# FERTILITY DESIRES, ATTITUDE TO THE NIGERIA POPULATION POLICY AND WILLINGNESS TO ADOPT CONTRACEPTION AMONG FEMALE POST- GRADUATE STUDENTS OF UNIVERSITY OF IBADAN, IBADAN, OYO STATE

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## ABSTRACT

In spite of high awareness of contraception and the Nigeria population policy, empirical evidence indicates that there is still increased fertility desire in Nigeria and many couples are having more children than they want. Most of the fertility literature reviewed were on married couples' fertility desire, but little has been done specifically on women's fertility desire. Therefore, this study assessed the fertility desires, attitude to the Nigeria population policy and willingness to adopt contraception among female post-graduate students of University of Ibadan, Ibadan, Oyo State.

This was a descriptive cross-sectional study using a validated semi-structured self-administered questionnaire. A total sample of 235 female postgraduate students were selected using a three-stage sampling technique. Respondents' attitude towards fertility desire was measured on 14-point scale. Attitudinal Score (AS) of ≤ 7 was rated as negative attitude while score >7 was rated as positive attitude and attitude towards government's policy on four children per woman was measured on 12- points scale. Attitudinal score of ≤6 was rated negative attitude while score > 6 represented positive attitude. Willingness to adopt contraception was measured on 16-point scale with scores ≤ 8 and >8 categorized as poor and good practice score. Data were analysed using descriptive statistics and Chi-square test at $p \leq 0.05$.

Respondents' mean age was 28.2 ± 5.6years. All (100.0%) were female. Majority (87.7%) of the respondents were single while only 11.9% were married. Majority (52.6%) of the respondents had positive attitude towards fertility desire but 47.4%were negatively disposed. Many (41.0%) of the respondents desired to have 3 children in the future and 54.2% reported that the husband was the major fertility decision maker. Many (53.4%) agreed not to have more than four children so as to avoid financial problems. Almost all (98.5%) have heard of contraceptives. The specific ones ever heard included; Pills (39.7%), condoms (33.1%), IUCD (15.7%), injection (4.1%) and implants. The contraceptives currently used included pills (47.1%), Injection (41.2%), IUCD (5.9%), and Condoms (2.9%). There was a significant association between attitude towards fertility desire and age of respondents using Chi square test statistics. One-third of the respondents did not support government four-child-per-family policy though majority did support. Major factor identified to influence the fertility desire of respondents was financial

constraint (53.4%). Majority (67.0%) of the respondents were willing to adopt contraceptive in the future to prevent unwanted pregnancies.

This study showed that fertility desire was high among the study population but contraceptive usage was low while religion and parental factors influenced high fertility desire, attitude towards the government policy of maximum of four children per family was good and most were willing to adopt contraceptive. Educational interventions for awareness creation and positive attitudinal disposition to population policy and low fertility desire, adoption of contraceptives and health risks associated with increased fertility should be implemented in the institution.

**Keywords:** Fertility desire, contraceptives, population policy, female postgraduate students

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## DEDICATION

This research work is dedicated to Almighty God who is my source and my all in all. To Him alone be all the glory.

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## CERTIFICATION

I hereby certify that this study was carried out by Sunmisola Elizabeth FATUASE 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

IUCD Intrauterine contraceptive device

NDHS National Demographic Health Survey

NFS National Fertility Survey

NPC National Population Commission

SDGs Sustainable Development Goals

TFR Total fertility rates

TPB Theory of Planned Behaviour

UN United nations

## OPERATIONAL DEFINITION OF TERMS

**Contraception:** The use of a device or procedure to prevent conception as a result of sexual activity.

**Fertility:** The birthrate of a population; the number of live births per 1000 people per year.

**Attitude:** This is the predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation

**Population:** A count of the number of residents within a political or geographical boundary such as a town, a nation or the world.

**Policy:** A principle of behavior, conduct thought to be desirable or necessary especially as formally expressed by a government or other authoritative body

**Female post-graduate students:** These are the female students who are currently registered for Post-graduate programmes

# CHAPTER ONE
# INTRODUCTION

## 1.1 Background to the study

Fertility desires are known to reflect subsequent fertility behaviour, therefore, understanding these desires could help in planning strategies to modify fertility behaviour. Fertility desire is a psychological state in which someone has the personal motivation to have a child. Those who have motivation to have more children in the future have fertility desire, while those who have no motivation to have more children have no fertility desire (Dereje, Bosena and Temamen, 2014).

Child bearing and contraceptive use are among the most important reproductive health decision that many have to make (Gertner, 2009). Most of the fertility literature studies the influence of married couples on fertility desire. However, the great majority of children are born within couple relationships. Therefore, it is important that the influence of women on fertility decisions should be studied.

There are currently over seven billion people in the world and the number keeps increasing on a daily basis. There is evidence to show that total fertility rates (TFR) are declining in the developed and much of the developing world (UN, 2012 and Shapiro &Gebreselassie, 2008), although the trend in some developing countries, including those in sub-Saharan Africa, shows stable or increasing fertility rates (Lesthaeghe, 2014). Globally, TFR declined from 4.97 children per woman in 1950–1954 to 2.53 in 2005–2010; in much of the developing world, the changes were even more dramatic over this period, from a TFR of 6.08 to 2.69. However, in sub-Saharan Africa, the changes in TFR were much smaller, from 6.53 to 5.39 (UN, 2012). The desire for more children, heavily entrenched into strong cultural preferences for large families (Dyer, Abrahams, Hoffman & van der Spuy, 2002), desire for sons rather than daughters (Chauduri, 2012) together with low levels of contraception (Creanga, Gillespie, Karklins&Tsui, 2011) seem to be the driving force for the high fertility rates in sub-Saharan Africa.

In recent times, Sub-Saharan African rising fertility levels remains a concern to family planning advocates, scientists and policy-actors in most sub-Saharan countries due to the unintended impact which high population growth has on the regional economic and social advancement. An in depth understanding of the fertility desires reflects the impact on the domestic social contraceptive behavior among couples and the implication on the family planning policy design and population growth in Africa. (Giddens, 2006).

The sub-Saharan African fertility regime continues to defy theory and to puzzle demographers and other population experts. While fertility has declined very substantially in other developing regions, it remains high in sub-Saharan Africa (Bankole and Audam, 2011).Despite the generally high fertility and lack of significant progress in the pace of fertility transition in sub-Saharan Africa, evidence shows that demand for smaller family size is increasing and many couples are having more children than they want. This is evident from the high levels of unmet need and unplanned pregnancies and births. For example, among the developing regions; only in sub-Saharan Africa is the proportion of married women with unmet need higher than one in five (Sedgh, Hussain, Bankole, and Singh, 2007).

The complex relationship between fertility and development is well established and is not lost on the Nigerian authorities who in 1988, concerned about the rate of demographic growth relative to economic growth, established the National Population Commission and also adopted her first population policy with the aim of achieving a total fertility rate of 4 by the year 2000, or what was generally referred to as the four children per family (woman) policy (NPC, 1988). In February 2005, Nigerian government launched a reviewed population policy tagged the National Policy on Population for Sustainable Development (NPC, 2004). Among the targets of this new policy were to reduce population growth rate to 2% or lower by 2015 and to reduce the total fertility rate by at least 0.6 children every 5 years by encouraging child spacing through the use of family planning.

Indeed, the aim of different Nigerian population policies and programmes has since been to reduce fertility in the country (NPC, 2018; NPC and ICF Macro, 2013). In spite of this, the Nigerian population has continued to grow while her GDP had continued to decline (PRB,

2010). Also in spite of a high awareness of contraception, contraceptive prevalence for modern contraceptives in the country has remained low (NPC and ICF Macro, 2009, PRB, 2010).

The recently delivered Nigeria's statement in New York on Sustainable Cities, Human Mobility and International Migration in the 51st Session of Commission on Population and Development, has put Nigeria's present population at 198 million people which has made Nigeria to remain the most populous in Africa, the seventh globally with an estimated population of over 198 million. The recent World Population Prospects predicts that by 2050, Nigeria will become the third most populated country in the world. Over the last 50 years, the Nigeria's urban population has grown at an average annual growth rate of more than 6.5 per cent without commensurate increase insocial amenities and infrastructure and the population has grown substantially from 17.3 in 1967 to 49.4 per cent in 2017 (NPC, 2018). If the current trends are not reversed, the world's population will grow to intolerable levels.

Most young females in higher institutions have the desire to get married usually a few years after their graduation, understanding their fertility desires and attitude to population policy and contraceptive adoption as a way assessing population policy impact.

## 1.2 Statement of the problem

Data from NDHS, 2013 shows diverse regional high fertility rate in Nigeria with 6.7% in North West and 4.3% in South-South respectively, factors influencing these fertility rates includes: African men desire for large family sizes, inequality in gender roles exacerbated by the patriarchal system in Nigeria, husband opposition to family planning usage due to family size preference, high female dependency on men, low socioeconomic status of women, adverse cultural beliefs and practices with negative outcomes for maternal and new born health as evident in the high preventable maternal illness and death rates (Bamikale, 2000) Furthermore, factors such as; low family planning awareness rates , myths and misinformation about side effects of contraception and knowledge of how to deal with contraceptive failure and inadequate number of family planning experts among other factors adds to the low usage of family planning services in Nigeria (Monjok, Smesny, Ekabua, Essien et al., 2010)

Total fertility rate in Nigeria which is 5.5; it's higher compared to that of Ghana and Liberia that are countries in the same region of West Africa. It was 4.0 in Ghana and 5.2 in Liberia in 2008 and 2007 respectively though the highest were among the countries like Niger (7.0), Mali (6.6) and Burkina Faso (5.9) (NPC and ICF Macro, 1999, 2004, 2009 and 2014). The consistently high fertility remains a serious issue in Nigeria. The results of surveys carried out in Nigeria have revealed high fertility for more than 15 years. Evidence revealed a range of between 6.0 births per woman in 1990 to 5.7 in 2008. This figure reduced marginally to 5.5 births per woman in 2013 (NPC/ICF Macro, 2014). Regional variations show that in 1999 the rate was 6.8 in the North East; North West had 6.5, 4.6 in the South East, 4.5 in the South West and 4.5 in the North Central (NPC and ICF Macro, 1999). While in 2003, North Central had 5.7, North East had 7.0, North West had 6.7 and South had 4.6. There was a slight decline in 2003 in the South East and South West which recorded 4.1 respectively. In 2008, the rate became 5.4 in the North Central, 7.2 in the North East, 7.3 in the North West, 4.8 in the South East, 4.7 in the South and 4.5 in the South West (NDHS, 2003 and 2008).

The 2013 NDHS results indicate that the TFR is 5.5 births per woman. This means that, on average, Nigerian women will give birth to 5.5 children by the end of their childbearing years. The current TFR of 5.5 is 0.2 children per woman less than that reported in the 2003 and 2008 NDHS surveys (5.7 each). Fertility peaks in the 25-29 age group in urban areas (237 births per 1,000 women) and the 20-24 age group in rural areas (267 births per 1,000 women) and declines thereafter.

