

**INTENTION TO USE CONTRACEPTIVES AMONG FEMALE
POSTGRADUATE STUDENTS OF PUBLIC HEALTH,
UNIVERSITY OF IBADAN, NIGERIA**

BY

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ABSTRACT

The world population growth rate is increasing and Nigeria being the most populous African country also ranked eight most populous countries in the world. Even though, knowledge of contraception should influence the practice of contraceptive use, but in Nigeria the case is different as we battle between high knowledge of contraceptive use and low practice. This implies that 44% of maternal death can be averted through contraceptive use. Also, 80% of female students in higher educational institutions are sexually active which leads to an increased rate of unplanned pregnancies. Therefore, this study was designed to investigate intention to use contraceptives among female postgraduate students of public health university of Ibadan, Nigeria.

The study was a descriptive cross-sectional design. The total sample of consenting respondents consists of 187 female MPH students from all departments using a multistage sampling technique, involving three stages. A pre-tested semi-structured interviewer questionnaire was used. A 20 point knowledge scale was used to assess knowledge of contraceptive use; knowledge score of ≥ 12 was rated good, $\geq 8 < 12$ was rated fair and < 8 was rated poor knowledge. A 18 point attitude scale was used to examine the attitudinal disposition of respondents towards contraceptive use; attitude score of ≥ 13 was rated good attitude while < 13 was rated bad attitude. Also, a 12 point intention scale was used to assess intention to use contraceptive; intention score of ≥ 9 was rated good intention while < 9 was rated bad intention. Data collected were analysed using descriptive and inferential statistics such as chi square test at $p < 0.05$ level of significance.

Age of the respondents was 26.9 ± 4.4 years. Majority were Christian (89.3%) and Yoruba (79.7%) while 19.3% were married. Modern contraceptive use prevalence was 48.7% with 60.4% sexually active respondents. Majority (71.7%) of the respondent had good knowledge of contraceptive, 20.9% had fair knowledge and 6.4% had poor knowledge of contraceptive use. Some (58.8%) of the respondents had poor attitude and few (41.2%) had good attitude towards use of contraceptives. Also, majority (71.7%) had bad intention while 28.3% had good intention towards contraceptive use. There was a significant difference between attitude of respondents and their intention to use contraceptives $\{X^2= 11.258, p=0.001, df=1\}$.

The findings suggested behavioural intervention programs towards female university students so as to bring about a positive behavior change on their attitude and intention to use contraceptives because intention predicts if an actual behavior will be enacted.

Keywords: Contraceptive use, behaviour, attitude, intention, post-graduate students

Word count: 415

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DEDICATION

This work is dedicated to Almighty God for the completion and to my husband (OLADEJO Sunday) for his support.

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ACKNOWLEDGEMENT

My foremost thanks is to God, who aligned all factors to ensure the successful execution of this academic programme. I also acknowledge the tremendous and laudable efforts of my project supervisor, Dr. O. E. Oyewole for his professional and insightful contributions towards this research project.

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Special thanks to my husband, Mr. Oladejo Sunday for his unrelenting efforts, patience and encouragement, spurring me on to greater heights.

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CERTIFICATION

This is to certify that this study was conducted by Faith Oluwatosin OYEBANJI in the department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria under my supervision.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
CLMS	Contraceptive Logistics Management System
DHS	Demography Health Survey
FHI	Family Health International
FP	Family Planning
HIV	Human Immune-deficiency Virus
IUCD	Intrauterine Contraceptives Device
IUDs	Intrauterine Devices
LAM	Lactation Amenorrhoea Method
MICS	Multiple Indicator Cluster Surveys
NDHS	National Demographic Health Survey
NGOs	Non Governmental Organizations
NPC	National Population Commission
NPP	National Policy Population
NRHP	National Reproductive Health Policy
NURHI	Nigerian Urban Reproductive Initiative
STIs	Sexually Transmitted Infections
TFR	Total Fertility Rate
TMPs	Traditional Medicine Practitioners
TPB	Theory of Planned Behaviour
UN	United Nation
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Contraceptive: A substance or device capable of preventing pregnancy or sexually transmitted infections.

Intention: Is a mental state that represents a commitment to carrying out an action or actions in the future.

Subjective norms: Reflect the perceived approval or disapproval or disapproval from significant others for behavioural performance

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CHAPTER ONE

1.0

INTRODUCTION

1.1 Background to the study

Whenever human reproduction is left unchecked, it results in high birth rates (Michael, 2012; Mosha, Mgimwa and Msuya, 2017). Indeed, uncontrolled births can destroy a nation's development aspirations and prevent its people from enjoying an improved standard of living. Family Planning (FP) in which the primary component is the use of contraceptive methods is a crucial fundamental of health services whose benefits are health and wellbeing of women, men, children, families, and their communities (Michael, 2012; Mosha et., al., 2017). The concept of contraceptive use as will be used in this study took the definition from WHO. The WHO (2015) defined the contraceptive as the use of a product or medical procedure that interferes with reproduction from acts of sexual intercourse. Contraceptive methods can be divided into two categories: traditional and modern. This study focused only on modern contraceptives, which include oral contraceptives, intrauterine devices (IUDs), female and male sterilization, injections, condoms and the diaphragm (Mosha, Mgimwa and Mbonea, 2017).

Now the world population growth rate of this era is increasing due to fertility rate which plays a significant role as one of the essential components of population dynamics and also plays a role in changing the size and structure of the population of a given area over time (Groth and May 2017). High fertility is defined as a total fertility rate (TFR) of 5.0 or higher (Casterline, 2010). The total fertility indicates the average number of live births per woman. The increase in the rate of fertility in less developed countries, as found in the sub-Sahara African countries, is worrisome that all measures including, several contraceptive devices suggested or put in place at national, community and household levels seem not to have had much impact (Liu, Oza, Hogan and Black, 2015). According to demography health survey (DHS) data of 52 countries, which includes Nigeria, it was reported that in high fertility countries, short pregnancy interval occurred more often than in low fertility countries.

The high fertility rate has been established to be linked with the increasing overpopulation in developing countries, a public health problem of concern which has an impact on high maternal mortality, morbidity and infant mortality (Salami and Oladosu, 2016; Yujie,

2015 and Asamoah 2013). There have been many factors attributed to a high fertility rate. However, low contraceptive use is a major contributor to developing countries. In Nigeria, it was recorded a fertility rate of approximately six (6) children per woman, which as lead to a mortality ratio of 576 deaths per 100,000 live births (NPC, 2013). Compared to the fertility rate in developed countries at a maximum of two (2) children per woman with a maternal mortality ratio of 12 deaths per 100,000 live births (WHO, 2016 and UN, 2015). In addition to this, it was understood that the higher the contraceptive use rate, the lower the fertility rate would be and also reduce maternal mobility and mortality (Alaba, Olubusoye and Olaomi, 2017).

As contraceptive use remains the main proximate determinate of fertility, yet, the use of contraceptives in Nigeria is about 15% compared to 70% of some developing countries where the level of knowledge of contraceptive is as high and significantly indifferent from Nigeria (Adjiwanou, Bougma and LeGrand, 2018). Although an estimated 225 million women in developing countries would like to delay or stop childbearing but are not using any method of contraceptive (WHO, 2015). Also, Nigeria recorded an annual population growth rate of 2.6% which is higher than Sweden and Algeria, with 1.1 and 1.89 annual population growth respectively, this can be attributed to the high level of contraceptive use in Sweden and Algeria which is at 75% and 57% respectively, a significantly higher level than Nigeria at 15%. It is in light of this that if Nigeria continues with the current trends in contraceptive use, the population will continue to grow exponentially in the next 10 to 20 years and population will be a highly dependent one with few productive and more dependent people.

Nigeria is yet to derive significant benefits of family planning, as her use of contraceptives has remained persistently low, the prevalence of modern contraceptive use stagnating at 10% among currently married women (National population commission and ICF International, 2014), much more lower than the African average. The resultant high fertility is a significant contributor of high maternal mortality in Nigeria has only 2% of the global population; it contributes a disproportionate 14% to the global burden of 289,000 annual maternal deaths (WHO, 2014). Consequently, contraceptive utilization has multiple benefits to a woman who is using and community in advance.

However, there is a growing consensus that a given behaviour is more likely to occur if the intention to practice it is strong, if there are no environmental barriers to performing it, and

if an individual has the skills and ability to perform the behaviour (Institute of Medicine, 2002; Fishbein and Cappella, 2006; Salem, Bernstein, Sullivan and Lande, 2008; Agha, 2010). Even though intentions are conceptually fundamental because it captures both the level of the set goal or behaviour and the person's level of commitment (Sheeran and Webb, 2016), yet studies on female intention to use contraceptives as an essential aspect of contraceptive use were limited. Therefore, understanding the intention to use contraceptive among female postgraduate students may provide further insight on how to increase the use of contraceptive among female students, as various studies have shown significant non-usage level of contraceptive among female undergraduate student (Maja and Ehlers 2004; Dreyer 2012).

Furthermore, as Nigeria studies among university students have exclusively been carried (Maja and Ehlers 2004; Dreyer 2012) out mainly among undergraduate female students neglecting female postgraduate students, meanwhile, female masters' of public health students are a cohort of change agent, so it is expected to examine what they understand about contraceptive use and their intention to use a contraceptive. Hence, this study aims at investigating the intention to use contraceptives among females postgraduate students of public health, University of Ibadan, Nigeria, with the view to make appropriate recommendations.

1.2 Statement of the problem

Nigeria is ranked among the ten fastest growing population in the world and the most populous African country and the eighth most populous country in the world. This implies that Nigeria population is increasing even though 85% of women knowing contraceptive use (NPC, 2013), despite this, statistically on an average, every Nigeria women give birth to approximately six children in her lifetime. Even though high knowledge of contraceptive use should influence the practice of contraceptive use, but in Nigeria, the case is different as we battle between high knowledge of contraceptive use and low practice. From studies carried out, knowledge of contraceptive means knowing at least one of the methods, either the female sterilization, the pills, intrauterine device (IUD), injectable, implants, male condoms, the diaphragm, form/ jelly, the lactational amenorrhea methods and traditional methods includes abstinence and withdrawal (Fayehun, 2017).

More so, Bryant (2009) believed that 80% of female students in higher educational institutions are sexually active, which leads to an increased rate of unplanned pregnancies. Further, studies also reported that female students are exposed to the risk of unplanned pregnancies as a result of ineffective or non-use of contraceptives (Maja and Ehlers, 2004 and Dreyer, 2012). Therefore, unplanned pregnancies among tertiary female students pose a severe public health concern that associated with adverse health control (such as, unsafe abortion, sexually transmitted infections and pregnancy-related mortality and morbidity) and social outcomes that impact both the educational progress and future carriers (Peltzer and Pengpid, 2015; Mbelle, Mabaso, Setswe and Sifunda, 2018).

Despite the benefit of contraceptives, only 15% of Nigerian women are using it (NPC, 2013) with 10% using modern contraceptives (National population commission and ICF International, 2014). This implies that there is a large gap in the utilization of modern contraceptive among countries with overall low contraceptive use rate (United Nation, 2015). Therefore, contributing to the increasing maternal mortality in developing countries that was estimated to be 239 per 100,000 live births which is roughly 20 times higher than that of developed countries estimated at 12 per 100,000 live births (WHO, UNICEF, UNFPA, World Bank Group and United Nations Population Division, 2015).

However, Nigeria maternal mortality rate was estimated at 576 per 100,000 live births (NPC, 2013) and lost 145 women to maternal mortality each day as started by UNICEF. This high level of maternal mortality can be linked to low utilization of contraceptive use. Also, studies have shown non-usage of contraceptives among higher educational female students (MacPhail, Pettifor, Pascoe and Rees 2007; Adhikari 2009) and as eventually contributed to high unplanned pregnancy rates (Coetzee and Ngunyulu 2015).

1.3 Justification for the Study

Seventy-seven per cent (77%) maternal mortality occurs as the result of a lack of contraceptive use, whereas 44% of this maternal death can be averted through contraceptive use. In other words, the numbers of maternal death would be almost 266,000 higher than the current level in the absence of contraceptive use (Saifuddin, Qingfeng, Li, & Amy, 2012). Also, World Health Organization (WHO), estimated that about 45% of all pregnancies across the world are unplanned, unintended or unwanted, and that half of

them end in termination of pregnancies with evidence showing that half of all these unwanted pregnancies occur among university students (Dreyer, 2012).

To reciprocate the knowledge of contraceptive use into practice, this study will aim at bringing to light the missing link between knowledge of contraceptive use and its practices. This will be conducted through their intention to use contraceptive coupled with environmental factors beyond individual control and to identify strategies to tackle the missing link to increase the use of contraceptive and in turn reduce unwanted pregnancies, fertility rate and maternal mortality rate due to parity.

To ensure the increase of contraceptive use among female student (21 to 45years) who are sexually active and progressively limit the increase rate of unplanned pregnancies, it is pertinent to investigate the intention and disposition of women towards contraceptives use. The information of this study will, therefore, help to increase the body of scientific knowledge. Also, it will guide governments, NGOs, health educators and donors focus on the gap between knowledge and utilization of contraceptives which will help to create a program and formulating an appropriate policy that will increase the utilization of contraceptive and reduce the current rate of high fertility.

1.4 Research questions

- What is the level of knowledge of female postgraduate students on contraceptive use?
- What is the attitudinal disposition of female postgraduate students towards contraceptive use?
- What are the subjective norms of female postgraduate students towards contraceptive use?
- What is the intention of female postgraduate students towards contraceptive use?

1.5 General objective

To investigate the intention to use contraceptives among female postgraduate students of public health, University of Ibadan, Nigeria.

1.6 Specific objectives

1. To assess the level of knowledge of female postgraduate students on contraceptive use.
2. To examine the attitudinal disposition of female postgraduate students towards contraceptive use.

3. To identify the subjective norms of female postgraduate students towards contraceptive use.
4. To determine the intention of female postgraduate students towards contraceptive use.

1.7 Hypotheses

The following null hypotheses were tested:

1. There is no statistically significant difference between the knowledge of respondents and their intention to use contraceptives.
2. There is no significant difference between the attitude of respondents and their intention to use contraceptives.
3. There is no significant difference between the age of respondents and their intention to use contraceptives.
4. There is no significant difference between marital status of respondents and their intention to use contraceptives.

CHAPTER TWO

LITERATURE REVIEW

2.1 An Overview of Contraceptive

Arguably, the practice of contraceptive is as old as human existence (Zaggi, 2014). Contraception refers to the deliberate prevention of pregnancy using any of several methods; contraceptives such as condoms also function to protect its users from contracting sexually transmitted infections (STIs) (Olugbenga-Bello, Abodunrin, and Adeomi, 2011; Obinna, 2011). Contraceptives that are reliable and safe (irrespective of whether they are reversible or not or designed for males or females) thus offer sexually active people the chance to lead a healthy sex life (Ogunbanjo and Bogaert 2004). The ideal contraceptive according to French, Sorhaindo, Van vliet, Mansour, Robinson, Logan et al., (2004) should be 100% effective, safe, convenient; it should be reversible, cheap, easily accessible, and acceptable to all religions and cultures. However, no form of contraceptive method, other than abstinence, has been proven to provide 100% protection in terms of pregnancy prevention or protection from STIs. Extensive research and clinical trials have led to an improvement in existing methods of contraceptive and the development of new, more effective and acceptable methods with fewer side effects (Monjok, Smesny, Ekabua and Essien, 2010). However, the level of effectiveness offered by contraceptives varies (Cleland, 2014). According to Family Health International (FHI), cited in Steiner, Trussell, Mehta, Condon, Subramaniam and Bourne in 2006, believed the failure rate of contraceptive methods and varied from as high as 30 pregnancies per 100 women in a year to as low as one or even fewer.

Studies have shown that human factors also influence the efficacy of contraception ranging from the knowledge of the individual about the proper use of contraceptive methods to the capacity of the individual to adhere to instructions of use (Benagiano, Bastianelli and Farris, 2006; Cleland, 2014). As such, people using contraceptive methods need to understand the risks and benefits of available contraceptive methods to be able to make an informed choice (Steiner et al., 2006) Contraception methods can be broadly divided into the traditional and the modern methods (Abiodun and Balogun, 2009). According to Nigeria's National Demographic Health Survey (NDHS) 2013, modern contraceptive methods include female sterilization, male sterilization, the pill, intra-uterine

device (IUD), injectables, implants, male condom, female condom, diaphragm, foam/jelly, lactation amenorrhoea method (LAM), and emergency contraceptives.

The increasing level of contraceptive use among women of reproductive age is an essential component of many national population and development programs in Sub-Saharan Africa; however, the prevalence use of these methods is still low despite various efforts of many governmental and Non-Governmental agencies (UN, 2015). Even though contraceptive use as help couples and individuals realize their basic right to decide freely and responsibly if, when, and how many children to have. The growing use of contraceptive methods has resulted in not only improvements in health-related outcomes such as reduced maternal mortality and infant mortality (Ahmed, Moussa, Petterson and Asamoah, 2012; Rutstein and Winter, 2015), but also improvements in schooling and economic outcomes, especially for girls and women (Canning and Schultz, 2012; Joshi and Schultz, 2013).

