Blenning & Paladine, 2005). The World Health Organization state that if breastfeeding is the infant's only source of nutrition, the failure rate is 2% in the six months following delivery (WHO, 2005). sic uncontrolled studies of lactational amenorrhea method users found failure rates at 6 months postpartum between 0% and 7.5% (Van et al., 2008) failure rates increase to 4-7% at one year

and 13% at two years. Feeding formula, pumping instead of nursing, the use of a pacifier, and feeding solids all increase its failure rate. In those who are exclusively breastfeeding, about 10% begin having periods before three months and 20% before six months. In those who are not breastfeeding fertility may return four weeks after delivery. (Fritz, 2012; Swisher & Lauwer, 2015).

Emergency contraceptive methods are medications (sometimes misleading referred to as "morning-after pills") or devices used after unprotected sexual intercourse with the hope of preventing pregnancy. (Office of Population Research & Association of Reproductive Health Professionals, 2013; Gizzo et al., 2012). They work primarily by preventing ovulation or fertilization. They are unlikely to affect implantation. But this has not been completely excluded. (Hanson & Burke, 2010; Leung et al., 2010) Several options exist, including high dose birth control pills, levonorgestrel, mifepristone, ulipristal, and IUDs. Levonorgestrel pills, when used within 3 days, decrease the chance of pregnancy after a single episode of unprotected sex or condom failure by 70% (resulting in a pregnancy rate of 2.2%). Ulipristal, when used within 5 days, decreases the chance of pregnancy by about 85% (pregnancy rate 1.4%) and might be a little effective than levonorgestrel. Mifepristone is also more effective than levonorgestrel, while copper IUDs are the most effective method. (Hanson & Burke, 2010; Cheng & Che_Gulmezoglu, 2012; Richardson & Maltz, 2012) IUDs can be inserted up to five days after intercourse and prevent about 99% of pregnancies after an episode of unprotected sex (pregnancy rate of 0.1 to 0.2%). This makes them the most effective form of emergency contraceptive. (Hanson & Burke, 2010; Association of Reproductive Health Professionals, 2011; Cleland et al., 2012) In those who are overweight or obese, levonorgestrel is less effective and an IUD or ulipristal is recommended (Glasier et al., 2011). Providing emergency contraceptive pills to women in advance does not affect rates of sexually transmitted infections, condom used, pregnancy rates, or sexual risk-taking behavior (Krikpe, 2007; Shrader et al., 2011). All methods have minimal side effects (Cheng et al., 2012).

Dual protection is the use of methods that prevent both sexually transmitted infections and pregnancy (International Planned Parenthood Federation, 2009) this can be with condoms either alone or along with other birth control methods at the same time is reasonable. (Cates & Steiner, 2002; International Planned Parenthood Federation, 2000) for example, two forms of birth control are recommended in those taking the anti-acne drugs isotretinoin or anti-epileptic drugs like carbamazepine, due to the high risk of birth defects if taken during pregnancy (Gupta, 2011; Bhakta et al., 2015).

2.1.8 Contraceptives Practices

In this study family, planning practice and contraceptive use were interchangeably used. Contraceptives use is also associated with education, marital status, and previous child-bearing experience. A study in Luanda, the capital of Angola, found that sexually active women who are unmarried, less educated, and have never given birth are less likely to be users of any method of contraceptive. More than half of women who were not using contraceptive at the time of the study reported feeling that contraceptive was inaccessible, underlying the importance of improving the method of availability and choice. (Prata et al, 2015). Women's preferences for particular methods are based on a multitude of factors including cost, ease of use, efficacy, side effects (both real and perceived), and partner relationships, among many other factors. Having a full range of family planning options is considered an important component of quality of care and informed choice, resulting in improved uptake of family planning (RamaRao et al., 2003).

When the public sector experiences stock-outs of short-acting methods, women might be directed to get contraceptives from the private sector, which is comprised of small local pharmacies (biotech). Modern pharmacy (e.g Mecofarma), and private clinics (PSI/Angola, 2015; Ndomba, 2016). In the case of condoms, the private sector also includes non-traditional establishments such as local stores, markets, gas stations, and hotels. The Public sector obtains contraceptives through donations from the United States Agency for International Development (USAID) or the United Nations Fund for Population Activities (UNFPA). Specific brands of oral contraceptive pills (Microgynon, Microlut), injectables (Depo-Provera), and implants (Jadelle) are donated exclusively for the public sector for free. In 2015, the private sector generally obtained contraceptives from wholesalers (including Princefarma, Shalina Farwell, and Ecofarma, among others) who import products mostly from Europe and Asia and, in some cases, from Angolan border countries. The products in the private sector include a wide range of brands for condoms (Davigra, Kamasura, Durex, among others), oral contraceptive pills (e.g Yasmin, Diane 35), and oral emergency contraceptives (Pilula & Norlevo). (UNFPA & USAID). 2016; Gutierrez-Amo, 2012).

To meet the latent demand for contraceptive, it is necessary not only to ensure the availability and affordability of contraceptives currently on the market but also to expand the range of options for women and to guarantee women's real access to sexual and reproductive health products and services. Accordingly, public health policies need to (1) ensure the provision of a much wider range of contraceptive methods; (2) improve the efficiency of the supply chain

distribution (with adequate monitoring and evaluation); and (3) strengthen demand generation activities. These actions will have a greater impact if they are developed within a context of strong political will, social accountability, and significant and sustained human and financial resources devoted to improving family planning services for the benefit of all women and their partners. (Nieto-Andrade et al, 2017).

Sub-Saharan African (SSA) countries are the most affected as they have persistently high rates of unmet need for family planning and low contraceptive use (Cleland et al., 2006; Khan Vinod et al., 2007; Aryeetey et al., 2008). Countries such as Tanzania and Nigeria record high unmet needs and low contraceptives use the National Bureau of Statistics (NBS & ICF Macro, 2011; NPC & ICF, 2009). The use of these methods varied according to the commodity, with injectables and pills as the most preferred methods. Information on the availability of these contraceptives commodities in health facilities in most African countries including Ghana is however Limited (GSS et al., 2009). The importance of making available family planning commodities to improve contraceptive use and contraceptives coverage in Ghana is emphasized in a recently released Ghana Millennium Development Goal Acceleration Framework and Country Action Plan (Ghanaian Government & United Nations Country Team, 2011).

The use of safe and effective methods of contraceptive allows couples to determine the number and spacing for their pregnancies. Access to such methods of contraceptive allows couples to determine the number and spacing of their pregnancies. Access to such methods was deemed a fundamental human right by the 1994 International Conference on Population and Development (ICPD) – a forum in which countries committed to working toward achieving the goal of universal access to reproductive health services, including access to effective contraceptives. Improving the use of effective contraceptive contributes to reducing the burden of reproductive ill-health by decreasing mortality and morbidity of unwanted pregnancies (Collumbien, Gerressu & Cleland, 2004; Marston & Cleland, 2004). Further, increasing contraceptive use reduces fertility which in turn can play a crucial role in poverty reduction (Bloom & Cannings, 2005; UNFPA, 2005).

The widespread increase in the use of contraceptive is one of the most dramatic social transformations of the second half of the twentieth century (Rosenfield & Schwartz, 2005). Spurred by the international population control movement in the 1960s, 1970s, and 1980s, contraceptive use increased dramatically throughout the developing world (Weinberger, 1994). This increase is likely due to multiple factors including access to modern contraceptive. Such access, in turn, is likely related to micro-and macroeconomic factors, including women's education, household income, integration into the modern economy, and the proactive efforts of governments and other health providers to make contraceptive services available. A question that has not been addressed to date is whether the poor have also experienced this positive trend, which has been demonstrated for national average use rates (Gwatkin, 2000; Victoria, Wagstaff et al., 2000; Claeson M. 2003).

The first Millennium Development Goal is the reduction in absolute poverty. The development community has increasingly focused its attention on the circumstances of the absolute poor living on $1 a day and the near-poor living on $2 a day (UNDP, 2006). Given the international commitment to ensuring that couples can exercise their rights to plan their pregnancies and the important role of contraceptive use in promoting both reproductive health and economic growth, it is essential to determine whether the absolute poor in different parts of the world can use modern contraceptive. One could explore differences in progress between the rich and the poor and the macro-level factors of these differences through the presented analysis using data from the Demographic and Health Surveys (DHS) (Measure DHS, 2006) as well as a methodology identifying the absolute poor women within each country. There are diverse factors associated with contraceptive use (Adam et al., 2005; Mexican MOH, 2006). The lack of skilled/trained hands to handle LARC adds to the growing perception that this is one of the key barriers (e.g health service barrier) that need to be addressed to increase the utilization of contraceptives in Ghana and particularly public health facilities. It also underlines the problem of inadequately trained staff in the insertion of these methods since these methods can only be inserted in facilities with trained providers (Aryeetey, Kohoh & Hindinm 2008; Ghana MOH, 2009). Consistent with expected relationships for demand and access, the few studies undertaken to date with a focus on socioeconomic issues indicate that contraceptive rates are lower in poor countries and, within the limited set of countries analyzed, lower in poor women (Clements & Madise, 2004; Montagu et al., 2005; Onwuzurike & Uzochukwu, 2001; Schoemaker, 2005; World bank, 2004). Several studies have evaluated the impact of geographical, educational, social, cultural, and political factors on the use of contraceptive (Ainsworth et al., 1996; Ali & Cleland 1995; Bongaarts & Bruce, 1995; Casterline & Sinding, 2000; Cebeci et al., 2004; Welsh et al., 2006), and the roles of religion, traditional concepts of family formation, health concerns, and medical barriers in demand for modern contraceptive have been thus explored (Bongaarts, 2003 & 2006; Shah, 2001).

The secular trend toward reduced levels of total fertility at any given level of national income has been well documented (United Nations Population Division, 2005). This reduction in infertility has been attributed in part to cultural change, as well as to changing the economic and social status of women, increasing access to information, and the role of mass media. This analysis showed that for all wealth quintiles there is a statistically significant increase in contraceptive rates over time. This trend may be a reflection of the nexus of cultural and social transformation. While improvements are seen across all quintiles, the gap between countries' average use and use by the poor has been increasing over time. The mechanisms of cultural change, such as exposure to mass media and changing socioeconomic roles of women may simply not have much influence on those in absolute deprivation (Bongaarts, 2006).

Gakidou and Vayena (2007), opined that the gap in modern contraceptive prevalence between the absolute poor and the micro and macro levels, there is a strong relationship between modern contraceptive rates and economic status. This is likely due to complex pathways relating income to both the demand for also the supply of contraceptive services. The gap in modern contraceptive use could be getting larger because as national income per capita rises, the gap in income between the rich and the absolute poor is also rising. Given the relationship between income inequality and contraceptive, increasing gaps in income might be driving the increasing gaps in contraceptive. Another explanation of the increasing gap may be that as countries get richer, the proportion of the population living in absolute poverty is decreasing; the composition of the poorest quintile may be becoming increasingly "selective" to include the most disadvantaged and hardest-to-reach populations. The gap remains even after taking into consideration supply (as approximated by skilled birth attendance), income per capita, income inequality, and secular trends. This finding highlights that Latin American health systems may need to pay particular attention to policies that affect the delivery of reproductive health services to the absolute poor. It is believed that a concerted effort by governments to facilitate an increase in physical, financial, and cultural access to reproductive health services for the poor could have a major effect. The fundamental challenge will be to raise the international and national priority accorded to reproductive health services for the poor. Nevertheless, in an era of increased resource flows for global health through mechanisms like the Global Fund for AIDS, Tuberculosis, and Malaria and GAVI (the Global Alliance for Vaccines and Immunizations). Contraceptive use and related reproductive health services seem increasingly difficult to place on the health agenda (Burke & Shields, 2005; Hwang & Stewart, 2004; Stewart et al., 2004).

2.2 Theoretical Framework

Several theories have been advanced to establish behavior change at the individual levels such as the Health Belief Model, Theory of Reasoned Action, Theory of Planned Behaviour, Integrated Behavioural Model, and Transtheoretical Model and Stages of Change. Theory of Reasoned Action (TRA) and The Health Belief Model (HBM) was discussed in this study.

2.2.1Theory of Reasoned Action

The Theory of Reasoned Action (TRA) was propounded by Ajzen and Fishbein in 1977. The TRA defines three factors of human behavior: behavioral intention and its antecedents, attitude, and subjective norms. The assumption underlying TRA is that the individual intention or motivation to carry out a specified behavior is the immediate factor of action. Hence behavioral intention is a measure of the likelihood a person will perform a specified behavior. The TRA assumes that the best predictor of behavior is behavior intention. The stronger the intention the more likely the individual will engage in the behavior. Based on the theory, the intention is the immediate antecedent of behavior that is under the volitional control of the individual. The intention or motivation to perform a specified behavior is, in turn, a function of two factors of attitude towards the behavior and subjective norms regarding the behavior (Fig 2).

Attitude is determined by behavioral belief (the individual beliefs about outcomes of performing behavior) and evaluation of those outcomes (Glanz, et al., 2002). This implies that a person who has a strong belief that performing a behavior will result in positive outcomes will have a positive attitude towards such behavior and vice versa. In the case of the present study, a person (male) with a strong belief that being involved in family planning will increase spousal contraceptive use will have a positive attitude towards contraceptive.

Subjective norms are the second construct in TRA which is determined by individual normative belief (that is whether an important referent individual approves or disapproves of performing the behavior) and motivation to comply with the referent approval (Glanz, et al, 2012). Implicitly, a person's belief that a certain referent thinks of performing the behavior and is motivated to meet the expectations of those referents will hold a positive subjective norm and vice versa.

This study adopted a variable in this theory of subjective norm (such as spousal support). In this study spousal support in family planning is associated with family planning practices among women of reproductive age.

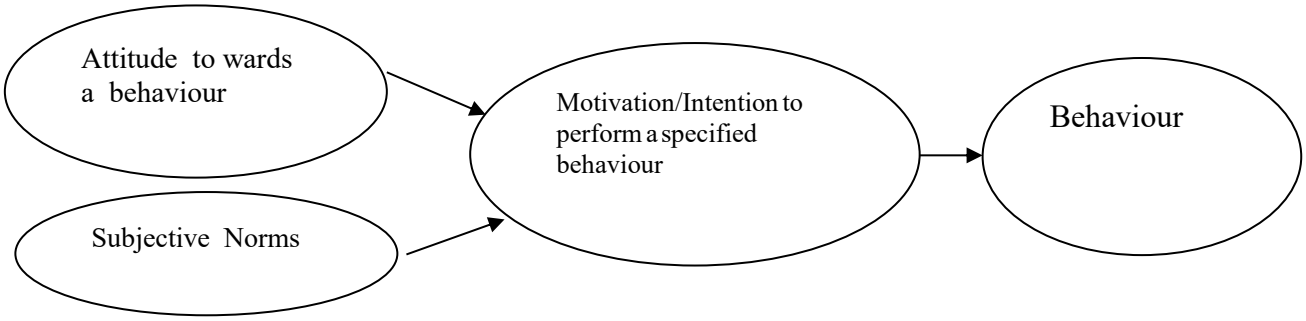

Fig.2: Theory of Reasoned Action

(Source: Glanz et al, 2002)

2.2.2 The Health Belief Model

The Health Belief Model (HBM) was developed in the 1950s. It is a decision-making model that outlines, explains, and predicts the likelihood of initiating certain health behavior. The focus of the HBM is the prevention of health problems rather than treatment and control. The model stressed its emphasis on motivation and the historical perspective of the individual based on prior experiences. Thus, the current driving forces confronting the individuals are made known as well as factors that motivate behavior.

HBM is interactive as each step influences the other and is based on three primary dimensions:

The individual's readiness to comply with the recommended action is based on the perception of threat, the motivating and enabling or discouraging and constraining forces that determine what the individual will do, and the compliance behaviors exhibited. The individual readiness to comply with preventive measures depends on three sets of related variables. They include belief in vulnerability to illness for preventive behavior and estimation of the degree of threat (perception of consequences of severity and seriousness, which can be both physical and social). Secondly, motivation to reduce the threat with related goals for good health and the belief that compliance to the preventive measure to reduce the threat of the health problem will not cost more and will lead to good health. Finally, the perception of the seriousness of the threat is an important inducement for positive behavior.

The probability of the individual is motivated to take an appropriate course of action is further influenced by a set of intervening variables which includes such elements as demographic characteristics, socio-psychological variables (personality trait, social class, peer and reference groups), structural variables, and knowledge, all of which affects or influence behavior.

Just as demographic, socio-psychological, structural, and knowledge variables constitute one set of factors modifying health behavior an additional set exist which constitute essential ingredients in the mode of behavior. This set of factors is called cue to action, triggers, or initiates appropriate health behavior. Such modifying cues may include mass media campaigns, advice from medical practitioners, and inclusion of male involvement in family planning.

The final phase of the HBM is the likelihood of taking action. The likelihood of taking action is enhanced when the benefit of taking this action is realized. Barriers also exist to prevent the individual from initiating the action. The likelihood of positive action is thus estimated in terms of the perceived benefit of the action minus the barriers that prevent it from occurring. This means that an individual may see that he is susceptible to a serious health problem and may also be convinced that no alternatives exist to alleviate the problem. Or an individual may believe that action will be costly, inconvenient, and painful. If readiness to act is high and the barriers to action are low the probability for action will be high. Conversely, if the individual is not ready to act and the barrier to act was high the action would not occur. However, if an equal level exists in both variables (high readiness to act and a high barrier to act) the conflict becomes very difficult to solve.

The HBM is different from other models/ theories like the Theory of reasoned action in that there are no strict guidelines as to how the different variables influence behavior. Instead, the Model proposed that the individual independent variables are likely to contribute to the prediction of Health behavior. The flexibility of the model makes it more adaptable to behavior changes such as risky sexual behaviors (Nejadi et al., 2005). Based on the premise that HBM does not have a strict guideline on how it predicts behavior. The demographic variables in the model were explored in the present study to predict Family planning practices among women of reproductive age in Rivers State.