The more urbanised zones, the South East (4.7), SouthSouth (4.3), and South West (4.6), have lower fertility rates than the three mostly rural northern zones. The highest TFR is seen in the North West (6.7), followed by the North East (6.3). The TFR decreases with increasing level of education. Women with more than a secondary education have a TFR of 3.1, as compared with a TFR of 6.9 among women with no education. Women in the highest wealth quintile have an average of three fewer children than women in the lowest quintile (3.9 and 7.0 births per woman, respectively) (NDHS, 2013).

This trend suggests that the National Population Commission policy target to reduce the fertility rate by 0.6 every five years (NPC, 2004) is not meeting its desired goal and this is of concern. Effective contraception and fertility control require the joint action and cooperation of husbands and wives, but in a situation where the man does not allow contraceptive decision making by the woman, the woman tend to have no choice and the woman's health is at stake. There is therefore the need to consider the fertility desire of young females in higher institutions and factors influencing such desires among females within the context of the population policy

### 1.3 Justification of the study

The National Population Commission policy target is to reduce the fertility rate by 0.6 every five years (NPC, 2004) but the target is not being met. A better understanding and positive attitude towards fertility desire among females will guide their decision on which family planning methods to adopt hence reducing the total fertility rate in Nigeria.

Most studies have been carried out among married couples especially but little study has been done about the fertility desires from female perspective. It is imperative for women to conclude on the number of children, contraceptive to adopt and the spacing between each child even before walking down the aisle as this will help avert problems that often arise from family size and child spacing decisions in the family. This will also help to control the exponential growth of the Nigerian population.

However, there is clear documentation of the factors affecting fertility desire in different settings, most studies (with the exception of demographic and health surveys) have been conducted among HIV-positive individuals (and especially among HIV-positive women) and HIV- discordant couples (Berhan&Berhan, 2013), few studies have explored fertility desire from a general population perspective (Taulo, 2009; Dube, 2012).

Therefore, there is need to adequately plan a health promotion intervention to effectively address the increasing growth rate and insignificant reduction in total fertility rate in Nigeria and there is need to investigate further on the fertility desire and attitude towards fertility desire among females who are the vulnerable ones when it comes to decision making about

the number of children to have and use of contraception so as to adequately ascertain and focus on specific groups.

Most of the female university students are at the age of active sexual life, but often desire to marry immediately or already planning to get married after graduation and become mothers and their opinion on fertility desire is very important. Achieving desirable SDGs and PoA of 1994 ICPD will be an illusion if research on the relationship between fertility desires and contraceptive intentions are not studied to provide insight into possible future expectations with regards to their fertility desire that could help in making choices on contraception. Thus, the need to undertake this study on the fertility desires, attitude to population policy and willingness to adopt contraception among female students in University of Ibadan, in Oyo state Nigeria. This is also desirable as this phenomenon is poorly understood in Oyo state,

Being a premier university with large population of female students, carrying out this study at this location has provided opportunity for informing stakeholders at State and national levels on how to better equip women with adequate information on contraceptives and child spacing methods to employ to prevent the consequences attached to large family size and uncontrolled child spacing such as low family income, maternal mortality, inadequate access to health care by mother and children, inadequate access to food among others.

### 1.4 Research questions

i. What is the fertility desire of female post-graduate students of University of Ibadan?
ii. What are the factors influencing the fertility desire of the female post-graduate students of University of Ibadan?
iii. How willing are female post-graduate students to adopting contraception to limit high birth rate?
iv. What is the attitude of female post-graduate students of University of Ibadan towards the government recommended four children per woman?

## 1.5 Objective of the study

### 1.5.1 General objective

To investigate the fertility desire, attitude to population policy and willingness to adopt contraception among female postgraduate students of University of Ibadan, Ibadan, Nigeria

### 1.5.2 Specific objectives

i. To assess the fertility desire of female postgraduate students of University of Ibadan
ii. To determine the factors influencing the fertility desire of female postgraduate students of University of Ibadan
iii. To assess the willingness of female postgraduate students of University of Ibadan to adopt contraception to limit high birth rate
iv. To assess the attitude of female postgraduate students of University of Ibadan towards the government recommended four children per woman

## 1.6 Research hypotheses

i. There is no statistically significant relationship between level of education of respondents and their fertility desires.
ii. There is no statistically significant relationship between respondents' religion and attitude towards fertility desires.

# CHAPTER TWO
# LITERATURE REVIEW

## 2.1 Introduction and Concepts clarification

In Western societies today, having children is, for most people, a matter of *if* and *when*. The disconnection between having a sexual relationship and having children has resulted in lifestyle choices (Giddens 1991) that have never existed before in human history. Like Giddens, Beck and Beck-Gernsheim also emphasize the importance of making choices in modern society: "The choosing, deciding, shaping human being who aspires to be the author of his or her own life, the creator of an individual identity, is the central character of our time" (Beck and Beck-Gernsheim 2002). According to Beck (1992), modern marriages and families are made by the joining of individuals, and as a consequence are more contingent upon decision-making and planning. Giddens describes how social relationships have become more democratic and he refers to democratic romantic relationships as pure relationships. According to him, "the imperative of free and open communication is the sine qua non of the pure relationship" (Giddens 1992).

It is a common sense idea that having children usually is a choice about which partners preferably reach agreement. Authors also assume that the duration of the decision-making process is increasing. For instance, Beck and Beck-Gernsheim write about the decision of whether to have children: "What is thought of as a situation requiring a decision often turns into a long-drawn-out process" (Beck and Beck-Gernsheim 1995). An important reason for this is that the demands on parenthood have increased, since parallel to the freedom to choose, children have become a precious possession. Having children might be preceded by a long process of thought, reflection discussion between partners. This decision process has not received much attention in empirical studies on fertility yet.

## 2.2 Prevalence of fertility (globally and in Nigeria)

Sentinel Survey. Between the 1981/1982 National Fertility Survey (NFS) and 1990 National Demographic Health Survey (NDHS), total fertility rate declined by 0.3. It also dropped to 5.9 in the1991 census, 5.7 in the 2003 National Demographic Health Survey (NDHS) which is the

same as that reported in the 2008 Nigeria Demographic Health Survey (NDHS), 5.6 in the 2007 Sentinel Survey, and 5.5 as reported in Nigeria Demographic Health Survey (NDHS). The observed decline from the eighties may be attributed to the introduction of population control issues and socio-economic policies by policy makers which engendered people to have few children. Fertility decline is observed to occur in varying degrees among the sub-population groups. Table 2 shows a description of the total fertility rates for women age 15-49 years in the 1981/82 Nigeria Fertility Survey (NFS), the 1990 Nigeria Demographic and Health Survey (NDHS), the 2007 and 2008 Nigeria Demographic Health Surveys (NDHS), the 2008 Sentinel Survey and the 2013 Nigeria Demographic Health Survey (NDHS).

### 2.3 The Nigerian population policy

The complex relationship between fertility and development is well established and is not lost on the Nigerian authorities who in 1988, concerned about the rate of demographic growth relative to economic growth, established the National Population Commission and also adopted her first population policy with the aim of achieving a total fertility rate of 4 by the year 2000, or what was generally referred to as the four children per family (woman) policy (NPC, 1988).

A study undertook by Umohet'al (2012) to contribute useful information in planning future family planning strategies in southern part of Nigeria (Uyo). Majority of respondents (66.7%) said they were aware of government policy on the number of children one should have. Of this number, 79.3% could mention the previous four-child-per-family policy. The number of children wanted was significantly related to awareness of the number of children stated in the country's old population policy ($P<0.05$). Results show that the mean number of children desired was four. Majority of women (73.2%) desired a maximum of four children while 24.1% wanted 5 to 6 children. The number of children desired was significantly related to the patient's education ($P<0.001$) and the husband's education ($P<0.001$) and majority of women (94%) had discussed this with their husbands. The most common reasons given for the number of children desired were the number they can cater for (45.2%), husband's desires (35.8%) and to protect the woman's health (21.5%). Majority of respondents (66.7%) were aware of the previous government policy on the number of children to have.

**2.4Nigeria's Population Policies of 1988 and 2004**

The Nigeria government promulgated her first population policy in 1988 which was a consequence of the effects of the rapid population growth (Federal Republic of Nigeria, 1988). One major part of the policy is the specification of targets, which shows a strong interest of the government to alter the reproductive behaviour of Nigerians.

The targets include the protection of the health of mother and child; to reduce the proportion of women who get married before the age of 18 years by 50 per cent by 1995 and by 80 per cent by the year 2000; to reduce the proportion of women bearing more than four children by 50 per cent by 1995 and by 80 per cent by the year 2000; to extend the coverage of family planning service to 50 per cent of women of childbearing age by 1995 and 80 per cent by year 2000; to reduce the number of children a woman is likely to have during her lifetime, now over 6, to 4 (Federal Republic of Nigeria, 1988).

It is clear from the above targets that the government wanted the total fertility rate to drop to four (4) live births per woman. In addition, the government expected the use of contraceptives to increase within women of child bearing age. In summary, the policy was aimed at improving the quality of life of an average Nigerian by reducing fertility through the provision of family planning services across the nation.

The revised edition of the policy was published in 2004 and it identified new challenges that came up from the 1991 National Population Census, 1994 International Conference on Population and Development, 1999 HIV/AIDS summit in Abuja, and 2000-2015 Millennium Development Goals. These challenges were pointers to a possible significant relationship between population and health. The policy also has some specific targets which include: "Achieving a reduction of the National population growth rate to 2 percent or lower by the year 2015; a reduction in the total fertility rate of at least 0.6 children every five years; increase the modern contraceptive prevalence rate by at least 2 percentage point per year; reduce infant mortality rate to 35 per 1,000 live births by 2015; reduce child mortality rate to 45 per 1,000 live births by 2015; reduce maternal mortality to 125 per 100,000 live births by

2010 and 75 by 2015; achieve a 25 percent reduction in HIV adult prevalence." (Federal Republic of Nigeria, 2004)

Population policies have not been effective in Africa in general, because of the socio-cultural complexities of Africa. Nigeria in particular has certain ideological and religious beliefs that revolve around the value for more children. High fertility preference is given social and economic importance in the country. This, among others amounts to several challenges. However, some of the challenges confronting the policies are explained below: Multiculturalism, religion, illiteracy, inadequate resources, approach adopted in policies formulation and lack of political will.

## 2.5 Fertility desires

Fertility desires are known to reflect subsequent fertility behaviour, therefore, understanding these desires could help in planning strategies to modify fertility behaviour.

According to a study carried out by Oche etal., (2018), on the fertility desire and contraceptive use of women in Sokoto, North western Nigeria It was observed that majority 85(41.3%) of the women were between 15 years with a mean age of a 26.7±7.5 in contrast to the studies done in some Northern and Southern parts of Nigeria where the mean age was between (25 ±3.4 years). The study showed that the mean number of children desired by the study subjects was eight; this is slightly higher than the national average of seven. The figure obtained from this study 15-24 years. This was also higher compared to other studies conducted in South-Western Nigeria where the average desired number of children was 4. This may be attributable to the fact that majority of the study subjects in our study lacked formal education, usually married and gave birth at early age.