Extensive research and rigorous clinical trials have led to an improvement in existing methods of contraceptives and also to the development of new, more effective and acceptable contraceptive methods with fewer side effects (Abasiattai, 2006). A summary of the various contraceptive methods, their current information, and concepts are outlined in Table 2.1. The table includes the mechanism of action, advantages, efficacy, and side effects of the common contraceptives in current use. Some relevant comments and information on each method are also included in the table.

Table 2.1a: Types of contraceptive

S/N	TYPES	MECHANISM OF ACTION	BENEFITS\ADVANTAGES	EFFICACY	SIDE EFFECTS\ COMMENTS
1.	Barrier methods, e.g. condoms	Act by preventing sperm cells from reaching the female cervix. However, they must be used correctly and consistently for maximum effectiveness.	Offers protection against STI, including HIV. The male condom is cheap and widely available and free of side effects	The failure rate is high, at 12% per year. When used with spermicide agent, the failure rate is reduced to about 8% per year.	Condoms are free of side effects but may fail due to leaks, tears, or slippage during intercourse and withdrawals.
2.	Intrauterine contraceptive device (IUCD)	Act by interfering with sperm survival and motility, thus preventing fertilization and implantation.	It can offer up to 10years of protection against pregnancy	0.1 pregnancies\100 women in the first year of use	Menstrual irregularities. Feeling of a foreign body in some women. Abnormal vaginal discharge, vulval\ vaginal itching and dislodgement of the other side effects
3.	Injectables	Act locally on cervical mucus and uterine endometrium preventing sperm transport and implantation of the fertilized ovum. Higher doses inhibit ovulation	Self-administration. Easy for non-physician. Convenient for most users. Benefit also varies from decrease incidence of endometrial and ovarian cancers, ectopic pregnancies and iron deficiency anaemia. It is also useful in sickling and epileptic seizures in sickle cell anaemia and epileptic patients.	0.3 pregnancy\100 women in the first year of use (effect equal to female sterilization).	Menstrual irregularities (may be severe to cause discontinuation). Delay (not less than 6months) in return of fertility after discontinuation.

Table 2.1b: Types of contraceptive

4.	Oral contraceptive s, eg. Postinor II	Progesterone inhibits ovulation and should be taken within 72 hours of unprotected vaginal intercourse or condom failure.	Highly effective with few side effects if used correctly.	It reduces the risk of pregnancy by 85% when administered correctly.	Minimal side effects. Good compliance rate.
5.	Subdermal implants, eg. Norplant, Jadelle e.t.c	These implants release low-dose of progesterone over an extended period.	Better compliance if no discontinuation	0.1 pregnancies\100 women in the first year of use	Menstrual irregularities
6.	Female sterilization	The fallopian tubes are permanently occluded to prevent pregnancy. This can be done after six weeks post-delivery or 48 hours after delivery (postpartum sterilization) or concurrently with cesarean section.	Permanent occlusion	If fallopian tubes correctly occluded, there is good efficacy	Minimal side effects of surgical procedure only, eg, bleeding, hematoma, and surgical infection.
7.	Traditional methods, eg. Periodic abstinence, withdrawal method (coitus interruptus) and prolong breast feeding		Free of side effects. Cheap. Encourages union and marital dialogue	High failure rate	Free of side effects

2.2 Contraceptive in Nigeria

In pre-colonial Nigerian communities, procreation was generally regarded as the primary function of marriage and children were seen as assets, as the number of children born in a family would determine the workforce of the family as well as its status within the community (Zaggi, 2014). Families with higher numbers of children were given greater respect as they were believed to be contributing more to the workforce and wellbeing of the community (Obinna, 2011). Despite this desire for more children in families, there was general knowledge about reproductive health issues concerning the health of the woman and the baby, hence the need to control pregnancy for adequate child spacing (Bablola, 2009). Traditional methods of birth control used local resources to ensure the reduction of reproductive health problems among its people.

A major form of contraception in pre-colonial Nigerian societies was abstinence from sex during breastfeeding. Traditional beads were also worn by women as waistbands or as armlets. These items were usually soaked in recipes available as concoctions or decoctions, and after that, believed to possess certain spiritual powers to protect women from getting pregnant during sex. Rings and padlocks were also used as clamps on the woman's vagina to ensure that she abstained from sex within a given period. These were being provided and administered by Traditional Medicine Practitioners (TMPs), who were mostly women (Nwachukwu and Obasi, 2008; Bablola, 2009; Obinna, 2011; Olugbenga-Bello et al., 2011; Adesina, 2013). Herbal contraceptives also form an essential aspect of traditional contraceptives in Nigeria. Bablola (2009) defines herbal contraceptives as "those plants used for birth control or in the prevention of pregnancy and for premature expulsion of the fetus from the womb". These plants possess sterilizing properties which act to inhibit implantation by causing a disturbance in the oestrogen progesterone balance in females. They also function by affecting the viability and count of sperm cells in males (Bablola 2009). Herbs used may include the leaf, stem, bark, root, seed or fruits of specific plants which are collected and prepared by knowledgeable TMPs (Abdullahi, 2011). Although the efficacy of these methods is often only explicated by the TMPs and their clients, it is however important to emphasize the relevance of traditional contraceptive methods to these clients.

Admittedly, most users of traditional contraceptives in Nigeria may lack access to modern contraceptives; they, however, believe that traditional contraceptive methods are products of their fore father's wisdom, which recognizes their socio-cultural and religious values

and has little or no side effects when compared to modern contraceptives (Adesina, 2013). These traditional methods are still being used in contemporary Nigerian societies as reported by Bablola (2009) and Olugbenga-Bello et al. (2011). Before 1988, most attempts to address family planning issues in Nigeria were carried out or led by international organizations (Smith, 2003). It was in 1988 that the Nigerian government showed its first significant concern with problems associated with reproductive health, which saw to the establishment of the National Policy on Population (NPP) in the Nigerian Ministry of Health (NMH). This policy discussed the need to improve the quality of reproductive health among its citizens to boost economic growth. An evaluation of this policy's objectives after 22 years of implementation, by Adekunle and Otolorin in 2000, reveals a rather insignificant improvement in the quality of reproductive health. Poor quality and limited availability of health services, as well as low rates of contraceptive use (estimated at 11%), still lingers on in Nigeria (Adekunle and Otolorin, 2000).

The Nigerian government in 2001 adopted a replica of the 1988 policy; this time called the National Population Policy (NPP) and National Reproductive Health Policy (NRHP). They are designed to ensure quality reproductive and sexual health for all Nigerians. The policy aimed at addressing issues of low level of awareness and use of contraceptive services so that all Nigerians (male and female, young and old) would have the opportunity to obtain and use contraceptives of their choice, at the right place, at all times and the cheapest possible cost (Zaggi, 2014).

In the same year (2001), The Bill and Melinda Gates Foundation provided funds for the 'Get it together' project initiated by the Nigerian Urban Reproductive Health Initiative (NURHI). 'Get it together' was a media campaign that used both electronic and print media to increase awareness and utilization of contraceptive methods (NUHRI, 2012). Although it is challenging to access recent evidence-based appraisals of contraceptive mass media initiatives in Nigeria online, assessments of media campaigns on reproductive health in Nigeria have proven such initiatives to be effective in increasing awareness on STIs as well as encouraging the practice of safe sex (Keating, Meekers and Adewuyi, 2006).

In 2003, the Nigeria government, in collaboration with the United States Agency for International Development (USAID), initiated the Contraceptive Logistics Management System (CLMS) with the primary objective of forecasting and procuring contraceptives;

clearing, storing and managing inventories; transportation and distribution of contraceptives; monitoring and supervision; improving logistics management; and cost recovery (Kolapo, Bunde, Ronnow and Igharo, 2007). A 2011 evaluation by USAID indicated that despite the acceptance of these initiatives by Nigerians, and the high levels of training conducted for personnel responsible for contraceptives at medical facilities across the country, the initiative recorded little success. This they attributed to inadequate supervision and the reluctance of trained personnel to adhere strictly to the CLMS guidelines, also, lack of support from policymakers in Nigeria in terms of funding which led to an uneven distribution of ordered contraceptives across states in Nigeria.

Subsequently, the National Population Policy (NPP) of 2004 presented a multi-sectional strategy for problems affecting the Nigerian population, including issues of reproductive health. This policy has specific objectives, among which is to improve the reproductive health of all Nigerians at every stage of the life cycle as well as to accelerate the response to HIV/AIDS epidemics and other related issues. This is achieved by increasing the prevalence rate of modern contraceptives by at least two percentage points per year, and the reduction of HIV/AIDS prevalence (3.6%)⁷ in adults by 25% every five years (NPC, 2004).

In 2012, as reported by Oshodi, the Nigerian Government stated its commitment to tripling the current funding for contraceptives in the country. This led to the approval of a 'task sharing' policy that will now allow community health workers to provide injectable contraceptives, which previously was only administered by doctors, nurses and midwives, to women in their neighbourhood. This practice had prevented some women in rural areas from having access to injectable contraceptives (Oshodi, 2012).

Despite efforts made by government and NGOs to improve contraceptive use among Nigerians, numerous studies have consistently revealed low contraceptive usage among Nigerians, especially among the youth (Duze and Mohammed, 2006; Ebuehi, Ekanem and Ebuehi 2006; Wusu, 2010; Cadmus and Owoaje, 2010; Ijadunola, Abiona, Ijadunola, Afolabi, Esimai, and OlaOlorun, 2010; Tayo, Akinola, Babatunde, Adewunmi, et, al, 2011; Adebayo, 2013). It is therefore pertinent to explore intention to use contraceptive among students to have a better understanding of the nature of contraceptive use.

2.3 Factors Affecting Contraceptive Use among Young People

Several studies have been done in the different countries in the past to find out the factors that affect an individual's use or non-use of contraceptives (Fikru, 2015). Kayongo (2014) revealed that the interaction of individual, societal and reproductive health service factors affecting young people's ability to access contraceptive. Such as demographic, socio-economic, Socio-cultural factors.

A. Demographic factors:- The demographic characteristics such as age, gender, educational status, number of living children and desire for additional children play an important role in determining the use of contraceptive (Kayongo, 2014). Also, ethnicity, marital status, age, and gender all shape clients' experiences with family planning and reproductive health services. In some cultures, women may be unwilling to receive care from male providers, or husbands may object to having their wives see male providers, so a shortage of female providers may limit women's access to services. According to Velasco, Quintana and Jove (1997), it was discussed that contraceptive use with their husbands, expressed even greater fear about talking to a male provider.

Further still, education also influences contraceptive use (Ibekwe and Oriahi, 2015). A study by Lasee and Becker (1997) revealed that if the husband lacked schooling, but the wife had some higher education, they were 4.3 times likely to use contraceptive compared to uneducated couples. According to Lasee and Beakur (1997), also explained that in case the wife was better educated than her husband, she might have considerably more household decision-making. On the contrary, a report by National Bureau of Statistics and United Nation Children's Fund (2017) that non-use of contraception was higher among women with lower educational level than among those who had tertiary education.

B. Socio-cultural factors:- In many parts of the world, women do not have the decision making power, physical mobility, or access to material resources to seek family planning services. Women's use of contraceptives is often strongly influenced by spousal or familial support of or opposition to family planning (Kayonga 2014; Fikru, 2015). A research Adongo, Phillips, kajihara, Fayorse, Debpuur and Binka, (1997) found that women who chose to practice contraception risked social ostracism or familial conflict. In some areas, women need their husband's permission to visit a health facility or to travel unaccompanied, which may result in either clandestine or limited use of contraceptives

(Biddlecom and Fapohunda, 1998). Additionally, Stigma around young people's sexuality may similarly deter young people from seeking such services or may result in denials of reproductive health services, even where parental consent is not required. Many sexually active young women report fear, embarrassment, or shyness about seeking family planning services (Biddlecom, Munthali, Singh and Woog 2007). Furthermore, Family planning methods sometimes challenge bio-cultural beliefs. For example, women in some societies believe it is healthy to menstruate monthly and therefore refuse to use injectable contraceptives that often result in irregular bleeding, spotting, or amenorrhea (no monthly bleeding) (kayongo 2014).

C. On the other hand, socio-economic factors are of greater importance than demographic factors in influencing the use of contraceptives (Ejembi, Dahiru and Aliyu, 2015). Fees for transportation, services, and supplies, can be a major barrier to contraceptives for many young people (Kayongo 2014). Cost is a significant obstacle for adolescents, as young people frequently lack their source of income or control over their finances to be able to afford contraceptives and even free or low-cost reproductive and other health care involves costs, including the opportunity cost of time away from income-generating activities (AbouZahr, Vlassoff and Kumar, 1996)

Also, competing demands on women's time can also make it difficult for women to use services, particularly when facilities are far away. Child care, food preparation, household sanitation, maintaining fuel and water supplies, and income-generating work outside the home can make seeking health care seem like a luxury (kayongo, 2014).

2.4 Prevalence of contraceptive

The prevalence of contraceptive use has increased worldwide due to the development and introduction of modern contraceptives and the establishment of organized family planning programs (D'Arcanques and Vogelsong, 2002; Adekanle, Afolabi and Adeyemi, 2013). It was also reported by WHO report in 2018 that contraceptive use has increased in any parts of the world, especially in Asia and Latin America, but continues to be low in sub-Saharan Africa. Globally, the use of modern contraception has risen slightly, from 54% in 1990 to 57.4% in 2015 (WHO, 2018). Regionally, the proportion of women aged 15-49 reporting use of the modern contraceptive method has risen minimally or plateaued between 2008 and 2015.

In Africa it went from 23.6% to 28.5%, in Asia it has raised slightly from 60.9% to 61.8%, and in Latin America and the Caribbean, it has remained stable at 66.7% (WHO, 2018). The proportion of Nigerian women using modern contraceptive methods rose from 3% in 1990 to 8% in 2003 and approximately 10% in 2013 (DHS, 2013). The rate of contraceptive use in Nigeria result in high fertility rates and also accounts for high maternal, infant and neonatal mortalities (Monok, Smesny, Ekabua and Essien, 2010). The use of modern contraceptive methods has been reported to be significant among women with higher educational level (Aviisah, Dery, Atsu, Yawon, Alotaibi, Rezk et al., 2018). Also, a study carried out by Igbockwe, Oladimeji, Adeoye, Akpa and Lawson (2014), reveals that women with higher (tertiary) education were four times more likely to use modern contraceptives compared to those with lower educational attainment.

Therefore, the contraceptive prevalence rate is related to the maternal mortality rate, and it has been shown that countries with a low prevalence of contraception have high maternal mortality rates (Okonofua, 2003 and United Nations Population Division, 2010; Egede, Onoh, Umeora, Iyoke, Dimejesi and Lawani, 2015). In industrialized countries, virtually all married women use contraception at some time in their reproductive lives, with contraception viewed as a fundamental right of women and most women are armed with the information, education, and means to use it. In contrast, the proportion of reporting such use in developing countries is extremely low (Olugbega-Bello, Abodunrin, Adeomi, 2011; Egede, et., al. 2015). Despite this awareness, the contraceptive prevalence rate among women in the reproductive age group is only 15% (NPC, 2013; Egede, et., al. 2015).

2.5 Knowledge of contraceptives

Knowledge about contraceptive methods showed the strongest and most consistent associations with contraceptive behaviours, especially among women (Frost, Lindberg and Finer, 2012). The theory of planned behaviour views knowledge as a reflection of the underlying attitudes towards behaviour (Ajzen, 1991). This could mean that beliefs about contraceptive use may represent information people have about contraceptives. Wallace (2002) argues that human behaviour is guided by knowledge of the behaviour and their willingness to perform the behaviour. Wallace's (2002) argument could imply that contraceptive users require sufficient information for them to compare a variety of methods of contraception, and evaluate their outcomes as either positive, negative or both positive and negative. The satisfaction of the methods of contraception could be measured by the lack of worries over the risk of pregnancy and STIs, and simplicity in the method used. Wallace (2002) further comments that knowledge may influence behavioural intention, but it is not sufficient in predicting behaviour. This argument suggests that having accurate information about contraceptives and their purpose does not guarantee wise decisions to prevent the risk of pregnancy and STIs. Scholars attribute knowledge of contraceptives to several sources, such as through peer interaction; through interaction with family members; and knowledge obtained in schools, from health care clinics and mass and social media (Adhikari, 2009; Nsubuga et al., 2016).

2.6 Attitudes towards contraception use

Attitudes are not gained by birth; they are learned and adopted by experiences and adopted by experiences and culturally gained during socialization (Thapa, Potharel and Shrestha, 2018). Also, Ajzen (1991) argues that attitude towards a behaviour is guided by beliefs about probable outcomes of performing the behaviour in question, for instance, contraceptive use.

Studies have shown that the attitude youths have about contraceptives is an important determinant of the use and non-use of contraceptives. Positive attitudes are associated with greater use of contraceptive while negative attitudes are associated with lesser contraceptive use (Salako, Iyaniwura, Jeminusi and Sofowora, 2006; Dube and Mohammed, 2006; Ryan, Franzetta and Manlove 2007; Ugoji, 2008; Wu, 2010; Mnyanda, 2013). Furthermore, the attitudes youths have towards contraception are shaped differently among males and females. Ryan and others (2007) suggest that an increase in contraceptive knowledge among boys helps them form positive attitudes towards

contraceptives. Girls, on the other hand, form positive attitudes towards contraceptives by acquiring more knowledge on actual reproductive health and how their bodies function.