2.3 Review of Empirical Studies

Many scholars had conducted empirical studies, nationally and globally similar to the present study. Eggleston et al. (2000) evaluated the sexuality education program among the population of young adolescents between the ages 11-14 years in Jamaica. The quasi-experimental design was

used on 945 Jamaican seven graders (490 girls and 455 boys) between 1995-1997. Respondents filled out questionnaires given at pretest, first post-test, and second post-test. On issues bothering on contraceptive, knowledge of respondents at pre-test was generally low among both intervention and comparison groups. Knowledge at the first post-test was high while knowledge at the second post-test was higher than the former.

Sohail (2000) assessed the impact of adolescent sexual health intervention programs between 1994 and 1998 in four countries namely, Cameroun, Botswana, South Africa, and Guinea. The objective of the study was to improve adolescents' reproductive health. A quasi-experimental design was used with Health-Belief Model as a theoretical anchor. The researcher employed the pre-test and post-test method to collect a questionnaire from respondents. Intervention program lasted within 8-13 months for each country with activities that were youth-oriented such as mass media, sponsored events such as soccer and concerts, peer education, and contraceptives access. From the results of the study, respondents from Cameroun showed an increase in knowledge and awareness level towards sex education while respondents in Botswana, South Africa, and Guinea showed little or no effect on sexual behavior.

Little et al. (2001) aimed at identifying vulnerable groups to unwanted pregnancy and their contraceptive knowledge. This study employed the randomized controlled trial method for the intervention. 636 women of reproductive age which had a follow-up appointment to attend the clinic were used for the study. The women had repeated prescriptions of the combined oral contraceptive pill with either a doctor or nurse and were randomly selected to receive a family planning leaflet, advice, or none of the aforementioned. A post-test was done after three months using a structured questionnaire to assess their knowledge of contraceptives and socio-demographic information. After controlling for educational intervention and other confounding variables, independent predictors of knowledge were further educated. The impact of educational intervention was more powerful than other predictors. Conclusively, the study recommended interventions that are educationally based to determine a positive change in knowledge of sexual reproductive matters.

Shahamfar et al. (2007) studies aimed at determining the effect of educational intervention on male participation in family planning in Iran. The study deployed the quasi-experimental method, randomly selecting 268 married men from the health centers in Iran. Data on awareness, beliefs, attitude, and co-operation in adopting family planning methods were recorded from men using a pre-tested schedule before and after 14 sessions of educational intervention. Most of the males were aware of at least one contraceptive method but awareness of modem methods was poor (20%) which was increased after an intervention (47%). Their willingness to allow their wives to use contraceptives also increased but the improvement was not statistically significant ($p=0.08$). The use of contraceptives remains low in men even after intervention. Family planning education could increase the knowledge of men about modem contraceptives but the use of contraceptives by the male may not increase which indicates that the behavior change process may take a longer time to affect.

Ogunjuyigbe et al. (2009) conducted a study on spousal communication, changes in partner, attitude, and contraceptive use among the Yorubas of southwest Nigeria. The study aimed to highlight the relevance of spousal communication on males' attitudes towards their partner's contraceptive use. The study adopted a cross-sectional survey design. A multistage sampling procedure was adopted to recruit 600 married men aged 25-59 years. The instrument for data collection was a structured interview guide. Data collected were analyzed using percentages and logistic regression with a 95% confidence interval at a 0.05 significant level. The result of the study showed that 37.2% reported joint spousal decision making whether to have another child, 40.8% when to stop child-bearing, and 44% what to do to stop child-bearing. The result of the study also showed that 50.5% of the study population approved of family planning, the result of the study established that significantly respondents below age 25 years are 4 times more likely to use contraceptives compared to those age 35 years and above.

Olaitan (2011) in a study on factors influencing the choice of family planning among couples in southwestern Nigeria. The study aimed to investigate factors influencing the choice of family planning among couples in Nigeria. The study adopted a descriptive research design. The population of the study consisted of all couples in southwestern Nigeria. The instrument for data collection was a validated questionnaire with a reliability coefficient of 0.99. Data collected were analyzed using percentages and chi-square at a 0.05 level of significance. The findings revealed that socio-economic status, religious factors, and cultural norms do not influence couples' choice, whereas the educational background of the couples and involvement of partners toward the choice of family planning significantly influenced the choice of family planning among couples. Based on the findings, it was recommended among others that every couple should be well informed about the importance of family planning's choice to improve their reproductive health and economic standard of living, to reduce maternal mortality, morbidity and reduce unwanted pregnancy.

Jabeen et al. (2011) in their study on knowledge, attitude, and practice of contraceptive in women of reproductive age. The study aimed to find out the relationship between age, parity, occupation, educational status, and knowledge, attitude, and practices of contraceptive. The study adopted a descriptive cross-sectional survey design. The non-probability convenience sampling technique was used to select 900 samples attending the outpatient department of gynecology and obstetrics unit in Kohat. Data was collected using a pre-designed questionnaire, data collected were analyzed using frequencies and percentages and logistic regression. The result of the study established that significantly respondents who are age greater than 35 years are 2.16 times more likely to use contraceptives compared to those who are less than 35 years. The result showed that the educational status of women was significantly associated with the use of contraceptives and that women who have matric and above are more likely to use contraceptives compared to those below matric and uneducated women. However, the study did not establish a significant association with the use of contraceptives. The study result showed a contraceptive use rate of 25.2% among the study population. The study recommended that there is a need to improve the educational status of women to improve their understanding and uptake of modern contraceptives more especially at an early age.

Megabiaw (2012) in a study on awareness and utilization of modern contraceptives among street women in North-west Ethiopia. The study aimed to assess the level of awareness, utilization, and associated factors of street women in North-west Ethiopia. The study adopted a cross-sectional survey design. The population of the study consisted of all street women. The cluster sampling technique was used to select 204 eligible participants for the study. The instrument for data collection was a structured questionnaire. Data collected were analyzed using descriptive statistics (percentages), binary, and multivariate logistic regression. The result of the study 47.1% of the study population had ever used contraceptives while 34.3% were currently using contraceptives. The result of the study established that respondents aged 25-34 years are 2.81 times (95%CI: 1.39-5.67, p=0.004) times more likely to use contraceptives compared to those aged 35-45 years. The result established that married respondents are 3.45 times more likely to use contraceptives compared to those who are unmarried. The study recommended that since static family planning services are not accessible to street people, strategies such as an outreach method should be organized to meet the needs of this population.

Azrnat (2012) conducted findings on an 18 months assessment of the effectiveness of a rural-based social franchising program using vouchers of long-term family planning services in Pakistan. A quasi-experimental study design with approximately 4,992 married women of reproductive age between 15 and 49 years in intervention and a control district was used. 2,483 respondents were assigned to the intervention and 2,509 were assigned to the control group. The intervention took 18 months. From the result of the study, there was an increase in knowledge and use of contraceptive after the intervention.

Dangat and Njau (2013) researched a study titled knowledge, attitude, and practice of family planning services among adolescents in secondary schools in Hai District, Northern Tanzania. The study aimed to determine the knowledge, attitude, and practice of family planning services. The research design adopted for the study was a descriptive cross-sectional study. The population of the study consisted of all students aged 15-24 years. A multistage sampling procedure was adopted to select a sample for the study. The instrument for data collection was a pre-tested self-administered questionnaire adopted from Mwaikambo (2005). Data collected were analyzed using percentages and chi-square at a 0.05 level of significance. The result of the study showed that the most common sources of information were radio (47.2%) followed by the newspaper (21.8%), television (18.0%), and friends (11.1%). The result also showed that the enablers of family planning use include parents (59.2%) and religious leaders (11.7%).

Sommart and Chulaporn (2013) researched the effectiveness of a school-based sexual health education program for high school students in KhonKaen, Thailand. The study deployed the quasi-experimental design of pre-test and post-test design with 33 respondents in the control group and 33 different respondents in the experimental group. Data was collected using a self-administered questionnaire and administered at pre-test and after the intervention at post-test. The t-test and independence t-test was used for the analysis of data. From the result of the study, there was a significant difference in the attitude and knowledge of respondents in the intervention group at post-test. There was no significant difference in the knowledge and attitude of respondents in the control group.

Al-Dubhani et al. (2014) assessed the impact of the education program on knowledge and attitude to family planning among women of Sana's, city Yemeni. The quasi-experimental design was used with a study population of 2996 women of reproductive age attending clinics and hospitals. 5% of the study population was equally divided into control and experimental group, giving 70 respondents in each group. A structured interview sheet designed by the researcher was used to assess the knowledge of the respondents at the pre-test. Post-test and at follow-up after three months of administering the post-test. The result of

the study revealed a significant increase in general knowledge and attitude towards family planning at post-test among the experimental group.

Kabagenyi et al. (2014) conducted a study on modern contraceptive use among sexually active men in Uganda: does discussion with a health worker matter? The study aimed to examine the influence of discussing family planning with health workers on modern contraceptives and the report of modern contraceptive use. The study adopted the 2011 Uganda Demographic and Health Survey (UDHS). A two-stage cluster sampling technique was adopted for the study to recruit 2,573 men age 15-54 years. Data collected were analyzed using chi-square and logistic regression with a 95% confidence interval (CI) at 0.05 alpha levels. The result of the study showed that Age and Educational level was significantly associated with the use of contraceptives ($p<0.05$).

Irani et al. (2014) conducted a study on couple characteristics and contraceptive use among women and their partners in urban Kenya. The study aimed to determine the association of relationship level characteristics on contraceptive use among couples living in Kenya. The study utilized the baseline survey data from the Measurement Learning and Evaluation. The study sampled all eligible women aged 15-49 years and men aged 15-59 years with a total of 5774 women and 2503 men. Data collected were analyzed using percentages and multivariate logistic regression. The result of the study showed that 25% of couples had used current contraceptive methods. The study also established that couples with secondary education or more were 1.56 times (95%CI: 0.78-3.12) more likely to use contraceptives compared to couples with primary education or less. The study concluded that more studies need to focus on the needs of couples to determine barriers to accessing family planning services. The study recommended that family planning programs should ensure that men are encouraged to be involved in family planning decision making since couple communication is associated with contraceptive use.

Mohammed et al. (2014) research on a study titled factors of modern contraceptive utilization among married women of the reproductive age group in North Shoa zone, Amhara region, Ethiopia. The study aimed to identify the prevalence and possible factors that determine the utilization of contraceptives for greater input to program management for designing programs, proper implementation, and evaluation of contribution regarding family planning. The study adopted a community-based cross-sectional survey design. A systematic random sampling technique was used to select 869 samples for the study. The tool for data collection used for the study was a pre-tested structured questionnaire. The data collected were analyzed using descriptive statistics and bivariate and multivariate logistic regression. The result of the study showed that 52.6% had ever used contraceptives, 46.9% are currently using modern contraceptives. The result of the study also indicated that the educational status of women and approval by partners was significant factors of modern contraceptive use. Furthermore, the results established that respondents whose partners approve of the use of contraceptives were 2.82 times (OR=2.82, 95%CI: 1.67-4.80) more likely to use contraceptives compared to those whose partners did not approve of the use of contraceptive.

Asiimwe et al. (2014) conducted a study on factors associated with modern contraceptive use among younger and older women in Uganda. The study aimed to explore whether or not the predictors of contraceptive use differs by age. The dataset of the 2011 Uganda Demographic and Health Survey (UDHS). The survey adopted two stages of sampling procedure in recruiting 8.674 women aged 15-34 years. Dataset was analyzed using percentages and logistic regression. The result of the study showed that educational attainment was significantly associated with the use of modern contraceptives as 68.1% and 49.3% of respondents aged 15-24 years and 25-34 years respectively use contraceptives. The result established women with post-secondary education are 12 times (95%CI: 2.25-67.85) significantly more likely to use contraceptives compared to those with no formal education. However, older women with secondary education are 1.06 times (95%CI: 0.30-3.72) more likely to use contraceptives compared to younger women. The study recommended that addressing the use of contraceptives among young and old women needs concerted efforts to address socio-economic factors that mitigate the use of contraceptives by strengthening the Village Health Team.

Anasel and Mlinga (2014) carried out a study on the factors of contraceptive use among married women in Tanzania. The study aimed to find out the factors of contraceptive use among married women and policy implications in Tanzania. The study adopted a dataset of the 2004–2005 Tanzania Demographic and Health Survey (TDHS) that consisted of 2,635 males, 10,329 females, and 1,244 couples. The couples' file was used for the study. Data were analyzed using chi-square and logistic regression. The result of the study showed that respondents whose partners approved of family planning were 3.36 times more likely to use contraceptives compared to those whose partners disapproved of family planning. Anasel and Mlinga (2014) advocated for male involvement in family planning programs as a factor that would create an understanding of the importance and use of the available methods of family planning.

Osungbade et al. (2014) carried out their study on commercial drivers' participation in the use of family planning services in Ibadan. The study aimed to determine the participation of male commercial drivers in the choice and use of family planning methods and possible implications for reproductive health. The study adopted a cross-sectional survey design. The study population consisted of intra-state male commercial bus drivers with a population of 800 drivers. A simple random sampling technique was used to select 402 male drivers for the study. The instrument for data collection was a pre-tested interviewer-administered structured questionnaire. Data collected were analyzed using percentages, chi-square, and multiple logistic regressions with a 95% confidence interval at a 0.05 significance level. The result of the study showed that 50.2% of the study population had good knowledge of contraceptives with a mean score of 6.3 ± 0.85. The result also showed that 53% of the respondents were current users of contraceptives, while 61.7% had ever used contraceptives with their partners at least once. The findings established that respondents who were less than 40 years old were about two times less likely to use contraceptives compared to those aged 40 years or more.

Azmat et al. (2015) conducted a study on assessing predictors of contraceptive use and demand for family planning services in an underserved area of Punjab Province, Pakistan. The study aimed to understand the predictors of contraceptive use and demand for family planning services. The study design adopted was a quasi-experimental study with a control arm. A multistage sampling procedure was used to sample 3,998 married women of reproductive age. The instrument for data collection was a questionnaire adapted from the 2006–2007 Pakistan Demographic and Health Survey (PDHS). Data collected were analyzed using descriptive statistics (frequencies, percentages, mean, median, and standard deviation), univariate, and multivariate logistic regression analysis. The result of the study showed a current contraceptive prevalence of 18.6%. The findings demonstrated that partners' age, partners' education, parity, age of respondents, and spousal communication were significantly associated with contraceptive use. Specifically, women aged >35 years and 24–35 years were 1.90 times (95% CI: 1.45–2.48) and 1.88 times (95% CI: 1.45–2.44) more likely to use contraceptives compared to those younger than 24 years. Also, partners aged ≥40 years and <40 years were 1.70 times (95% CI: 1.37–2.13) and 1.41 times (95% CI: 1.13–1.77) more likely to use contraceptives compared to those younger than 30 years. The study concluded that there is a need for quality, affordable, long-term family planning services close to homes.

Asakitikpi and Simbi (2015), in their study on knowledge, attitude, and practices regarding contraceptive use among female students in a private university in South Africa, aimed to determine whether young women had adequate knowledge, positive attitudes toward contraceptives, and appropriate contraceptive use patterns. A cross-sectional descriptive and exploratory approach was adopted. The study used a non-probability (volunteer) sampling technique to recruit participants. The population consisted of female students aged 18–24 years in the university. The instrument for data collection was a self-administered structured questionnaire. Data were analyzed using frequencies and percentages. The result revealed that the majority (90.4%) had ever used contraceptives, while 21.9% were currently using contraceptives. The study did not establish a relationship between knowledge, attitude, and contraceptive use. It was concluded that non-use and inconsistent use of modern contraceptives among the study sample were salient and disturbing. The authors recommended intensified enlightenment campaigns to mitigate unintended pregnancies.

Sileo et al. (2015) conducted a study on factors affecting family planning service uptake and contraceptive use among postpartum women in rural Uganda. The study aimed to explore factors associated with the uptake of family planning services and contraceptive use among postpartum women. The study adopted a cross-sectional survey design and was a follow-up to a larger study conducted in Gombe Hospital. The study sampled 301 eligible participants. Data were collected using an interviewer-administered questionnaire and analyzed using univariate logistic regression and hierarchical multivariate regression. The result showed that, at univariate analysis, secondary education (OR = 1.71, 95% CI: 0.94–3.11) was associated with contraceptive use. At multivariate analysis, the overall model was statistically significant ($\chi^2 = 59.44$, $p < 0.01$). Women with secondary education were 3.03 times (95% CI: 1.57–5.83) more likely to use contraceptives compared to those with primary education or less.

Tekelab et al. (2015) conducted a study on predictors of modern contraceptive methods among married women of reproductive age groups in western Ethiopia. The study aimed to identify factors associated with the utilization of modern contraceptive methods to help policymakers and health managers design effective strategies. The study adopted a community-based cross-sectional design. The population consisted of married women aged 15–49 years. A multistage sampling procedure was used to recruit participants. The instrument for data collection was a pretested structured questionnaire translated into the Afan Oromo language. Data collected were analyzed using percentages, measures of central tendency, and logistic

regression. The result showed that 82.0% had ever used modern contraceptives, while 71.9% were currently using modern contraceptive methods. Respondents aged 25–34 years were 2.0 times (AOR = 2.00, 95% CI: 1.35–2.98) more likely to use contraceptives compared to those aged 15–24 years. The study further established that respondents with secondary education and above were 2.5 times (95% CI: 1.62–3.84) more likely to use contraceptives compared to those with primary education and below. Respondents whose partners had secondary education and above were 1.21 times (95% CI: 0.83–1.78) more likely to use contraceptives compared to those whose partners had primary education or less. The study recommended that policymakers and implementers should address these factors to increase the use of modern contraceptives.

Nansseu et al. (2015) submitted a study on assessing the knowledge, attitude, and practice of family planning among women living in the Mbouda Health District, Cameroon. The study aimed at assessing the knowledge, attitude, and practice of family planning and investigating male participation in family planning from the point of view of their female partners. The study used a descriptive cross-sectional survey design. One hundred households were selected using a simple random sampling technique. Data were collected using a structured pre-tested questionnaire. Data collected were analyzed using percentages, chi-square, and logistic regression with a 95% confidence interval at a 0.05 alpha level. The results indicated that 65.3% were currently using contraceptives. The findings showed no significant association between education and contraceptive use ($p > 0.05$). The study concluded that although the level of contraceptive use was not optimal among the study population, more adapted educational and counseling interventions should be undertaken among women, and family planning-targeted messages directed at men should be included.