Similarly, those who are Hausa and were married had a larger proportion of those who wanted more children but there is no statistically significant relationship. A high proportion (83.5%) of the respondents' husbands with formal education desired to have more children and similarly those with more children desired to have more than five children.

## 2.6 Factors influencing Fertility desire

In one of the literature on fertility, Umoh etal., (2012) carried out a study on fertility intention of women in Uyo, found that the mean number of children desired by women in the study was four. About 73.4% of the women desired to have a maximum of 4 children while 19.5 and 4.6% would prefer 5 and 6 children respectively. The observed findings is similar to that reported in a study in Southwest Nigeria where 60% of women desired 3 to 4 children and that among Nigeria students in a tertiary institution where 50% also desired a maximum of 4 children (Omobude-idiado and Konwea, 2009; Adedini and Liasu, 2009). It is however different from the finding of the NDHS 2008 (NPC and ICF Macro, 2009) where only 25.2% of women nationally, and 32% in the south south geopolitical zone, with four living children desired no more children. The study shows that despite the generally higher desire for children by women in the national study, the women in Uyo do not desire such high number of children. This supports the findings in the same national report where while the national total fertility rate TFR was found to be 5.7, the TFR for AkwaIbom state, where Uyo is the capital city, was found to be 4.0 (NPC and ICF Macro, 2009).

Similar to the findings in this study, the study in Uyo found that the number of children desired was significantly associated with the husband's education and the number of children alive, this is not surprising as the level of education allows the individual to make informed decisions as to the responsibility towards the needs of the child beyond food and shelter and studies have also shown that men desire more children than women irrespective of their educational status probably because they are deemed in charge of the family and are responsible for providing for the family so having more children may be seen as ego booster and show how capable the man is.

Across the globe, fertility rates had fallen largely due to the widespread and increasing use of modern methods of contraception. However, in some developing countries, the uptake of contraception remains low due to cultural, economic and political barriers. Today, sub-Saharan Africa is one region with the lowest levels of contraceptive use and higher levels of fertility rates. Community suspicion, and in many cases, rejection of family planning,

particularly in the northern region of Nigeria has impacted on the health of women and children. In northern Nigeria, researchers found that the mean number of pregnancies was 6.7. On the average, a northern Nigerian woman would have given birth to one child by the age of 19 and more than 50% would have had eight or more children by the time they were in their late forties compare to other geopolitical zones of Nigeria(NDHS, 2013)

## 2.7 Prevalence of contraceptive practices

Family Planning is a principal strategy in controlling population growth and promotion of maternal and child health through the adequate spacing of births as well as avoidance of unwanted pregnancy (Gebre, 2015). The prevalence for contraceptive use in Nigeria is approximately 12%–15% (Essien, Monjok, Smesny, Ekabua, 2010).

Prevalence of contraceptive practices varies worldwide, in Nigeria, fifteen percent of currently married women use a contraceptive method, an increase of only 2 percentage points from the 2003 National Health Demographic Survey (NDHS) with no change observed from the 2008 NDHS findings. A study conducted in Sokoto to determine awareness and utilization of family planning commodities in a rural community of north-west Nigeria found a very low contraceptive prevalence rate of 4% and only 6.1% of the respondents had ever used modern family planning. Several studies conducted within and outside the country observed that myths and misinformation about family planning had significant negative effects on contraceptive use and alluded that “contraception makes women become promiscuous”, “it is expensive to practice family planning”, and “family planning causes cancer”.

In Nigeria, a study carried out on men sample on their reproductive decision in urban areas revealed that men want more children because it adds to their status thereby affecting women decision making on the use of contraceptive (Khan and Patel, 1997; Ijadunola, 2010). Although, men know at least one method of contraception but the decision to use by the wife must be made by them (Khan and Patel, 1997).

## 2.8 Attitude towards fertility desire (maximum of 4 children policy in Nigeria)

Fertility desires are known to reflect subsequent fertility behaviour, therefore, understanding these desires therefore could help in planning strategies to modify fertility behaviour.

According to (Wolf *et al.*, 2008) in a study on child spacing and family planning attitude of young married men and women in selected parts of Northern Nigeria revealed that the majority of young married men and women held positive attitudes towards family planning (FP) because they understood it to contribute to child spacing. They perceived spacing to be beneficial for maternal and child health, particularly to avoid "kwanika" – a situation where a woman becomes pregnant before she has finished weaning her child. The respondents further stated that spacing allows a mother time to rest and enables the infant to grow up strong and healthy before another child is born. Also, some respondents believed that spacing enabled parents to better care for their children, having sufficient resources to pay for the children's education and health care needs, as well as time to pay attention to the children's moral upbringing. Furthermore, many respondents felt that spacing was preferable to limiting because they believe that spacing is clearly permitted by Islam.

However, some young married men and women held negative attitudes toward family planning for religious or cultural reasons. Some respondents saw family planning to be for limiting of family size, which they said was unacceptable in Islam: one should not decide on having an exact number of children as children are blessings from God and limitation challenges God's will. Furthermore, some respondents felt that one should not practice family planning in order to avoid economic hardship. Instead, one should have faith in God to provide all that is needed. In addition to religious reasons, some young married men and male community members felt that family planning was a subversive Western policy for population control of Muslim and/or African populations (Wolf *et al*., 2008).

Among the Yoruba, husband and wife fertility preference determines their fertility but husband desire influences their behaviour towards the number of children (Ejembi, Dahiru and Aliyu, 2015).

## 2.9 Theoretical framework

### 2.9.1 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) propounded 1980 by Ajzen and fishbein aimed at explaining various health behaviours, such as smoking behaviours, diet and exercise behaviours, diabetic management and condom use (Glanz, Rimer, and Lewis, 2002). The Theory of Planned Behaviour, was a modification of the theory of reasoned action, was based on the rationale and make systematic use of the information available to them (Ajzen and Fishbein, 1980). The theory contends that people estimate consequences of actions before deciding to engage or not engage (intent factor). However, according to the Theory of Planned Behaviour, intention, devoid of unforeseen circumstances that limit individual control, will help predict future behaviour.

The Theory of Planned Behavior (TPB) explores the relationship between behavior and beliefs, attitudes, and intentions. TPB assumes behavioral intention is the most important determinant of behavior. According to this model, behavioral intention is influenced by a person's attitude toward performing a behavior, and by beliefs about whether individuals who are important to the person approve or disapprove of the behavior (subjective norm).

External Variables

The factors such as factors (e.g., culture, Age, gender, income, level of education, religion the environment) operate through the models' constructs, and do not independently explain the likelihood that a person will behave a certain way. As in the case of this study, the respondents cultural believe may affect the desire for large family, also the presence of friends and family pressure and belonging to a large family may influence a woman to have desire for a large family and many children so as to fit into the family traditional framework.

**Reference groups**

Significant others such as friends, peers, colleagues, neighbours, relatives and colleagues. This includes feedback of significant others that influence the desire for large or small family. These influence from significant others may include; pressure from peers, co-workers, policy

actors, and health workers. They are also behavioural experiences that motivate an individual to act in a certain way.

**Attitude toward behaviour**

Positive attitude towards the use of Fertility regulation or negative attitude towards the Fertility regulation. Some may see fertility regulation from government as an attempt to control their lives while others may welcome it as a way of controlling the population growth rate in the nation. Attitude towards fertility regulation and fertility desire are predisposing factors that could lead to good behaviour concerning fertility desire. A positive fertility desire would bring about an improvement in the quality of life among postgraduate female of reproductive age

**Evaluation of Behavioural Outcomes**

Perception of the respondents towards the idea of fertility regulation varies. The believe that the regulation policies as helpful or not be helpful in preventing unwanted pregnancy is dependent on a number of factors such as the age, level of education, influence of significant others, cultural influences, previous experience and religious views on fertility desires.

**Subjective norm**

The subjective norm is based on Beliefs about whether key people approve or disapprove of the behavior; motivation to behave in a way that gains their approval or not. Positive or negative influence of friends, family and significant others may influence someone believe system.

**Behavioural Intention**

One of the construct which is perceived behavioral control that has to do with people's beliefs that they can control a particular behavior (Azjen and Driver, 1991). This construct was added to account for situations in which people's behavior, or behavioral intention, is influenced by factors beyond their control. They argued that people might try harder to perform a behavior if they feel they have a high degree of control over it.

Azjen and Driver (1991) added this construct to account for situations in which people's behavior, or behavioral intention, is influenced by factors beyond their control. Behavioral intention is the most important determinant of behavior. According to these models, behavioral intention is influenced by a person's attitude toward performing a behavior, and by beliefs about whether individuals who are important to the person approve or disapprove of the behavior (subjective norm). The factors (e.g., culture, the environment) operate through the models' constructs. People might try harder to perform a behavior if they feel they have a high degree of control over it The Perceived likelihood of performing and the strong or favourable intention towards the Fertility regulation may be viewed as favourable or unfavorable intention towards Fertility regulation.

**Behaviour**

Behaviour of an individual are determined by several factors such as the sense of self believe that they can change behaviors even when faced with obstacles. If they do not feel that they can exercise control over their health behavior, they are not motivated to act, or to persist through challenges.As a person adopts new behavior, this causes changes in both the environment and in the person. The knowledge of the presence of an existing fertility regulation or the absence of knowledge on fertility regulation influences an individual behavior towards fertility. This tenet was used to design relevant fertility behavioural questions.

**Subjective norm**

This tenet address the beliefs about whether key significant others approve or disapprove of the behavior; motivation to behave in a way that gains their approval. The family, friends, religious view, environmental and cultural norms may influence the fertility desire among the postgraduate students. This factors of a positive or negative influence of friends, family and significant others may determine the fertility desires of a woman.

Therefore, this theory can be applied to fertility desire, attitude to population policy and willingness of women to adopt contraception as shown in the figure 2.1.