2.7 Significant others and contraceptive use

Ajzen (1991) explained that contraceptive use held by significant others like the peers, parents, health care service providers and religious institutions played a role in influencing decision-making process about contraceptives use. The influence of this significant others on decision-making process about contraceptive use relates to the argument in the theory of planned behaviour that individuals do not make decisions to perform a behaviour in isolation, but are influenced by others in their interaction.

The theory of planned behaviour proposes that subjective norms are views about normative expectations of essential others about behaviour, for instance, contraceptive use, and a person's motivation to comply with the expectations (Ajzen, 1991). The issues to be explored under subjective norms are the role of peers in influencing contraceptive use, the role of health care service providers in influencing contraceptive use, and religious beliefs about sexual activity and contraceptive use

2.8 Behavioural intentions about contraceptive use

Research has shown consistently that the intention to perform a behaviour can be translated into actual behavior (Ogden, Karim, Choudry and Brown, 2006). For example, research indicates that the intention to use condoms predicts condom use, that the intention to exercise correlates with this behaviour and the intention to attend for cervical or breast screening practices predicts actual attendance (Plotnikoff and Higginbotham, 1998; Sheeran and Orbell, 2000; Yzer, Siero, and Buunk, 2001). In terms of eating behaviour, research has also shown that the intention to eat healthily is a successful predictor of subsequent behaviour (Povey, Conner, Sparks and Shepherd, 2000). Therefore, the cognition 'I intend to ...' seems to translate into 'I did'. Sutton (1998) carried out an analysis of the association between behavioural intentions and behaviour across a series of studies and concluded that intentions generally predict between 19% and 38% of the actual variance in behaviour. This suggests that behavioural intentions may be useful predictors of successful behavioural change (Ogden et., al., 2006).

Furthermore, Sheeran and Webb (2016) explained that behavioural intentions are self-instructions to perform particular actions directed towards attaining behavioural outcomes. Intentions capture both the level of the set goal or behaviour and the person's level of commitment (Sheeran and Webb, 2016). Although most behaviour is habitual or involves responses that are triggered automatically by situational cues (Bargh, 2006; Wood and Neal, 2007), forming intentions can be crucial for securing long-term goals (Baumeister and Bargh, 2014; Kuhl and Quirin, 2011). The concept of intention has thus proved invaluable for researchers concerned with behaviour change, and interventions designed to promote public health, energy conservation, and educational and organizational outcomes generally rely on frameworks that construe intentions as a key determinant of behaviour change (Ajzen, 1991; Bandura, 1996; Locke and Latham, 1992; Rhodes and Dickau, 2012).

Therefore the qualities of Intention depends on the nature of the goal dimensions, the basis of intention, and properties of intention each influence the quality of the respective intention and its likelihood of performing a behaviour (Sheeran and Webb, 2016).

Goal dimensions: - The contents or structural features of a specified goal can have an important bearing on the likelihood that the intention to achieve that goal is realized (Grant and Gelety, 2009; Fujita and MacGregor, 2012). In general, evidence suggests that goals that are framed in terms of promotion prevention, autonomy and learning or mastery are more likely to be attained (Elliot and Church, 1997; Ryan and Deci 2000). On the other hand, Zhang and Fishbach (2010) found that optimistic goal setting can constitute a self-control strategy that helps people to deal with obstacles during goal pursuit. People allocate more effort to the pursuit of optimistic goals than more realistic goal setting and as a result, perform better. Thus, optimistic goals may contribute to the intention and at the same time, lead to greater overall actual behaviour. Not surprisingly, evidence also suggests that intentions are more likely to be translated into action when respective behaviours are more comfortable to perform (Sheeran, Trafimow, and Armitage, 2003). Goal difficulty is a function of the resources, ability, skills, co-operation, opportunities, and time and effort needed to realize the goal.

Consistent with this idea, socioeconomic status (SES) appears to moderate the intention-behaviour relation (Conner, McEachan, Lawton and Gardner, 2016). However, people's beliefs about the difficulty of performing the behavior or the extent to which they have

control over behavioural performance (self-efficacy and perceived behavioral control, respectively) do not consistently moderate the intention-behavior relationship (Armitage and Conner, 2001; Sheeran, 2002), perhaps because people generally over-estimate the difficulty of performing behaviours (DiBonaventura and Chapman, 2008; Sheeran and Abraham, 2003).

Basis of the intention: -Several factors that guide intention formation (i.e., form the basis of the intention) also influence whether those intentions are realized. Consistent with self-determination theory (Deci and Ryan, 2000; Sheeran and Webb, 2016), evidence suggests that intentions based on personal beliefs about the outcomes of acting (attitudes) better predict behaviour than intentions based on social pressure to act (norms) (Sheeran and Orbell, 1999). Intentions based more on feelings about performing the behaviour (affective attitudes) than on thoughts about the likely consequences of acting (cognitive attitudes) are also associated with improved prediction of behaviour (Keer, Conner, Putte and Neijen, 2014; Conner et al., 2016). Findings also indicate that greater feelings of moral obligation and anticipated regret about failing to act increase the likelihood that intentions are enacted (Abraham and Sheeran, 2004; Conner et al., 2006; Godin, Conner, and Sheeran, 2005; Godin, Germain, Conner, Delege and Sheeran, 2014; Sheeran and Abraham, 2003; Sheeran and Orbell, 1999; Sheeran and Webb, 2016).

Also, many intentions present a conflict between what people want to do and what they feel they should do (Milkman, Rogers, and Bazerman, 2008). Taylor, Webb, and Sheeran (2014) found that such conflicts can give rise to justifications for indulgence that can undermine the realization of intentions. Taken together with research on self-licensing (De Witt Huberts, Evers, and De Ridder, 2012; 2014), it seems that there are times when people willingly undermine their intentions by justifying so doing to themselves. The extent to which intentions are relevant to the persons' identity can also influence the likelihood that they are achieved. For example, Sheeran and Orbell (2000) found that people for whom exercising was an essential part of their self-concept better translated their intentions to exercise into action compared to participants who did not think of themselves as 'an exerciser'. On the other hand, when behavioural intentions serve an identity goal, and other people take notice of the person's intention, intention realization is compromised - because the person feels they possess the identity and no longer needs to act on their intention (Gollwitzer and Sheeran 2009).

Experience with a behaviour, or how often a person has performed the appropriate behaviour in the past, appears to have paradoxical effects on intention-behaviour relations. On the one hand, several studies indicate that more considerable experience serves to stabilize intentions, meaning that they are more likely to be enacted (Doll and Ajzen, 1992; Kashima, Gallois, and McCamish, 1993; Sheeran and Abraham, 2003). On the other hand, research on habits indicates that greater experience reduces intention-behaviour consistency because encountering the relevant contextual cues (e.g., a particular time, place, person) elicits the behaviour automatically – habit performance bypasses intentional control (Ouellette and Wood, 1998; Verplanken and Aarts, 1999; Wood and Neal, 2007). Sheeran, Klein and Rothman, (2017) proposed that this paradox could be resolved by hypothesizing that the impact of experience on the relationship between intentions and behaviour is captured by an inverted U-shaped curve. Findings supported the hypothesis: Greater experience initially enhanced the predictive validity of intention (because experience stabilizes intentions); after a certain point, however, greater experience merely reflects increased automatization of behaviour and so the predictive validity of intention declined. Thus, experience with behavior can serve both to strengthen and weaken intention-behaviour consistency.

Properties of intention: -Properties of intentions also influence intention-behaviour consistency. Studies of properties of intentions measure not only the direction and intensity of an intention but also other features such as accessibility, certainty and temporal stability (Cooke and Sheeran, 2013). Several lines of research indicate that intention stability is a better indicator of the strength of the respective intention than accessibility or certainty. First, intention stability is a more powerful moderator of the intention-behaviour relation than the other indicators (Sheeran and Abraham, 2003 and Cooke and Sheeran, 2004; Conner and Godin, 2007; Cooke and Sheeran, 2013; Sheeran and Webb, 2016). Second, temporal stability is associated with improved processing of goal-relevant information and increased resistance to attacks on intention (Cooke and Sheeran, 2013). Finally, evidence indicates that intention stability mediates the influence of other moderators of the intention-behaviour relationship such as attitudinal versus normative control, anticipated regret, self-schemas, and experience with the behaviour, and intention certainty (Sheeran and Abraham, 2003; Turchik and Gidycz, 2012; Keer et al., 2014).

2.9 Conceptual framework of the study

The study was informed by the Planned Behavioral Theory (PBT). It shows the evidence that people's intention to perform a behaviour is influenced by an array of factors including their attitudes, what their significant others' stance is with respect to their performance of the behaviour and the existence of factors such as side effects that facilitate or impede the performance of the behaviour (Ajzen, Netemeyer, and Ryn, 1991). The Theory of Planned Behaviour (TPB) operates on the principle that the best way to predict behaviour is to measure behavioural intention, which in turn is seen to be a function of three autonomous variables, i.e. attitude, subjective norms and perceived behavioural control.

This theory is an extension of the theory of reasoned action. Both theories envisage that the likelihood of an individual performing a particular action is determined by intentions of the individual towards the behaviour. Behavioural intentions are factors that inspire the performance of the behaviour, which is evident in the determinations and preparedness of an individual to try the behaviour (Ajzen et al., 1991). Behavioural intentions directly result from attitudes towards the behaviour, the subjective norms towards the behaviour after which the TPB builds a third component which is perceived control towards the enactment of the behaviour (Ajzen et al., 1991).

Attitude towards behaviour is a person's overall assessment of the result of the behaviour. It is assumed to have two components, which work in unison. These are one's beliefs about the consequences of the behaviour and positive or negative judgments about the features of the behaviour associated with it. A person with strong beliefs about a particular behaviour will be more likely than not develop a positive attitude to that behaviour and vice versa (Ajzen et al., 1991).

Perceived behavioural control is the degree to which a person feels able to act out the behaviour. It refers to how much control a person has over the behaviour and how confident he or she feels concerning performing or not performing the behaviour. It is determined by control beliefs concerning facilitators or impediments to the presentation of the behaviour. Perceived control is also influenced by how the alleged authority augments or impedes the performance of that behaviour (Ajzen et al., 1991).

Subjective norms are a person's evaluation of the social pressure to perform the target behaviour. Subjective norms are presumed to have two components, which work in interaction: beliefs of other people, who may be in some way meaningful about the behaviour and the preparedness of an individual to enact behaviour. This is defined as his/her intention. A person's attitude, subjective norms and perceived behaviour predict his/her intention; hence, an individual's particular behaviour is a precursor to the performance of behaviour (Ajzen et al., 1991). There is a growing consensus that a given behaviour is more likely to occur if the intention to practice it is strong, if there are no environmental barriers to performing it, and if an individual has the skills and ability to perform the behaviour (Salem, Bernstein, Sullivan and Lande, 2008)

Although the assumption is often made that women who intend to use contraceptives will use them in the future, few studies have examined whether contraceptive intentions are translated into behaviour. One reason for the scarcity of studies concerning this issue is the lack of suitable data. Most fertility surveys in developing countries are cross-sectional in design, whereas longitudinal data from individual respondents are required to evaluate the predictive validity of contraceptive intention

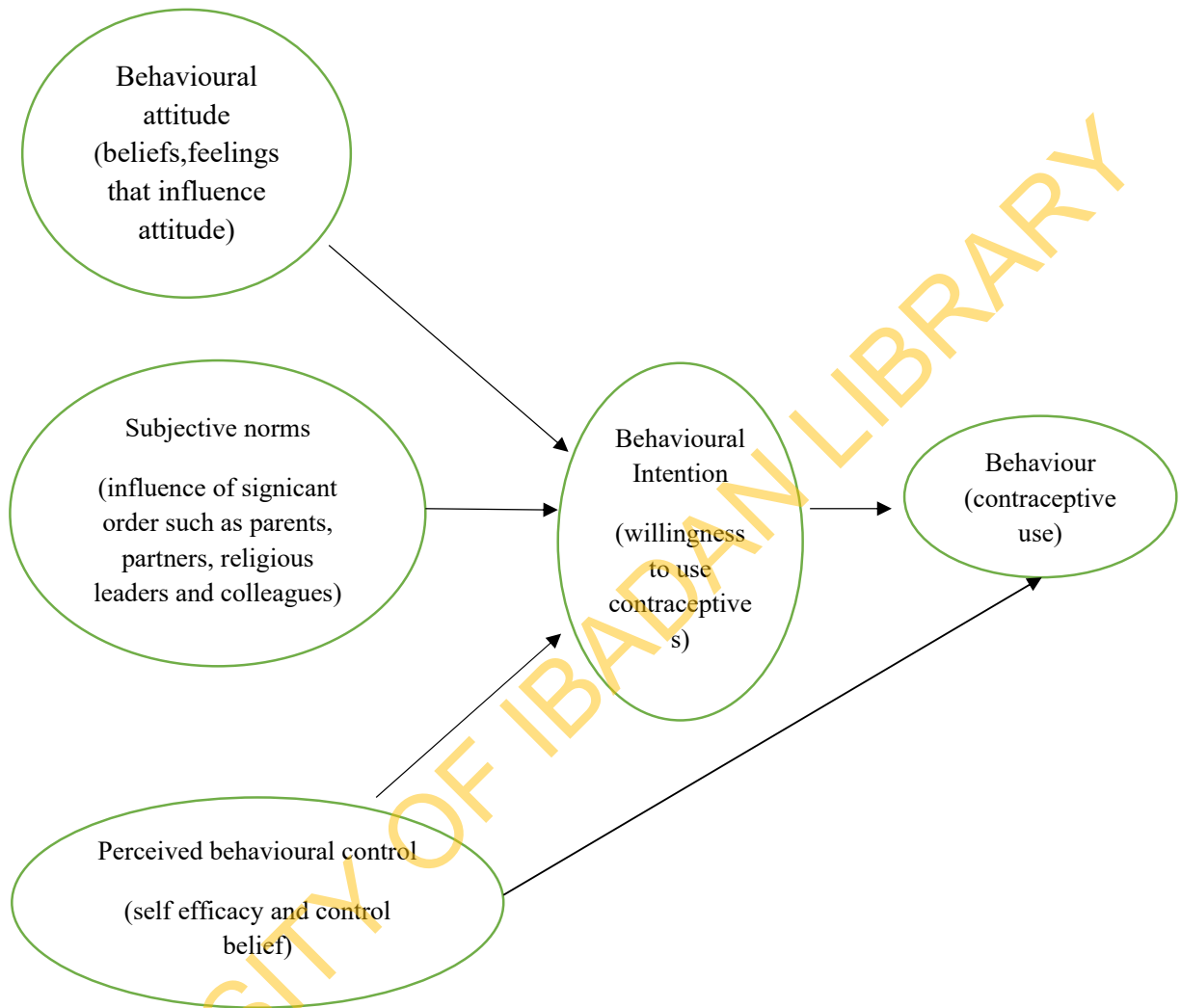


Figure 2.1 Theory of Planned Behaviour (Netemeyer, Ryn, and Ajzen, 1991)

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Study design

This study design adopted a descriptive cross-sectional design using semi-structured self-administered questionnaire.

3.2 Study Area

This study was carried out at the Faculty of Public Health, College of Medicine University of Ibadan, Nigeria. University of Ibadan campus spans over 1,032 hectares of land in Ibadan North Local Government Area. The institution was originally established on 17th November 1948 as an external College of the University of London. As at that time, it was called the University College and had 104 students spread across the three existing faculties at the time: Arts, Science and Medicine (University of Ibadan, 2016). It became a full-fledged university in 1962 following Nigeria independence in 1960. At the moment, the University has academic programs in thirteen Faculties which include Arts, Sciences, Agriculture and Forestry, The Social Sciences, Education, Pharmacy, Veterinary Medicine, Technology, Law, Basic Medical Sciences, Clinical Sciences, Public Health and Dentistry. The last four faculties are organized as College of Medicine. Other academic units in the University include Institute of Child Health, Institute of Education, Institute of African Studies, Centre for Sustainable Development and Centre for Entrepreneur and Innovation, among others. There are twelve halls of residence and 1212 housing units for both academic and non-academic staff in the university.

The Faculty of Public Health, where the study took place was founded in 2002 as the first Faculty of Public Health in Nigeria. The Department of Preventive and Social Medicine of the then faculty of Clinical sciences metamorphosed into the Faculty of Public Health. The Faculty currently has Six Departments and one Institute which include Epidemiology and Medical Statistics (EMS), Health Promotion and Education (HPE), Health Policy and Management (HPM), Environmental Health Sciences (EHS), Human Nutrition, Community Medicine and Institute of Child Health.

The Faculty is located inside the University College Hospital Ibadan. The Faculty building where all the departments (except Human Nutrition and Institute of Child Health) are located was named after late Professor Oladele Ajose. Begin the cohort of change agent and the foremost and leading Faculty of public health in Nigeria, carrying this study out at this location will ensure that the results and recommendations from the study can be adopted by the other schools of Public Health in the country.