Adjei et al. (2015) conducted a comparative study of modern contraceptives in public and private health facilities in a peri-urban community in Ghana. A cross-sectional design was used, allowing for a comparative approach. A mixed-methods approach involving qualitative and quantitative data collection techniques was employed. Data were collected from the Ga East Municipality, a predominantly peri-urban area located in the Greater Accra Region of Ghana. The municipality has a population of 320,853 and over 100 health facilities ranging from hospitals and clinics to pharmacies and licensed chemical shops. A sample of 51 facilities from an estimated 150 health facilities was used, comprising 43 private and 8 public health facilities. Eleven categories of contraceptives were identified and distributed across the facilities as follows: combined oral contraceptives (82%), progestin-only pills (18%), emergency contraceptives (49%), progestin-only injectables (35%), monthly injectables (22%), spermicides (39%), female condoms (4%), male condoms (78%), copper intrauterine devices (14%), implants (14%), and ovulation predictors (2.3%). Common brands available included Microgynon, Secure, Depo-Provera, Postinor-2, and Champion Condoms.

Rutaremwa et al. (2015) conducted a study on predictors of modern contraceptive use during the postpartum period among women in Uganda. The study aimed to establish the level of contraceptive use and analyze predictors of contraceptive use. A population-based cross-sectional survey design was adopted. Secondary data from the 2011 Uganda Demographic and Health Survey (UDHS) were analyzed, involving 3,298 postpartum women aged 15–49 years. Data were analyzed using descriptive statistics, chi-square, and logistic regression at a 0.05 significance level. The results showed that 42.4% of respondents with secondary education, 26% with primary education, and 11.9% with no formal education used contraceptives postpartum. Educational level was significantly associated with contraceptive use ($p = 0.01$). Respondents with secondary and primary education were 3.03 times (95% CI: 2.09–4.38) and 2.09 times (95% CI: 1.53–2.86) more likely to use contraceptives compared to those with no formal education. Age was also significantly associated with family planning use ($p = 0.01$). The study concluded that women's education, parity, and age were predictors of postpartum contraceptive use and recommended integrating family planning fully into maternal healthcare services.

Pandey and Singh (2015) conducted a study on contraceptive use before first pregnancy among women in India (2005–2006): factors and differentials. The study aimed to investigate the levels and trends of contraceptive use before first pregnancy and identify socio-demographic factors influencing this behavior. The study used data from the National Family Health Survey (NFHS-3) conducted in 2005–2006 by the Ministry of Health and Family Welfare. Data were analyzed using logistic regression. The findings showed that educational qualification was significantly associated with contraceptive use. Respondents with higher, secondary, and primary education were 5.7 times (95% CI: 4.97–6.54), 1.89 times (95% CI: 1.71–2.10), and 1.40 times (95% CI: 1.24–1.58) more likely, respectively, to use contraceptives before their first pregnancy compared to those with no education. The study recommended intensifying family planning promotion through print and electronic media to increase exposure among women and couples.

Alege et al. (2016) carried out a study on knowledge, sources of information, and use of family planning methods

among women aged 15–49 years in Uganda. The study aimed to assess knowledge, sources of information, and use of family planning methods among women of reproductive age in rural Uganda. The population consisted of women of reproductive age in 34 districts of Uganda. The instrument for data collection was a structured interviewer-administered questionnaire. Data were entered into SPSS, transferred to STATA, and analyzed using frequencies and percentages. The results showed that the prevalence of family planning use was 62.2%. Methods used included injectables (33.0%), lactational amenorrhea (16.7%), female sterilization (12.3%), and male condoms (11.0%). The study also revealed that the most trusted sources of information were clinic providers (60.4%), friends (56.9%), and the media (51.3%).

Alemayehu et al. (2016) examined family planning use and associated factors among pastoralist communities in the Afar Region of Eastern Ethiopia. The study aimed to assess and identify the level of modern family planning utilization and factors associated with family planning use. A community-based cross-sectional survey design was adopted. A sample size of 621 respondents was selected using a multistage random sampling technique. Data were collected using a pre-tested structured questionnaire and analyzed using descriptive statistics (frequencies and percentages) and multiple logistic regression with a 95% confidence interval at a 0.05 alpha level. The results showed that 11.6% of the study population had ever used contraceptives, while 8.5% were current users. Educated respondents were 4.4 times more likely (AOR = 4.4, 95% CI: 1.80–11.08) to use contraceptives compared to those with no formal education. Age was not significantly associated with contraceptive use, although respondents aged 35–49 years and 30–34 years were less likely to use contraceptives than younger respondents. The study concluded that low utilization of family planning could be attributed to the influence of partners, religious leaders, and clan leaders.

Muema (2016) conducted a study on predictors of family planning service uptake among women of reproductive age in Moyale Sub-County, Kenya. The study aimed to examine predictors of family planning service uptake among women attending health facilities. A cross-sectional survey design was adopted. The population consisted of women of reproductive age attending health facilities. A two-stage stratified random sampling technique was used to select 170 respondents. Both quantitative and qualitative methods of data collection were employed. Quantitative data were collected using a pre-tested semi-structured interview schedule, while qualitative data were obtained through focus group discussions and key informant interviews. Data were analyzed using percentages, chi-square, and logistic regression with a 95% confidence interval at a 0.05 alpha level. The results showed that 54.7% of respondents were currently using family planning methods, while 45.3% were not. There was no statistically significant association between age and contraceptive use ($p > 0.05$). However, respondents' education ($\chi^2 = 6.90$, df = 2, $p = 0.03$) and spousal approval ($\chi^2 = 26.743$, df = 2, $p = 0.00$) were significantly associated with contraceptive use. Respondents whose partners approved of family planning were 2.18 times more likely (OR = 2.18, 95% CI: 0.49–9.73) to use contraceptives compared to those whose partners disapproved. The study concluded that partner approval was a significant predictor of family planning use and recommended strengthening male involvement and religious leaders' participation in family planning interventions.

Ola Olorun et al. (2016) conducted a study on women's fertility desires and contraceptive behavior in three peri-urban communities in Sub-Saharan Africa. The study aimed to examine the influence of changes in fertility desires on changes in modern contraceptive use over time. A community-based longitudinal survey design was adopted. Data were obtained from the Family Health and Wealth Study at two different time points and analyzed using generalized linear models and binary logistic regression. The findings showed that, at baseline, the prevalence of modern contraceptive use was 66.9% in Ethiopia, 12.6% in Ghana, and 29.5% in Nigeria. At follow-up, contraceptive use was 61.3% in Ethiopia, 10.8% in Ghana, and 36.7% in Nigeria. The study concluded that women's fertility desires significantly influenced contraceptive behavior over time. The authors recommended that family planning programs should better understand the dynamics of changing contraceptive demand and ensure that services remain flexible enough to enable women to act on their fertility preferences.

Durowade et al. (2016) conducted a study on barriers to contraceptive uptake among women of reproductive age in a semi-urban community of Ekiti State, Southwestern Nigeria. The study aimed to examine the use of modern contraceptives among women of reproductive age in Ise-Ekiti community. A descriptive cross-sectional research design was adopted. A multistage sampling procedure was used in selecting the study sample. Data were collected using a pre-tested semi-structured questionnaire and analyzed using frequency tables, cross-tabulations, and chi-square statistics at a 0.05 level of significance. The findings showed that 254 of the 503 respondents were using modern contraceptive methods, giving a Contraceptive Prevalence Rate (CPR) of 50.5%. Among those not using any form of contraceptive, identifiable barriers included desire for more children (39.5%), partner disapproval (25.5%), and fear of

side effects (14.6%). Marital status (p = 0.028), educational level (p = 0.041), and religion (p = 0.043) were significantly associated with contraceptive use. The study recommended community-based and culturally acceptable interventions to improve contraceptive uptake and address these barriers.

Nieto-Andrade et al. (2016) conducted a study titled *"Women's Limited Choice and Availability of Modern Contraceptives at Retail Outlets and Public-Sector Facilities in Luanda, Angola, 2012–2015."* The study assessed the relationship between women's contraceptive choices and the availability of contraceptive methods in Luanda, Angola. Data were drawn from three surveys: a 2012 survey among women aged 15–49 years and two retail surveys conducted in 2014 and 2015 among outlets and facilities providing contraceptive methods. Descriptive statistics were used to assess women's contraceptive knowledge, use, and preferred methods. Results showed that 51% of women reported having experienced an unwanted pregnancy. Less than 40% knew about long-acting reversible contraceptives (LARCs). Male condoms were the most commonly used method (32.1%), while 17.3% of women were not using their preferred contraceptive method. The availability of contraceptive methods declined significantly between 2014 and 2015, accompanied by increases in prices. The study recommended improving women's knowledge of contraceptive options, strengthening behavior change programs, improving service quality, training healthcare providers, and enhancing contraceptive supply chains in both public and private sectors.

Kana et al. (2016) investigated the prevalence and factors associated with contraceptive use in rural Northeastern Nigeria. The study aimed to assess contraceptive prevalence and determinants using both quantitative and qualitative methods. A cross-sectional descriptive survey design was employed. The study population consisted of women of childbearing age and their husbands. Data were collected through key informant interviews, focus group discussions, and semi-structured questionnaires. Quantitative data were analyzed using proportions and binary logistic regression with a 95% confidence interval at a 0.05 significance level. The results showed that 42% of respondents had ever used contraceptives, while 22% were current users. A majority (93.2%) reported that their spouses supported contraceptive use. Husband or partner support was a significant predictor of contraceptive use (p = 0.000). Women whose husbands supported contraceptive use were 55.1 times more likely (OR = 55.1, 95% CI: 16.00–189.76) to use contraceptives compared to those with unsupportive husbands. Age was also a significant predictor (p = 0.02), with women younger than 35 years being three times more likely (OR = 3.0, 95% CI: 1.01–8.95) to use contraceptives. However, women's educational level was not a significant predictor (p = 0.17).

Suchithra and Sujina (2016) carried out a study on the current practice and factors associated with family planning methods among married women of reproductive age. The study aimed to determine the prevalence, pattern, and factors associated with the current use of family planning methods. A cross-sectional survey design was adopted. A simple random sampling technique was used to recruit 206 participants. Data were collected using a pre-tested semi-structured questionnaire and analyzed using percentages and chi-square statistics at a 0.05 significance level. The findings showed that the prevalence of current contraceptive use was 48.8%, while the prevalence of ever-use was 52.7%. Age was significantly associated with contraceptive use (p = 0.03). However, no significant association was found between contraceptive use and the educational level of women, educational level of partners, or occupation (p > 0.05).

Endriya et al. (2017) conducted a study titled contraceptive utilization and associated factors among women of the reproductive age group in Southern Nations Nationalities and Peoples Region, Ethiopia: Cross-Sectional Survey, Mixed-method was used. The study aimed to assess the status and individual characteristics affecting contraceptive utilization for key program improvement. The research design adopted for the study was a community-based descriptive cross-sectional survey design. The multistage stratified cluster sampling technique was used to sample 3205 eligible non-pregnant women in their reproductive age (15-49years). The triangulation method (qualitative and quantitative) was used to collect data from eligible participants. The qualitative method of data collection used both focused group discussions (FGDs) and in-depth interviews (IDIs) while in the quantitative data collection the study adapted a questionnaire from a standard Demographic and Health Survey (DHS). Data collected were analyzed using percentages and univariate and multivariate logistic regression at 95%CI (p<0.05). The results of the study showed that 53.3% use modern contraceptives. The results of the study further showed that age, marital status, parity, knowledge, and attitude are factors associated with contraceptive use. The study exposed that respondents who are ever married are 4.17times (95%CI: 0.16-0.37) less likely to use contraceptives compared to those living with their partners. Also, respondents in the age range of 35-39, 40-44, and 45-49years are 1.9times (AOR=0.52, 95%CI: 0.31-0.89), 3.45times (AOR=0.29, 95%CI: 0.15-0.54) and 3.45times (AOR=0.29, 95%CI: 0.09-0.86) less likely to use contraceptives compared to those in the age range of 15-19years. The study concluded that contraceptive utilization

among the study respondents was below the national target. Therefore, recommended that program implementers need to address socio-cultural barriers to contraceptives utilization such as gender myths and specific roles, and power inequality.

Wuni et al. (2017) in a study on the factors of contraceptive use and future contraceptive intentions of women attending child welfare clinics in urban Ghana. The study aimed to assess factors influencing contraceptive uptake and future contraceptive intention. The study adopted an analytical cross-sectional survey design. The population of the study consisted of all mothers attending the child welfare clinic. The study adopted a systematic random sampling technique to select 590 eligible participants for the study. The instrument for data collection was a pre-tested structured questionnaire. Data collected were analyzed using chi-square, univariate, and multivariate Poisson regression with a robust error variance. The findings of the study showed that overall, 50.2% of the study populations were using contraceptives out of which 30.7% were using modern contraceptives methods. Specifically, respondents who had greater than basic education were 1.13times (AOR=1.13, 95%CI: 0.82-1.58, p=0.02) more likely to use contraceptives compared to those with no formal education. Parity and marital status were not significantly associated with contraceptive use. The study concluded that the prevalence of contraceptive use among the study population was impressive. Significant factors influencing contraceptive use were some demographic characteristics and spousal communication. The study recommended that strategies to improve contraceptive counseling during postnatal care and child welfare clinic and male involvement in family planning should be explored.

Medhanye et al. (2017) carried a study on factors associated with contraceptive use in Tigray, North Ethiopia. The study aimed to determine the contraceptive prevalence rate and factors associated with it. The design adopted for the study was a community-based cross-sectional survey design. A stratified random sampling technique was used to sample respondents for the study. The data collection tool was an adapted questionnaire from the Ethiopian Demographic and Health Survey (EDHS). Data collected was analyzed using descriptive statistics such as frequencies and percentages and binary and multivariate logistic regression. The findings of the study showed that 65.1% had ever used contraceptives. The current modern contraceptive use rate was 35.6%. The majority (85%) had partners support. The result showed that younger women were more likely to use contraceptives compared to older women. As the highest (43.3%) contraceptive use was recorded among women age 15-19years and lowest (25%) among the 40 and above age group. The results established that women's education predicts utilization of contraceptives, as women with primary education and secondary education were 1.4times (AOR=1.4, 95%CI: 0.88-2.40) and 1.6times (AOR=1.6.95%CI: 0.85-3.22) more likely to use contraceptives compared to women with no formal education. The study concluded that despite the increased overall contraceptive prevalence rate the study showed disparity among the different populations, then recommended that the Federal Ministry of Health and its partners should devise a mechanism to narrow the observed differences in contraceptive use and improve family planning services.

Orach et al. (2017) revealed in their study on Perceptions, attitude, and use of family planning services in post-conflict Gulu district, northern Uganda. The study aimed to examine community perceptions, attitudes, and factors associated with the utilization of family planning services. The study adopted a community-based cross-sectional survey design. A cluster sampling technique was adopted to select 500 samples for the study. A mixed-method involving qualitative and quantitative methods of data collection was adopted. The instrument for data collection for the quantitative data was a structured questionnaire while for the qualitative data Key Informant Interview (KII) guide and In-depth Interview (IDI) guide. Data collected were analyzed using descriptive statistics and logistic regression with a 95% confidence interval at 0.05 alpha levels. The results of the study showed that 71.3% of the study population had ever used contraceptive, 47.5% are currently using contraceptives. The result of the study established that the age of the respondents was significantly associated with contraceptive use and that respondents who are aged 26-35years and 36-45 years were 1.92times (AOR=1.92, 95%CI: 1.18-3.10, p=0.01) and 2.27times (AOR=2.27, 95%CI: 1.21-4.25, p=0.01) more likely to use contraceptives compared to those age 18-25years. Also, respondents who are married and cohabiting were 3.33times (AOR=3.33, 95%CI: 1.35-8.22, p=0.01) and 2.77times (AOR=2.77, 95%CI: 1.15-6.65, p=0.02) more likely to use contraceptives compared to those who are single. The study concluded that family planning use was high in the post-conflict region and that the main factors associated with the use of family planning included age, and marital status. The study recommended that stakeholders and key actors involved in the implementation of family planning programs should intensify awareness campaigns on method-specific side effects management to improve uptake of contraceptives and better reproductive health outcomes.

Belda et al. (2017) conducted a study on modern contraceptive utilization and associated factors among married pastoralist women in the Bale eco-region. The

study aimed to assess modern contraceptive method utilization and its factors among married women. The study adopted a community-based cross-sectional survey design. The population of the study consisted of all married women aged 15-49years. The study employed multistage sampling procedures to recruit 580 samples for the study. The instrument for data collection was a pre-tested structured questionnaire. Data collected were analyzed using frequencies, percentages, and logistic regression. The result of the study indicated that 20.8% of the study population were currently using a contraceptive. The results also established that partners' age was significantly associated with the use of contraceptives and that partners who are older than 34years were 5.49times(95%CI: 1.13-26.65) more likely to use modern contraceptives compared to those aged less than 25years. The result of the study established that the Age of respondents though not significant showed that respondents aged 15-24years were 2.37times (95%CI: 0.65-8.73) are likely to use contraceptives compared to those aged 35-49years. The result of the study established that respondents' educational status was not significantly associated with the use of contraceptives. However, the result established that respondents with secondary and above education and primary education were 3.75times (95%CI: 0.83-16.88) and 1.51times (95%CI: 0.63-3.67) more likely to use contraceptives compared to those with no formal education, also that partners with secondary and above education are 1.66times(95%CI: 0.66-4.17) more likely to use contraceptives compared to those with no formal education. The study recommended that family planning programs should target cultural and social relationships to tailor and actively involve pastoralist women and significant others in the community.

Ogboghodo et al. (2017) in their research on prevalence and factors of contraceptive use among women of child-bearing age in a rural community in southern Nigeria. The study aimed to assess the knowledge and prevalence and factors of contraceptive among women of child-bearing age in a rural community. The study was a descriptive cross-sectional study. The population of the study consisted of all sexually active women of child-bearing age and permanent residents in the study area. The instrument for data collection was a structured questionnaire. Data collected were analyzed using percentages and binary logistic regression at a 95% confidence interval. The result of the study showed that the prevalence of contraceptive use was 26.4%. The result of the study further showed that 52.6% were using contraceptives, 35.9% OCP, and 23.1% injectable. The result further showed a level of education and was statistically significant to the use of contraceptives ($p<0.05$). The result showed that age, marital status, and religion were not statistically significant to the use of contraceptives ($p>0.05$). The study concluded that the prevalence of contraceptives was low and the level of education was a significant factor of contraceptive use. The result of the study showed that respondents aged 15-24years use contraceptives more compared to the older age group and that use of contraceptives decreases with age. The result also showed that more (33.1%) Christians use contraceptives compared to those who are Muslims (19.6%). Also, the result showed that respondents with tertiary use contraceptives more (62.5%) compared to secondary, primary, and non-formal education.