**Theory of Planned Behaviour Framework**

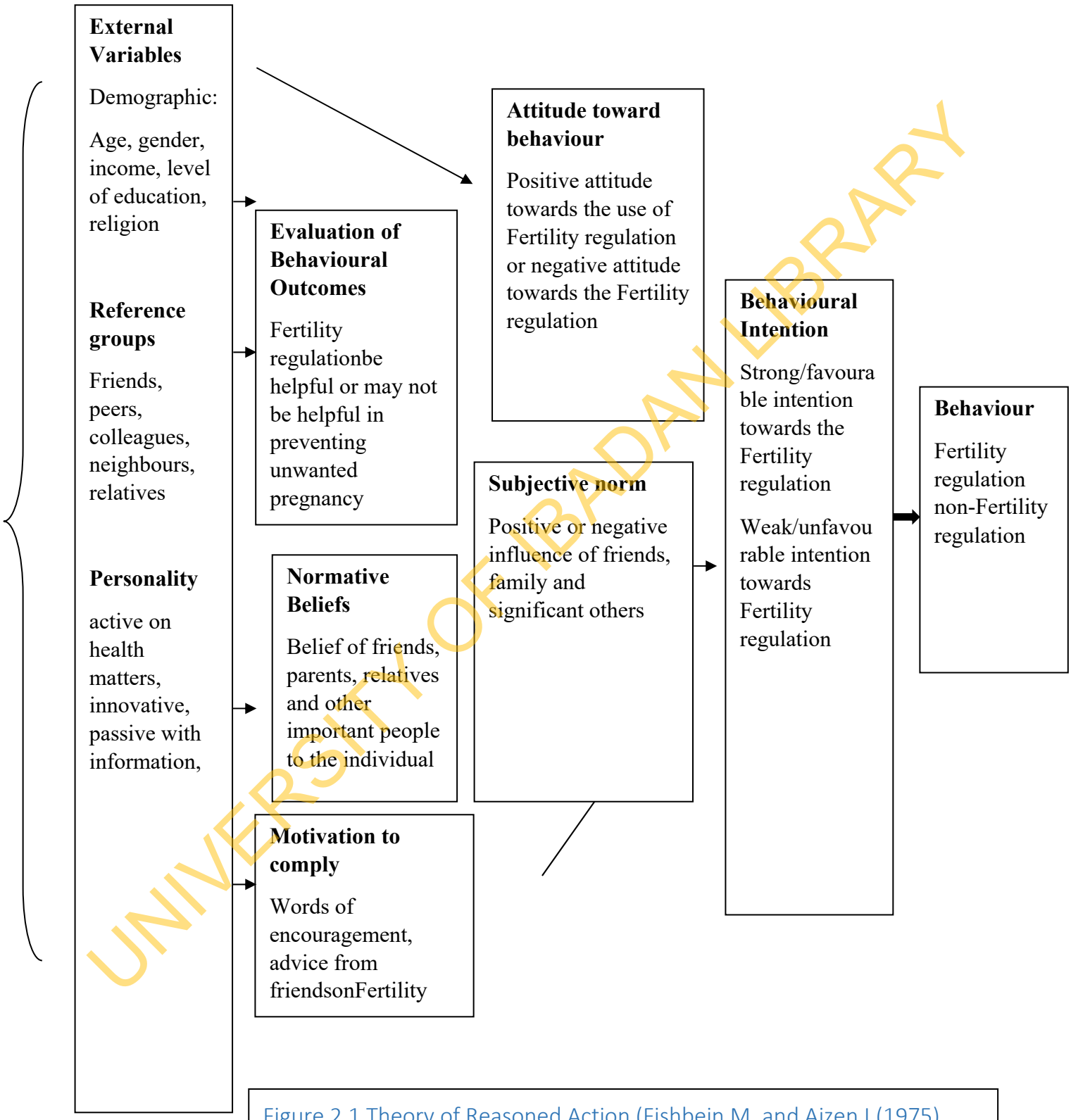


Figure 2.1 Theory of Reasoned Action (Fishbein M. and Ajzen I.(1975)

# CHAPTER THREE
# RESEARCH METHODOLOGY

This section highlights the type of research design that this study employed, research participants, sampling method, instruments, data collection procedures, validity and reliability of the test, statistical treatment and analysis of data and ethical issues.

## 3.1 Study design

A descriptive cross sectional study design was used. The scope covered fertility desire, attitude towards fertility desire, population policy, factors influencing fertility desire among the respondents.

## 3.2 Study area

The University of Ibadan was founded in 1948. Located in southwestern Nigeria, it is generally recognized as the premier institution of higher learning and also the foremost postgraduate training centre in the country serving about 25,000 students in 13 different faculties namely faculties of basic medical sciences, clinical sciences and dentistry, public health, pharmacy, education, science, technology, agriculture and Forestry, veterinary medicine, social sciences, law and faculty of arts. The University accommodates students and it has 10 halls of residents: 6 males and 2 females' undergraduate halls, one mixed (male and female) hall of residence and 2 post-graduate halls of residence.

The population of the University of Ibadan has increased over the years. In 1976-77, the total number of students was 8,586 and in 1984-85, the total was 13,862, rising in 1986-96 to 18,690. The total number of students in the University during the 1996/97 session was 20,434 and in 2016 /2017 session. A breakdown by gender for 2016/2017 revealed that about 52% of the full-time students were female: excluding those under the Centre for External Studies (CES) programme and affiliated colleges.

The University has a health services unit, opened daily for general consultation from 7.30 a.m. to 9.30 p.m, provides a broad-based health services to the students, staff, staff dependents and ancillary personnel. Besides these, there is a 24-hour emergency service provided by

doctors and nurses daily, on weekends and public holiday. Patients are referred to University College Hospital when and if necessary for consultation and admissions. In addition to curative services the clinic also offers Preventive health services. Uncomplicated medical investigations such as x-rays and other laboratory services are also offered to patients. In addition to this, there is a drug shop and a small pharmacy for students.

### 3.3 Study population

The study population consisted of female postgraduate students in University of Ibadan.

#### 3.3.1 Inclusion criteria

All female postgraduate students who consented to participate in the study were included in the study.

#### 3.3.2 Exclusion criteria

Female postgraduate students who did not consent (those who gave informed dissent) were excluded from this study.

### 3.4 Sample size

Sample size for this study was estimated using Cochran's formula (1963) with the proportion of respondents who desires more than four children which is 83.5% according to a study conducted by Oche *et al.,* (2018), on the fertility desire and contraceptive use of women in Sokoto, North western Nigeria which is as follows:

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

Where: Z= 1.96 (confidence level at 95%)

p= 0.835

q= 1-p= 1-0.835=0.165

n= Sample size

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

$$n_0 = \frac{1.96^2 \times 0.835 \times 0.165}{0.05^2} = 211.71$$

$n_0$ is approximately 212

A non-response rate of 10% of 212 using $q = \frac{1}{1-f}$

Where f = estimated non response rate = 1.11

Therefore, 1.11 was multiplied by the sample size calculated to make the sample size 235 in order to address issue of incomplete response.

The sample size for this study was 235 female postgraduate students of University of Ibadan.

### 3.5 Sampling technique

The eligible participants were selected by 3 stage sampling techniques.

**Stage 1: Number of Faculties in the University of Ibadan**

The 15 faculties in the University were grouped into 15 major clusters (strata) and the 6 Institutes into 1 cluster based on their historical and academic linkages as shown below:

**15 Faculties** : Agriculture, Arts, Basic Medical Sciences, Clinical Sciences, Dentistry, Public Health, Education, Environmental Design and Management, Law, Pharmacy, Renewable Natural Resources, Science, The Social Sciences, Technology, Veterinary Medicine. (University of Ibadan postgraduate admission guide, 2016).

**6 Institutes**: Institutes of African Studies, Institute of Child Health, Institute of Education, Advanced Medical Research and Training, Institute for Peace and Strategic Studies and LES Institute of PAU

| Cluster | Faculty | Department |
|---|---|---|
| Cluster 1 | Agriculture | Agricultural Economics, Agronomy, Agricultural Extension and Rural Development, Animal Science, Crop Protection and Environmental Biology, Forest Resources and Management, Aquaculture and Fisheries Management, Wildlife and Ecotourism Management |
| Cluster 2 | Arts | Archaeology and Anthropology, Classics, Communication and Language Arts, English, European Studies, History, Linguistics and African Languages, Music, Philosophy, Religious Studies, Theatre Arts, Arabic and Islamic Studies |
| Cluster 3 | Basic Medical Sciences | Anatomy, Biochemistry, Physiology, Pharmacology& Therapeutics, Chemical Pathology, Haematology, Medical Microbiology, Pathology, Virology, Biomedical Laboratory Science. |
| Cluster 4 | Clinical Sciences | Anaesthesia, Medicine, Nursing, Obstetrics and Gynaecology, Ophthalmology, Oto-Rhino-Laryngology, Paediatrics, Physiotherapy, Preventive Medicine and Primary Care, Psychiatry, Radiation Oncology, Radiology, Surgery. |
| Cluster 5 | Dentistry | Child Oral Health, Oral and Maxillofacial Surgery, Oral Pathology/Oral Medicine, Periodontology and Community, Dentistry and |

| | | |
|---|---|---|
| | | Restorative Dentistry |
| Cluster 6 | Public Health | Health Promotion and Education, Health Policy and Management, Human Nutrition and Dietetics, Community Medicine, Epidemiology and Medical Statistics, Environmental Health Science |
| Cluster 7 | Education | Adult Education, Guidance and Counseling, Library Archival and Information Science, Special Education, Arts and Social Sciences Education, Educational Management, Human Kinetics and Health Education, Social Works, Teacher Education, Centre for Education Media Resource Studies, Early Childhood and Education Foundation. |
| Cluster 8 | Environmental Design and Management | Urban and Regional Planning, Architecture |
| Cluster 9 | Law | Commercial and Industrial Law, Jurisprudence and International Law, Private and Property Law, Public and International Law. |
| Cluster 10 | Pharmacy | Clinical pharmacy and Pharmacy Administration, Pharmaceutical Chemistry, Pharmaceutical Microbiology, Pharmaceutical& Industrial Pharmacy, Pharmacognosy, Pharmacology and Toxicology |
| Cluster 11 | Renewable Natural Resources | Aquaculture and Fisheries Management, Forest Production and Products, Social and Environmental Forest, Wildlife and Ecotourism Management. |
| Cluster 12 | Science | Archaeology & Anthropology, Botany, Chemistry, Computer Science, Geography, Geology, Mathematics, Microbiology, |

| | | |
|---|---|---|
| | | Physics, Statistics, Zoology |
| Cluster 13 | The Social Sciences | Economics, Geography, Political Science, Psychology, Sociology |
| Cluster 14 | Technology | Agricultural and Environmental Engineering, Civil Engineering, Electrical and Electronics Engineering, Food Technology, Industrial and Production Engineering, Mechanical Engineering, Petroleum Engineering, Wood Production Engineering. |
| Cluster 15 | Veterinary Medicine | Veterinary Anatomy, Veterinary Physiology and Biochemistry, Veterinary Microbiology, Veterinary Parasitology, Veterinary Pathology, Veterinary Pharmacology and Toxicology, Veterinary Medicine, Theriogenology, Veterinary Surgery and Radiology, Veterinary Public Health and Preventive Medicine, Veterinary Teaching Hospital. |
| Cluster 16 | Institutes | Institutes of African Studies, Institute of Child Health, Institute of Education, Advanced Medical Research and Training, Institute for Peace and Strategic Studies LES Institute of PAU |

Simple random sampling was used to select 2 departments from each faculty and 3 institutes from the entire institute. This was done to get a proper representation of each cluster.