3.3 Study population

The study population consist of Female Master of Public Health (MPH) Students both in year one (MPH 1) and in year two (MPH 2) of the Faculty of Public Health, University of Ibadan. As at the time of enquiry from various departments, total numbers of female MPH 1 and MPH 2 students are 186 and 153 respectively. Public Health professional is generally promoters of good behaviour regardless of their religious or cultural affiliations.

3.4 Inclusion criteria

This study included female MPH 1 and MPH, two students of faculty of public health between the ages of 21 years and 49 years who gave consent to participate in this study,

3.5 Exclusion criteria

Female MPH Students in the Faculty of Public Health who did not give their consent (those who did not give informed dissent) and not within the desired age range was excluded from this study.

3.6 Sample size determination

The sample size for this study was estimated from the Leslie-Kish formula (1965) for a single proportion. Prevalence 10% using modern contraceptives (National population commission and ICF International, 2014) was used in the determination of sample size.

$$N = \frac{Z^2 pq}{d^2}$$

N= Minimum sample size

Z= Standard normal deviation set at 1.96 normal interval

p = Proportion estimated to be obtained in the target population

p = 0.1 (Prevalence of 10% from National population commission and ICF International, 2014)

$$q=1-p; =1-0.1; = 0.9$$

d= Degree of accuracy set at 0.05 (precision set at 5% significant)

$$\text{Therefore, } N = \frac{(1.96)^2 \times 0.1 \times 0.9}{0.05^2}$$

$$\frac{0.345744}{0.0025}$$

$$N = 138.2976$$

Therefore, 1.11 (% of none response rate by international statistical institute 2003) was multiplied with the sample size calculated (138.2976) to make sample size 153.51 ($n = 1.11 \times 138.2976 = 153.51$). Approximately, the sample size was **154**.

However, the total population of female MPH students in the University of Ibadan is 339, and the sample size calculated is small (154) compared to the total population. Therefore, the sample size for this study was 187 as estimated using the calculated sampling option by Singh and Masuku (2014) at $\pm 5\%$ precision level where Confidence Level is 95% and $p=0.5$. Also, two out of every three female MPH students was recruited as research participant for this study.

Table 3.1: Number of female MPH students in the Faculty of Public Health

S/N	Department	2016/2017	2017/2018	Total
1.	Health Promotion and Education	47	40	87
2.	Health Policy Management	17	18	35
3.	Epidemiology and Medical statistics	30	23	53
4.	Environmental Health Sciences	31	21	52
5.	Community Medicine	35	21	56
6.	Human Nutrition	10	9	19
7.	Institute of Child Health	16	21	37
	TOTAL	186	153	339

Source: Departmental offices record (2018).

Table 3.2: Estimated sampling option by Singh and Masuku (2014)

Size of population	Sample size
100	81
125	96
150	110
200	134
250	154
300	172
350	187
400	201
450	212

The Singh and Masuku (2014) estimated sampling option was used for this study and Sample Size for $\pm 5\%$ precision level where Confidence Level is 95% and $p=0.5$

3.7 Sampling technique

A multistage sampling technique was considered which involved three (3) stages

Stage 1

The numbers of female students in each department and level were determined by collecting their data from the school authority.

Stage 2

A proportionate sampling technique was considered to allow good selection of an appropriate number of respondent across each department and among both MPH 1 and MPH 2 students.

The proportion of women needed in each department and level was calculated by using the formula below:

$$\text{Proportion needed in each department} = \frac{\text{Total number of women in each department} \times \text{sample size}}{\text{Total number of women in the faculty}}$$

Table 3.3: Table showing the proportionate sampling of the female population

S/N	Department	Number of female students	Proportionate sampling
1.	Health Promotion and Education	87	$\frac{87}{339} \times 187 = 48$
2.	Health Policy Management	35	$\frac{35}{339} \times 187 = 19$
3.	Epidemiology and Medical statistics	53	$\frac{53}{339} \times 187 = 30$
4.	Environmental Health Sciences	52	$\frac{52}{339} \times 187 = 29$
5.	Community Medicine	56	$\frac{56}{339} \times 187 = 31$
6.	Human Nutrition	19	$\frac{19}{339} \times 187 = 10$
7.	Institute of Child Health	37	$\frac{37}{339} \times 187 = 20$
	TOTAL	339	187

With this method, students across the department were randomly selected for the study and their opinions on the subject matter was collected and documented.

Stage 3

The respondents in each department and levels were selected using systematic sampling among the female postgraduate students of the faculty. Sample interval K was calculated, and this was done by dividing the number of female students per class by the number of female students needed to participate in the study in that class.

Sample interval K =

$$\frac{\text{Total number of female students in a class}}{\text{Number of female students needed to participate in the study}}$$

The first respondent was selected by simple random sampling e.g. N1 while the other respondents were selected consecutively e.g. $N1 + K = N2$, $N2 + K = N3$

The questionnaire was administered to the consenting female students who meet the criteria for the study.

3.8 Instrument for data collection

The instrument used for this study was a semi-structured semi-administered questionnaire. The questionnaire was developed using information obtained from literature related to contraceptive use and made available to my project supervisor for correction. The instrument had seven (7) sections: the first section was designed to elicit data on socio-demographics of the respondents, the second section was designed to determine the prevalence/behaviour of contraceptive among respondents, the third section was designed to determine the level of knowledge of respondents on contraceptive use, the fourth section was designed to examine the attitudinal disposition of respondents on contraceptive use, the fifth section focused on respondents subjective norms towards contraceptives, the sixth section was respondents perceived control belief on contraceptive use and the seventh section focused on respondents intention on contraceptive use.

3.9 Validity of the instrument

The validity of this instrument ensured that the questionnaire measure what is expected or supposed to measure using both the content and construct validity. The content validity of this study ensured that individual items in the questionnaire represent what is expected to assess. While construct validity ensured that the questionnaire measures the variable in the

conceptual framework upon which the study was established. Also, face validity was used to ensure the effectiveness of the instrument.

The conceptual framework used was the theory of planned behaviour. A copy of prepared instrument was also being made available to my project supervisor for vetting, review, critique, amendments and corrections. The instrument was also be subjected to independent peer and experts review

3.10 Reliability of the instrument

The reliability of this study was carried out by ensuring that 10% of the questionnaire be pre-tested among female MPH students of the Obafemi Awolowo University, Ile-Ife, Osun State. After the pre-test, the data gathered was checked for errors and completeness. Each questionnaire was numbered for easy recall, and a coding guide was prepared to facilitate entry of the data into the computer software. The data were subjected to descriptive statistics, which was frequencies and charts. The Cronbach's Alpha was obtained, and a reliability coefficient of 0.7 upward was considered fit for the study.

3.11 Data collection procedure

The data were collected by the researcher with the assistance of the class representatives of each of the departments who were trained before the administration of the questionnaire as research assistants. The student was being met in their various classes, and the researcher provided correct and understandable information to them about the research. This was necessary in order to obtain informed consent from every participant. The informed consent forms (attached to the questionnaire) were distributed to the research participants after they have known about the study. After filling the questionnaire, the researcher checked for completeness and errors before leaving the location of data collection.

3.12 Data management and analysis

Serial numbers were written on the copies of the questionnaire for easy entry and recall. Statistical Package for Social Sciences (SPSS) version 21 was used to analyze the data that were obtained from the questionnaire. Using the coding guide, the data collected were carefully entered into the statistical software. Analyses were done using descriptive statistics such as mean, median, mode and inferential statistics such as Chi-square, was used to measure the association between knowledge and intention to use any form of

contraceptives among female MPH students. The results obtained from the SPSS analysis was summarized and presented in tables and charts.

3.13 Expected Study Outcome

This study will enable government, NGOs, health educators/partners focus on the gap between knowledge and utilization of contraceptives which will help to provide a programme that will enhance appropriate policy formulation with the aim to moderate high fertility through the use of contraceptives. Therefore, this study will be of beneficial to all females of reproductive age (15- 49 years), especially towards the reduction of maternal mortality.

However, if this study is not carried out, the importance of contraceptives use might not be emphasized, and maternal mortality can be increased to 77% in the absence of contraceptives use, whereby 44% of this maternal death can be averted if contraceptive use is increased (Saifuddin et al., 2012).

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CHAPTER FOUR

RESULTS OF FINDINGS

4.1 Socio-demographic characteristics of respondents

A total of 187 respondents participated in this study. The mean age of respondents was 26.9 ± 4.4 with minimum and maximum ages of 21 and 48 years, respectively. Respondents were selected from all the seven Departments in the Faculty of Public Health, University of Ibadan. The majority, (79.7% and 89.3%) of the respondents were Yoruba and Christian, respectively. While 80.7% were single, 47.2% of those who were married had a child. The children's mean age was 7.1 ± 4.7 with minimum and maximum ages of one and sixteen years, respectively.

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Table 4.1: Socio-demographic characteristics of respondents

		N=187	
Variables	Responses	Frequency	%
<i>Age of respondents</i>	20-24	53	28.3
	25-29	97	51.9
	30-34	27	14.4
	35 and above	10	5.4
<i>Departments of respondents</i>	Environmental Health Sciences	29	15.5
	Health Promotion and Education	48	25.7
	Health Policy and Management	19	10.2
	Community Medicine	31	16.6
	Human Nutrition	10	5.3
	Institute of Child Health	20	10.7
	Epidemiology and Medical Statistics	30	16.0
<i>Ethnicity</i>	Yoruba	149	79.7
	Igbo	14	7.5
	Hausa	2	1.1
	Efik/Ibibio	6	3.2
	*Others	16	8.5
<i>Religion</i>	Christianity	167	89.3
	Islamic	20	10.7
<i>Marital Status</i>	Married	36	19.3
	Single	151	80.7
<i>Numbers of children (n=36)</i>	One	17	47.2
	Two	11	30.6
	Three	6	16.7
	Four	2	5.5
<i>Age of children (n=36)</i>	0-4	12	33.3
	5-9	15	41.7
	10-14	4	11.1
	15 above	5	13.9

Mean respondents' age=26.9±4.4

*Others=Idoma, Edo, Igala, Isoko

4.2 Prevalence/Behaviour of Contraceptive Use

The prevalence of contraceptive among the 187 respondents was 48.7%. While 60.4% were sexually active, 39.6% were not. The majority, (87.9%) of the respondents had at least one sexual partner in the last twelve months. Also, 70.1% of the respondents had not used any form of contraceptive in the last 12 months. The types of contraceptives that were used among those (29.9%) who had used it in the last 12 months included; Oral contraceptives 38.2%, Condoms 38.2%, injections 10.3%, and others such as intrauterine devices (IUDs), Hormonal, withdrawal, diaphragm were reported. More so, 71.1% of the respondents reported non-usage of any contraceptive each time of having sexual intercourse.

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Table 4.2: Prevalence/Behaviour of Contraceptive Use

Variables	Responses	N=187	
		Frequency	%
<i>Ever used any form of contraceptive</i>	Yes	91	48.7
	No	96	51.3
<i>Sexually Active</i>	Yes	113	60.4
	No	74	39.6
<i>Currently, have a sexual partner(s)</i>	Yes	78	41.7
	No	109	58.3
<i>Number(s) of the sexual partner in the past 12months (n=91)</i>	One	80	87.9
	Two	10	11.0
	Three	1	1.1
<i>Used any form of contraceptive in the past 12months</i>	Yes	56	29.9
	No	131	70.1
<i>Types of contraceptives used (n=68)</i>	Oral contraceptives	26	38.2
	Condoms	26	38.2
	Injections	7	10.3
	Intrauterine devices (IUDs)	3	4.4
	Hormonal	3	4.4
	Withdrawal	2	3.0
	Diaphragm	1	1.5
<i>Use of contraceptive each time of having sexual intercourse</i>	Yes	32	17.1
	No	133	71.1
	No response	22	11.8

4.3 Knowledge of contraceptive use

The knowledge of contraceptive use among the respondents was presented in table 4.3. The majority (71.7%) of the respondents had good knowledge score, 20.9% had fair knowledge, while 6.4% had poor knowledge of contraceptive use.

Most (91.7%), of the respondents, defined contraceptives as substances or devices capable of preventing pregnancy. The types of modern contraceptives reported by the respondents include; condom, oral contraceptives, IUDs, injectable, hormonal, diaphragm, vasectomy, natural method. The use of contraceptives that were reported was, to prevent unwanted pregnancy (92.8%), to allow child spacing (63.5%), to prevent STIs (58.0%), to improve health status (6.1%). Other uses include, to lower risk of ectopic pregnancy, to make sex enjoyable, to reduce maternal mortality and to reduce menstrual cramp. The side effects of contraceptives use include excessive bleeding (34.7%) weight loss/gain (73.5%), irregular menses (40.0%) and infertility (26.5%). Others side effect reported include headache, depression/irritability, mood swing, hormonal imbalance and decreased libido.

The respondents also identified places where information about contraceptives can be obtained to include hospital, media, Ministry of Health, health centres, NGOs and through television programmes. They reported that family planning services could be obtained at the Hospital (76.2%), health centres (21.5%) and youth-friendly centres (2.3%)

Table 4.3: Knowledge of contraceptive use

N=187

Variables	Responses	%
<i>Definition of Contraceptive</i>	A substance or device capable of preventing pregnancy	91.7
	A means of prevention of conception and STDs	3.6
	Device or instrument used to delay or prevent pregnancy after sexual intercourse	3.0
	Barriers to prevent fertilization	1.1
	A form of pregnancy protection	0.6
<i>*Types of modern contraceptives</i>	Condoms	85.0
	Oral contraceptives	78.0
	IUDs	4.6
	Injectable	6.9
	Hormonal	2.3
	Diaphragm	1.7
	Natural method	0.6
	Vasectomy	0.6
<i>*Uses of contraceptive</i>	To prevent unwanted pregnancy	92.8
	To allow child spacing	63.5
	To prevent STIs	58.0
	Improve health status	6.1
	Reduces heavy menstruation	2.2
	To regulate the cycle	4.4
	To reduce menstrual cramp	3.3
	Lower the risk of ectopic pregnancy	1.1
	To make sex enjoyable	1.7
	To reduce maternal mortality	1.1
<i>*Side effects of contraceptive</i>	Weight gain/loss	73.5
	Excessive bleeding	34.7
	Infertility	26.5
	Irregular menses	40.0
	Terminal diseases e.g. cancer	11.2
	Headache	23.5
	Abdominal pain	11.8
	Nausea/vomiting	17.1
	Depression/irritability	20.6
	Mood swing	10.6
	Hormonal imbalance	20.6
	Decrease libido	11.8
	Fainting and Anorexia	7.1
	Promiscuity	2.9
	Miscarriages	1.2
Allergies	2.9	

*Multiple responses present
Mean knowledge score=12.9±3.1

Table 4.3b: Knowledge of contraceptive use

		N=187
Variables	Responses	%
<i>*Modern contraceptives that can be self-administered</i>	Condoms	85.0
	Oral contraceptives	78.0
	ICUD	4.6
	Injectable	6.9
	Hormonal	2.3
	Diaphragm	1.7
	Natural method	0.6
	Vasectomy	0.6
<i>*Places where information about contraceptives can be obtained</i>	Hospital	72.8
	Media	42.8
	Ministry of health	1.7
	Health centre	32.8
	Schools/books	7.8
	Pharmaceutical shops	5.6
	Colleagues and friends	4.4
	NGOs	1.7
	Youth-friendly centres	1.7
	Television programs	6.7
	Religious Centres	1.7
<i>Where can family planning services are obtained</i>	Hospital	76.2
	Health Centres	21.5
	Youth-friendly centres	2.3
<i>Knowledge Score (KS)</i>	Good (KS \geq 12)	72.7
	Fair (KS $<$ 12 \geq 8)	20.9
	Poor (KS $<$ 8)	6.4