Prata et al. (2017) conducted a study on partners' support for family planning and modern contraceptive use in Angola. The study aimed to assess the relationship between partner approval and encouragement on the use of contraceptives based on women; perception. A multi-stage sampling procedure was used to select a representative sample of women of reproductive age. Data was collected using a structured questionnaire that was modeled on the women's questionnaire of Demographic and Health Survey and Angola's malaria indicator survey. Data collected were analyzed using percentage and Binary logistic regression with a 95% Confidence Interval. The result of the study showed that husbands communication was significantly associated with contraceptive use ($p<0.05$) and that respondent who had discussed with their partners at least once or twice and more often were 3.18 times and 3.62 times more likely to use contraceptives compared to those who had never discussed family planning in the past with their partners. The result of the study also demonstrated that the age of respondents significantly predicts contraceptive use. As respondents between the age group of 20-24 and 25years and above were 2.69times and 2.49times more likely to use contraceptives compared to those aged 15-19years. The result of the study also exposed that education level attained significantly predict contraceptives use as respondents who had attained grade7-9 and grade 10-13 and university degree were 1.51 times and 2.10 times more likely to use contraceptives compared to those with no education/grade 1-6. The result indicated that parity was a significant predictor of contraceptive use.

Alemayehu et al. (2018) conducted a study on prevalence and factors of contraceptive utilization among married women at Dabat Health and Demographic surveillance system site, northwest Ethiopia. The study aimed to determine the prevalence of modern contraceptive utilization and factors in the Dabat Health and Demographic surveillance system site, northwest Ethiopia. The study used the database of Health and demographic surveillance of Dabat. Data were analyzed using percentages, principal component analysis, and multivariate binary logistic regression. The result of the

study showed the overall prevalence of contraceptive utilization as 32.5% (95%CI: 31.5-33.5%). The result demonstrated the age of the women, educational status was significantly associated with contraceptive use. Specifically, the result established that women in the age group of 21-30years were 1.32 times (AOR=1.32, 95%CI: 1.11-1.58) more likely to use contraceptives compared to those less than or equal to 20years. Women in the age group of 40years or more were 34 times (AOR=0.66, 95%CI: 0.51-0.85) less likely to use contraceptives compared to those less than or equal to 20years. The result also showed that women at primary educational levels and with secondary and above educational levels were 1.42 times (AOR=1.42, 95%CI: 1.22-1.65) and 2.35 times (AOR=2.35, 95%CI: 1.2-2.88) more likely to use modern contraceptives compared to women who are unable to read or write. The study recommends that special emphasis should be given to those aged 20-40years and those with six or more children while serving for contraceptives.

Gonie et al. (2018) in a research study on factors of family planning use among married women in Bae eco-region southeast Ethiopia: a community-based study. The study adopted a community-based cross-sectional study design that employed a mixed method of data collection. The population of the study consisted of married women who had at least one child. A multi-stage sampling procedure was used to select 660sample for the study. For quantitative data pre-tested structured questionnaire was used to collect data while for qualitative data FGDs and key informant interviews were conducted. Data collected was analyzed using descriptive statistics and logistic regression. The result of the study showed that 41.5% of the respondents were using modern contraceptives. The study concluded that contraceptive prevalence was low and was attributable to spousal opposition. The study recommended continuous information education opportunities for the male to make them involved in family planning.

Hossain et al. (2018) carried out a study on identifying factors influencing contraceptive use in Bangladesh: evidence from BDHS 2014 data. The objective of the study was to explore the socio-economic, demographic, and other key factors that influence the use of contraceptives in Bangladesh. The study adopted a two-stage stratified random sampling technique to select a sample for the study. Dataset of the BDHS was used and was analyzed using descriptive statistics, chi-square, mixed-effect logistic regression. The result of the study showed that the prevalence of contraceptive use was 62.4% for all methods of contraceptive and 54% for modern contraceptive methods. The result showed that the age of respondents (p=0.001) and partners were significantly (p=0.0012) associated with the use of contraceptives. The study established that women aged 20-24 years, 25-29years, 30-34years and 35-39years were 1.27 times (AOR:1.27,95%CI: 1.10-1.47), 1.87 times (AOR: 1.87, 95% CI: 1.62-2.16), 3.37 times (AOR: 3.37, 95% CI: 2.89-3.94) and 3.23 times (AOR: 3.23, 95% CI: 2.73-3.81)respectively more likely to use contraceptives compared to those aged 15-19years. The result of the study also showed that the education level of partners was significantly associated with contraceptive use while the education of respondents (women) was not significantly associated with the use of contraceptives.

Islam (2018) researched on factors affecting modern contraceptive use among fecund young women in Bangladesh: does couples' joint participation in household decision-making matters? The purpose of the study was to explore the association between couples' joint participation in house-hold decision-making and modern contraceptive use among fecund young women in Bangladesh. The study adopted cross-sectional data that was extracted from the 2011 Bangladesh Demographic and Health Survey. Data extracted were analyzed using percentage, chi-square, and binary logistic regression. The result of the study showed that the age of study respondents, age at marriage were significantly associated with contraceptive use ($p<0.001$). However, partners' age and educational level were not significantly associated with contraceptive use. The study recommended that policymakers should focus on developing negotiation skills in young people by creating educational opportunities for these cohorts.

Abdel-Salam et al. (2020) conducted a study on prevalence, correlates, and barriers of contraceptive use among women attending primary health centers in the Aljouf region, Saudi Arabia. The study aimed to identify the prevalence, correlates, and barriers of contraceptive use among women attending primary health centers in the Aljouf region, Saudi Arabia. The study adopted a cross-sectional research design. The population of the study consisted of all women attending primary health centers in the region. A simple random sampling technique was used to select a sample for the study. The instrument for data collection was a structured interview questionnaire. Data collected were analyzed using mean and standard deviation, chi-square, Fisher exact test, and logistic regression. The findings of the study showed that There was a statistically significant association between contraceptive use and women's age, children number, years of marriage, and monthly income. Logistic regression analysis showed that women's age >35 years, children number ≥4, and monthly income ≥5000 RS were significant predictors of contraceptive use. Women aged > 35 years were 4.5 times more likely to use contraceptive methods than women aged <25 years (odds ratio (OR): 4.52; confidence interval (CI):1.56–15.42).

Furthermore, women with several children ≥4 were 1.4 times more likely to use contraceptive methods than women with no children (odds ratio (OR): 1.41; confidence interval (CI): 1.06–1.92. the findings of the study showed that The most perceived barriers towards contraceptive utilization were cultural, demographic, medical, administrative, and barriers related to the method itself. The least reported barriers were psychosocial and physical. The findings of the study showed that 32.2% of the study respondents were currently using contraceptives.

Chaudhary et al. (2016) investigated a study on predictors of the use of contraceptive among married women of reproductive age in a rural area of Nepal. The objective of the study was to find out the predictors of the use of contraceptive among married women in the Morang district. The study adopted a descriptive cross-sectional study design. The population of the study consisted of all married women in the Morang district. The sample size for the study was selected using purposive and cluster random sampling techniques. The instrument for data collection was an interviewer guide. Data collected were analyzed using percentage, chi-square, and binary logistic regression at a 95% confidence interval. The mean age of the respondents was 29.52 ± 5.64 years. The result of the study showed a current contraceptive prevalence rate of 39.9% among study respondents. The findings of the study also showed that the significant predictors associated with the use of contraceptive were education status of husband (Adjusted Odd Ratio (AOR = 0.331, 95%CI = 0.144-0.759), being the desire of children (AOR = 2.564, 95%CI = 1.060-6.198), spousal communication on contraceptive (AOR=5.120, 95%CI = 2.460-10.656), husband approval on contraceptive (AOR = 8.048, 95%CI = 4.047-16.006), and prior use of contraceptive (AOR = 0.122, 95%CI = 0.055-0.272). The common barriers to the utilization of contraceptive were husband disapproval (57.4%) followed by fear of side effects (29.6%). It was concluded that contraceptive prevalence among the study population was low, thus continued joint efforts are required to increase the use of contraceptive to improve maternal and child health including male involvement in family planning.

Tilahun et al. (2014) conducted a study on spousal discordance on fertility preference and its effect on contraceptive practice among married couples in Jimma zone, Ethiopia. The objective of the study was to assess spousal agreement levels regarding fertility preference and spousal communication and its effect on contraceptive use by couples. The study adopted a cross-sectional research design. The population of the study consisted of all married couples in the Jimma zone. A multi-stage sampling procedure was used to select a sample for the study. The instrument for data collection was a semi-structured questionnaire. Data collected were analyzed using ANOVA, Cohen K, and McNemer test. The result of the study showed 42.9% have a family planning practice rate. Furthermore, the result of the study showed that husband involvement, in particular, his willingness to finance and purchase contraceptive was almost consistently linked to higher contraceptive use, with an odds ratio of 1.

Johnson and Ekong (2016) carried out a study on knowledge, attitude, and practice of family planning among women in a rural community in southern Nigeria. The study aimed to determine the changing trend in the knowledge, attitude, and practice of family planning among women of child-bearing age. The population of the study consisted of all women of child-bearing age in Abak local government area of Akwa-Ibom state. The study adopted a cross-sectional descriptive design. The sample for the study was selected using a multi-stage sampling procedure. The instrument for data collection was an interviewer-administered questionnaire adapted from the 2013 NDHS. Data collected were analyzed using frequencies and chi-square at a 5% level of significance. The findings of the study showed that 42.3% of the study sample used the family planning method of those who had used family planning the most commonly stated family planning used was pills (27.3%) followed by injectable (25.2%). The result of the study further showed a statistically significant association between the use of family planning methods and educational qualification, age, and marital status ($p<0.05$).

Prata et al. (2017) research on partner support for family planning and modern contraceptive use in Luanda, Angola. Husband‘s/partner‘s support for family planning may influence a women‘s modern contraceptive use. Socio-demographic factors, couple communication about family planning, and fertility preferences are known to play a role in contraceptive use. Perceived husband‘s/partner‘s approval was associated with triple the odds of women‘s modern contraceptive use and remained significantly associated with 1.6 times the odds, after controlling for contraceptive accessibility and contraceptive self-efficacy. Husband‘s/partner‘s encouragement, while initially significantly associated with contraceptive use, became non-significant after adjustments for socio-demographic factors and couple communication. Perceived husband‘s/partner‘s approval, separate from a woman‘s sense of self-efficacy and perceived accessibility of contraceptives, appears strongly and positively associated with current modern contraceptive use. Increased couple communication may help women identify their husband‘s/partner‘s approval. The difference between the meaning of approval and encouragement should be explored. Interventions involving information education

and communication campaigns geared to men and promoting male involvement in family planning could increase contraceptive prevalence.

Omar and Manzoor (2018) in a study on trends in family planning practices of women in child-bearing age: a community-based survey in northern Peri-urban areas of Lahore. The study aimed to assess the trends in the family planning practices in northern peri-urban areas of Lahore, Pakistan. The study adopted a community-based survey. The population of the study was all women of reproductive age with an estimated population of 15,000. The sample size of 862 was selected using a systematic random sampling technique. A pre-tested structured questionnaire was used for data collection. Data collected were analyzed using percentages and chi-square for comparison between different variables at a 95% confidence interval. The findings of the study showed a contraceptive prevalence rate of 36.1%. The findings of the study showed that the most preferred method of contraceptive was tubal ligation 37% and condoms 29% vasectomy being the least preferred. Tubal ligation 10%, condoms 6.5%, and intrauterine contraceptive device 2.6% was the choice for females aged 15 – 20 years. Women having four to six pregnancies were opting for tubal ligation 10.3% (p-value <0.0001).

Duru et al. (2018) researched the utilization of family planning services among women of reproductive age in urban and rural communities in Imo State, Nigeria: a comparative study. The study aimed to determine and compare the differences in family planning utilization based on location. The study adopted a comparative research design. The population of the study consisted of all women of reproductive age in the 7 health zones of the state. The sample size for the study was sampled using multi-stage sampling procedures. The instrument for the study was a semi-structured interviewer-administered questionnaire. Data collected was analyzed using Epi –Info 3.3.2 and was presented using percentages and chi-square. The findings of the study showed that The mean age of respondents in urban areas, 32.7±7.7 years was higher than in rural areas, 31.2+8.1years, (p=0.001). More women in rural, 433 (77.2%) than urban areas, 365 (65.1%) were married (p<0.0001). More respondents had heard about family planning in urban 555(99.1%) than rural 539(96.1%) (p=0.001). More respondents in urban, 450 (80.90%), had good contraceptive knowledge, compared to rural, 303(56.10%) (p<0.0001). More respondents had ever used any form of contraceptive in urban, 303(53.9%), than rural 239(47.2%), counterparts, (p<0.0001). Current contraceptive use was higher among urban women, 196(35.2%) than in rural counterparts, 109 (19.5%), p<0.0001. More rural respondents currently used modern methods (74.0%) than their urban counterparts, (58.2%), p=0.002. The commonest reason for choosing any family planning method in both rural (52.3%) and urban, (49.5%) areas was that it is convenient.

Hong et al. (2006) listed the most available modern methods of contraceptive in Ghana as the pills, injectables, and male condoms. Findings from this study however indicated that the injectables might be available only to women who patronize public health but not to those who patronize private health facilities like LCS and pharmacies. Findings from this study also suggest the utility of motivating an increase in the number of private hospitals and clinics/ maternity homes as well as public hospitals and clinics/maternity health centers which offer family planning in the municipality if there is to be an increase in the availability of LARC methods since these methods require surgical procedures that can be carried out only in these types of facilities. Community-based Health Planning and Services (CHPS concept introduction in this area and the probable setting up of CHPs compounds in the municipality is a step in the right direction. These authors have recommended that policies regarding the sale of injectables in LCS and pharmacies be reviewed to increase availability and possible use of these methods. Increasing the number of trained personnel in LARC methods in both private and public hospitals as well as clinics/maternity home may positively affect their availability in the currently authorized outlets.

Gakidou and Vayena (2007) investigated the use of Modern Contraceptives by the Poor is Falling Behind. This study was based on an analysis of 110 DHS (Measure DHS, 2006). The DHS is a household survey program that collects data on maternal and child health, using nationally represented samples of women of reproductive ages. The survey spans a period of nearly 20 years (1985-2003) and includes several countries with three or more surveys from Latin America and the Caribbean, sub-Saharan Africa, and South-Eastern Asia. Average rates of use of contraceptives methods have increased over the past few decades in most developing countries. Our findings illustrate the differences in use by the poorest groups and how these differences relate to the estimated national average use. A striking result was that there are larger variations in modern contraceptives use across countries with similar proportions of women in poverty; for example; in countries with 30% of women in quintile, the prevalence of use ranges from near zero to 24%. Some countries, e.g. Mexico and Gabon which have a comparatively high level of economic development had relatively small gaps in contraceptive prevalence between that of the national average and the poor. The finding that countries with higher economic inequality also exhibit higher inequalities in modern

contraceptive use is not surprising, but it is important to imply that inequality in contraceptive coverage reflects overall inequalities in a country. Latin American countries exhibit significantly larger gaps in use between the poor and the average, while compared to Latin America sub-Saharan African countries have an average gap that is smaller by 15.8% and Southeast Asian countries have on average 11.6% smaller gaps. This result implies that, even after controlling for variables that might be important in determining the use of contraceptive, there is a strong regional effect, with Latin Americans showing the largest inequalities in contraceptive use.

Essiben Unmeka et al. (2016) carried out a study at Yaounde on factors preventing the use of modern contraceptive methods in sexually active adolescents. It was a case-control study with 270 adolescents aged 15 to 19 years (135 cases and 135 control subjects). This result revealed that the factors preventing the use of modern contraceptives include: living with a single father, being unable to talk about sexuality with one's peers having only one partner, anal sex, absence of contraceptives services, ignorance on the after pill, and not knowing injectables contraceptives. They concluded that the family environment sexual habits and knowledge on contraceptive limit the request for modern contraceptive on the part of adolescents. Adolescents also need better support to face the challenges of their sexuality.

Ngome and Odimegwu (2014) in their research on the social context of adolescent women's use of modern contraceptives in Zimbabwe; a multilevel analysis. The sample size for the study was 457 non-pregnant women aged 15-49 years. Results revealed that the odds of contraceptive use were higher for adolescent women with one or more children ever born (OR 13.6) and for those ever married (OR 2.5). Having medium and high access to media also increased the odds of using contraceptives. At the community level, the odds of modern contraceptive use decreased with an increase in the mean number of children ever born per woman (OR 0.071), an increase in the mean number of school years per woman (OR 0.4), and an increase in the proportion of women with at least secondary education. They concluded that both individual and community characteristics were important predictors of adolescent contraceptive use in Zimbabwe. Reproductive program interventions aimed at increasing adolescent contraceptive use should take into account both individual and community factors.

Athchison et al. (2018) worked on a topic evaluating the impact of an intervention to increase uptake of modern contraceptives among adolescent girls (15-19 years) in Nigeria, Ethiopia, and Tanzania; the adolescents' girls and 50.3% of unmarried sexually active adolescent girls do not use a modern contraceptive method. They recommended that preventing pregnancy among adolescents is a global priority, and new interventions are needed, particularly in countries like Nigeria, Ethiopia, and Tanzania where the adolescent fertility rate is high.