**Stage 2: Selection of Institutes and departments from each faculty**

Simple random sampling was employed in selecting two departments each from each faculty and three institute were selected from the entire institutes. This is done to get proper representation of the faculty and institute. This gave a total of thirty departments and three institutes for the study. The following departments from the faculties and institutes were finally selected.

| Cluster | Faculty | Department |
|---|---|---|
| Cluster 1 | Agriculture | Agricultural Economics and Animal Science |
| Cluster 2 | Arts | Communication and Language Arts and Philosophy |
| Cluster 3 | Basic Medical Sciences | Biochemistry and Physiology |
| Cluster 4 | Clinical Sciences | Medicine and Physiotherapy |
| Cluster 5 | Dentistry | Child Oral Health and Dentistry |
| Cluster 6 | Public Health | Health Promotion and Education and Environmental Health Science |
| Cluster 7 | Education | Guidance and Counseling and Social Works |
| Cluster 8 | Environmental Design and Management | Urban and Regional Planning and Architecture |
| Cluster 9 | Law | Private and Property Law and Public and International Law. |
| Cluster 10 | Pharmacy | Pharmaceutical Chemistry and Pharmacognosy. |
| Cluster 11 | Renewable Natural Resources | Aquaculture and Fisheries Management and Wildlife and Ecotourism Management. |
| Cluster 12 | Science | Chemistry and Zoology |
| Cluster 13 | The Social Sciences | Economics and Sociology |
| Cluster 14 | Technology | Agricultural and Environmental Engineering |

| | | |
|---|---|---|
| | | and Food Technology |
| Cluster 15 | Veterinary Medicine | Veterinary Anatomy and Veterinary Public Health and Preventive Medicine |
| Cluster 16 | Institutes | Institutes of African Studies, Institute of Child Health and Institute for Peace |

**Stage 3: Selection of number of respondents in each department**

Proportionate sampling was used to select the total number of respondents from each department and institute.

| Cluster | Faculty | Department | No of Respondents |
|---|---|---|---|
| Cluster 1 | Agriculture | Agricultural Economics and Animal Science | 14 |
| Cluster 2 | Arts | Communication and Language Arts and Philosophy | 14 |
| Cluster 3 | Basic Medical Sciences | Biochemistry and Physiology | 14 |
| Cluster 4 | Clinical Sciences | Medicine and Physiotherapy | 14 |
| Cluster 5 | Dentistry | Child Oral Health and Dentistry | 14 |
| Cluster 6 | Public Health | Health Promotion and Education and Environmental Health Science | 14 |
| Cluster 7 | Education | Guidance and Counseling and Social Works | 14 |
| Cluster 8 | Environmental Design and Management | Urban and Regional Planning and Architecture | 14 |
| Cluster 9 | Law | Private and Property Law and Public and | 14 |

| | | | |
|---|---|---|---|
| | | International Law. | |
| Cluster 10 | Pharmacy | Pharmaceutical Chemistry and Pharmacognosy. | 14 |
| Cluster 11 | Renewable Natural Resources | Aquaculture and Fisheries Management and Wildlife and Ecotourism Management. | 14 |
| Cluster 12 | Science | Chemistry and Zoology | 14 |
| Cluster 13 | The Social Sciences | Economics and Sociology | 14 |
| Cluster 14 | Technology | Agricultural and Environmental Engineering and Food Technology | 14 |
| Cluster 15 | Veterinary Medicine | Veterinary Anatomy and Veterinary Public Health and Preventive Medicine | 14 |
| Cluster 16 | Institutes | Institutes of African Studies, Institute of Child Health and Institute for Peace | 25 |

### 3.6 Instrument for data collection

Quantitative method was used for data collection. This involved the use of self-administered questionnaires. The questionnaires were developed using information obtained from literatures on fertility desire, attitude to population policy and adoption of contraception. The instrument have seven (6) sections. Section 1 was designed to collect data on socio-demographics of the respondents, section 2 assessed the respondents on fertility desire, section 3 was examine their attitude towards fertility desire, section 4 assessed the willingness of female postgraduate students to adopt contraception to limit high birth rate, while section 5 assess the attitude of respondents towards the government recommended four

children per woman policy, section 6 assessed factors that could influence their practices of fertility desire.

### 3.7 Validation of instrument

(Thatcher, 2010) stated that, validity refers to the extent to which any measuring instrument measures what it intended to measure.

In order to establish validity of the instruments, the researcher ensured validity of the instrument by reviewing relevant literatures. My supervisor was consulted to give a valid template of how the instrument should be. Extensive literature search was done on previous studies that have been carried on the topic and search results were employed in the design of the data collection instrument. The instrument was subjected to scrutiny by experts in Reproductive and family health to validate the instrument and corrections made by the experts were adapted, and the instruments were pre-tested in Obafemi Awolowo University, Ile Ife, Osun State before the actual administration of the questionnaire to the study participants.

### 3.8 Reliability of instrument

Reliability of an instrument is a measure of the consistency in which the instrument will measure what it is supposed to measure (Mugenda, 2000). An instrument is reliable if it gives similar results after several administrations under similar conditions.

In establishing the reliability of the instrument, the researcher shall apply the pre-test technique. The Pre-test technique is a process whereby the researcher shall administer the constructed questionnaire to 10% of the total study sample size in another representative population but the filled questionnaire for the pre-test shall not be used in the final analysis of the work. The pre-test of this study was carried out among twenty three (23) female postgraduate students in ObafemiAwolowo University, Ile Ife, Osun State which is a similar population group. A Cronbach Alpha measurement and reliability co-efficient measure was carried out on the pre-test questionnaire to know how reliable the instrument is. A co-efficient of 0.7-1.0 is anticipated.

### 3.9 Data collection procedure

For the study, serially numbered self-administered questionnaires were used. These questionnaires were administered to the study population during school hours at the school area between 9.00am and 4.00pm by two well-trained research assistants under the supervision of the investigator. Respondents were selected from the various faculties and departments and levels of study in the university. Both the benefits and the possible harms that may arise as a result of participating in the study will be explained to the research participants. The informed consent forms (attached to the questionnaires) were distributed to the potential participants after they would have been given adequate information about the study. After the questionnaires have been filled by the respondents, the researcher checked for completeness and errors before leaving the field. Each interview lasted for about 10minutes. Data collection was completed within 20 working days and a total of 235 completed questionnaires were obtained.

### 3.10 Data management and analysis

Serial numbers was written on the copies of the questionnaire for easy entry and recall. A coding guide was developed along with the data collection tool in order to facilitate its analysis. Questionnaires were reviewed to ensure consistency and completeness. Cleaning, recording and coding of data for analysis was done. Using the coding guide, the data collected were carefully entered into the statistical software and analysed using descriptive statistics such as mean and standard deviation and inferential statistics such as Chi-square. The results obtained from the Statistical Package for Social Science (SPSS version 21) analysis were summarized and presented in tables and charts.

Respondents' fertility desire was documented in percentages of the options selected.

Seven statement questions were to measure attitude towards fertility desire and 14-points. (2 points were allocated to each statement). A score ≤ 7 was rated as negative attitude while score >7 will rated as positive attitude towards fertility desire.

Six statement questions were used to measure attitudes towards government's policy on four child per woman, and 12 points were allocated where a score ≤6 was represented negative attitude and a score >6 represented positive attitude towards government's policy on four child per woman.

Eight (8) statements to identify willingness to adopt contraception among female postgraduate students were reported in percentages.

Twenty (20) statements to highlight the factors that could influence females' decision on fertility desire were reported in percentages.

Chi square test statistic was conducted to investigate the relationship between level of education and knowledge on fertility desire and association between knowledge on fertility desire and attitudes towards fertility desire among female postgraduate students.

Logistic regression analysis was conducted to ascertain the level of influence each of the factors has on female postgraduate students.

### 3.11 Study limitation

A limitation for this study is that the criteria for taking part in this study require that the participant must be a female postgraduate student in Ibadan, Ibadan, Oyo state, Nigeria. These criteria bound generalizing the research only to female postgraduate students and may not be applicable to other persons such as men or undergraduate students.

### 3.12 Ethical approval

Ethical approval was sought and obtained from the University of Ibadan research ethics committee before going to the field for data collection. Also, written informed consent as attached to the questionnaire. To ensure confidentiality of research participants, identifiers such as names and other information that can reveal the identity of research participants were not be included in the research instruments. The nature of the study, benefits and objectives was explained to the respondents and they were assured that the information given would be treated with utmost confidentiality. Respondents were intimated about the opportunity to withdraw their consent freely at any point during the study. Confidentiality of each participant was maximally maintained during and after the collection of their information. Information gathered from the respondents was stored in the computer for analysis by the researcher while copies of the filled instruments were kept for maximum safety.

Ethical consideration

Ethical approval UI/EC/18/0451 was obtained from the University of Ibadan/University College Hospital (UI/UCH) Ethics Review Committee to ensure the proposed study meets all the principles and National guidelines in research involving human participants and Permission from Oyo state Police command to conduct study among the respondents. UI/EC/18/0451.

**Informed Consent/Confidentiality:** A valid Informed consent was obtained from the study participants through appended signature on the informed consent form after adequate provision of information. All identifiers were removed from the questionnaire and confidentiality was ensured through protection of data collected from participants.

**Voluntariness:** Participants would be accorded the right to or not to participate in the study without any consequence. It would be made clear to participants that they are under no obligation to participate in the study.

**Beneficence:** Conducting this study among this population therefore serve to inform the necessary stakeholders on how to better equip students with adequate information on fertility desire and also serve as role models for people in the society.

**Non-maleficence:** The study did not involve any risk as it does not involve utilization of any invasive material. No harm would come to respondents who chose to participate in the study. Only the time needed to respond to the questionnaires and focus group discussion would be required of the participants.

**Dissemination of Findings:** To ensure study participants were informed about the information gathered, the result of the findings would be sent to the faculty for dissemination to the students.

**Translation of protocol to the local language:** Participants are literate in English language. The research instrument was not be translated into any local language.

# CHAPTER FOUR

# RESULTS

## 4.1 Demographic characteristics of the respondents

Majority of the participants in this study were of the Christian faith (88.3%) compared to those who practiced Islamic faith (9.9%). Majority, (87.7%) of the respondents were single while few, (11.9%) are married. The age range of the respondents was between the age of 20-55 years with a mean age = 28.2±5.6 years. Majority, (70.6%) of the respondents were between the ages of 20-30years.

Majority, (70.2%) of the respondents were of the Yoruba ethnic group. Almost all, (99.1%) of the respondents had an average income of less than 10,000 per month. Almost half, (59.1%) has been married for less than 5 years. More, than one third, (36.8%) desired to have about 3 children. The mean age of the last child is 4.7±5.0, with a minimum age of 1, and a maximum= 5years (See table 4.1 for details).

Figure 4.1 shows the family household income head. More than two thirds, (63.2% said their husband is the bread winner (See figure 4.1 for details). More, (41.0%) of the respondents desired to have 3 children in the future. A little above half, (50.9%) preferred to have 2 male children while a little above one third, (36.8%) desired to have 3 children, almost all, (94.1%) of the respondent reported that their last pregnancy was wanted (See table 4.4 for details).