*Multiple responses present
 Mean knowledge score=12.9 \pm 3.1

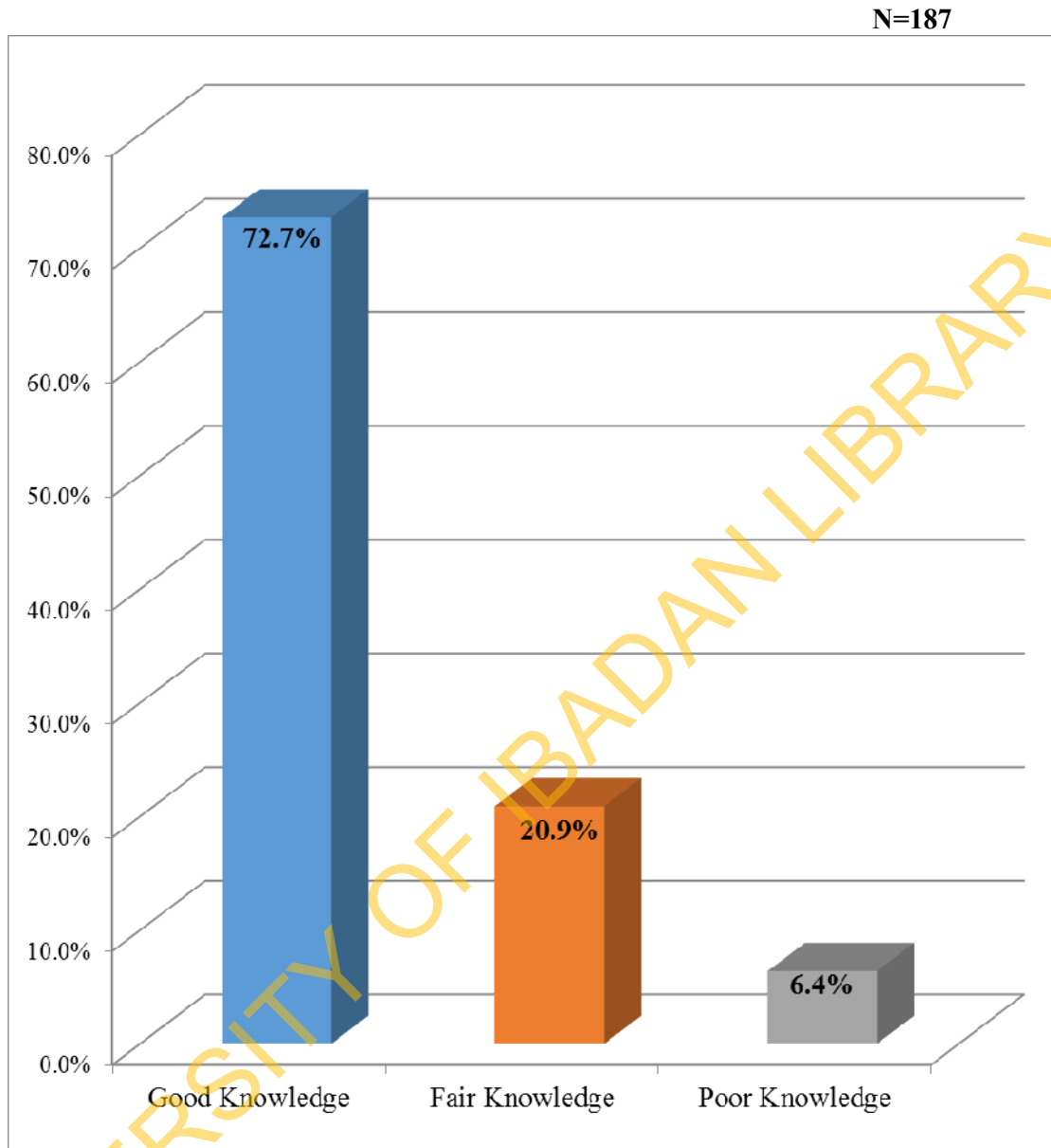


Figure 4.1: Respondents' knowledge of contraceptive use

4.4 Attitude towards the use of Contraceptives

The respondents' attitude towards the use of contraceptives was presented in table 4.4. Some (58.8%) of the respondents had a poor attitude, and 41.2% had good attitude towards the use of contraceptives.

While 85.5% of the respondents can use any form of contraceptive, 14.4% cannot. Few (37.4%) thought contraceptives could reduce their chances of fertility. The majority (72.7%) of the respondents enjoyed using contraceptives, and 24.6% thought that contraceptive can reduces their sexual pleasure. Also, 70.0% encouraged partners to use contraceptives, 26.2% think contraceptive is harmful to health. The majority (74.3%) of the respondents thought that the benefits of contraceptives outweigh the risks, and 32.1% saw the use of contraceptive to promoting promiscuity. Most (82.9%) of the respondents dared to suggest the use of contraceptives to anybody.

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Table 4.4: Attitude towards the use of Contraceptives

N=187

Attitude statements	Responses	
	Agree (%)	Disagree (%)
I cannot use any form of contraceptive	27(14.4)	160 (85.6)
I think contraceptive reduces my chances of fertility	70(37.4)	117(62.6)
I enjoy using contraceptives	51(27.3)	136(72.7)
I think contraceptive reduces my sexual pleasure	46(24.6)	141(75.4)
I encourage my partner to use contraceptive	131(70.0)	56(30.0)
I think contraceptive is harmful to my health	49(26.2)	138(73.8)
I think the benefit of contraceptives outweigh the risks	139(74.3)	48(25.7)
I see the use of contraceptive as promoting promiscuity	60(32.1)	127(67.9)
I dare to suggest the use of contraceptives to anybody	155(82.9)	32(17.9)

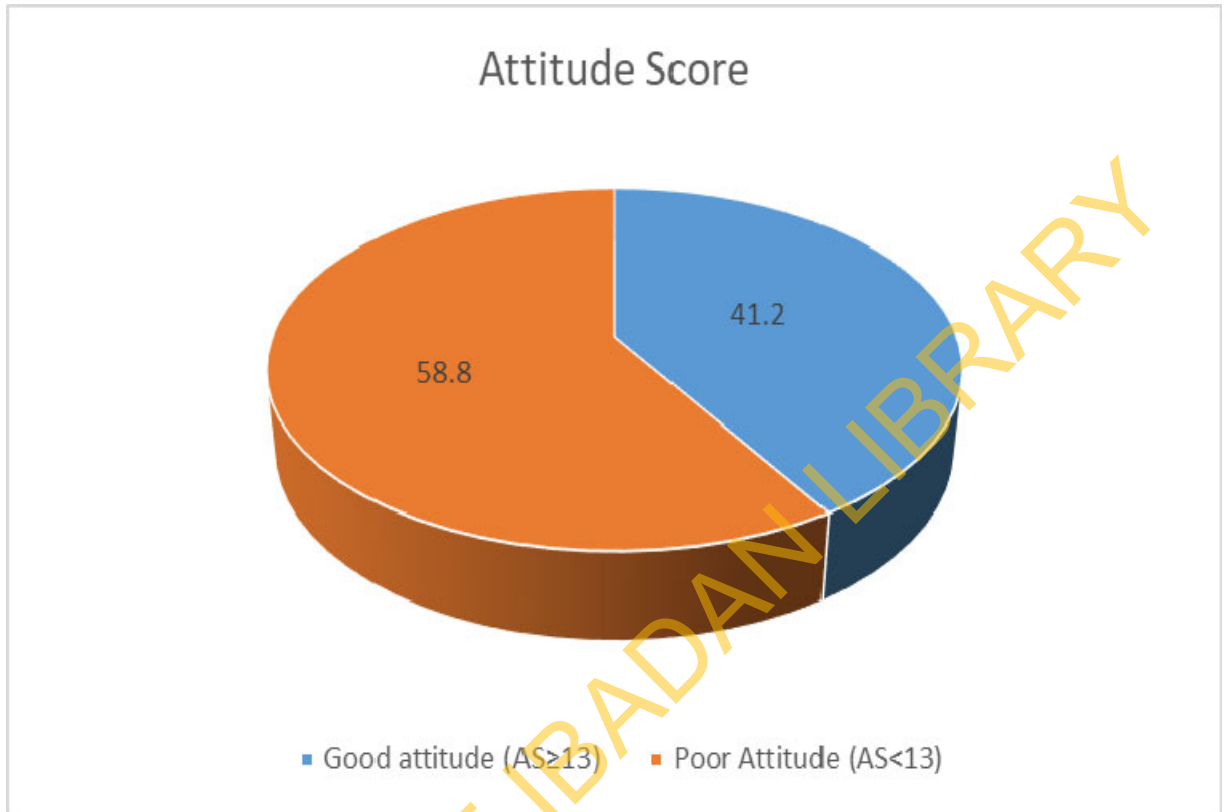


Figure 4.2: Respondents' attitude towards the use of contraceptives

4.5 Intention to Use Contraceptive

Respondents' intention to use contraceptive was presented in table 4.8. The majority (71.7%) of the respondents had bad intention while 28.3% had good intention. Few (36.9%) were willing to start using contraceptive in their next sexual intercourse while 34.2% were considering using contraceptive within the next 6months and 49.2% reported they would consider the use of contraceptive at least once in every few times they have sexual intercourse. Also, 41.2% reported they would ensure the usage of contraceptive in every sexual intercourse they are engaged in while 90.4% said they could not use contraceptive no matter what. Few (23.0%) of the respondents intended to use contraceptive in the nearest future.

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Table 4.5: Intention to Use Contraceptive

Statement	N=187	
	Response	
	Agree (%)	Disagree (%)
Am willing to start using contraceptive in my next sexual intercourse	69(36.9)	118(63.1)
Am considering using contraceptive within the next 6months	64(34.2)	123(65.8)
I will consider the use of contraceptive at least once in every few times I have sexual intercourse	92(49.2)	95(50.8)
I will ensure the usage of contraceptive in every sexual intercourse am engaged in	77(41.2)	110(58.8)
I cannot use contraceptive no matter what	169(90.4)	18(9.6)
I intend using contraceptive in the nearest future	43(23.0)	144(77.0)

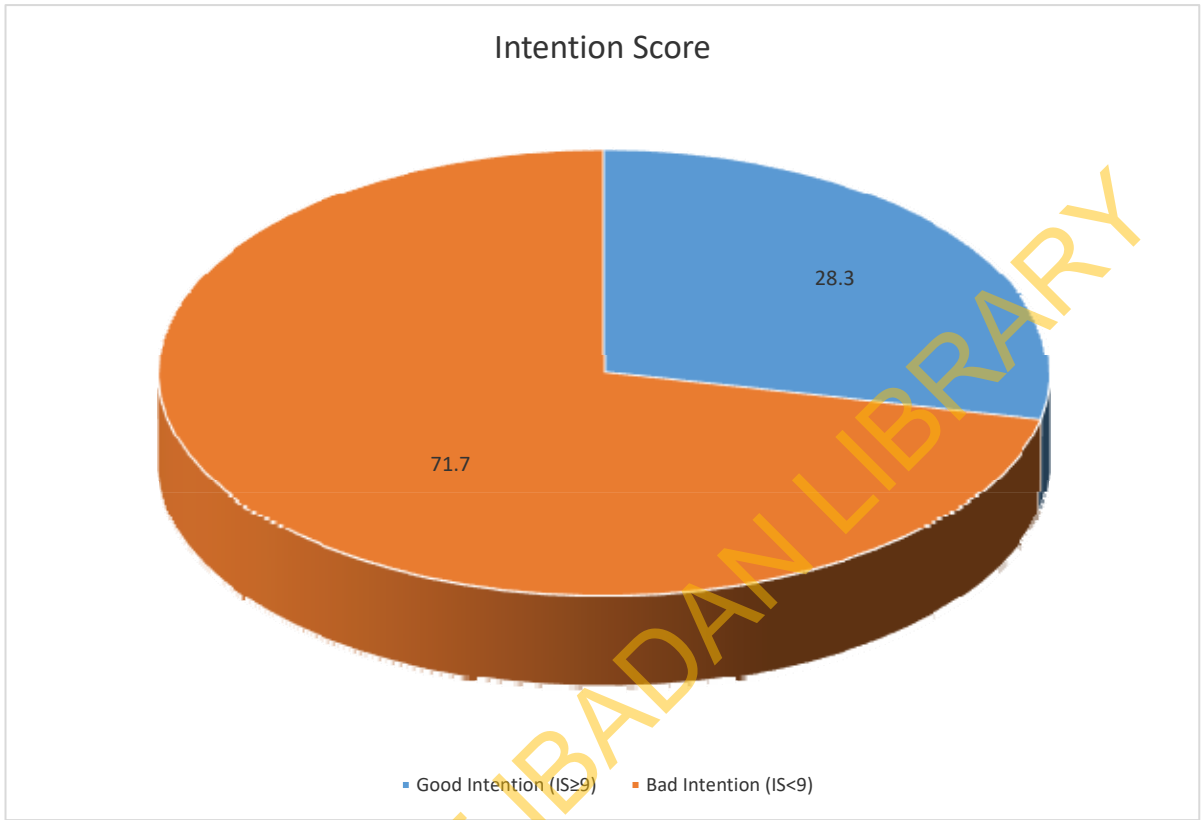


Figure 4.3: Respondents' intention to use contraceptives

4.6 Influence of significant others (Subjective Norms) on Contraceptive use

The subjective norms on contraceptive were presented in table 4.6. Some (59.9%) of the respondents disagreed that family friends who are important to them think they should use contraceptives. Also, 15.0% felt pressurised from colleagues to use contraceptives. The majority (65.2%) felt partner would appreciate them for using contraceptives while 37.4% thought their spiritual leader would not support the use of contraceptives. Meanwhile, 55.6% felt they are expected to use contraceptives, while 44.4% did not.

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Table 4.6: Influence of significant others (Subjective Norms) on Contraceptive use

Statements	N=187	
	Response	
	Agree (%)	Disagree (%)
Family friends vital to me think that I should use contraceptive	75(40.1)	112(59.9)
I feel pressurised to use contraceptives from colleagues	28(15.0)	159(85.0)
My partner will appreciate if I use contraceptive	122(65.2)	65(34.8)
I think my spiritual leader(s) will not support the use of contraceptive	70(37.4)	117(62.6)
I am expected to use contraceptive	104(55.6)	83(44.4)

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4.7 Self-efficacy (Perceived Control Belief) on Contraceptive Use

Respondents' Self-efficacy (Perceived Control Belief) on Contraceptive Use was presented in table 4.7. Most (92.5%) of the respondents agreed that it is completely up to them to use contraceptive or not and 88.8% felt if they have to use a contraceptive, they believe they would not have a problem using it. Also, 78.6% reported they had control over the use of contraceptive when next they engage in sexual intercourse. Few (39.6%) did not have confidence inconsistent use of contraceptives, and most (94.7%) of the respondents believed they could seek medical advice on the appropriate use of contraceptive.

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Table 4.7: Self-efficacy (Perceived Control Belief) on Contraceptive Use

Statements	N=187	
	Responses	
	Agree (%)	Disagree (%)
It is completely up to me to use contraceptive or not	173(92.5)	14(7.5)
If I have to, I believe I will not have problems using a contraceptive.	166(88.8)	21(11.2)
I have control over the use of contraceptive when next I engage in sexual intercourse	147(78.6)	40(21.4)
I have confidence in the consistent use of contraceptives	113(60.4)	74(39.6)
I believe I can seek medical advice on the appropriate use of contraceptive.	177(94.7)	10(5.3)

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4.8 Statistical Test of Hypotheses

Hypothesis 1: There is no statistically significant difference between the knowledge of respondents and their intention to use contraceptives.

Fischer exact test statistics were used to determine the relationship between the two variables, and it was found not significant $\{X^2= 2.425, p=0.321, df=2\}$ as shown in table 4.10

Therefore, the null hypothesis that there was no significant difference between the knowledge of respondents and their intention to use contraceptives was not rejected

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Table 4.8: Relationship between knowledge and intention to used contraceptives

Knowledge	Intention to use		Total	Df	X ²	p-value
	Poor	Good				
Poor	10(83.3)	2(16.7)	12(100.0)	2	2.425*	0.321 ⁺
Fair	31(79.5)	8(20.5)	39(100.0)			
Good	93(68.4)	43(31.6)	136(100.0)			
Total	134(71.7)	53(28.3)	187(100.0)			

*Fischer exact test statistics was used

+Not Significant (p>0.05)

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Hypothesis 2: There is no significant difference between the attitude of respondents and their intention to use contraceptives.

Chi-square test statistics were used to test for the relationship between the two variables, and it was found to be significant $\{\chi^2= 11.258, p=0.001, df=1\}$ as shown in table 4.11

Therefore, the null hypothesis that there was no significant difference between the attitude of respondents and their intention to use contraceptives was rejected

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Table 4.9: Relationship between attitude and intention to use contraceptives

Attitude	Intention to use		Total	Df	χ^2	p-value
	Poor	Good				
Poor	89(80.9)	21(19.1)	110(100.0)	1	11.258*	0.001 ⁺
Good	45(58.4)	32(41.6)	77(100.0)			
Total	134(71.7)	53(28.3)	187(100.0)			

*Chi-square statistics were used

+Significant ($p < 0.05$)

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Hypothesis 3: There is no significant difference between the age of respondents and their intention to use contraceptives.

Fischer exact test statistics were used to test for the relationship between the two variables, and it was found not significant $\{X^2= 2.250, p=0.536, df=3\}$ as shown in table 4.12

Therefore, the null hypothesis that there was no significant difference between the age of respondents and their intention to use contraceptives was not rejected

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Table 4.10: Relationship between age and intention to use contraceptives

Age (years)	Intention to use		Total	Df	χ^2	p- value
	Poor	Good				
20-24	34(64.2)	19(35.8)	53(100.0)	3	2.250*	0.536 ⁺
25-29	73(75.3)	24(24.7)	97(100.0)			
30-34	20(74.1)	7(25.9)	27(100.0)			
35 and above	7(20.0)	3(30.0)	10(100.0)			
Total	134(71.7)	53(28.3)	187(100.0)			

*Fischer exact test statistics was used

+Not significant ($p > 0.05$)

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Hypothesis 4: There is no significant difference between marital status of respondents and their intention to use contraceptives.