Boamah et al. (2014) researched on use of contraceptives among adolescents in Kintampo, Ghana; a cross-sectional study. This cross-sectional survey using both quantitative and qualitative methods was conducted among 793 male and female adolescents (aged 15-19 years) in the Kintampo area of Ghana. The objective was to access contraceptive use among adolescents as evidence to develop appropriate interventions for adolescent sexual health program. The result revealed that the use of contraceptive use was very low. Several factors such as level of knowledge, sex, age, cost, and contraceptive availability, among others, might account for this. They concluded that adolescents have appreciable knowledge of at least one contraceptive method and knowledge is mostly associated with condoms. However, this knowledge has not been translated into practice (usage) for several reasons such as; negotiation skills, age, sex, and level of education among others. They recommended that adolescents should know about other methods of contraceptive, such as pills and injectables, creation of youth-friendly centers where adolescents can confidently and conveniently go to seek contraceptive services, counseling regarding sex, sexuality, and pregnancy.

Nyarko (2015) researched the prevalence and correlates of adolescents in Ghana, data collection was based on a 2008 Ghana demographic and health survey. The result revealed that female adolescents' contraceptive use was significantly determined by age of adolescence, education, work status, knowledge of adulatory cycle, visit a health facility, and marital status. Conclusively, there is a need for adolescent sexual and reproductive health programs in Ghana. It is therefore essential to intensify girl child education and strengthen the provision of contraceptives information and services for female adolescents in the country.

Blackstone et al. (2017) studies on Factors Influencing Contraceptive use in sub-Saharan Africa; a systematic review. The study was aimed at a systematic review of literature on factors influencing contraceptive use in sub-Saharan Africa between 2014 and 2015. 58 studies from twelve sub-Saharan Africa countries were reviewed negative factors hindering contraceptive use were: women's misconception of contraceptive side effects, male partner disapproval, and socio/cultural norms surrounding fertility. Positive factors were education employment and communication with a male partner. They recommended that increasing modern contraceptive use in sub-Saharan Africa is a multifaceted problem that will require

community and systems-wide intervention that to counteract negative perceptions and information.

Rao et al. (2008) researched the effectiveness of an educational intervention program on knowledge of reproductive health among women of reproductive age. The whole duration for the completion of the study was one year. 791 adolescent girls between ages 16-19 were randomly selected from the rural area of Udupi district in Karnantaka. An intervention that consisted of reproductive health issues was mounted and their level of awareness towards the subject area was evaluated immediately after the subject was discussed. SPSS was used for data analysis, data alongside proportions, and percentages. The effect of the intervention was tested using chi-square. From the result, there was a significant rise in the overall knowledge Level of respondents towards contraceptive, ovulation, the first sign of pregnancy, fertilization, and importance of diet during pregnancy.

Larsson et al. (2006) conducted an intervention on sexual education among high school students of Sweden. The study aimed to improve their sexuality knowledge and attitude as well as increasing the right practices towards condom use and emergency contraceptive. The quasi-experimental design was used on selected two vocational secondary schools. The classes were divided into the experimental and control group. An educational intervention was mounted after administering a questionnaire at pre-test with lessons on sexual education delivered by a midwife nurse and medical students as well as the distribution of free condoms only on request accompanied by telephone counseling. From the result of the study, most of the respondents had used contraceptive (condom) at first intercourse and had good knowledge of condom use at pretest and remained stable at post-test while attitudes toward condom use increased and significantly. Knowledge of and attitude towards emergency contraceptives improved at post-test. For maximal results, the study suggested the use of midwives, nurses, and medical students as research assistants in sexual education intervention studies.

Ihejiarnaizu et al. (2012) focused on undergraduate students in the south-south region of Nigeria, with the view of determining the effectiveness of reproductive health education intervention on their attitude towards family planning. Quasi-experimental research design involving pre-test post-test of experimental and control groups were used and 400 years one undergraduate student formed the subjects of the study. Literature relevant to the study was reviewed. An intervention consisting of a reproductive health education package which lasted for one semester was mounted only for the intervention group and the control group received no intervention program. Four-point Likert type scales titled Students Family Planning Attitude Questionnaire (SFPAQ) was used for data collection, inferential statistics of ANCOVA was used for the analysis of retrieved data. From the result of the study, students' attitudes towards family planning had increased significantly.

Arinze-Onyia et al. (2014) examined the effect of offering only health education and a further supply of Emergency Contraceptive Pill (ECP) accompanied with health education on attitudes and knowledge of university students, basically female in an Eastern state in Nigeria. The study consisted of an experimental group of 150 respondents and a comparison group consisting of 140 females given a pretest and post-test within 3 months. Both groups receive health education but only the experimental group was provided with ECP called postinor. From the result of the study, knowledge and attitude towards ECP increased significantly in the experimental group at post-test more than those in the control group that only received health education as this practice was recommended by the researchers.

Odusina et al. (2015) undertook a study to a quasi-experimental study to access the impact of a passive social marketing intervention in pharmacies around a particular community called Lowa on oral contraceptive and condom sales. The study deployed the quasi-experimental design using 55 pharmacies (both independent pharmacies and grocery pharmacies) from 12 regions as the intervention group and 32 grocery pharmacies from 10 regions as the comparison or control group. The target group for the intervention included women, even of reproductive age between the ages of 18-30 years of age who buy drugs from those pharmacies. The intervention included a ten-fold educational brochure, shelf-talkers, and posters. Sales of contraceptives between 2009 and 2011 were evaluated from both the intervention and comparison groups. From the result of the study, sales of oral contraceptives did not show any change while there was a decrease in the sales of the condom. Consequently, grocery pharmacies witnessed significantly higher sales compared to independent pharmacies in both oral contraceptives and condoms. Conclusively, the researchers reported that "the passive community pharmacy-based public health intervention appeared to reduce the decrease in condom sales from baseline, particularly in independent pharmacies, but it did not impact oral contraceptive sales".

2.4 Appraisal of Reviewed Literature

Related literature reviewed ranged from global, regional to local perspective of the concepts of contraceptives and factors associated with contraceptives practices such as marital status, age, level of education, spousal support, and barriers to contraceptives practices.

Existing literature showed that contraceptives practice was low. In Nigeria for instance the national contraceptive use based on 2013 Demographic and Health Survey showed that 16% of the survey participants use any form of contraceptives with an unmet need of 16%. In course of the review of related literature theories such as the Theory of Reasoned Action (TRA) and Health Belief Models (HBM) were reviewed. TRA suggested that the immediate factor of behavior is an individual intention or motivation to perform an action which in turn is determined by attitude and subjective norms. This theory was used in explaining in the present study that spousal support in contraceptives could favorably predict contraceptives practices. The HBM holds that constructs such as perceived threat and benefits, cue to action and self-efficacy predict the likelihood of performing behavior change. Other than the aforementioned, socio-demographic factor, structural factors could explain the likelihood of performing the behavior.

The literature reviewed had also demonstrated that factors such as socio-demographic factors also predict contraceptives practices which are usually inconclusive and smaller sample size studies were conducted in Rivers State. Hence the researcher's intent to fill the existing gap in knowledge through this study.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The research design adopted for the study was a descriptive research design that explored contraceptive practices among women of reproductive age in two Senatorial district, Rivers State. According to Ogunleye (2011), descriptive research allows the researcher to gather information about a characteristic without manipulation. This design is useful as it allowed the researcher to gather information about a subject at the same time. This research design had been successfully utilized by Chaudhary et al. (2016) on predictors of the use of contraceptive among married women in a rural area of Nepal. Thus it is considered appropriate for the present study.

3.2 Study Area

Rivers West and East senatorial district comprises of sixteen (16) local government area of Rivers State. Rivers state is one of the thirty-six (36) states of the Federal Government of Nigeria created from the then Eastern Region of Nigeria by Decree No. 19 of 1967 by General Yakubu Gowon. It is located in the South-South geo-political zone of the Niger Delta Region of the country. The state has a population of 5,198,716 people, making it the sixth most populous state in Nigeria from the 2006 census data. Port Harcourt is the state capital and the largest city in the state. It is made up of twenty-three (23) local government areas LGA which are comprised of three (3) senatorial districts, namely Rivers South, population 1,333,327, Rivers East population 2,038,789 and Rivers West Senatorial districts population 1,826,600. The following local government areas are also chosen from the three senatorial districts for the study.

LGAs Rivers West: Abua Odual, Degema, Ahoaha East, Ahoada West, Ogba-Egbema-Ndoni and Bonny, Rivers East: Ogu/Bolo, Okirika, Obio/Akpor, Port Harcourt, Etche and Ikwerre LGAs respectively. Fishing and farming are the main occupations of the people, although some of the people are civil servants and traders.

Rivers State is bounded in the south by the Atlantic Ocean to the North by Imo, Abia, and Anambra States. It is also bounded in the East by Akwa Ibom State and on the West by Bayelsa and Delta States. It is a home of three major indigenous ethnic groups: the Ijaws (Kalabari; Bonny and Okrika), Ikwerres, and Ogonis. Rivers state has a rich traditional culture, it is an economic center, and is one of the major oil-producing states in Nigeria. In Rivers State contraceptive practice is low and there seems to be a continuous report of unwanted pregnancy by some clients. This study thus investigated contraceptive practices in two senatorial district, Rivers State.

3.3 Study Population

The population of the study consisted of all women of reproductive age 15-49 age in Rivers West and East senatorial district with a population of 1,681,343 (National Population Commission, 2006).

3.4 Inclusion and Exclusion Criteria

Inclusion are six local governments in each senatorial district in the State, while the exclusion consists of the number of women within reproductive age.

3.5 Study Tool

Study tool consist of structured and validated questionnaire referred to as the contraceptive utilization Questionnaire was used to elicit data from the respondents. The questionnaire consisted of six sections (A-F). Section A elicited information on demographic data of the respondents. Section B elicited information on the prevalence of contraceptive utilization. Section C elicited information on sources of information on contraceptive utilization. Section D asked questions on types of contraceptive used. Section E comprised questions on spousal support of contraceptive utilization. Section F asked questions on barriers to contraceptive utilization among women of reproductive age (APPENDIX B).

3.6 Sample Size

The sample size for the study consisted of 1,250 women of reproductive age 15years to 49years. The sample size was determined using EPI Info 7 Statistical package using the single proportion for descriptive surveys. Epi Info is statistical software for sample size determination among others developed by the Center for Disease Control (CDC) for descriptive cross-sectional studies.

3.7 Sampling Technique

The technique is the use of software that has the following parameters for calculating sample size, 1) Population, 2) expected frequency of the behavior based on previous studies, Confidence Interval, and design effect. The researcher inputted into the software to determine the minimum sample size: population size = 1,681,343; 52.6% for family planning practice based on a previous study (Mohammed, Woldeyohannes, Fedeke & Megabiaw, 2014), 95% Confidence Interval, and a design effect of 2, and arrived at the sample size used for the study. The sample size for the study was selected using a multi-stage sampling procedure comprising of stratified sampling technique with a non-proportionate allocation of sample size, systematic random sampling, and simple random sampling techniques.

The first stage included stratification of State based on two senatorial zones (Rivers East and Rivers west) and allocation of an equal sample of 417 to each stratum. Secondly, systematic random sampling was used to select six Local Government areas from each of the senatorial districts. Finally, simple random sampling was used to select a sample for each of the Local Government Areas (Table 3.1).

Table 3.1 sampling Technique

Senatorial zones	**Population**	**Women of Reproductive Age**	**Sample size**
Rivers West			
Abua/Odual	132,084	29,058	117
Degema	123,328	27,132	110
Ahoada West	116,313	25,589	104
Bonny	96,242	21,173	86
Ahoada East	101,439	22, 317	104
Onelga	59,202	13,024	61
Total	**628,608**	**138,293**	**582**
Rivers East			
Obio/Akpor	219,914	48,381	205
Ikwerre	88,646	19,502	83
Okrika	103,592	22,790	97
Ogu/Bolo	34,412	7,571	32
Phalga	106,949	23,529	109
Etche	139,828	30,762	143
Total	**693,341**	**152,535**	**669**

3.8 Data Collection

A letter of identification was collected from the School of Public Health of the University of Port Harcourt, which helped in the identification of purpose and solicited for the co-operation of the respondents'. The letter was submitted to the Rivers State Primary Health Care Management Board for their permission to use the primary health care facilities at the various local government areas (LGA). Permission was also sorted for at the LGA headquarters of identified health centers to be used through their supervisory counselor for health.

The researcher administered the questionnaire by self to the respondents with three research assistants. The research assistants were recruited from the senatorial districts so we can explain the content, how to answer the questions and the purpose of the questionnaire. This helped to allay their fears and assure them of the confidentiality of the information given. The process of distribution of the questionnaire lasted for one week to go round the three senatorial districts and the researcher was able to retrieve 1,122 questionnaires out of the 1,250 questionnaires distributed, yielding an 89.9% return rate.

3.9 Data Analysis

The completed copies of the questionnaire were collated, coded, and analyzed using the Statistical Product for Service Solution (SPSS) version 25.0. The results obtained were presented using Descriptive statistics of percentages and frequency distribution to answer research questions and Chi-square analysis to test hypotheses at a 0.05 level of significance. Research questions 1-8 were analyzed using Percentages. The United Nation Population Department (UNDP) (2018) criterion for contraceptive use satisfaction, was used, where a score of 75% and above are considered high, less than or equals to 50% as low while 51% to74% as moderate prevalence. This was used to interpret results on the prevalence of contraceptives practices. The UNDP criterion was also used to interpret spousal support on contraceptives practices. All the stated hypotheses were tested at a 0.05 level of significance using chi-square test analysis. Decisions were based on the stated level of significance.

3.10 Validity of Study tools

To ensure the content, construct, and face validity of the instrument for data collection, copies of the questionnaire was given to the researcher's supervisors and three lecturers in the Department of Public Health Highstone Global University for assessment, correction, observation and inputs before the final copies of the questionnaire was produced in consultation with the supervisor. The purpose of the study, research questions, and hypotheses were included to enable the lecturers to determine items that would elicit the actual, appropriate, and adequate information they intend to elicit. The comments made by the experts included among others are: to expunge sub-section such as contraceptive practice based on age, contraceptive based on marital status, contraceptive utilization based on educational qualification, and contraceptive utilization based on Religion respectively from the instrument. The questions on the utilization of contraceptive was also restructured and the questions response items were changed from a four-point Likert scale to Yes or No. There after, the items were modified along the lines suggested by the comments of the lecturers, and the final instrument was produced for data collection (APPENDIX A).

3.11 Reliability iof istudy tools

To ascertain the reliability coefficient, the instrument was pretested among women of reproductive age in Iko-Abebi Local Government Area of Akwa-Ibom State, where 30 copies of the instrument were distributed. The pre-tested instrument was analyzed using Guttama split half. The reliability coefficient of 0.72 on the barrier to contraceptive, 0.74 on spousal support, 0.73 on the utilization of contraceptive, and 0.70 on sources of information was obtained. The Pallant (2011) criterion for interpretation of coefficient was used where reliability value of 0.70 and above was said to be reliable. Thus the instrument was reliable and was used for data collection.

3.12 Ethical considerations

Ethical clearance was sought and got from the Highstone Global University Ethical Review Committee, Permission from the relevant authorities in the Rivers State Primary Health Care Management Board, was obtained before administering the questionnaires. The objectives of the study were clearly explained to the participants and informed consent was obtained.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter deals with the presentation of results and discussion. One thousand, two hundred and fifty questionnaires were distributed and one thousand one hundred and twenty-two were retrieved. This yielded a return rate of 89.9%. Thus results were presented based on the number of retrieved questionnaires.

4.1 Results

Table 4.1: Percentage distribution on demographic characteristics of respondents

Demographic	Frequency	Percentage
Marital status		
Separated	35	3.1
Divorced	108	9.6
Single	333	29.7
Married	646	57.6
Educational qualification		
Primary	54	4.8
Non-formal	87	7.8
Secondary	371	33.1
Tertiary	610	54.4
Religion		
African Traditional religion	69	6.1
Islam	378	33.7
Christianity	675	60.2
Age		
15-19years	85	7.6
20-24years	174	15.6
25-29years	84	7.5
30-34years	255	22.8
≥35years	520	46.5

Tables 4.1 shows the percentage distribution of demographic characteristics of respondents. The results showed that 57.6% of the respondents are married, 29.7% single. More (54.4%) had tertiary education, 33.1% secondary education. Majority (60.2%) are Christians, 33.7% Islam. Also, the result showed that higher proportions (46.5%) are aged 35years and more, 22.8% 30-34years, 15.6% 20-24years, and 7.6% aged 15-19years.

Research Question i1: What is the level of utilization of contraceptive among women of reproductive age in two senatorial district in Rivers State**?**

Table 4.2: Percentage Distribution on the Utilization of contraceptive

Utilization	Frequency	Percentage	Decision
Currently using contraceptives			
Yes	788	70.2	**Moderate**
No	334	29.8	**Low**

Table 4.2 shows the utilization of contraceptive practices among women of reproductive age in Rivers State. The result of the study showed that of the 1,122 respondents 70.2% indicated currently using family planning while 29.8% were not currently practicing contraceptive. Hence, the level of utilization of contraceptive among women of reproductive age in two senatorial district in Rivers State was moderate.

Research Question i2: What is the most preferred method of contraceptive utilized among women of reproductive age in two senatorial district Rivers State**?**

Table 4.3: Percentage distribution on the most preferred method of contraceptive

Method	Frequency	Percentage
Condom	251	**22.4**
Pills	122	**10.9**
Implants	53	**4.7**
IUD	66	**5.9**
Injectables	74	**6.6**
Tubal ligation	29	**2.6**
Diaphragm	23	**2.0**
Spermicides i	87	**7.8**
Periodic iabstinence	25	**2.2**
Coitus iinterruptus	50	**4.5**
Billings imethod	31	**2.8**
Rhythm imethod	25	**2.2**

Table 4.3 shows the most preferred method of contraceptive among women of reproductive age in Rivers State. The result of the study showed 22.4% use condoms, 10.9% pills, 7.8% spermicides, 6.6% injectables, 5.9% IUD, 2.0% Diaphragm. Thus, the most preferred method of contraceptive among women of reproductive age in two senarorial district in two senatorial district in Rivers State was the use of a condom.

Research Question 3: What are the sources of information on contraceptive among women of reproductive age in two senatorial distrct in Rivers State?

Table 4.4: Percentage distribution on sources of information on contraceptive.