**Table 4.1 Demographic Profile of Respondents**

| Demographic | N | % |
|---|---|---|
| **Religion(N=222)** | | |
| Christianity | 196 | 88.3 |
| Islam | 22 | 9.9 |
| Traditional | 4 | 1.8 |
| **Marital Status (N=235)** | | |
| Married | 28 | 11.9 |
| Single | 206 | 87.7 |
| Divorce | 1 | .4 |
| **Age(235)** | | |
| 20 -30 Years | 166 | 70.6 |
| 31-40 Years | 41 | 17.4 |
| 41-50 Years | 28 | 11.9 |
| **Ethnicity (N=235)** | | |
| Yoruba | 165 | 70.2 |
| Igbo | 23 | 9.8 |
| Edo | 13 | 5.5 |
| Hausa | 13 | 5.5 |
| **Others | 21 | 8.9 |
| **Average Income in Naira(N=235)** | | |
| Less than 10000 | 233 | 99.1 |
| 10001-50000 | 1 | .4 |
| 150001 and above | 1 | .4 |
| Age of Child(N=218) | | |
| < 5Years | 13 | 76.5 |
| 6-10 Years | 4 | 23.5 |
| **Years of marriage (N=235)** | | |
| < 5Years | 13 | 5.5 |
| 6-10 Years | 8 | 3.4 |
| 11-15 years | 1 | .4 |
| > 20 years | 213 | 90.6 |
| **Number of biological children desired (N=57)** | | |
| 4 | 18 | 31.6 |
| 2 | 15 | 26.3 |
| 3 | 21 | 36.8 |
| 5 | 2 | 3.5 |
| 6 | 1 | 1.8 |
| ***Age of last child (N=17)** | | |
| < 5Years | 13 | 5.5 |
| 6-10 Years | 4 | 1.7 |
| **Length of marriage (N=22)** | | |
| Less than 5 years | 13 | 59.1 |
| 6-10 years | 8 | 36.4 |
| More than 10 years | 1 | 0.4 |

Age Mean= 28.2±5.6, Median = 27 years, Minimum= 20, Maximum= 50years

Income Mean= #2,662.9±5.6, Median = #800.00 , Minimum= #0.00, Maximum= #300,000

Number of children desired Mean= 2.3±.08 children, Median = 2.0, Minimum= 1.0, Maximum= 5children

Number of biological children Mean= 2.1±0.9, Median = 2.0, Minimum= 1, Maximum= 5

Length of marriage- Mean= 5.1±3.0, Median = 4.5 years, Minimum= 1, Maximum= 11years

Age of last child Mean= 4.7±5.0, Median = 5.0 years, Minimum= 1, Maximum= 5years

**Table 4.2a Departmental distribution of the respondents**

| Department | N | % |
|---|---|---|
| Health Promotion and Education | 25 | 15.6 |
| Education | 6 | 3.8 |
| Physiology | 3 | 1.9 |
| CAMH | 7 | 4.4 |
| Peace | 4 | 2.5 |
| Art | 5 | 3.1 |
| English | 3 | 1.9 |
| Human nutrition | 3 | 1.9 |
| Mechanical Engineering | 1 | 0.6 |
| KHE | 2 | 1.3 |
| Geology | 3 | 1.9 |
| RES | 1 | 0.6 |
| Biochemistry | 3 | 1.9 |
| Religion study | 2 | 1.3 |
| Agric Engineering | 3 | 1.9 |
| Public Health Biotechnology | 7 | 4.4 |
| Chemistry | 1 | 0.6 |
| Anatomy | 2 | 1.3 |
| Zoology | 4 | 2.5 |
| Medicine | 2 | 1.3 |
| Mathematics | 2 | 1.3 |
| Linguistic | 1 | .6 |
| LARIS | 2 | 1.3 |
| History | 2 | 1.3 |
| Food Tech | 3 | 1.9 |
| Basic Health | 1 | 0.6 |
| Agronomy | 1 | 0.6 |
| Physics | 1 | 0.6 |

**Table 4.2b Departmental distribution of the respondents**

| Department | N | % |
|---|---|---|
| ENT | 1 | 0.6 |
| Civil engineering | 2 | 1.3 |
| CPEEL | 4 | 2.5 |
| Economics | 2 | 1.3 |
| Psychology | 1 | 0.6 |
| Pharmacognosy | 1 | 0.6 |
| Sociology | 6 | 3.8 |
| Early childhood and Educational Foundation | 1 | 0.6 |
| Pharmacology | 1 | 0.6 |
| Guidance and counseling | 1 | .6.0 |
| Social work | 1 | 0.6 |
| Information science | 3 | 1.9 |
| Humanitarian and refugee study | 1 | 0.6 |
| Institute of child health | 2 | 1.3 |
| EHS | 13 | 8.1 |
| Community Medicine | 6 | 3.8 |
| RFH | 3 | 1.9 |
| ICH | 6 | 3.8 |
| HPM | 2 | 1.3 |
| EMS | 2 | 1.3 |
| AGE | 1 | 0.6 |

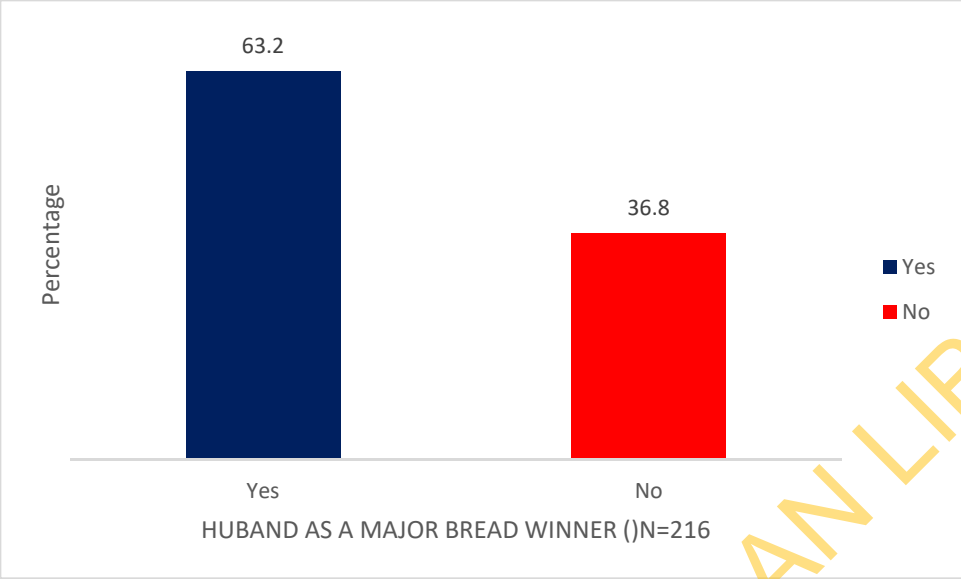


**Figure 4.1: Family Economic Head (N=216)**

**Table 4.3 Respondents fertility Desire**

| Variable | N | % |
|---|---|---|
| Number of Children desired in future (N=122) | | |
| 2 | 26 | 21.3 |
| 4 | 40 | 32.8 |
| 3 | 50 | 41.0 |
| 5 | 5 | 4.1 |
| 6 | 1 | .8 |
| Preferred Male Child number (N=114) | | |
| 1 | 41 | 36.0 |
| 2 | 58 | 50.9 |
| 3 | 14 | 12.3 |
| 4 | 1 | .9 |
| Preferred Female Child number (N=107) | | |
| 1 | 50 | 21.3 |
| 2 | 54 | 23.0 |
| 3 | 3 | 1.3 |
| Number of Preferred Children | | |
| 4 | 18 | 31.6 |
| 2 | 15 | 26.3 |
| 3 | 21 | 36.8 |
| 5 | 2 | 3.5 |
| 6 | 1 | 1.8 |

## 4.2 Assessment of Fertility Desire

Assessment of the fertility desire among the respondents revealed the followings responses from the respondents. A little more than half, (52.3%) of the respondents reported "No" to the statement "having more children makes me feel fertile" and majority, (79.6%) said "No" to the statement that women have no control at all over the number of children they desire to have.

When asked whether the fertility desire of the man is more important than that of the woman because he is the head of the family. Majority (62.2%), said No. Majority (71.2%) said "Yes" to the statement that "family planning can help women to control the number of children they wish to have" A little more than half, (51.4%) said "No" Having less than 2 years interval before the next child has no negative effect on a mother's health (See table 4.5 for details).

**Table 4.4 RespondentsAssessment of Fertility Desire**

| Fertility Statements | Yes(%) | No(%) |
|---|---|---|
| Having more children makes me feel fertile (N=212) | 89 (37.9) | 123 (52.3) |
| Women have no control at all over the number of children they desire to have (N=223) | 36 (15.3) | 187 (79.6) |
| The fertility desire of the man is more important than that of the woman because he is the head of the family (N=222) | 84 (37.8) | 138 (62.2) |
| Family planning can help women to control the number of children they wish to have (N=222) | 158(71.2) | 64(28.8) |
| Having less than 2 years interval before the next child has no negative effect on a mother's health (216) | 105(48.6) | 111(51.4) |

## 4.3 Perceived Factors Influencing Fertility Desire

More than half of the respondents, (55.7%) disagreed with the statement that their parents' want for them to have as many children as possible which will influence them. Similarly, more than half, (56.3%) disagreed' Spousal desire many children as possible may influence their fertility desire. When asked whether being the only child of parent, motivated the desire to have as many child as possible majority, (62.5%) disagreed with the statement. As to whether religion motivates desire for many children, majority (65.6%) said disagreed with the statement.

On the statement if they would have more than four (4) children if friends motivate them to do so Majority (61.0%) disagreed with the statement. Similarly, in respect of whether they would not have more than four (4) children so as to avoid financial problem more than half, (53.4%) agreed with the statement; and for whether they would have many children because the culture encourages it, majority, (60.0%) disagreed with the statement.

Furthermore, when asked whether parental disapproval of having few or many children can affect respondent's decision more than half, (55.7%) disagreed with the statement. Moreover, on the statement whether they would have a male child. If not, they intend to continue to give birth until having a male child majority, (56.5%) disagreed with the statement (See table 4.5 for details)

Table 4.5 **Perceived Factors Influencing Fertility Desire**

| ITEMS | Agree | Undecided | Disagree |
|---|---|---|---|
| My parents want me to have as many children as possible, So I will(N=210) | 52(24.8) | 41(19.5) | 117(55.7) |
| My spouse wants me to have as many children as possible, So I will (N=208) | 21(10.1) | 70(33.7) | 117(56.3) |
| the only child of my parent, so it is expected of me to have as many child as possible(N=208) | 23(11.1) | 55(26.4) | 130(62.5) |
| I would have many children because my religion motivates me to do so(N=209) | 24(11.5) | 48(23.0) | 137(65.6) |
| I would have more than four (4) children if my friends motivate me to do so(N=218) | 35(16.1) | 50(22.9) | 133(61.0) |
| I will not have more than four (4) children so as to avoid financial problem(N=219) | 117(53.4) | 63(28.8) | 39(17..8) |
| I will have many children because my culture encourages it(N=215) | 38(17.7) | 48(22.3) | 129(60.0) |
| My parents disapproval of having few or many children can affect my decision (N=219) | 19(8.7) | 78(35.6) | 122(55.7) |
| I must have a male child. If not, I intend to continue to give birth until I have a male child (N=235) | 62(28.7) | 32(14.8) | 122(56.5) |

4.4**Awareness and uptake of family planning methods**.