Chi-square test statistics were used to test for the relationship between the two variables, and it was found not significant $\{X^2= 0.547, p=0.560, df=1\}$ as shown in table 4.13

Therefore, the null hypothesis that there was no significant difference between marital status of respondents and their intention to use contraceptives was not rejected

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Table 4.11: Relationship between marital status and intention to use contraceptives

Marital status	Intention to use		Total	Df	χ^2	p-value
	Poor	Good				
Single	110(72.8)	41(27.2)	151(100.0)	1	0.547	0.460
Married	24(66.7)	12(33.3)	36(100.0)			
Total	134(71.7)	53(28.3)	187(100.0)			

*Chi-square statistics were used

+Not significant ($p>0.05$)

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CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

5.1.1 Socio-demographic profile of female MPH students of University of Ibadan

The data collected has shown the female MPH students of the University of Ibadan are within the age range of 21-48 years, and highest number of the respondents are between the ages of 25-29 years. Majority of them being single and those married had at least a child. Most of the respondents are the Yoruba ethnicity as expected because the University of Ibadan where the study was conducted in the capital city of Oyo-State which is in the south-western part of Nigeria where Yoruba is the major ethnic group. Most of the respondents were Christians, and about half of the respondents have an idea on what contraceptive is all about based on their responses on their knowledge scale. The knowledge and information that was given by the respondents did not translate into the intention or the use of contraceptive in this study. It is also important to note that religion, marital status and ethnicity were not equitably distributed in this study population because the majority of the respondents were Christians, singles and Yoruba.

5.1.2 Prevalence/Behaviour of Contraceptive use

Several survey reports, such as NDHS (2013) and MICS (2017) revealed the lower prevalence of modern contraceptive among women of reproductive age; this was also supported by Solanke (2017); Damian, George, Martin, Temba and Msuya (2018). Even though there were limited studies showing contraceptive prevalence among female MPH students, to compare their lower prevalence rate of contraceptive with a similar study population. The study also revealed a high level of sexually active respondents, who also reported non-usage of any contraceptive each time of having sexual intercourse. This was supported by Ahmed, Sure, Abolaji, Mohammed and Nguku (2017) and was reported that utilisation of contraceptive among sexually active students is way very low.

The study also revealed that about one-third of the respondents are using contraceptive and the majorly used contraceptive, in increasing order are; oral contraceptive, condoms, injections and the rest which includes an intrauterine device, hormonal, withdrawal, diaphragm were reported. This was by a study carried out by Mosha, Mgimwa, Msuya

(2017), which confirms that oral contraceptive, condoms and injections are the majorly used forms of contraceptive among female students.

5.1.3 Knowledge relating to contraceptive use

This study revealed that the respondents level on contraceptive use and the majority of the respondents had good knowledge scores. Although, literature were scared on knowledge of female postgraduate students about contraceptive use, several studies were available on knowledge of female tertiary students and the use of contraceptive. So, a study by Ibekwe and Oriahi (2015) indicated that respondents with a higher level of education and in the health-related field had good knowledge of Contraception. Also, a study by Ali, Alnatour, Alnuaimi, Alzoubi and Othman (2018) stated that female students had higher scores on knowledge of contraceptive use.

Some respondents also defined and equally stated the use of contraceptive as a device capable of preventing pregnancy and a means of preventing sexually transmitted infection or unwanted pregnancy, respectively. This aligned with a study carried out by Jain and Muralidhar (2011). Furthermore, this study relieved that major and most typical side effects are weight gain, excessive bleeding and irregular menses. Also, studies by Lwelamura, Mnyamagola and Msaki (2012); Thapa, Pokharel and Shrestha (2018) supported that majority of their respondents relieved major side effects of contraceptive as weight gain, heavy bleeding and menstrual irregularities. Therefore, the good knowledge of contraceptive use by female MPH students suggested that their educational exposure has an influence on the responses and can, in turn, be of help to the general public. Also, this exposure can be affiliated with the training obtained during their cause of obtaining a master degree in public health who are trained to become a change agent.

5.1.4 Attitude towards the use of contraceptive

Despite the various studies that have been conducted among the general population, married women and female adolescent but relatively, studies have not focused on female postgraduate students, especially among those in the public health field. This study revealed that few of the respondents think contraceptive is harmful to health and also see the use of contraceptive as a means of promoting promiscuity, but the majority of the respondents still acknowledge that they dare to suggest the use of contraceptive to anybody. This can be worrisome because the female MPH students are potential mothers

and already mothers. So, it is expected of them as a public health professional, to be a role model by leaving as an example to others.

Therefore, majority of the respondents had a poor attitude toward the use of contraceptive and a similar study by Ekhtiar, Amirkhani, Esfaham, Bayesh et al., (2018) showed the evidence that majority of the respondents who are women of reproductive age had a negative attitude towards contraceptive use. This was contradicted by a report from Bajracharya (2015) and Thapa et al., (2018), which revealed that majority of the respondents had good attitude towards contraceptive use. Also, this study revealed that majority of the respondents thinks that the benefits of contraceptive outweigh the risks and this report was by Lwelamira et al., (2012), the majority thought that the benefit contraceptive outweighs negative effects.

5.1.5 Influence of significant others of respondents on contraceptive use

This study showed evidence of significant others towards the use of contraceptive. Significant others such as family, colleagues and spiritual leader can influence the use of contraceptive. A study by Chebitok (2017), indicated that significant others played a role in influencing decision-making processes about contraceptive use. Just as several studies confirm the key role religion plays in shaping the decision to use contraceptive methods (Doctor, Phillips and Sakeah, (2009); Gyimah, Adjei and Takyi (2012) and Farrell, Masquelier, Tissot and Bertrnd, (2014). Although, the impact of religious leaders on the use of contraceptives was also explained, for example, this study revealed that few of the respondents thought that their spiritual leader would not support the use of contraceptive. This can be explained by a study carried out by Agadjanian and Yabiku (2014) that religious leaders can substantially influence, shape people's ideas and view about issues such as contraceptive use

5.1.6 Self-efficacy (perceived control belief) of the respondent on contraceptive use

Even though, majority of the respondents revealed that it is completely up to them to use contraceptives. This report can be supported by Muhindo, Okonya, Groves and Chenault (2015), which revealed that there was a significant relationship between the level of education and self-efficacy. That is, the higher the respondent level of education the better their chances of understanding contraceptive information (Pajares and Urdan 2006; Longmore, Manning, Giordano, Rudolph, 2013)

5.1.7 Intention to use contraceptives of respondents

This study revealed that majority of the respondent had bad intention toward contraceptive use which was an evidence of low usage of contraceptives because Bader (2015) reported that the best predictor of a behaviour is the person's intention to perform that behaviour. This study also revealed that few respondents intend contraceptives in the nearest future. Frost supported this, Lindbergh and Finer (2012) in a study conducted among young adult, revealed that only a few respondents had the intention of using contraceptive in the nearest future. As several studies such as Ajzen (1991); Solanke, Banjo, Oyinloye, and Asa (2018) explained that intention is the major drive for behavioural change and subsequent use of contraceptives. However, this study revealed a low intention to use contraceptives and the danger for the future among this group is that the majority will not use a contraceptive. This portends danger for population growth, sexually transmitted diseases and other reproductive health-related problems.

5.1.8 Implications of finding for health promotion and education

The findings of this study have several implications for planning, development and implementation for health promotion and education on the intention to use contraceptive among women of reproductive age. It has been deduced that the attitude and intention of women have a direct influence on the use of contraceptive. Therefore, to improve and encourage the use of contraceptives among females, the following should be considered.

Public Enlightenment

This can be done by creating awareness through the campaign, targeting towards influencing their attitudes, decision making and intention to use a contraceptive. Since this has a potential of reaching out to larger number of the society at large. This public enlightenment program could involve the use of educational interventions that can be delivered through a variety of media such as the use of posters, leaflets, documentaries, jingles and billboard (Whitaker, Baker and Arias, 2007; Pazol, Zapata, Tregear, Mautone-Smith and Gavin, 2015). Also, the enlightenment should focus more on the benefits and how to overcome the adverse effect of contraceptive methods. However, efforts must also be made to combine it with other strategies such as peer education, advocacy and policy intervention to effectively address attitude towards contraceptive because Bader (2015) stated that intention to perform a behaviour is predicted by attitudes toward the behaviour.

Social Marketing

This is the process of applying marketing principles and techniques to create, communicate and deliver value in order to influence the target audience behaviours that benefit their health (National Social Marketing Centre, 2010). This strategy can be used to make contraceptives more available in all places at an affordable price, either at the health clinics or at pharmaceutical shops. It can also be corroborated with advocacy to necessary stakeholders or partners to ensure that at every place where health services can be obtained, health professionals are available to discussed contraceptive use in details. With this, female intention to use contraceptives will be increase.

Inter-sectorial approach

Addressing the issue of contraceptive use, it should cut across various sectors, not just the health sector but also the education and investment sector. There is a need that at all level of education, students are exposed to adequate knowledge of family planning, and this will, in turn, encourage the use of contraceptives, especially among sexually active students.

Counselling

This approach should involve quality interpersonal communication in the health care settings and at all places where contraceptives services can be obtained. Because this communication relates to both the formation of a positive therapeutic relationship between the providers and the patient (i.e. relational communication) and the ability of health care providers to successfully communicate essential information about various contraceptive plans. Therefore, this will improve women intention, actual use and continuation of contraceptives.

5.2 Conclusion

The study investigates the intention to use any form of contraceptives among female postgraduate students of public health, University of Ibadan. It can be concluded that the low prevalence rate of modern contraceptive use could be a result of non-usage, especially among those that are sexually active. The findings also suggested that the high level of contraceptive knowledge does not translate into contraceptive usage or intention to use a contraceptive. Although, knowledge is high, but the in-depth knowledge of contraceptive is very shallow, as shown in this study. This was because respondent was not clear enough in their mind on the benefits of contraceptive, which outweigh the risk associated with

carrying unintended pregnancy and/or contracting sexually transmitted diseases. Also, respondents listed more of the side effect of contraceptives than the benefits, which implies that respondents are more aware of the adverse effect of contraceptives than the benefits.

5.3 Recommendations

Based on the findings of this study, the following recommendations are made

1. Behavioural intervention program should be encouraged and focus on female students at public health schools and those who influence their decisions towards contraceptives use, and \or can affect changes in their sexual reproductive health to bring about a positive behaviour on their attitude and intention to use contraceptives.
2. More education\ counselling services to women should be made on how to handle or deal with side effect associated with various contraceptive methods should be given due attention and campaigns against myths should be focused on.
3. Family planning programs and policies should focus more on the intention to use contraceptives as a measure to improve contraceptive use
4. All sources and\or personnel through which contraceptive information can be obtained should be trained adequately to deliver a quality interpersonal relationship between the health provider and the patient. This will increase the in-depth knowledge of female on various contraceptive methods.
5. Sexual health-related courses should be taken by all public health students with more emphases on family planning methods. As this will enable them to be an ideal role model in the field of public health and as a professional change agent.

5.4 Study Limitation

This study did not explore environmental factors such as culture, availability of contraceptives on the intention to use contraception. Also, this study was only limited to female postgraduate students who by educational qualification have a higher knowledge of contraceptive use. Therefore, the findings cannot be generalized across students of similar age group, and there is a need to explore female student of the different department that's not health-related

REFERENCES

- Abraha, T. H., Belay, H. S., and Welay, G. M. 2018. Intentions on contraception use and its associated factors among postpartum women in Aksum town, Tigray region, northern Ethiopia: a community-based cross-sectional study. *Reproductive health*, 15(1), 188.
- Abasiattai, A. M. 2006. Current concepts in contraception. *Nigerian journal of medicine: Journal of the National Association of Resident Doctors of Nigeria*, 15(4), 364-372.
- Abdullahi, A. A. 2011. Trends and challenges of traditional medicine in Africa. *African Journal of Traditional, Complementary and Alternative Medicines*, 8(5S).
- Abiodun, O. M., and Balogun, O. R. 2009. Sexual activity and contraceptive use among young female students of tertiary educational institutions in Ilorin, Nigeria. *Contraception*, 79(2), 146-149.
- AbouZahr, C., Vlassoff, C., and Kumar, A. 1996. Quality health care for women: a global challenge. *Health care for women international*, 17(5), 449-467.
- Abraham, C., and Sheeran, P. 2004. Deciding to exercise: The role of anticipated regret. *British Journal of Health Psychology*, 9(2), 269-278.
doi:10.1348/135910704773891096
- Adebayo, S. 2013. Introduction to Contraception. *Punch Nigerian Newspaper* (May 24)
- Adekanle, D. A., Afolabi, A. F., and Adeyemi, A. S. 2013. Terminal fertility control: Clients' own reason for the choice of the contraceptive method. *Open Journal of Obstetrics and Gynecology*, 3(09), 706.
- Adekunle, A. O., and Otolorin, E. O. 2000. Evaluation of the Nigerian population policy-- myth or reality?. *African journal of medicine and medical sciences*, 29(3-4), 305-310.
- Adesina, S. K. 2014. Traditional Medical Care in Nigeria: *Online Nigeria Daily News*.
- Adhikari, R. (2009). Factors affecting awareness of emergency contraception among college students in Kathmandu, Nepal. *BMC women's health*, 9(1), 27.
- Adjiwanou, V., Bougma, M., and Legrand, T. 2018. The Effect of Partners' Education on Women's Reproductive and Maternal Health in Developing Countries. *Social Science and Medicine*, 197, 104-115.

- Adongo, P. B., Phillips, J. F., Kajihara, B., Fayorsey, C., Debpuur, C., and Binka, F. N. 1997. Cultural factors constraining the introduction of family planning among the Kassena-Nankana of Northern Ghana. *Social science and medicine*, 45(12), 1789-1804.
- Agadjanian V. 2013. Religious denomination, religious involvement, and modern contraceptive use in southern Mozambique. *Stud Fam Plann*; 44 (3):259–274.
- Agadjanian, V., and Yabiku, S. T. 2014. Religious affiliation and fertility in a sub-Saharan context: dynamic and lifetime perspectives. *Population research and policy review*, 33(5), 673-691.
- Agha, S. 2010. Intentions to use contraceptives in Pakistan: implications for behavior change campaigns. *BMC public health*, 10(1), 450.
- Ahmed, F. A., Moussa, K. M., Petterson, K. O., and Asamoah, B. O. 2012. Assessing knowledge, attitude, and practice of emergency contraception: a cross-sectional study among Ethiopian undergraduate female students. *BMC public Health*, 12(1), 110.
- Ahmed, Z. D., Sule, I. B., Abolaji, M. L., Mohammed, Y., and Nguku, P. 2017. Knowledge and utilization of contraceptive devices among unmarried undergraduate students of a tertiary institution in Kano State, Nigeria. *The Pan African Medical Journal*, 26.
- Ajzen I. 1991. The theory of planned behaviour. *Journal of Organisational Behaviour and Human Decision Processes*, 50(1), 179–211. doi: 10.1016/0749-5978(91)90020-T
- Ajzen, I., Netemeyer, R., and Ryn, M. Van. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. <http://doi.org/10.1016/j.drugalcdep.2011.10.011>
- Alaba, O. O., Olubusoye, O. E., and Olaomi, J. O. 2017. Spatial Patterns and Determinants of Fertility Levels among Women of Childbearing Age in Nigeria. *South African Family Practice*, 59(4), 143-147.
- Ali, R. A., Alnatour, A., Alnuaimi, K., Alzoubi, F., Almomani, M., and Othman, A. 2018. Effects of interactive teaching on university students' knowledge and attitude toward reproductive health: a pilot study in Jordan. *Journal of multidisciplinary healthcare*, 11, 211.p

- Asamoah, B. O., Agardh, A., and Östergren, P. O. 2013. Inequality in Fertility Rate and Modern Contraceptive Use among Ghanaian Women from 1988–2008. *International Journal for Equity in Health*, 12(1), 37.
- Aviisah, P. A., Dery, S., Atsu, B. K., Yawson, A., Alotaibi, R. M., Rezk, H. R., and Guure, C. (2018). Modern contraceptive use among women of reproductive age in Ghana: analysis of the 2003–2014 Ghana Demographic and Health Surveys. *BMC women's health*, 18(1), 141.
- Bablola, K.A. 2009. An Examination of the Usage of Herbal Contraceptives and Abortifacients in Lagos State, Nigeria. *Ethnobotanical leaflets*, 13: 140-146.
- Bader, V. G. 2015. Influences on contraceptive use among college women (Doctoral dissertation).
- Bandura, A. 1996. Failures in self-regulation: Energy depletion or selective disengagement? *Psychological Inquiry*, 7, 20-24. doi: 10.1207/s15327965pli0701_3
- Bargh, J. A. 2006. What have we been priming all these years? On the development, mechanisms, and ecology of nonconscious social behavior. *European journal of social psychology*, 36(2), 147-168.
- Baumeister, R. F., and Bargh, J. A. (2014). Conscious and unconscious: Toward an integrative understanding of human mental life and action.
- Bazerman, C. 2008. Theories of the middle range in historical studies of writing practice. *Written Communication*, 25(3), 298-318.
- Benagiano, G., Bastianelli, C., and Farris, M. 2006. Infertility: a global perspective. *Minerva ginecologica*, 58(6), 445-457.
- Biddlecom, A. E., and Fapohunda, B. M. 1998. Covert contraceptive use: prevalence, motivations, and consequences. *Studies in family planning*, 360-372.
- Biddlecom, A. E., Munthali, A., Singh, S., and Woog, V. 2007. Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana and Malawi
- Bhatia, S. 1982. Contraceptive intentions and subsequent behavior in rural Bangladesh. *Studies in family planning*, 24-31.
- Bryant, K.D., 2009, Contraceptive use and attitudes among female college students, *Journal of ABNF* 20(1), 12 - 16. PMID: 19278182.