Sources	Frequency	Percentage i
Book and Pamphlets	151	**13.5**
Church/mosque	307	**27.6**
Family members	124	**11.1**
Friends/colleagues	160	**14.3**
Hospital/health centers	241	**21.6**
Radio/television	200	**17.9**
Social media	228	**20.4**

Table 4.4 shows the percentage distribution of respondents' sources of information on contraceptive. The findings of the study showed that 27.6% of the respondents' sources of information on contraceptive was, church/mosques, 21.6% hospitals, and health centers, 20.4% social media, 17.9% radio/television while 11.1% from a family member. Thus, the most prevalent source of information on contraceptive is the Church/Mosque.

Research Question 4: What is the extent of spousal support on contraceptive among women of reproductive age in two senatorial district in Rivers State?

Table 4.5: Percentage on spousal support on contraceptive utilization.

Spousal Support*	Frequency	Percentage	Decision
My spouse is in support of my using contraceptive by reminding me of my next appointment.	847	75.5	**High**
My spouse encourages me to continue the use of contraceptive despite some side effects.	607	54.1	**Moderate**
My spouse approves of my using the contraceptive method.	708	63.1	**Moderate**
My spouse accompanies me to visit the contraceptive clinic whenever he is around.	575	51.2	**Moderate**
My spouse bears the cost of using contraceptive.	583	52.0	**Moderate**
Average		**59.1**	**Moderate**

- Multiple response

Table 4.5 shows the percentage distribution on spousal support in contraceptive utilization among women of reproductive age in two senatorial district, Rivers State. The results of the study showed that three quarter (75.5%) of the respondents indicated that their spouse is in support of their contraceptive utilization by reminding them of the next appointment, 63.1% showed that their spouse approved of their contraceptive practice, 54.1% of the respondents' spouses encouraged them to continue with the use of contraceptive despite some side effects. Overall, the findings of the study showed that spousal support was 59.1%. Thus, spousal support on family contraceptive utilization was moderate.

Research Question i5: To what extent does maternal age determine contraceptive utilization among women of reproductive age in two senatorial districts in Rivers State**?**

Table 4.6: Cross-tabulation on the utilization of contraceptive age of women

Age i	Utilization of contraceptive		Total	Decision
	No	Yes		
15-19years	71(83.45%)	14(16.5%)	85(100.0%)	**Low**
20-24years	103(59.2%)	71(40.8%)	174(100.0%)	**Low**
25-29years	41(48.8%)	43(51.2%)	84(100.0%)	**Moderate**
30-34years	33(12.9%)	222(87.1%)	255(100.0%)	**High**
≥35years	85(16.3%)	435(83.7%)	520(100.0%)	**High**

Table 4.6 shows cross-tabulation on the utilization of contraceptive age among women. The findings of the study showed that among respondents aged 30-34years and ≥35years contraceptive utilization was high with 87.1% and 83.7% contraceptive utilization respectively. But contraceptive utilization was low among respondents aged 15-19years, 20-24yeras, and 25-29yeras with prevalence rates of 16.5%, 40.8%, and 51.2% respectively. The results showed that the lower the age of

respondents the lower the utilization of contraceptive. Worthy of note also is that after 34years contraceptive utilization rate decreased.

Research Question 6: What is the extent to which educational status of women determine contraceptive utilization among women of reproductive age in two senatorial districts in Rivers State**?**

Table 4.7: Cross-tabulation on the utilization of contraceptive and educational qualification

Educational qualification	Utilization of contraceptive		Total	Decision
	No	Yes		
No formal education	19(21.8%)	68(78.2%)	87(100.0%)	**High**
Primary education	19(33.3%)	36(66.7%)	54(100.0%)	**Moderate**
Secondary education	115(31.0%)	256(69.0%)	371(100.0%)	**Moderate**
Tertiary education	182(29.8%)	428(70.2%)	610(100.0%)	**Moderate**

Table 4.7 shows cross-tabulation on the prevalence of contraceptive utilization based on educational qualification among women of reproductive age in Rivers West Senatorial District, Rivers State. The result of the study showed contraceptives utilization rate was high among respondents with no formal education (78.2%) but was moderate among respondents with primary, secondary, and tertiary education.

Research Question i7: What is the extent to which marital status of women determine contraceptive utilization among women of reproductive age in two senatorial districts in Rivers State**?**

Table 4.8: Cross-tabulation on the utilization of contraceptive and marital status

Marital status	Utilization of contraceptive		Total	Decision
	No	Yes		
Single	213(64.0%)	120(36.0%)	333(100.0%)	**Low**
Married	94(14.6%)	552(85.4%)	646(100.0%)	**High**
Divorced	19(17.6%)	89(82.4%)	108(100.0%)	**High i**
Separated	8(22.9%)	27(77.1%)	35(100.0%)	**High**

Table 4.8 shows cross-tabulation on the utilization of contraceptive based on marital status among women of reproductive age in two Senatorial District, Rivers State. The result of the study showed a contraceptive utilization rate of 85.4% among respondents who were married, 82.4% utilization rate among divorced respondents, and 36.0% among single respondents. Thus, the result showed that the utilization of contraceptive among single respondents was low.

Research Question 8: What is the extent to which religious affiliation of women determine contraceptive utilization among women of reproductive age in two Senatorial District, Rivers State?

Table 4.9: Cross-tabulation on the utilization of contraceptive and Religion.

Religion	Utilization of contraceptive		Total	Decision
	No	Yes		
Christianity	206(30.5%)	469(69.5%)	675(100.0%)	**Moderate**
Islam	99(26.2%)	279(73.8%)	378(100.0%)	**Moderate**
African Traditional Religion	29(42.0%)	40(58.0%)	69(100.0%)	**Moderate**

The result in Table 4.9 shows cross-tabulation on the utilization of contraceptive based on religion. The result of the study showed irrespective of religious sects, contraceptive utilization was moderate. Specifically, the findings of the study showed that the majority (73.8%) of respondents who are of Islamic religious utilized contraceptive, followed by respondents who

were of the Christian religion with 69.5%.

Research Question 9: What are the barriers to contraceptive utilization among women of reproductive age in two Senatorial District, Rivers State?

Table 4.10: Percentage distribution on barriers to contraception utilization.

Barriers	Frequency	Percentages
Distance to family planning clinics	737	65.7
Long waiting hours	606	54.0
Attitude of contraceptive service providers	637	56.8
Operating hours of family planning clinic	585	52.1
Side effects of contraceptive commodities	584	52.0
Cost of contraceptive commodities	556	49.6
Failure rates of contraceptive commodities	562	50.1

Table 4.10 shows the percentage distribution on barriers to contraception utilization among women of reproductive age in Rivers State. The results of the study showed among others the barriers to contraceptive utilization were: distance to contraceptive clinics (65.7%), the attitude of service providers (56.8%), long waiting hours for service providers (54.0%), operating hours (52.1%), side effects (52.0%), and failure rates (50.1). Thus, distance to the family planning clinic was a major barrier to contraceptive practice.

Hypothesis 1: There is no significant association between age and utilization of contraceptive among women of reproductive age in two Senatorial district, Rivers State?

Table 4.11: Chi-square analysis on the prevalence of contraception practices based on age.

Age	Utilization of contraceptive		Total	χ^2	df	p-value	Decision
	No	Yes					
15-19years	71(83.45%)	14(16.5%)	85(100.0%)				
20-24years	103(59.2%)	71(40.8%)	174(100.0%)	283.39	4	0.00	**Rejected**
25-29years	41(48.8%)	43(51.2%)	84(100.0%)				
30-34years	33(12.9%)	222(87.1%)	255(100.0%)				
≥35years	85(16.3%)	435(83.7$)	520(100.0%)				

P<0.05

Table 4.11 displayed chi-square analysis results on the prevalence of contraception utilization based on age. The result indicated a significant (χ^2= 283.39, df=4, p< 0.05) association with the utilization of contraceptive practices based on age. The null hypothesis which states that there is no significant association between age and the utilization of contraception was thus rejected.

Hypothesis 2: There is no significant association between educational qualification and utilization of contraceptive practices among women of reproductive age in two Senatorial district, Rivers State.

Table 4.12: Chi-square analysis on the utilization of contraceptive based on educational qualification.

Educational qualification	Utilization of contraceptive		Total	χ^2	Df	p-value	Decision
	No	Yes					
No formal education	19(21.8%)	68(78.2%)	87(100.0%)				
Primary education	19(33.3%)	36(66.7%)	54(100.0%)	3.21	3	0.36	
Secondary education	115(31.0%)	256(69.0%)	371(100.0%)				**Not**
Tertiary education	182(29.8%)	428(70.2%)	610(100.0%)				**rejected**

p> i0.05, Not significant

Table 4.12 displays the chi-square analysis result in the utilization of contraceptive based on educational qualifications. The result indicated a non-significant (χ^2= 3.21, df=3, p>0.05) association on the utilization of contraceptive based on educational qualification. The null hypothesis which states that there is no significant association between educational qualification and the utilization of contraceptive was thus not rejected.

Hypothesis 3: There is no significant association between marital status and utilization of contraceptive among women of reproductive age in two Senatorial district, Rivers State.

Table 4.13: Chi-square analysis on the utilization of contraceptive based on marital status.

Marital status	**Utilization of contraceptive**		**Total**	χ^2	**Df**	**p-value**	**Decision**
	No	Yes					
Single	213(64.0%)	120(36.0%)	333(100.0%)				
married i	94(14.6%)	552(85.4%)	646(100.0%)	266.26	3	0.00	**Rejected**
divorced	19(17.6%)	89(82.4%)	108(100.0%)				
separated	8(22.9%)	27(77.1%)	35(100.0%)				

P<0.05

Table 4.13 displays the chi-square analysis result on the utilization of contraceptive based on marital status. The result demonstrated a significant (χ^2= 266.26, df=3, p<0.05) association on the utilization of contraceptive practices based on marital status. The null hypothesis which states that there is no significant association between marital status and the utilization of contraceptive was thus rejected.

Hypothesis 4: There is no significant association between religious affiliation and the utilization of contraceptive among women of reproductive age in two Senatorial district, Rivers State.

Table 4.14: Cross-tabulation on the utilization of contraceptive based on Religious affiliation.

Religion	**Utilization of family planning**		**Total**	χ^2		**df**	**p-value**	**Decision**
	No	Yes						
Christianity	206(30.5%)	469(69.5%)	675(100.0%)					
Islam	99(26.2%)	279(73.8%)	378(100.0%)	7.45		2	0.024	
African Traditional Religion	29(42.0%)	40(58.0%)	69(100.0%)					

P<0.05

Table 4.14 displays the chi-square analysis result on the utilization of contraceptive based on religion. The result indicated a significant (χ^2= 7.4,5 df=2, p<0.05) association with the prevalence of contraceptive practices based on religion. The null hypothesis which states that there is no significant association of the utilization of contraceptive based on religion is thus rejected.

Hypothesis 5: There is no significant association between spousal support and the Utilization of contraceptive among women of reproductive age in two Senatorial district, Rivers State.

Table 4.15: Chi-square analysis on the utilization of contraceptive based on spousal support.

Spousal support	**Utilization of contraceptive**		**Total**	χ^2	**Df**	**p-value**	**Decision**
	No	Yes					
Low	172 i(55.8%)	136(44.2%)	308(100.0%)	138.07	1	0.00	**Rejected i**
High	162(19.9%)	652(80.1%)	814(100.0%)				

P<0.05

Table 4.15 displays the chi-square analysis result in the utilization of contraceptive based on spousal support. The result demonstrated a significant (χ^2= 138, df=1, $p<0.05$) association with the utilization of contraceptive based on spousal support. The null hypothesis which states that there is no significant association between spousal support and the utilization of contraceptive was thus rejected.

Summary of major findings

Based on the results of the study, the following is a summary of the major findings of the study.

1. The level of utilization of contraceptive was 70.2% among women of reproductive age.
2. The condom was the most preferred method of contraceptive (22.4%).
3. The major sources of contraceptive information are religious centers (27.6%).
4. Spousal support on contraceptive was 59.1%.
5. Contraceptive utilization was lowest among respondents whose ages are between 15-19years (16.0%).
6. Contraceptive utilization was highest among respondents who had no formal education (78.2%).
7. Contraceptive utilization was lowest among single respondents (36.0%).
8. Respondents who are of Islamic religion utilized contraceptive more (73.8%).
9. Distance to family planning clinic was a major barrier to the utilization of contraceptive (65.7%).
10. There was a significant association on the utilization of contraceptive based on age ($p<0.05$).
11. There was no significant association on the utilization of contraceptive based on educational qualification ($p>0.05$).
12. There was a significant association on the utilization of contraceptive based on marital status ($p<0.05$).
13. There was a significant association on the utilization of contraceptive based on religion ($p<0.05$).
14. There was a significant association on the utilization of contraceptive practices based on spousal support ($p<0.05$).

4.2 Discussion

Table 4.2 showed that the Prevalence of contraceptive practice was 70.2% among women of reproductive age which is moderate. This is very surprising comparing to the national prevalence of contracept use which is low. The plausible reason for this high prevalence rate may be associated with the free distribution of contraceptive commodities at the government-owned family planning clinics and primary health care centers in Rivers State and the increased sensitization of the need for contraceptive in the State. The findings of the study are comparable to the findings of Nansseu, Nchinda, Katte, Nchagnouot, and Nguetsa (2015) in the Mbouda health district Cameroon where 65.3% prevalence was recorded. Also, the finding of the study is lower than the findings of Tekelab et al. (2015) in western Ethiopia which recorded a prevalence of 71.9%.

However, the findings of the study are at variance with the findings of Asakitikpi and Simbi (2015) in South Africa; Achana et al. (2015) in the Upper East region of Ghana; Alemayehu et al. (2016) afar region eastern Ethiopia. The finding of the study differed from the finding of Bifato (2016) in Southern Ethiopia and Alemayehu et al. (2018) in northwest Ethiopia where prevalence rates were less than 50%. The difference in the result could be attributed to the time of the study. for instance in the COVID 19 and Post COVID 19 era and with lockdown and its attendant economic hardship many families are more likely to go for prevention of pregnancy than getting pregnant which in turn could tell on the welfare of the family. The findings of the study is commendable but then, health workers and health educators should not relent but intensify action in making the prevalence optimal.

Table 4.3 showed that Condom was the most preferred method of contraceptive (22.4%). This is expected as condoms could prevent both pregnancy and sexually transmitted infections. This finding of the study could be attributed to intensified sensitization during the HIV/AIDS campaigns in the state and the use of condoms for its dual function. The findings of the study are in keeping with the findings of Bankole et al. (2007), Imaledo et al. (2013), Peter-Kio and Dokiboeria (2015) where the most preferred family planning commodity was condom.

However, the finding of the study is at variance with the findings of Briggs and Peter-Kio (2011) where oral contraceptive pills were the most preferred family contraceptive method. The difference in the study could be linked to the setting, wherein the previous setting was in a family planning clinic where the sole aim of the respondents are to prevent pregnancy.

The result of the study in Table 4.4 showed that the major sources of contraceptives information are religious centers (27.6%). This is surprising as it seems there is a shift in the focus of religious settings due to the increase in sexual behavior and the need for mainstreaming HIV/AIDS and Sexual information in a religious setting. The mainstreaming of contraceptive in the religious setting

could be attributed to the increase in physical dependence of the members to the church rather than the crux of the religious organization which is salvation.

The finding of the study is at variance with the findings of Dangat and Njau (2013) in Tanzania and Alege et al. (2016), where radio and health worker top the sources of information on contraceptive. The sources of variance could be attributed to the fact the more especially during the HIV/AIDS pandemic, Uganda was one of the worst-hit countries and development partners used all available means in propagating the behavior change more especially behavior change information through trusted sources as that of health workers.

In the present study, there seems to be a shift from sharing information through health workers to the religious leaders. This is cause for concern and showed that health workers in the communities and facilities are neglecting their roles as the facilitator of the right information to other stakeholders. This may have been attributed to the average prevalence rate of contraceptive practice in the state despite government efforts in making contraceptive commodities available for the populace. Health workers should not only be concerned with dispensing drugs and treating patients but at times propagate contraceptive information to patients and clients as they arrive at the facilities to help reduce the high rate of fertility and population growth rate in the state.

The result of the study in Table 4.5 showed that Spousal support for contraceptive was 59.1%. This is discouraging despite the current economic situation in the country. The rate of spousal support in the study area could depict that attitude of males towards the acceptance of contraceptive is still negative. Also, it showed that IEC materials and media are distributed only to females thus males are engendered. Twenty-six years after the International Conference on Population and Development males are still excluded in contraceptive programs and programming. Therefore, there is a need for evaluation of the IECs and other behavior change communication materials and processes for better support and optimal use of contraceptive commodities. The finding of the study is in keeping with the findings of Ogunjuyigbe et al. (2009) among the Yoruba communities.

However, the finding of the study differs from the findings of Kana et al. (2016) in Northern Nigeria. The difference in the result should be attributed to the fact females in Northern Nigeria are more dependent on their husbands and significant others in the family before ever they could do anything. Also, the difference in the study could be as a result of the population of the study as the previous study included husbands of the women and may not be the true representation of the fact.

The findings of the study in Table 4.6 showed that contraceptive practice was lowest among respondents aged 15-19years (16.0%). This is expected and could be attributed to the fact that this population are risk-takers and are more likely to say that pregnancy may not occur at first intercourse. However, it is expected that respondents who are sexually active within this age group have an increased risk of total fertility rate. This implies that these strata of people, if not, adequately taken care of, as they start engaging in sexual intercourse are likely to increase the already high fertility rate of the country giving rise to population explosion, food insecurity, high economic dependent rate, and high maternal mortality rate and calls for urgent action from relevant authorities in sexual and reproductive health including the government through their ministries. The findings of the study are similar to the findings of Tekelab et al. (2015) in Ethiopia, Rutaremwa et al. (2015) in Uganda, Pandey and Singh (2015) in India, Prata et al. (2017) in Angola where respondent greater age 20 are more likely to use contraceptive compared to respondents age 15-19years. The similarities could be attributed to the fact that most contraceptives programs are hospital-based and in the obstetrics and gynecology department of the health facilities attending to women who are pregnant, delivered, or for fertility problems.