Contraceptive awareness

More, (98.5%) of the respondents reported "Yes" they have had of contraceptive before while few, (1.5%) said "No" (See figure 4.2 for details).On the methods of contraceptive known by the respondents, More than one third, (39.7%) reported knowing pills, while the proportion of respondent reporting other methods includes; condoms (33.1%), IUCD (15.7%), injection (4.1%), implants (3.3%), withdrawer (1.7%), family planning (0.8%), Vasectomy (0.8%) and subcutaneous (0.8%) method respectively (See Table 4.6 for details).

Contraceptive use

On the proportion who used contraceptive in the past 2 years, Majority, (75.0%) were married said yes while few, (25.0%) said No. Majority, (75.0%) were single said Yes while few, (25.0%) said No to use of contraceptive within the past 2 years (See figure 4.3 for details).

On the reasons why respondents used contraceptives in the past 2 years among the married respondent includes; (65.4%) reported that it was to prevent pregnancy, other reasons includes; (3.8%) for child spacing among the married while among the single,; prevent disease(23.1%), not ready to start a family(3.8%) I was sexually active (2.6%) (See figure 4.4 for details).

On the current contraceptive methods used among the married more than one third, (47.1%) used post pill used by (33.3%) condoms(41.7%), injection (16.7%), IUCD(8.3%)of the married to (54.5%). On the child spacing among the single, others reasons areused condoms (41.2%) injection (5.9%), IUCD (2.9%) condoms (2.9%) methods. (See table 4.7 for details).

On the reasons why the respondents have not been currently contracepting among the married are; not been married (40.0%); in need of a child (20.0%), do not like the idea of contracepting(20.0%), using withdrawal method(20.0%). Reasons for noncontracepting among the single respondents includes;not sexualy active (29.4%), no need for that (11.8%)not been married (43.1%), don't like it(20.0%), I observed withdrawer method (2.0%) not yet time(2.0%), belief that it leads to cancer (2.0%)( see Table 4.8 for details)

In respect to willingness to use contraceptive to prevent future pregnancy more than two third, (67.0%) said yes while few, (33.0%)said No. (See figure 4.5 for details).

On married respondents' fertility willingness and contraceptive uptake, majority, (80.0%) said "Yes" to the statement that their husbands had asked them previously to prevent or delay by using contraceptive during the last pregnancy. About half, (50.0%) of the respondents said "Yes" their husband as asked them to use one form of contraceptive in the last two years while and equal proportion (50.0%) said "No" (see Table 4.10 for details) on the reason for husband use of contraception. More, (77.8%) of the respondents reported that he uses contraceptive to prevent pregnancy, other reasons include; prevent pregnancy (11.1%), and for child spacing (11.1%) (see Table 4.9 for details).

On the appropriate year of spacing a child, more than half, (56.4%) reported that 2 years was appropriate spacing year while few, (0.9%) said 2-5 years was appropriate (See table 4.11 for details) The Contraceptive adoption willingness among the respondents, Majority, (89.4%) reported "Yes' that they are aware of the use of contraceptive. Majority, (71.8%) also supports family planning uptake. Majority, (79.2%) reported "yes" that their use of contraceptive is subject of communication between my fiancé/husband and themselves. Majority, (61.%) reported "Yes" their partner approves the use of contraceptives and more than fourfifth, (87.0%) reported "yes" the use of contraceptive will help to achieve desired number of children (See Table 4.9 for details).

On reasons why respondents currently use contraceptive, more (29.1%) reported for prevent unwanted pregnancy some, (25.2%) birth spacing other reasons includes; to prevent sexually transmitted disease(19.9%), to have a child when required(16.6%) and to improve my health(9.3%) (See Table 4.10 for details).

On the reaction to unplanned pregnancy, the following responses were elicited. Majority, (90.8%) reported that they would give birth to it, Terminate the pregnancy (4.6%), Pregnancy cannot be by mistake(1.5%), it cannot Happen(1.5%) (See table 4.11 for details).

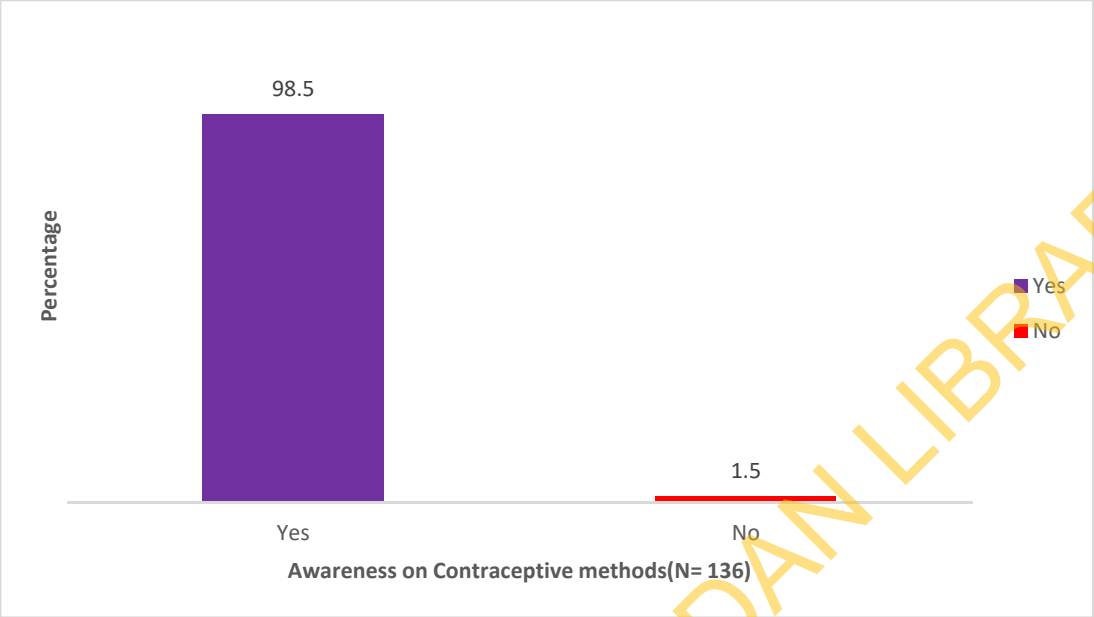


**Figure 4.2: Awareness on Contraceptives (N=136)**

**Table 4.6 Methods of contraceptives known by respondents (N-121)**

| Type of contraceptive | N | % |
|---|---|---|
| Pills | 48 | 39.7 |
| Condoms | 40 | 33.1 |
| IUD | 19 | 15.7 |
| Injections | 5 | 4.1 |
| Implant | 4 | 3.3 |
| Withdrawal method | 2 | 1.7 |
| Family planning | 1 | 0.8 |
| Vasectomy | 1 | 0.8 |
| Subcutaneous | 1 | 0.8 |
| **Total** | **121** | **100.0** |

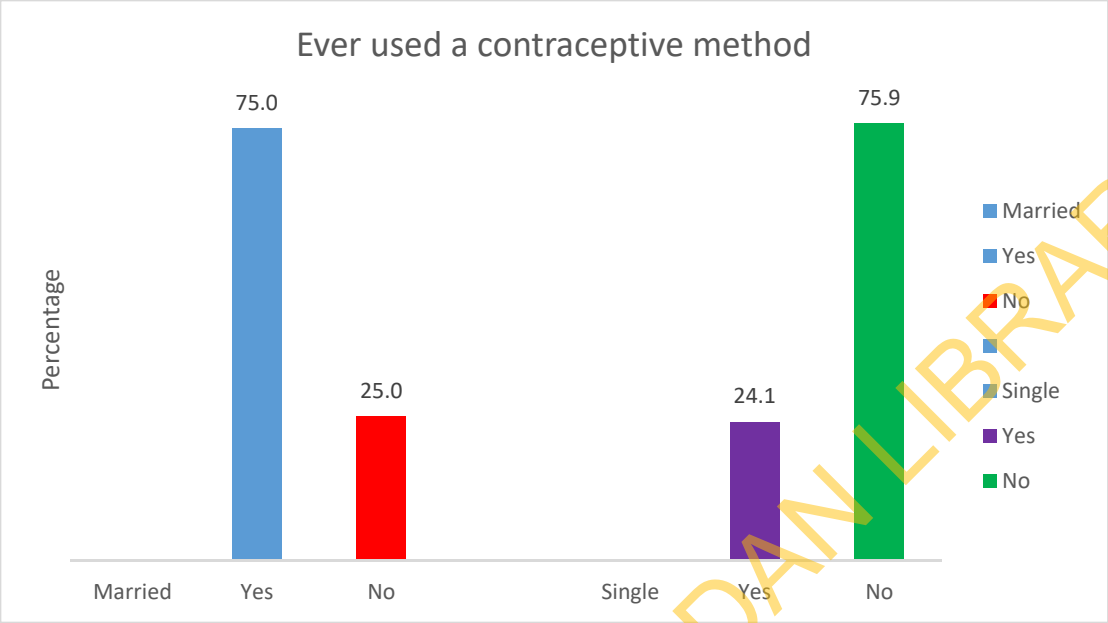


Figure 4.3 proportion of married women who used contraceptive in the past 2 years (N=128)

**Table 4.7 Current contraceptive type used by Respondents (N=34)**

| Current contraceptive type used | **Married** | **Single** |
|---|---|---|
| **Post pill** | 4(33.3) | 12(54.5) |
| **Condoms** | 5(41.7) | 9(40.9) |
| **Injection** | 2(16.7) | 0(0.0) |
| **IUCD** | 1(8.3) | 0(0.0) |
| **Condoms and pills** | 0(0.0) | 1(4.5) |
| **Total** | 12(100.0) | 22(100.0) |

Table 4.8 Reason why married respondents have not been contracepting

| **Reason for non use of contraceptive** | **Married** | **Single** |
|---|---|---|
| I am not married | 2(40.0) | 22(43.1) |
| Am not sexually active | 0(0.0) | 15(29.4) |
| There is no need for that | 0(0.0) | 6(11.8) |
| I need a child | 1(20.0) | 0(0.0) |
| I don't feel like using | 0(0.0) | 4(7.8) |
| I don't like it | 1(20.0) | 1(2.0) |
| I observed withdrawal method is good for me | 1(20.0) | 1(2.0) |
| Not yet time | 0(0.0) | 1(2.0) |
| Because it leads to cancer | 0(0.0) | 1(2.0) |
| Total | 5(100.0) | 51(100.0) |