- Cadmus, E.O. and Owoaje, E.T. 2010. Patterns of Contraceptive Use among Female Undergraduates In The University Of Ibadan, Nigeria. *The Internet Journal of Health*, 10 (2).
- Canning, D., and Schultz, T. P. (2012). The economic consequences of reproductive health and family planning. *The Lancet*, 380(9837), 165-171.
- Casterline, J. B. 2010. "Wanted Fertility, Unwanted Fertility, and Fertility Decline: A Fresh Assessment." Paper Presented At The Annual Meeting Of The Population Association Of America, Dallas, Texas.
- Chebitok, B. 2017. Knowledge of contraceptives, attitudes towards contraceptive use, and perceptions of sexual risk, among university students at a South African university (Doctoral dissertation).
- Coetzee, M. H., and Ngunyulu, R. N. 2015. Assessing the use of contraceptives by female undergraduate students in a selected higher educational institution in Gauteng. *Curationis*, 38(2), 1-7.
- Cooke, R., and Sheeran, P. 2013. Properties of intention: Component structure and consequences for behavior, information processing, and resistance. *Journal of Applied Social Psychology*, 43(4), 749-760. doi:10.1111/jasp.12003
- Conner, M., and Godin, G. 2007. Temporal stability of behavioural intention as a moderator of intention-health behaviour relationships. *Psychology & Health*, 22(8), 875-897. doi:10.1080/14768320601070449
- Conner, M., McEachan, R., Lawton, R., and Gardner, P. 2016. Basis of intentions as a moderator of the intention - health behavior relationship. *Health Psychology*, 35(3), 219-227. doi:10.1037/hea0000261
- Damian, D. J., George, J. M., Martin, E., Temba, B., and Msuya, S. E. 2018. Prevalence and factors influencing modern contraceptive use among HIV-positive women in Kilimanjaro region, northern Tanzania. *Contraception and reproductive medicine*, 3(1), 7.
- D'Arcangues, C. M., and Vogelsong, K. M. 2002. Recent advances in family planning methods. *Archives of Ibadan Medicine*, 3(1), 6-9.
- Deci, E. L., and Ryan, R. M. 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268. doi:10.1207/S15327965PLI1104_01

- De Witt Huberts, J. C., Evers, C., and De Ridder, D. T. D. 2012. License to sin: Self-licensing as a mechanism underlying hedonic consumption. *European Journal of Social Psychology*, 42(4), 490-496. doi:10.1002/ejsp.861
- De Witt Huberts, J. C., Evers, C., and De Ridder, D. T. D. 2014. "Because I am worth it" A theoretical framework and empirical review of a justification-based account of self-regulation failure. *Personality and Social Psychology Review*, 18(2), 119-138. doi:10.1177/1088868313507533
- Doctor, H. V., Phillips, J. F., and Sakeah, E. 2009. The Influence of Changes in Women's Religious Affiliation on Contraceptive Use and Fertility Among the Kassena-Nankana of Northern Ghana. *Studies in family planning*, 40(2), 113-122.
- Duze, M. and Mohammed, I. 2006. Male Knowledge, Attitudes, and Family Planning Practices in Northern Nigeria. *African Journal of Reproductive Health*, 10(3): 53-65.
- Dreyer, G. 2012. Contraception: a south African perspective. Van Schaik.
- Egede, J. O., Onoh, R. C., Umeora, O. U. J., Iyoke, C. A., Dimejesi, I. B. O., and Lawani, L. O. 2015. Contraceptive prevalence and preference in a cohort of south - east Nigerian women. *Patient preference and adherence*, 9, 707.
- Elliot, A. J., and Church, M. A. 1997. A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218-232. doi:10.1037/0022-3514.72.1.218
- Ebuehi, O.M., Ekanem, E.E. and Ebuehi, O.A. 2006. Knowledge and Practice of Emergency Contraception among Female Undergraduates in the University of Lagos, Nigeria. *East African Medical Journal*, 83(3): 90-95.
- Ejembi, C. L., Dahiru, T., and Aliyu, A. A. (2015). Contextual factors influencing modern contraceptive use in Nigeria.
- Ekhtiari, A., Amirkhani, Z., Esfahani, A., Bayesh, S., Najibpour, R., and Saghafi, M. 2018. Survey of Knowledge and Attitude Toward Emergency Contraceptive Methods Among Women in Reproductive Age Group. *Journal of Health Sciences*,
- Farrell, M., Masquelier, A., Tissot, E., and Bertrand, J. 2014. Islam, polygyny and modern contraceptive use in Francophone sub-Saharan Africa. *African Population Studies*, 28(3), 1389-1398
- Fayehun, F. 2017. Contraceptive Use In Nigeria Is Incredibly Low. A Lack Of Knowledge May Be Why: *The Conversation*.

- Fikru, T. 2015. The effect of blue star healthcare network on family planning services uptake in member private clinics in Ethiopia. *Slideshow*.
- Fishbein, M., and J. N. Cappella. 2006. The role of theory in developing effective health communications. *Journal of Communication* 56 (s1):S1 – S17.
doi:10.1111/jcom.2006.56.issue-s1.
- French, R., Sorhaindo, A. M., Van Vliet, H. A., Mansour, D. D., Robinson, A. A., Logan, S., ... and Cowan, F. M. 2004. Progestogen-releasing intrauterine systems versus other forms of reversible contraceptives for contraception. *Cochrane Database of Systematic Reviews*, (3).
- Frost, J. J., Lindberg, L. D., and Finer, L. B. 2012. Young adults' contraceptive knowledge, norms and attitudes: associations with risk of unintended pregnancy. *Perspectives on Sexual and Reproductive Health*, 44(2), 107-116.
- Fujita, K., and MacGregor, K. E. 2012. Basic goal distinctions. In H. Aarts, A. J. Elliot, H. Aarts, A. J. Elliot (Eds.), *Goal-directed behavior* (pp. 85-114). New York, NY, US: Psychology Press.
- Godin, G., Conner, M., and Sheeran, P. 2005. Bridging the intention-behaviour 'gap': The role of moral norm. *British Journal of Social Psychology*, 44(4), 497-512.
doi:10.1348/014466604X17452
- Godin, G., Germain, M., Conner, M., Delage, G., and Sheeran, P. 2014. Promoting the return of lapsed blood donors: A seven-arm randomized controlled trial of the question – behavior effect. *Health Psychology*, 33(7), 646-655.
doi:10.1037/a0033505
- Gollwitzer, P. M., and Sheeran, P. 2009. Self-regulation of consumer decision making and behavior: The role of implementation intentions. *Journal of Consumer Psychology*, 19(4), 593-607. doi:10.1016/j.jcps.2009.08.004
- Grant, H., and Gelety, L. 2009. Goal content theories: Why differences in what we are striving for matter. In G. B. Moskowitz, H. Grant, G. B. Moskowitz, H. Grant (Eds.), *The psychology of goals* (pp. 77-97). New York, NY, US: Guilford Press.
- Groth, H., and May, J. F. (Eds.). 2017. *Africa's Population: In Search of a Demographic Dividend*. Springer.
- Gyimah, S. O., Adjei, J. K., and Takyi, B. K. 2012. Religion, contraception, and method choice of married women in Ghana. *Journal of religion and health*, 51(4), 1359-1374.

- Ibekwe, R. U., and Oriahi, I. J. 2015. Knowledge, attitude and utilization of contraception among nursing students in tertiary health facilities in Nigeria. *Highland Medical Research Journal*, 15(1), 43-46.
- Igbodekwe FC, Oladimeji O, Oladimeji KE, Adeoye IA, Akpa OM, and Lawson L. 2014. Utilisation of modern contraceptive among women of childbearing age in resource constraint setting: evidence from 2008 National Demographic and health survey in Nigeria. *J Health Sci*; 4 (3q):72–8.
- Ijadunola, M. Y., Abiona, T. C., Ijadunola, K. T., Afolabi, O. T., Esimai, O. A., and OlaOlorun, F. M. 2010. Male involvement in family planning decision making in Ile-Ife, Osun State, Nigeria. *African journal of reproductive health*, 14(4).
- Institute of Medicine (US). Committee on Communication for Behavior Change in the 21st Century, & Improving the Health of Diverse Populations. 2002. Speaking of health: Assessing health communication strategies for diverse populations. National Academy Press.
- Jain, R., and Muralidhar, S. 2011. Contraceptive methods: needs, options and utilization. *The Journal of Obstetrics and Gynecology of India*, 61(6), 626-634.
- Joshi, S., and Schultz, T. P. 2013. Family planning and women's and children's health: Long-term consequences of an outreach program in Matlab, Bangladesh. *Demography*, 50(1), 149-180.
- Kashima, Y., Gallois, C., and McCamish, M. 1993. The theory of reasoned action and cooperative behaviour: It takes two to use a condom. *British Journal of Social Psychology*, 32(3), 227-239. doi:10.1111/j.2044-8309.1993.tb00997.xfa
- Kayongo, S. B. 2014. Uptake of modern contraception among youths (15-24) at community level in busia district, Uganda. Makerere University.
- Keating, J., Meekers, D. and Adewuyi, A. 2006. Assessing effects of a media campaign on HIV/AIDS awareness and prevention in Nigeria: Results from the Vision Project. BMC Public Health
- Keer, M., Conner, M., Putte, B., and Neijens, P. 2014. The temporal stability and predictive validity of affect based and cognition based intentions. *British Journal of Social Psychology*, 53(2), 315-327. doi:10.1111/bjso.12034
- Kolapo, U., Bunde, E., Ronnow, E. and Igharo, E. 2007. Nigeria, Contraceptive Logistics Management System Report. Arlington, Va. USAID/DELIVER PROJECT, Task order 1. 13-DIFID

- Kuhl, J., and Quirin, M. 2011. Seven steps toward freedom and two ways to lose it: Overcoming limitations of intentionality through self-confrontational coping with stress. *Social Psychology*, 42(1), 74–84. doi: 10.1027/1864-9335/a000045
- Lasee, A., and Becker, S. 1997. Husband-wife communication about family planning and contraceptive use in Kenya. *International family planning perspectives*, 15-33.
- Liu, L., Oza, S., Hogan, D., Perin, J., Rudan, I., Lawn, J. E., and Black, R. E. 2015. Global, Regional, and National Causes of Child Mortality in 2000–13, With Projections to Inform Post-2015 Priorities: An Updated Systematic Analysis. *The Lancet*, 385(9966), 430-440.
- Locke, E. A., Latham, G. P. 1992. 'Process feedback in task groups: An application of goal setting': Comments. *Journal of Applied Behavioral Science*, 28(1), 42-45. doi:10.1177/0021886392281004
- Lwelamira J, Mnyamagola G, Msaki MM (2012) Knowledge, Attitude and Practice (KAP) Towards Modern Contraceptives Among Married Women of Reproductive Age in Mpwapwa District, Central Tanzania. *Curr Res J Soc Sci* 4: 235–245.
- MacGregor, R. 2012. *Neural and brain modeling*. Elsevier.
- MacPhail, C., Pettifor, A. E., Pascoe, S., and Rees, H. V. 2007. Contraception use and pregnancy among 15 – 24 year old South African women: a nationally representative cross-sectional survey. *BMC medicine*, 5(1), 31.
- Maja, L. J., and TMM, E. 2004. Women's knowledge, perceptions and use of emergency contraceptives at three health care centres in northern Tshwane, Gauteng Province. *Africa Journal of Nursing and Midwifery*, 6(2), 30-34.
- Mbelle, N., Mabaso, M., Setswe, G., and Sifunda, S. 2018. Predictors of unplanned pregnancies among female students at South African Technical and Vocational Education and Training colleges: Findings from the 2014 Higher Education and Training HIV and AIDS survey. *South African Medical Journal*, 108(6), 511-516.
- Michael, E. J. 2012. Use of contraceptives methods among women in stable marital relations attending health facilities in Kahama district, Shinyanga region, Tanzania.
- Milkman, K. L., Rogers, T., and Bazerman, M. H. 2008. Harnessing our inner angels and demons: What we have learned about want should conflicts and how that knowledge can help us reduce short-sighted decision making. *Perspectives on Psychological Science*, 3(4), 324 – 338. doi:10.1111/j.1745-6924.2008.00083.x

- Mnyanda, P. 2013. Attitudes, Understanding and Perceptions of Teenagers about the Use of Contraceptives (Buffalo City Municipality – Eastern Cape). An Assignment Submitted to the University of Stellenbosch in Fulfilment of a Degree in Philosophy in HIV/AIDS Management
- Monjok, E., Smesny, A., Ekabua, J. E., and Essien, E. J. 2010. Contraceptive practices in Nigeria: literature review and recommendation for future policy decisions. *Open access journal of contraception*, 1, 9-22.
- Mosha, P. E., Mgimwa, C. A., and Mbonea, S. M. 2017. Assessment of Knowledge and Perception towards Modern Contraceptives Use among Women of Reproductive Age in Mtwivila, Tanzania. *Science Journal of Public Health*. Vol. 5, 335-340. doi: 10.11648/j.sjph.20170504.19
- Mosha, P. E., Mgimwa, C. A., and Msuya, S. M. 2017. Assessment of Knowledge and Perception Towards Modern Contraceptives Use Among Women of Reproductive Age in Mtwivila, Tanzania. *Science Journal of Public Health*, 5(4), 335.
- Muhindo, R., Okonya, J. N., Groves, S., and Chenault, M. 2015. Predictors of contraceptive adherence among women seeking family planning services at Reproductive Health Uganda, Mityana Branch. *International Journal of Population Research*.
- National Bureau of Statistics (NBS) and United Nations Children’s Fund (UNICEF). 2017 Multiple Indicator Cluster Survey 2016-17, Survey Findings Report. Abuja, Nigeria: National Bureau of Statistics and United
- National Population Commission and ICF International. 2014. Nigeria Demographic and Health Survey. 2013. Rockville, Maryland, USA.
- National Population Commission and ICF International. 2014. Nigeria Demographic and Health Survey (NDHS) 2013. Abuja-Nigeria and Rockville, Maryland USA; NPC and ICF International.
- Nigerian Urban Reproductive Health Initiative (NURHI 2), 2007 Project. Christian Perspectives on Reproductive Health and Family Planning in Nigeria. Abuja, Nigeria: NURHI 2.
- Nwachukwu, I., and Obasi, O. O. 2008. Use of modern birth control methods among rural communities in Imo State, Nigeria. *African Journal of Reproductive Health*, 12(1), 101-108.

- Ogboghodo, E. O., Adam, V. Y., and Wagbatsoma, V. A. 2017. Prevalence and determinants of contraceptive use among women of child-bearing age in a rural community in southern Nigeria. *Journal of Community Medicine and Primary Health Care*, 29(2), 97-107.
- Ogden, J., Karim, L., Choudry, A., and Brown, K. 2006. Understanding successful behaviour change: the role of intentions, attitudes to the target and motivations and the example of diet. *Health education research*, 22(3), 397-405.
- Ogunbanjo, G. A., and van Bogaert, D. K. 2004. Contraception: ethical quandaries and misconceptions. *South African Family Practice*, 46(7), 36-37.
- Okonkwo, A. D. 2018. Consumerism, Transactional Sex and Some Nigerian Undergraduate Students: More Complex Interrelationships than Alleged. *Sexuality & Culture*, 22(4), 1112-1136.
- Okonofua, F. E. 2003. Infertility in sub-saharan Africa. *Contemporary Obstetrics and Gynaecology for Developing Countries*, 8, 128-56.
- Olugbenga-Bello, A. I., Abodunrin, O. L., and Adeomi, A. A. 2011. Contraceptive practices among women in rural communities in south-western Nigeria. *Global Journal of Medical Research*, 11(2).
- Ouellette, J. A., and Wood, W. 1998. Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, 124(1), 54-74. doi:10.1037/0033-2909.124.1.54
- Oshodi, A. 2012. NURHI Set to Expand Family Planning Strategy. *Nigerian Tribune*
- Pazol, K., Zapata, L. B., Tregear, S. J., Mautone-Smith, N., and Gavin, L. E. 2015. Impact of contraceptive education on contraceptive knowledge and decision making: a systematic review. *American journal of preventive medicine*, 49(2), S46-S56.
- Peltzer, K., and Pengpid, S. 2015. Contraceptive non-use and associated factors among university students in 22 countries. *African health sciences*, 15(4), 1056-1064.
- Plotnikoff, R. C., and Higginbotham, N. 1998. Protection motivation theory and the prediction of exercise and low-fat diet behaviours among Australian cardiac patients. *Psychology and Health*, 13(3), 411-429.
- Povey, R., Conner, M., Sparks, P., James, R., and Shepherd, R. 2000. The theory of planned behaviour and healthy eating: Examining additive and moderating effects of social influence variables. *Psychology and Health*, 14(6), 991-1006.