The findings of the study in Table 4.7 showed that contraceptive practice was highest among respondents who had no formal education (78.2%). This is disturbing as education is usually seen as a precursor to adopting preventive methods such as contraceptive practice. However, the finding could be attributed to the increased number of primary health care facilities at the grassroots by the State Government in Rivers. Also, the findings of the study could be attributed to the free contraceptive commodities distributed at these health facilities. However, the findings of this study are at variance with the findings of Tekelab et al. (2015) in Ethiopia, Rutaremwa et al. (2015) in Uganda, Alemayehu et al. (2016) in eastern Ethiopia, Wuni et al. (2017) in urban Ghana and Belda et al. (2017). The variance in the study result could be attributed to regional differences in the health budget.

The findings of the study in Table 4.8 showed that contraceptive practice was the lowest among single respondents (36.0%). This result is as expected since single women in non-stable relationships are less likely to plan for sexual intercourse and thus use the contraceptive method. Also, in the communities where data was collected pregnancy out of wed-lock is not much of a sensitive issue, so single women who are pregnant are usually not discriminated against, this might explain their none use of contraceptive method. The findings of this study is similar to the finding of Orach et al. (2017) in Uganda where

singles are less likely to use contraceptive compared to those married.

The findings of the study in Table 4.9 showed that Respondents who are of the Islamic religion practiced contraceptive more (73.8%). This is surprising, more so, since the study was conducted in a Christian populated area, and Muslims are observed in Nigeria to have more children. The plausible reason for this could be due to cultural adaptation and globalization. The findings of this study are variance with the findings of the previous studies such as that of Ogboghodo et al. (2017). The difference in the study could be due to time and study setting.

The findings of the study in Table 4.10 indicated that Distance to the contraceptive clinic is a major barrier to the practice of contraceptive (65.7%). This could be true and expected since in Nigeria and indeed in Rivers State distance to health facilities are longer than the recommended 5kilometers in most settings. The findings of this study are at variance with the findings of Durowade et al. (2017) and Prata et al. (2017) where husband approval and communication constituted barriers to contraceptive practice. The findings of the study imply that government should take cognizance of the distance covered by clients while building health facilities following the recommended distance by the WHO.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This study investigated contraceptive utilization and determinants among women of reproductive age in two Senatorial district, Rivers State. This chapter, therefore, presented the summary, conclusion, recommendations, contribution to knowledge, limitations, and suggestions for further research studies.

5.1 Summary

This study investigated contraceptive utilization and determinants among women of reproductive age in two Senatorial district, Rivers State. In other to achieve the aim of the study, ten research objectives with corresponding research questions and 5 hypotheses were formulated to guide the study. Literature was reviewed along with the conceptual framework, theoretical framework, and review of empirical studies. A descriptive research design was adopted for the study. The population of the study consisted of all women of reproductive age in Rivers state. A multi-stage sampling procedure was used to select 1,250 respondents for the study. A semi-structured questionnaire titled “contraceptive practice questionnaire” was used for data collection. The instrument was subjected to a reliability test using the split-half method. The reliability of the instrument yielded a reliability coefficient of 0.72 for barriers to family planning practice, 0.74 for spousal support, 0.73 for contraceptive practice, and 0.50 for sources of information. Data collected were analyzed using frequency and percentage to answer research questions and Chi-square was used to test the Hypotheses at a 0.05 level of significance.

One thousand two hundred and fifty copies of the questionnaire were distributed, out of which one thousand one hundred and twenty-two were used for data analysis. The findings of the study were as follows:

1. The level of utilization of contraceptive was 70.2% among women of reproductive age.
2. The condom was the most preferred method of contraceptive (22.4%).
3. The major sources of contraceptive information are religious centers (27.6%).
4. Spousal support on contraceptive was 59.1%.
5. Contraceptive utilization was lowest among respondents whose ages are between 15-19years (16.0%).
6. Contraceptive utilization was highest among respondents who had no formal education (78.2%).
7. Contraceptive utilization was lowest among single respondents (36.0%).
8. Respondents who are of Islamic religion utilized contraceptive more (73.8%).
9. Distance to family planning clinic was a major barrier to the utilization of contraceptive (65.7%).
10. There was a significant association on the utilization of contraceptive based on age ($p<0.05$).
11. There was no significant association on the utilization of contraceptive based on educational qualification ($p>0.05$).
12. There was a significant association on the utilization of contraceptive based on marital status ($p<0.05$).

13. There was a significant association on the utilization of contraceptive based on religion ($p<0.05$).
14. There was a significant association on the utilization of contraceptive practices based on spousal support ($p<0.05$).

5.2 Conclusion

Based on the findings of the study, it was shown that contraceptive utilization among women of reproductive age in two senatorial district in Rivers State was moderate. Spousal support in contraceptive was high. There was a significant association between family planning utilization and age, religion, spousal support, and marital status. Conclusively, there is a need for continuous sensitization of communities and training of service providers that would help utilization optimal which in turn could help bring about a sustainable nation.

5.3 Recommendations

Based on the findings of the study the following recommendations were postulated.

1. Health workers and Health educators should carry out community-based sensitization to make the prevalence optimal.
2. Public Health educators/Health care providers should partner with religious bodies on how to mainstream contraceptive and religious teaching to pass on accurate information to the religious communities and the society at large.
3. Health workers/Professionals, contraceptive providers with other services should be rendered in the health facilities across the nation.
4. Communication specialists should re-design and evaluate existing IEC material for behavior change communication by targeting males as wells as women as partners in development.
5. Ministries of education should evaluate the curriculum and include sexuality education more especially contraceptive in the curriculum from the junior secondary school level.
6. The government should increase the health budget and build more health facilities to close the distance to the recommended 5km maximum distance to health facilities by the WHO.
7. Christian religious leaders should mainstream health education on contraceptive with religious teaching in the church.
8. Contraceptive service providers should include single mothers as part of their target population during a community sensitization.

5.5 Limitations of the Study

This study had some limitations. First, the contraceptive practice prevalence recorded in this study was not verifiable from the records of the study population. This may introduce elements of bias in the study as contraceptive practice might have been over-reported. Also, the result of the study was not verified by partners. Another result worthy of note is the need for caution in generalizing, for the fact that in this study, respondents with no formal education having the highest prevalence of contraceptive practice. Since the instrument for the study is a self-administered questionnaire the result seems not to be a true representation of a situation of this nature. However, without a different method of data collection to verify this result caution should be adhere in extrapolating result to the large population.

Another limitation of the study is that the study surveyed only females who are sexually active and attending health facilities in Rivers State, where the sample was collected. In the future, caution should be taken in generalizing to the larger population.

5.6 Suggestions for Further Research

The following were suggestions for further studies:

1. Research on contraceptive practice among couples in Rivers State.
2. Contraceptive practice among women of reproductive age in the south-south geopolitical zone of Nigeria.
3. Proximate Determinants Family planning use among couples in Rivers State.
4. Effect of the film industry on Promoting contraceptive practice among women in Rivers State.

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APPENDIX A

Questionnaire

Department of Public Health,

Highstone Global University

Tx, USA.

Dear Respondents,

Contraceptive Utilization Among Women of Reproductive Age
In Rivers West Senatorial District, Rivers State

I am a post-graduate student of the above-named department. I am conductinga a research and this questionnaire is designed to find out the contraceptive utilization and determinants among women of reproductive age in Rivers West Senatorial District, Rivers State.

Please kindly fill in your response to the questions. Be assured that all information supplied will be treated with strict confidentiality and will be used for research purposes only.

Thank you.

Dr. Innime Righteous

Researcher

SECTION A (Demographic)

Please √ the option that applies to you

1. Age: a. 15–19…… b. 20–29…… c. 30–34 ……
2. Mothers Occupation: a. Civil servant…… b. Private sector……
   c. Farmer…… Others_____ (Please specify)
3. Fathers Occupation: a. Civil servant…… b. Private sector……
   c. Farmer…… Others_____ (Please specify)
4. Number of Siblings: a. 0…… b. 1…… c. 2…… d. 3……
   e. 4 above……
5. Age at first use of contraceptives: a. 20–25years…… b. 26–35……
   c. 40–above……

SECTION B (Knowledge of Contraceptives items)

Instruction: Please (√) Yes or No in the appropriate column.

S/No.	Knowledge Statements	True	False	I idon't iKnow
6	Have you ever heard of contraceptives?			
7	Contraceptive is the process of preventing pregnancy using a medication, device, or other methods?			
8	Contraceptives are drugs, methods, or any device used to prevent pregnancy.			
9	Contraceptive helps in preventing unwanted pregnancies.			
10	The use of condom helps in preventing unwanted pregnancies.			
11	Condom use prevents sexually transmitted infections			
12	Contraceptives come in different forms			
13	Do you know any contraceptive methods?			
14	Withdrawal Billing's method is a contraceptive method			
15	I recognize Abstinence as a contraceptive method			
16	1 know about Male Condom			
17	1 know about Female Condom			
18	I know Intra-Uterine Contraceptive Device i(IUCD)			
19	I know that diaphragms are contraceptives			
20	Cervical cap is a type of contraceptive			
21	Some pills are used as contraceptives			
22	Some contraceptives are in form of injection			
23	**Traditional Methods of family planning include the following:**			
	Rings			
	Waist band			
	Wooden carving			
	Herbs			
	Udah seeds			
	Sex style			
	7 Up (soft drink)			
	Alligator pepper			
	Antibiotics			
	Others (Specify)…….			
24	Some contraceptives cause itching			
25	Some contraceptives can cause infertility			
26	The use of contraceptives can lead ito ectopic pregnancy			
27	Cancer is one of the effects of using some contraceptives.			

28	**Source of information on family planning**			
	a.) Friends			
	b.) Community members			
	c.) Age mates			
	d.) Mother			
	e.) Father			
	f.) Other relatives			
	g.) Mass media (Tv, radio, books, magazines, advertisement)			
	h.) Social media (internet, WhatsApp, Facebook, Twitter, etc.)			
	i.) Books, journals, and magazines			
	j.) Pharmacy/chemist shop			
	k.) Health workers (nurse, doctor, etc.)			
	l.) Church/religious gathering			

Section C: Attitude towards family planning items (Please indicate the extent to which you agree or disagree with the statements below)

	Questionnaire Item	**SA**	**A**	**D**	**SD**
29	It is safe to use the family method.				
30	I use family planning because I think it is beneficial.				
31	Contraceptives help in preventing having children outside wedlock.				
32	The use of family planning makes one not depend on his parents to cater for the child born out of wedlock.				
33	The use of family planning can assure a prosperous future.				
34	Family planning reduces forced or early marriage.				
35	Family planning should be used when having unprotected sex.				
36	Use of family planning makes sex uninteresting.				
37	Family planning use encourages promiscuity (sleeping around or having more than one sexual partner).				
38	Family planning are meant for sex workers				
39	Family planning can cause cancer				
40	The use of family planning can lead to impotence				
41	It can cause health challenges (such as weight gain, pimples, irregular menstruation, pains, itching, and discomforts).				
42	I dislike contraceptives because regular use of contraceptives causes damage to the body.				
43	The use of family planning can cause distrust in relationships				
44	Family planning promote the spread of Sexually Transmitted Infections/HIV				

45	Condoms should be used for new or casual relationships only				
46	Stigmatization is attached to the use of contraceptives.				
47	Family planning are not for adolescents				
48	I surf the internet for information on contraceptives				
49	I'll advise my married sister/brother/friend to use family planning				

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Marital status: 1. Single…… 2. Married…… 3. Divorced…… 4. Separated……

1. Educational qualification:

1. No formal education…… 2. Primary Education……
2. Secondary Education…… 4. Tertiary Education……

2. Location of residence:

1. Urban…… 2. Semi-Urban…… 3. Rural……

3. Current Age: _____

4. Number of children: _____

5. Religion:

1. Christianity…… 2. Islam…… 3. African Traditional Religion……

6. Occupation:

1. Housewife…… 2. Farming…… 3. Trading……
2. Employee…… 5. Student……

SECTION B: PREVALENCE OF CONTRACEPTIVE USE

7. Are you currently using the family planning method?

1. Yes…… 2. No……

8. Have you ever heard of family planning?

1. Yes…… 2. No……

9. Through which source did you get the information?

A. Books and pamphlet……
B. Church/Mosque……
C. Family Members……
D. Friends/Colleagues……
E. Hospitals/Health Centers……
F. Radio/Television……
G. Social Media……

10. Which method of contraceptive are you currently using? (Tick any that apply)

1	Condom	
2. i	Family planning pills	
3.	Implants/ jadelle	
4	IUD/ coil	

5.	Injectables	
6.	Tubal ligation	
7.	Diaphragm	
8.	Spermicides	
9	Periodic abstinence	
10	Withdrawal method(coitus interruptus)	
11.	Cervical mucus(Billings method)	
12	Calendar method (Rhythm method)	
13	Lactation method	
14	Sympto-thermal method	

1. For how long have you been using this method of family planning? Please specify _____
2. Are you satisfied with the method you are currently using?
    1. Yes …… 2. No ……
3. Where did you go for the family planning services? _____
4. Since your baby was born, have you ever discontinued or switched family planning methods?
    1. Yes …… 2. No ……
5. What was the reason for discontinuation or switching of family planning? _____

SECTION C: SPOUSAL SUPPORT OF CONTRACEPTIVE USE

	SPOUSAL SUPPORT OF CONTRACEPTIVE USE	**SA**	**A**	**D**	**SD**
15.	My spouse is in support of my use of contraceptive by reminding me of my next appointment.				
16	My spouse encourages me to continue the use of contraceptive despite some side effects.				
17	My spouse approves of my using the contraceptive method.				
18	My spouse accompanies me to visit the contraceptive clinic whenever he is around.				
19	My spouse bears the cost of my use of contraceptive.				

SECTION D: BARRIERS TO CONTRACEPTIVE PRACTICES

	BARRIERS TO CONTRACEPTIVE PRACTICES	**SA**	**A**	**D**	**SD**
20	Distance from where I live to the family planning clinic is a barrier for the practice of family planning.				
21	Long hours to wait before seeing the family planning service provider is a barrier to the practice of contraceptive.				
22	Attitude of contraceptive service providers is a barrier to the practice of family planning.				

23	Family planning clinics do not operate 24 hours, this is a barrier to my practice of contraceptive.				
24	Side effects of contraceptive commodities is a barrier to my practice of family planning.				
25	Cost of contraceptive commodities is a barrier to my practice of family planning.				
26	Failure rate of contraceptive commodities is a barrier to my practice of family planning.				

APPENDIX B

Reliability on barriers to contraceptive practices

Case Processing Summary			
		N	%
Cases	Valid	67	100.0
	Excluded[a]	0	.0
	Total	67	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.639
		N of Items	4[a]
	Part 2	Value	.591
		N of Items	3[b]
	Total N of Items		7
Correlation Between Forms			.563
Spearman-Brown Coefficient	Equal Length		.721
	Unequal Length		.724
Guttman split-half Coefficient			.712
a. The items are: Distance from where I live to the family planning clinic is a barrier for the practice of family planning, Long hours to wait before seeing the family planning providers is a barrier to practice family planning, Attitude of family planning service providers is a barrier to the practice of family planning, Family planning clinic do not operate 24 hours, this is a barrier to my practicing of family planning.			
b. The items are: Family planning clinic do not operate 24 hours, this is a barrier to my practicing of family planning, Side effects of family planning commodities is a barrier to my practice of family planning, Cost of family planning commodities is a barrier to my practice of family planning, the Failure rate of family planning commodities is a barrier to my practice of family planning.			

Reliability on Spousal Support

Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	67	100.0
	Excluded	0	.0
	Total	67	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.507
		N of Items	3[a]
	Part 2	Value	.258
		N of Items	2[b]
	Total N of Items		5
Correlation Between Forms			.616
Spearman-Brown Coefficient	Equal Length		.763
	Unequal Length		.769
Guttman split-half Coefficient			.742
a. The items are: My spouse is in support of my using family planning by reminding me of my next appointment, My spouse encourages me to continue the use of family planning despite some side effects, My spouse approves of my using family planning method.			
b. The items are: My spouse approves of my using the family planning method, My spouse accompanies me to visit the family planning clinic whenever he is around, My spouse bears the cost of using family planning.			

Scale: ALL VARIABLES contraceptive practices

Case Processing Summary			
		N	%
Cases	Valid	57	85.1
	Excluded	10	14.9
	Total	67	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics			
Cronbach's Alpha	Part i1	Value	.276
		N of Items	8[a]
	Part i2	Value	-.649[b]
		N of Items	8[c]

	Total N of Items	16
Correlation Between Forms		-.341[d]
Spearman-Brown Coefficient	Equal Length	-1.035[d]
	Unequal Length	-.509[d]
Guttman split-half Coefficient		-.727

a. The items are: Have you ever used family planning, Are you currently using any family planning, Method of family planning currently using: Condom, Family planning pills, Implants/Jadelle, IUD/Coil, Injectables, Tubal ligation.

b. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item coding.

c. The items are Diaphragm, Spermicides, Periodic abstinence, Withdrawal method (coitus interruptus), Cervical Mucus (Billing method), Calendar method (Rhythm method), Lactation method, Sympto-thermal method.

d. The correlation between forms (halves) of the test is negative. This violates reliability model assumptions. Statistics that are functions of this value may have estimates outside theoretically possible ranges.

Reliability on sources of information

Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	67	100.0
	Excluded[a]	0	.0
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.012
		N of Items	4[a]
	Part 2	Value	.210
		N of Items	3[b]
	Total N of Items		7
Correlation Between Forms			.284
Spearman-Brown Coefficient	Equal Length		.443
	Unequal Length		.446
Guttman split-half Coefficient			.499

a. The items are Sources of information: Books and Pamphlets, Church/Mosques, Family members, Friends/colleagues.

b. The items are Friends/colleagues, Hospitals/health centers, Radio/television, Social media.