- Ross, J. A., and Winfrey, W. L. 2001. Contraceptive use, intention to use and unmet need during the extended postpartum period. *International family planning perspectives*, 20-27.
- Roy, T. K., Ram, F., Nangia, P., Saha, U., and Khan, N. 2003. Can women's childbearing and contraceptive intentions predict contraceptive demand? Findings from a longitudinal study in Central India. *International family planning perspectives*, 25-31.
- Rhodes, R. E., and Dickau, L. 2012. Experimental evidence for the intention – behavior relationship in the physical activity domain: A meta-analysis. *Health Psychology*, 31(6), 724-727. doi:10.1037/a0027290
- Rutstein, S. O., and Winter, R. 2015. Contraception needed to avoid high-fertility-risk births, and maternal and child deaths that would be averted. ICF International.
- Ryan, S., Franzetta, K., and Manlove, J. 2007. Knowledge, perceptions, and motivations for contraception: influence on teens' contraceptive consistency. *Youth & Society*, 39(2), 182-208.
- Saifuddin A., Qingfeng L., Li L., and Amy O. T. 2012. Maternal Deaths Averted By Contraceptive Use: An Analysis of 172 Countries. *The Lancet*; DOI: 10.1016/S0140-6736(12)60478-4
- Salako, A. A., Iyaniwura, C. A., Jeminusi, O. A., and Sofowora, R. 2006. Sexual behaviour: Contraception and fertility among in-school adolescent in Ikenne local government, South-western Nigeria. *Nigerian journal of CLINICAL practice*, 9(1), 26-36.
- Salami, I., and Oladosu, M. 2017. Factors Influencing Women's Empowerment Status and Fertility Preferences among Married Women in South-South Region of Nigeria: 3rd International Conference on African Development Issues (CU - ICADI 2016).
- Sheeran, P. 2002. Intention-behaviour relations: A conceptual and empirical review. *European Review of Social Psychology*, 12, 1-36.
- Sheeran, P., and Abraham, C. 2003. Mediator of moderators: Temporal stability of intention and the intention-behavior relationship. *Personality and Social Psychology Bulletin*, 29, 205-215.

- Sheeran, P., and Orbell, S. 1999. Implementation intentions and repeated behaviour: Augmenting the predictive validity of the theory of planned behaviour. *European Journal of Social Psychology*, 29(2-3), 349-369. doi:10.1002/(SICI)1099-0992(199903/05)29:2/3<349::AID-EJSP931>3.0.CO;2-Y
- Sheeran, P., and Orbell, S. 2000. Self-schemas and the theory of planned behaviour. *European Journal of Social Psychology*, 30(4), 533-550.
- Sheeran, P., Klein, W. M., and Rothman, A. J. 2017. Health behavior change: Moving from observation to intervention. *Annual review of psychology*, 68, 573-600.
- Sheeran, P., Trafimow, D., and Armitage, C. J. 2003. Predicting behavior from perceived behavioural control: Tests of the accuracy assumption of the Theory of Planned Behaviour. *British Journal of Social Psychology*, 42, 393-410. doi:10.1348/014466603322438224
- Sheeran, P., and Orbell, S. 2000. Using implementation intentions to increase attendance for cervical cancer screening. *Health Psychology*, 19(3), 283.
- Sheeran, P., and Webb, T. L. 2016. The intention–behavior gap. *Social and personality psychology compass*, 10(9), 503-518.
- Singh A. S. and Masuku M. B. 2014. Sampling Techniques and Determination of Sample Size in Applied Statistics Research: An Overview; *International Journal of Economics, Commerce and Management*, Vol II, pg 12.
- Smith, D. J. 2003. Patronage, per diems and the “workshop mentality”: the practice of family planning programs in southeastern Nigeria. *World Development*, 31(4), 703-715.
- Solanke, B. L. 2017. Factors influencing contraceptive use and non-use among women of advanced reproductive age in Nigeria. *Journal of Health, Population and Nutrition*, 36(1), 1.
- Solanke, B. L., Banjo, O. O., Oyinloye, B. O., and Asa, S. S. 2018. Maternal grand multiparity and intention to use modern contraceptives in Nigeria. *BMC public health*, 18(1), 1207.
- Steiner, M. J., Trussell, J., Mehta, N., Condon, S., Subramaniam, S., and Bourne, D. 2006. Communicating contraceptive effectiveness: A randomized controlled trial to inform a World Health Organization family planning handbook. *American journal of obstetrics and gynecology*, 195(1), 85-91.
- Sutton, S. 1998. Predicting and explaining intentions and behavior: How well are we doing?. *Journal of applied social psychology*, 28(15), 1317-1338.

- Taylor, C., Webb, T. L., and Sheeran, P. 2014. 'I deserve a treat: Justifications for indulgence undermine the translation of intentions into action. *British Journal of Social Psychology*, 53(3), 501-520. doi:10.1111/bjso.12043
- Tayo, A., Akinola, O., Babatunde, A., Adewunmi, A., Osinusi, D., and Shittu, L. 2011. Contraceptive knowledge and usage amongst female secondary school students in Lagos, Southwest Nigeria. *Journal of Public health and Epidemiology*, 3(1), 34-37.
- Thapa P., Pokharel N., and Shrestha M. (2018). Knowledge, Attitude and Practices of Contraception among the Married Women of Reproductive Age Group in Selected Wards of Dharan Sub-Metropolitan City. *J Contracept Stud* Vol.3 No.3:18
- Turchik, J. A., and Gidycz, C. A. 2012. Exploring the intention-behavior relationship in the prediction of sexual risk behaviors: can it be strengthened? *Journal of Sex Research*, 49, 50-60. doi:10.1080/00224499.2011.578220
- Trussell, J., Raymond, E. G., and Cleland, K. 2014. Emergency contraception: A last chance to prevent unintended pregnancy. *Contemporary Readings in Law and Social Justice*, 6(2).
- Ugoji, F. N. 2008. Attitude of undergraduates towards contraceptive use. *Pakistan journal of social sciences*, 5(1), 111-115.
- United Nations, 2015. Department of Economic and Social Affairs, Population Division. Data Booklet (ST/ESA/SER.A/370).
- United Nations. 2015. Department of economics and social affairs, population division. Trends in contraceptive use worldwide [internet].
- United Nations. 2015. World Fertility Patterns. Trends in Contraceptive Use Worldwide, (ST/ESA/SER. A/349).
- Urdan, T., and Pajares, F. (Eds.). 2006. Self-efficacy beliefs of adolescents. IAP.
- Velasco, C., De la Quintana, C., and Jove, G. 1997. Calidad en los servicios de anticoncepción de El Alto, Bolivia. In *Calidad en los servicios de anticoncepcion de El Alto, Bolivia*.
- Verplanken, B., and Aarts, H. 1999. Habit, attitude, and planned behaviour: is habit an empty construct or an interesting case of goal-directed automaticity? *European Review of Social Psychology*, 10(1), 101-134.
- Whitaker, D. J., Baker, C., and Arias, I. 2007. A review of prevention strategies for intimate partner violence. *Handbook on injury and violence prevention*, 203-221.

- Wood, W., and Neal, D. T. 2007. A new look at habits and the habit-goal interface. *Psychological review*, 114(4), 843.
- World Health Organization. 2014. Family Planning Fact Sheet. WHO.
- World Health Organization. 2015. Family Planning/Contraception Fact Sheet. WHO
- World Health Organization. 2016. Maternal Mortality Fact Sheet. WHO
- World Health Organization. 2018. Family Planning/Contraception Fact Sheet. WHO
- Wu, L. 2010. A survey on the knowledge, attitude, and behavior regarding contraception use among pregnant teenagers in Beijing, China. *Clinical Nursing Research*, 19(4), 403-415.
- Yujie, L., 2015. The Relationship Bet Fertility Rate and Economy Growth in Developing Countries: Lund University, School Of Economics and Manager.
- Yzer, M. C., Siero, F. W., and Buunk, B. P. 2001. Bringing up condom use and using condoms with new sexual partners: Intentional or habitual?. *Psychology and Health*, 16(4), 409-421.
- Zaggi, H. Y. 2014. Contraceptive knowledge and practices among students in federal polytechnic Kaduna, Nigeria: an exploratory study (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Zhang, Y., and Fishbach, A. 2010. Counteracting obstacles with optimistic predictions. *Journal of Experimental Psychology: General*, 139, 16-31. doi:10.1037/a0018143

APPENDICES

QUESTIONNAIRE

Serial no

DEPARTMENT OF HEALTH PROMOTION AND EDUCATION, COLLEGE OF
MEDICINE, UNIVERSITY OF IBADAN, OYO STATE

Intention to Use Any Form of Contraceptives among Female Post Graduate Students of Public Health, University of Ibadan, Nigeria

Dear Respondents,

I am a post graduate student of the University of Ibadan, conducting a research on women of reproductive age (21-49years) and the study is titled “**Intention to Use Any Form of Contraceptives among Female Post Graduate Students of Public Health, University of Ibadan, Nigeria**”

I will very much appreciate your participation in this study. The information will help Government, health educator, NGO and donors to better plan contraceptive services. Whatever information you provide will be kept strictly confidential and will not be shown to anyone other than the analyst and my supervisor.

Participation in this study is voluntary and if you come across any question you do not want to answer, please signify and you can stop participating at any time. However, I hope that you will participate in this study since your views are important.

(Note that all contraceptives mentioned in this questionnaire referred to modern contraceptive).

SECTION 1: Socio-demographic characteristics

Please fill in or tick the responses appropriate to you in this section

1. Department: _____
2. Age: _____
3. Ethnicity: Yoruba Igbo Hausa Others (Specify) _____
4. Religion: Christianity Islam Others (Specify) _____
5. Marital status: Single married divorced single mothers cohabiting

*if single skip question 6 and 7

6. No of children _____

7. Children age(s) _____

SECTION 2: Prevalence\ Behaviour of Contraceptive Use

Please provide answers to the following questions

8. Have you ever used any form of contraceptive before?: Yes No

9. Are you sexually active: Yes No

If 'No' skip other question in this section

10. Do you currently have sexual partner(s)?: Yes No

11. How many sexual partners have you had in the past 12 months: _____

12. In the past 12 months have you used any form of contraceptive: Yes No

13. Mention the type(s) used: _____

14. Do you use contraceptive each time you engage in sexual intercourse: Yes No

SECTION 3: Knowledge of contraceptive use

Please provide answers to the following questions

SN	QUESTIONS	OPTIONS
15.	What is contraceptive?	
16.	Mention 5 types of modern contraceptives	
17.	Mention 3 uses of contraceptive	
18.	State 5 side effects of contraceptive	
19.	Mention 2 contraceptives(modern) that can be self-administered	
20.	State 2 places where information about contraceptives can be obtained	
21.	Where can family planning services be obtained	
22.	Total score obtained	
23.	Code	

Section 4: Attitude towards use of Contraceptives

Please tick the right answers to the following questions

SN	Questions	Agree	Disagree
24.	I can't use any form of contraceptive		
25.	I think contraceptive reduces my chances of fertility		

26.	I enjoy using contraceptives		
27.	I think contraceptive reduces my sexual pleasure		
28.	I encourage my partner to use contraceptive		
29.	I think contraceptive is harmful to my health		
30.	I think the benefit of contraceptives outweigh the risks		
31.	I see the use of contraceptive promote promiscuity		
32.	I have the courage to suggest the use of contraceptives to anybody		

Section 5: Influence of significant others (Subjective Norms) on Contraceptive use

Please provide the appropriate answers below

SN	Questions	Agree	Disagree
33.	Family friends important to me thinks that I should use contraceptive		
34.	I feel pressurized to use contraceptives from colleagues		
35.	My partner will appreciate if I use contraceptive		
36.	I think my spiritual leader(s) will not support the use of contraceptive		
37.	I am expected to use contraceptive		

Section 6: Self-efficacy (Perceived Control Belief) on Contraceptive Use

Please tick the appropriate answers to the following questions

SN	Questions	Agree	Disagree
38.	It is completely up to me to use contraceptive or not		
39.	If I have to, I would not have problems in succeeding to use contraceptive		
40.	I have control over the use of contraceptive when next I engage in sexual intercourse		
41.	I have confidence in consistent use of contraceptives		
42.	I believe I can seek medical advice on appropriate use of contraceptive		

Section 7: Intention to Use Contraceptive

Please tick the appropriate answers to the following questions

SN	Questions	Agree	Disagree
43.	Am willing to start using contraceptive in my next sexual intercourse		
44.	Am considering using contraceptive within the next 6months		

45.	I will consider the use of contraceptive at least once in every few times I have sexual intercourse		
46.	I will ensure usage of contraceptive in every sexual intercourse am engaged in		
47.	I cannot use contraceptive no matter what		
48.	I intend using contraceptive in the nearest future		

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SCORES ALLOTTED

SECTION 3: Knowledge of contraceptive use

Please provide answers to the following questions

S/N	STATEMENTS	RESPONSES	POINTS ALLOTTED
15.	What is contraceptive?	A substance or device capable of preventing pregnancy .	2points
16.	Mention 5 types of modern contraceptives	iii. Oral contraceptives iv. condoms v. injections vi. intrauterine devices vii. diaphragm viii. female sterilization	5points
17.	Mention 3 uses of contraceptive	I. to prevent unwanted pregnancy II. to allow child spacing III. to prevent STIs	3points
18.	State 5 side effects of contraceptive	i. weight gain ii. weight loss iii. excessive bleeding iv. infertility v. encourages promiscuity vi. irregular men	5points
19.	Mention 2 contraceptives(modern) that can be self-administered	i. condoms ii. oral contraceptive	2points
20.	State 2 places where information about contraceptives can be obtained	i. hospitals ii. media	2points
21.	Where can family planning services be obtained	i. hospital ii. health centers	1points
22.	Total score obtained		20points
23.	Code = scores \geq 12 points (good knowledge) Scores \geq 8 < 12 points (fair knowledge) Scores < 8 points (poor knowledge)		

Section 4: Attitude towards use of Contraceptives

Please tick the right answers to the following questions

SN	Questions	Agree	Disagree
24.	I can't use any form of contraceptive		✓
25.	I think contraceptive reduces my chances of fertility		✓
26.	I enjoy using contraceptives	✓	
27.	I think contraceptive reduces my sexual pleasure		✓
28.	I encourage my partner to use contraceptive	✓	
29.	I think contraceptive is harmful to my health		✓
30.	I think the benefit of contraceptives outweigh the risks	✓	
31.	I see the use of contraceptive promote promiscuity		✓
32.	I have the courage to suggest the use of contraceptives to anybody	✓	
33	Total score obtained (each variable has 2points)	18points	
	Codes = scores \geq 13 points (good attitude) Scores < 13 points (bad attitude)		

Section 7: Intention to Use Contraceptive

Please tick the appropriate answers to the following questions

SN	Questions	Agree	Disagree
43.	Am willing to start using contraceptive in my next sexual intercourse	✓	
44.	Am considering using contraceptive within the next 6months	✓	
45.	I will consider the use of contraceptive at least once in every few times I have sexual intercourse	✓	
46.	I will ensure usage of contraceptive in every sexual intercourse am engaged in	✓	
47.	I cannot use contraceptive no matter what		✓
48.	I intend using contraceptive in the nearest future	✓	
49	Total score obtained (each variable has 2points)		
	Code = scores \geq 9 points (good intention) Scores < 9 points (bad intention)		

Ethical Approval



INSTITUTE FOR ADVANCED MEDICAL RESEARCH AND TRAINING (IAMRAT) College of Medicine, University of Ibadan, Ibadan, Nigeria.



Director: **Prof. Catherine O. Falade**, MBBS (Ib), M.Sc., FMCP, FWACP

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UI/UCH EC Registration Number: NHREC/05/01/2008a

NOTICE OF FULL APPROVAL AFTER FULL COMMITTEE REVIEW

Re: Intention to use any Form of Contraceptives among Female Postgraduate Students of Public Health, University of Ibadan, Nigeria.

UI/UCH Ethics Committee assigned number: UI/EC/18/0305

Name of Principal Investigator: **Faith O. Oyebanji**

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

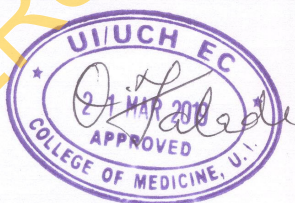
Date of receipt of valid application: 23/07/2018

Date of meeting when final determination on ethical approval was made: **21/03/2019**

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

This approval dates from **21/03/2019 to 20/03/2020**. If there is delay in starting the research, please inform the UI/UCH Ethics Committee so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. *All informed consent forms used in this study must carry the UI/UCH EC assigned number and duration of UI/UCH EC approval of the study.* It is expected that you submit your annual report as well as an annual request for the project renewal to the UI/UCH EC at least four weeks before the expiration of this approval in order to avoid disruption of your research.

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



Professor Catherine O. Falade

Director, IAMRAT

Chairperson, UI/UCH Research Ethics Committee

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Research Units • Genetics & Bioethics • Malaria • Environmental Sciences • Epidemiology Research & Service
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