APPENDIX C

Frequency Table on Demographic Characteristics of Respondents

Marital status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Separated	35	3.1	3.1	3.1
	Divorced	108	9.6	9.6	12.7
	Single	333	29.7	29.7	42.4
	Married	646	57.6	57.6	100.0
	Total	1122	100.0	100.0	

Educational qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	primary education	54	4.8	4.8	4.8
	no formal education	87	7.8	7.8	12.6
	secondary education	371	33.1	33.1	45.6
	Tertiary education	610	54.4	54.4	100.0
	Total	1122	100.0	100.0	

Religion					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African Traditional Religion	69	6.1	6.1	6.1
	Islam	378	33.7	33.7	39.8
	Christianity	675	60.2	60.2	100.0
	Total	1122	100.0	100.0	

Current iage					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-29 years	84	7.5	7.5	7.5
	15-19 years	85	7.6	7.6	15.1
	20-24 years	174	15.5	15.6	30.7
	30-34 years	255	22.7	22.8	53.5
	35years and above	520	46.3	46.5	100.0
	Total	1118	99.6	100.0	

Missing	System	4	.4		
Total		1122	100.0		

Sources of information ion contraceptive

Have you ever heard of contraceptive					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1014	90.4	90.9	90.9
	No	102	9.1	9.1	100.0
	Total	1116	99.5	100.0	
Missing	System	6	.5		
Total		1122	100.0		

Sources of information: Books and Pamphlets					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	964	85.9	86.5	86.5
	Yes	151	13.5	13.5	100.0
	Total	1115	99.4	100.0	
Missing	System	7	.6		
Total		1122	100.0		

Church/Mosques					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	807	71.9	72.4	72.4
	Yes	307	27.4	27.6	100.0
	Total	1114	99.3	100.0	
Missing	System	8	.7		
Total		1122	100.0		

Family members					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	991	88.3	88.9	88.9
	Yes	124	11.1	11.1	100.0
	Total	1115	99.4	100.0	
Missing	System	7	.6		
Total		1122	100.0		

Friends/colleagues					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	955	85.1	85.7	85.7
	Yes	160	14.3	14.3	100.0
	Total	1115	99.4	100.0	
Missing	System	7	.6		
Total		1122	100.0		

Hospitals/health centers					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	874	77.9	78.4	78.4
	Yes	241	21.5	21.6	100.0
	Total	1115	99.4	100.0	
Missing	System	7	.6		
Total		1122	100.0		

Radio/television					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	915	81.6	82.1	82.1
	Yes	200	17.8	17.9	100.0
	Total	1115	99.4	100.0	
Missing	System	7	.6		
Total		1122	100.0		

Social media					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	887	79.1	79.6	79.6
	Yes	228	20.3	20.4	100.0
	Total	1115	99.4	100.0	
Missing	System	7	.6		
Total		1122	100.0		

Frequency Table ion the prevalence of contraceptive practices

Have you ever used contraceptive					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	833	74.2	74.2	74.2
	No	289	25.8	25.8	100.0
	Total	1122	100.0	100.0	

Are you currently using any contraceptive					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	788	70.2	70.2	70.2
	No	334	29.8	29.8	100.0
	Total	1122	100.0	100.0	

Frequency Table on spousal support towards contraceptive practice

My spouse is in support of my using contraceptive by reminding me of my next appointment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	847	75.5	78.1	78.1
	No	238	21.2	21.9	100.0
	Total	1085	96.7	100.0	
Missing	System	37	3.3		
Total		1122	100.0		

My spouse encourages me to continue the use of contraceptive despite some side effects					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	607	54.1	55.9	55.9
	Yes	478	42.6	44.1	100.0
	Total	1085	96.7	100.0	
Missing	System	37	3.3		
Total		1122	100.0		

My spouse approves of my using the contraceptive method					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	708	63.1	65.3	65.3
	No	376	33.5	34.7	100.0
	Total	1084	96.6	100.0	
Missing	System	38	3.4		
Total		1122	100.0		

My spouse accompanies me to visit the contraceptive clinic whenever he is around					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	575	51.2	53.0	53.0
	No	510	45.5	47.0	100.0
	Total	1085	96.7	100.0	
Missing	System	37	3.3		
Total		1122	100.0		

My spouse bears the cost of using contraceptive					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	583	52.0	53.9	53.9
	No	499	44.5	46.1	100.0
	Total	1082	96.4	100.0	
Missing	System	40	3.6		
Total		1122	100.0		

Frequency Table on barriers to contraceptive practices

Distance from where I live to the contraceptive clinic is a barrier for the practice of contraceptive					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	737	65.7	67.9	67.9
	No	348	31.0	32.1	100.0
	Total	1085	96.7	100.0	
Missing	System	37	3.3		
Total		1122	100.0		

Long hours to wait before seeing the contraceptive providers is a barrier to practice family planning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	606	54.0	55.9	55.9
	Yes	479	42.7	44.1	100.0
	Total	1085	96.7	100.0	
Missing	System	37	3.3		
Total		1122	100.0		

Attitude of family planning service providers is a barrier to the practice of family planning					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	637	56.8	58.8	58.8
	No	447	39.8	41.2	100.0
	Total	1084	96.6	100.0	
Missing	System	38	3.4		
Total		1122	100.0		

Family planning clinic do not operate 24 hours, this is a barrier to my practicing of contraceptive.					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	No	585	52.1	53.9	53.9
	Yes	500	44.6	46.1	100.0
	Total	1085	96.7	100.0	
Missing	System	37	3.3		
Total		1122	100.0		

Side effects of contraceptive commodities is a barrier to my practice of family planning.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	584	52.0	53.9	53.9
	No	500	44.6	46.1	100.0
	Total	1084	96.6	100.0	
Missing	System	38	3.4		
Total		1122	100.0		

Cost of contraceptive commodities is a barrier to my practice of family planning.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	556	49.6	51.3	51.3
	Yes	528	47.1	48.7	100.0
	Total	1084	96.6	100.0	
Missing	System	38	3.4		
Total		1122	100.0		

Failure rate of contraceptive commodities is a barrier to my practice of family planning.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	562	50.1	52.1	52.1
	No	517	46.1	47.9	100.0
	Total	1079	96.2	100.0	
Missing	System	43	3.8		
Total		1122	100.0		

Chi-square analysis on contraceptive practice prevalence based on age.

Current age * Are you currently using any family planning Crosstabulation.					
			Are you currently using any family planning Crosstabulation.		
			No	Yes	Total
Current age	15-19 years	Count	71	14	85
		% within Current age.	83.5%	16.5%	100.0%
		% of Total.	6.4%	1.3%	7.6%
	20-24 years	Count	103	71	174
		% within Current age.	59.2%	40.8%	100.0%
		% of Total.	9.2%	6.4%	15.6%
	25-29 years	Count	41	43	84
		% within Current age.	48.8%	51.2%	100.0%
		% of Total.	3.7%	3.8%	7.5%
	30-34 years	Count	33	222	255
		% within Current age.	12.9%	87.1%	100.0%
		% of Total.	3.0%	19.9%	22.8%
	35years and above	Count	85	435	520
		% within Current age.	16.3%	83.7%	100.0%
		% of Total.	7.6%	38.9%	46.5%
Total		Count	333	785	1118
		% within Current age.	29.8%	70.2%	100.0%
		% of Total.	29.8%	70.2%	100.0%

Chi-Square Tests			
	Value	Df	Asymptotic Significance i(2-sided)
Pearson Chi-Square	283.397[a]	4	.000
Likelihood Ratio	274.380	4	.000
Linear-by-Linear Association	247.740	1	.000
N of Valid Cases	1118		
a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 25.02.			

Chi-square analysis on contraceptive practice prevalence based on marital status.

Marital status * Are you currently using any family planning Crosstabulation.					
			Are you currently using any family planning Crosstabulation.		
			No	Yes	Total
Marital status	Single	Count	213	120	333
		% within Current age.	64.0%	36.0%	100.0%
		% of Total	19.0%	10.7%	29.7%
	Married	Count	94	552	646

		% within Current age.	14.6%	85.4%	100.0%
		% of Total	8.4%	49.2%	57.6%
	Divorced	Count	19	89	108
		% within Current age.	17.6%	82.4%	100.0%
		% of Total	1.7%	7.9%	9.6%
	Separated	Count	8	27	35
		% within Current age.	22.9%	77.1%	100.0%
		% of Total	0.7%	2.4%	3.1%
Total		Count	334	788	1122
		% within Current age.	29.8%	70.2%	100.0%
		% of Total	29.8%	70.2%	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance i(2-sided)
Pearson Chi-Square	266.260[a]	3	.000
Likelihood Ratio	256.951	3	.000
Linear-by-Linear Association	148.484	1	.000
N of Valid Cases	1122		

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 10.42.

Chi-square analysis on contraceptive practice prevalence based on educational qualification.

			Are you currently using any family planning Crosstabulation.		
			No	Yes	Total
Educational qualification	no formal education	Count	19	68	87
		% within educational qualification.	21.8%	78.2%	100.0%
		% of Total	1.7%	6.1%	7.8%
	primary education	Count	18	36	54
		% within educational qualification.	33.3%	66.7%	100.0%
		% of Total	1.6%	3.2%	4.8%
	secondary education	Count	115	256	371
		% within educational qualification.	31.0%	69.0%	100.0%
		% of Total	10.2%	22.8%	33.1%
	Tertiary education	Count	182	428	610
		% within educational qualification.	29.8%	70.2%	100.0%
		% of Total	16.2%	38.1%	54.4%
Total		Count	334	788	1122

	% within educational qualification.	29.8%	70.2%	100.0%
	% of Total	29.8%	70.2%	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.214[a]	3	.360
Likelihood Ratio	3.366	3	.339
Linear-by-Linear Association	.818	1	.366
N of Valid Cases	1122		

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 16.07.

Chi-square analysis on family planning practice prevalence based on religion.

Religion * Are you currently using any family planning Crosstabulation.

			Are you currently using any family planning?		
			No	Yes	Total
Religion	Christianity	Count	206	469	675
		% within Religion.	30.5%	69.5%	100.0%
		% of Total.	18.4%	41.8%	60.2%
	Islam	Count	99	279	378
		% within Religion.	26.2%	73.8%	100.0%
		% of Total.	8.8%	24.9%	33.7%
	African Traditional Religion	Count	29	40	69
		% within Religion.	42.0%	58.0%	100.0%
		% of Total.	2.6%	3.6%	6.1%
Total		Count	334	788	1122
		% within Religion.	29.8%	70.2%	100.0%
		% of Total.	29.8%	70.2%	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.457[a]	2	.024
Likelihood Ratio	7.210	2	.027
Linear-by-Linear Association	.132	1	.716
N of Valid Cases	1122		

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 20.54.

Crosstabs

Church/Mosques * Are you currently using any contraceptive

Crosstab					
			Are you currently using any family planning?		Total
			No	Yes	
Church/Mosques	No	Count	253	554	807
		% within Church/Mosques.	31.4%	68.6%	100.0%
		% of Total.	22.7%	49.7%	72.4%
	Yes	Count	74	233	307
		% within Church/Mosques.	24.1%	75.9%	100.0%
		% of Total.	6.6%	20.9%	27.6%
Total		Count	327	787	1114
		% within Church/Mosques.	29.4%	70.6%	100.0%
		% of Total.	29.4%	70.6%	100.0%

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.632[a]	1	.018		
Continuity Correction[b]	5.287	1	.021		
Likelihood Ratio	5.772	1	.016		
Fisher's Exact iTest				.018	.010
Linear-by-Linear Association	5.626	1	.018		
N of Valid Cases	1114				
a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 90.12.					
b. Computed only for a 2x2 table.					

Family members * Are you currently using any contraceptive Crosstabulation.

Crosstab					
			Are you currently using any family planning?		Total
			No	Yes	
Family members	No	Count	298	693	991
		% within Family members.	30.1%	69.9%	100.0%
		% of Total.	26.7%	62.2%	88.9%

	Yes	Count	29	95	124
		% within Family members.	23.4%	76.6%	100.0%
		% of Total.	2.6%	8.5%	11.1%
Total		Count	327	788	1115
		% within Family members.	29.3%	70.7%	100.0%
		% of Total.	29.3%	70.7%	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.375[a]	1	.123		
Continuity Correction[b]	2.064	1	.151		
Likelihood Ratio	2.470	1	.116		
Fisher's Exact iTest				.143	.073
Linear-by-Linear Association	2.373	1	.123		
N of Valid Cases	1115				

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 36.37.

b. Computed only for a 2x2 table.

Friends/colleagues * Are you currently using any contraceptive

Crosstab

			Are you currently using any family planning?		Total
			No	Yes	
Friends/colleagues	No	Count	260	695	955
		% within Friends/colleagues.	27.2%	72.8%	100.0%
		% of Total.	23.3%	62.3%	85.7%
	Yes	Count	67	93	160
		% within Friends/colleagues.	41.9%	58.1%	100.0%
		% of Total.	6.0%	8.3%	14.3%
Total		Count	327	788	1115
		% within Friends/colleagues.	29.3%	70.7%	100.0%
		% of Total.	29.3%	70.7%	100.0%

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.190[a]	1	.000		
Continuity Correction[b]	13.492	1	.000		
Likelihood Ratio	13.437	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	14.178	1	.000		
N of Valid Cases	1115				
a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 46.92.					
b. Computed only for a 2x2 table.					

Hospitals/health centers * Are you currently using any contraceptive Crosstabulation.

Crosstab					
			Are you currently using any family planning?		Total
			No	Yes	
Hospitals/health centers	No	Count	246	628	874
		% within Hospitals/health centres.	28.1%	71.9%	100.0%
		% of Total.	22.1%	56.3%	78.4%
	Yes	Count	81	160	241
		% within Hospitals/health centres.	33.6%	66.4%	100.0%
		% of Total.	7.3%	14.3%	21.6%
Total		Count	327	788	1115
		% within Hospitals/health centres.	29.3%	70.7%	100.0%
		% of Total.	29.3%	70.7%	100.0%

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. i(1-sided)
Pearson Chi-Square	2.721[a]	1	.099		
Continuity Correction[b]	2.463	1	.117		
Likelihood Ratio	2.670	1	.102		
Fisher's Exact iTest				.110	.059

Linear-by-Linear Association	2.718	1	.099		
N of Valid Cases	1115				

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 70.68.

b. Computed only for a 2x2 table.

Radio/television * Are you currently using any contraceptive Crosstabulation.

Crosstab

			Are you currently using any family planning?		
			No	Yes	Total
Radio/television	No	Count	274	641	915
		% within Radio/television.	29.9%	70.1%	100.0%
		% of Total.	24.6%	57.5%	82.1%
	Yes	Count	53	147	200
		% within Radio/television.	26.5%	73.5%	100.0%
		% of Total.	4.8%	13.2%	17.9%
Total		Count	327	788	1115
		% within Radio/television.	29.3%	70.7%	100.0%
		% of Total.	29.3%	70.7%	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.940[a]	1	.332		
Continuity Correction[b]	.781	1	.377		
Likelihood Ratio	.955	1	.329		
Fisher's Exact iTest				.347	.189
Linear-by-Linear Association	.939	1	.332		
N of Valid Cases	1115				

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 58.65.

b. Computed only for a 2x2 table.

Social media * Are you currently using any contraceptive

Crosstab					
			Are you currently using any family planning?		
			No	Yes	Total
Social media	No	Count	251	636	887
		% within Social media.	28.3%	71.7%	100.0%
		% of Total.	22.5%	57.0%	79.6%
	Yes	Count	76	152	228
		% within Social media.	33.3%	66.7%	100.0%
		% of Total.	6.8%	13.6%	20.4%
Total		Count	327	788	1115
		% within Social media.	29.3%	70.7%	100.0%
		% of Total.	29.3%	70.7%	100.0%

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.219[a]	1	.136		
Continuity Correction[b]	1.983	1	.159		
Likelihood Ratio	2.179	1	.140		
Fisher's Exact iTest				.143	.080
Linear-by-Linear Association	2.217	1	.136		
N of Valid Cases	1115				
a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 66.87.					
b. Computed only for a 2x2 table.					

Chi-square analysis on contraceptive practice prevalence and spousal support.

Spousal support * Are you currently using any family planning Crosstabulation.					
			Are you currently using any family planning?		
			No	Yes	Total
spousal support	low support	Count	172	136	308
		% within spousal support.	55.8%	44.2%	100.0%
		% of Total.	15.3%	12.1%	27.5%
	high isupport	Count	162	652	814

		% within spousal support.	19.9%	80.1%	100.0%
		% of Total.	14.4%	58.1%	72.5%
Total		Count	334	788	1122
		% within spousal support.	29.8%	70.2%	100.0%
		% of Total.	29.8%	70.2%	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	138.073[a]	1	.000		
Continuity Correction[b]	136.360	1	.000		
Likelihood Ratio	131.151	1	.000		
Fisher's Exact iTest				.000	.000
Linear-by-Linear Association	137.950	1	.000		
N of Valid Cases	1122				

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 91.69.

b. Computed only for a 2x2 table.

Frequency distribution on methods of contraceptive.

Method of family planning currently using: Condom.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	737	65.7	74.6	74.6
	Yes	251	22.4	25.4	100.0
	Total	988	88.1	100.0	
Missing	System	134	11.9		
Total		1122	100.0		

Family planning pills					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	865	77.1	87.6	87.6
	Yes	122	10.9	12.4	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Implants/Jadelle					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	934	83.2	94.6	94.6
	Yes	53	4.7	5.4	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

IUD/Coil					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	921	82.1	93.3	93.3
	Yes	66	5.9	6.7	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Injectables					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	913	81.4	92.5	92.5
	Yes	74	6.6	7.5	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Tubal ligation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	958	85.4	97.1	97.1
	Yes	29	2.6	2.9	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Diaphragm					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	964	85.9	97.7	97.7
	Yes	23	2.0	2.3	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Spermicides					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	900	80.2	91.2	91.2
	Yes	87	7.8	8.8	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Periodic abstinence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	962	85.7	97.5	97.5
	Yes	25	2.2	2.5	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Withdrawal method (coitus interruptus)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	937	83.5	94.9	94.9
	Yes	50	4.5	5.1	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Cervical Mucus (Billing method)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	956	85.2	96.9	96.9
	Yes	31	2.8	3.1	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Calendar method (Rhythm method)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	961	85.7	97.5	97.5
	Yes	25	2.2	2.5	100.0

	Total	986	87.9	100.0	
Missing	System	136	12.1		
Total		1122	100.0		

Lactation method					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	977	87.1	99.0	99.0
	Yes	10	.9	1.0	100.0
	Total	987	88.0	100.0	
Missing	System	135	12.0		
Total		1122	100.0		

Sympto-thermal method					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	979	87.3	99.3	99.3
	Yes	7	.6	.7	100.0
	Total	986	87.9	100.0	
Missing	System	136	12.1		
Total		1122	100.0		