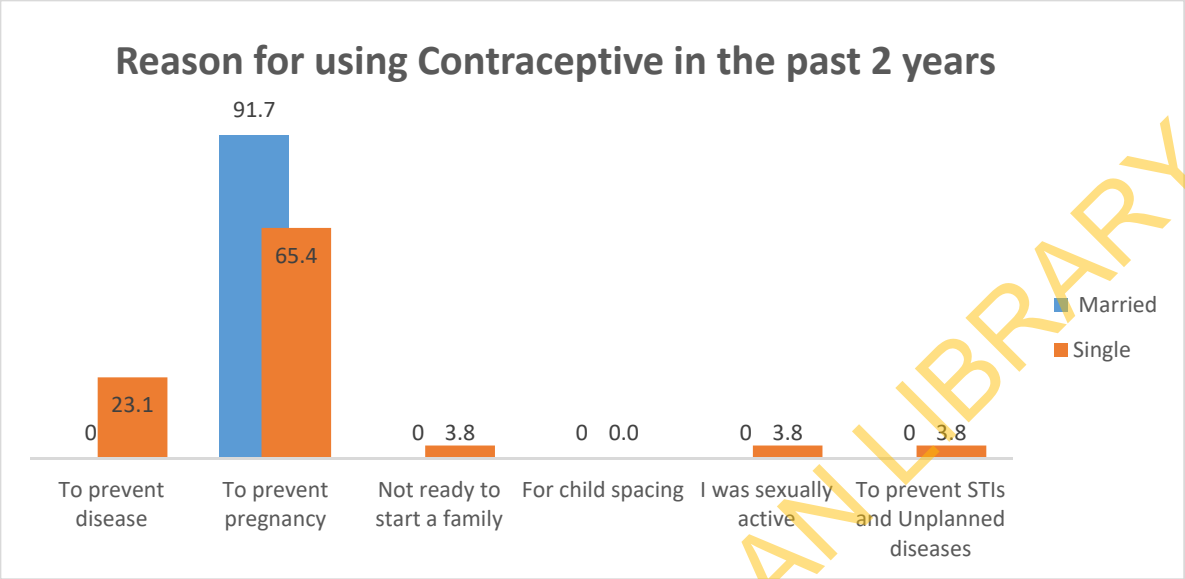


Figure 4.4 Reasons why respondents used contraceptives in the past 2 years (N=38)

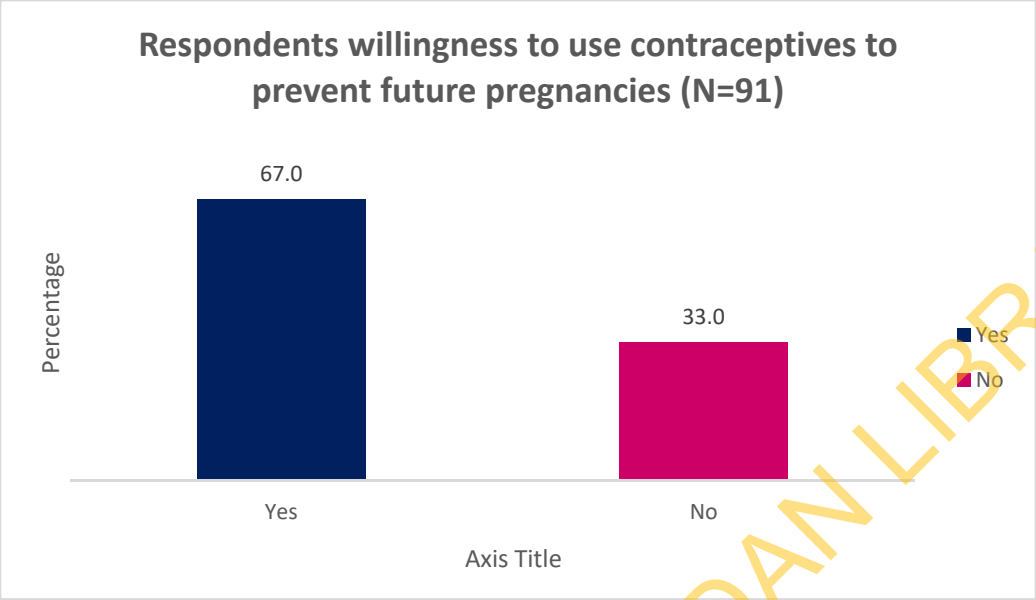


Figure 4.5 Willingness to use contraceptives to prevent future pregnancies (N=91)

**Table 4.9 Willingness to adopt Contraceptives among respondents**

| Question | Yes (%) | No (%) |
|---|---|---|
| I am well aware of the use of contraceptives (N=218) | 195(89.4) | 23(10.6) |
| I support family planning (N=220) | 158(71.8) | 62(28.2) |
| The use of contraceptive is subject of communication between my fiancé/husband and I (N=216) | 171(79.2) | 45(20.8) |
| My partner approves the use of contraceptives(N=196) | 121(61.7) | 75(38.3) |
| The use of contraceptive will help me to achieve my desired number of children(N=216) | 188(87.0) | 28(13.0) |

**Table 4.10 Reasons why respondents use contraceptive (N=302)*** Multiple response**

| Desired outcome for contraceptive use | N | % |
|---|---|---|
| Prevent of unwanted birth | 88 | 29.1 |
| Space birth | 76 | 25.2 |
| Prevent | 60 | 19.9 |
| I have a child when required | 50 | 16.6 |
| improve my health | 28 | 9.3 |
| **Total** | 302 | 100.0 |

**Table 4.11 Reported reaction to unplanned pregnancy**

| Reported control measure | N | % |
|---|---|---|
| Terminate | 3 | 4.6 |
| Give birth to it | 59 | 90.8 |
| Pregnancy cannot be by mistake | 1 | 1.5 |
| I am offended by this question | 1 | 1.5 |
| It cannot Happen | 1 | 1.5 |
| **Total** | 65 | **100.0** |

## 4.5 Attitude towards fertility desire

Almost four fifth, (79.6%) of the respondents agreed that they are comfortable discussing my fertility desire with my fiancé/husband. More than half, (56.4%) of the respondents disagreed with the statement that they are against having few children because of religion. More than half, (57.1%) of the respondents agreed with the statement that they are in support of having few number of children as it helps the mother to be healthy. More than half, (57.0%) of the respondents agreed that they are comfortable having few number of children as it helps reduce my expenses. More than half, (54.9%) of the respondents disagreed with the statement that they are not comfortable with having few number of children as it can lead to infidelity of my partner. More than half, (59.4%) of the respondents disagreed with the statement that only the man should determine the number of children desired because he is the head of the family (See table 4.12 for details).

The overall attitude score of the respondents showed that more than half, (52.6%) of the respondents had positive attitude towards fertility desire while few, (47.4%) had a negative attitude towards fertility desire. The mean attitudinal score =7.0±4.3and a range of 0-12. (See table 4.13 for details).

**Table 4.12 Attitude Towards Fertility Desire**

| Attitudinal Statement | Agree (%) | Undecided (%) | Disagree (%) |
|---|---|---|---|
| Am comfortable discussing my fertility desire with my fiancé/husband (N=226) | 180(79.6) | 35(15.5) | 11(4.9) |
| Am against having few children because of my religion (N=225) | 26(11.6) | 72(32.0) | 127(56.4) |
| Am in support of having few number of children as it helps the mother to be healthy(N=226) | 129(57.1) | 65(28.8) | 32(14.2) |
| Am comfortable having few number of children as it helps reduce my expenses (N=223) | 127(57.0) | 69(30.9) | 27(12.1) |
| Not comfortable with having few number of children as it can lead to infidelity of my partner (N=226) | 31(13.7) | 71(31.4) | 124(54.9) |
| Only the man should determine the number of children desired because he is the head of the family (N=224) | 54(24.1) | 37(16.5) | 133(59.4) |

**Table 4.13 Attitude Score**

| Attitudinal Scale | N | % |
|---|---|---|
| Negative Attitude(0-6) | 111 | 47.4 |
| Positive Attitude (7-12) | 123 | 52.6 |
| **Total** | **234** | **100.0** |

Mean=7.0± 4.3, Median =8.0, Minimum=0, Maximum=12.0

### 4.5.1 Categorization of the respondent's Attitude towards fertility desire

Majority, (82.9%) of the respondents who had positive attitude towards fertility desire are within the age of 20-30 years compared to few, (8.1%) of the respondents who fall within the age of 41-50 years. More, (56.8%) of the respondent with negative attitude fall within 20-30 years of age while few, (16.2%) of the respondents falls within the age of 41-50 years. The association between the attitude and age of the respondents was found to be statistically significant ($X^2$=19.745, df =2, p-value=0.000). Therefore, we reject the null hypothesis (See table 4.14 for details).

Majority, (98.4%) of the respondents who had positive attitude made less than 10000 per month compared to few, (0.8%) who made between 15001 and above. All of the respondent (100.0%) of the respondent who made less than 10000 per month had negative attitude. The association between the attitude and income of the respondents was found to be statistically significant ($X^2$=1.820, df =2, p-value=0.402). Therefore, we reject the null hypothesis (See table 4.14 for details).

More than four fifth, (86.2%) of the respondents who were single had positive attitude compared to few (13.8%)who are married. More than four fifth (89.2%) of the respondent who had negative attitude were single compared to few, (0.9%) who are divorced. The association between the attitude and marital status of the respondents was found to be statistically significant ($X^2$=1.914, df =2, p-value=0.384). Therefore, we reject the null hypothesis (See table 4.14 for details).

**Table 4.14 Categorisation of respondent's Attitude towards fertility desire**

| Variable | Attitude Categorisation | | Total | $X^2$ | df | PValue | Null Hypothesis |
|---|---|---|---|---|---|---|---|
| | Negative | Possitive | | | | | |
| **Age** | | | | | | | |
| 20-30 Years | 63(56.8) | 102(82.9) | 165(82.9) | 19.745 | 2 | 0.000 | Rejected |
| 31-40 Years | 30(27.0) | 11(8.9) | 41(17.5) | | | | |
| 41-50 Years | 18(16.2) | 10(8.1) | 28(12.0) | | | | |
| **Average Income** | | | | | | | |
| Less than 10,000 | 111(100.0) | 121(98.4) | 232(99.1) | 1.820 | 2 | 0.402 | Fail to rejected |
| 10001-50000 | 0(0.1) | 1(0.8) | 1(0.4) | | | | |
| 15001 and above | 0(0.0) | 1(0.8) | 1(0.4) | | | | |
| **Marital Status** | | | | | | | |
| Married | 11(9.9) | 17(13.8) | 28(12.0) | 1.914 | 2 | 0.384 | Fail to reject |
| Single | 99(89.2) | 106(86.2) | 205(87.6) | | | | |
| Divorced | 1(0.9) | 0(0.0) | 1(0.4) | | | | |

***Significant at (p=0.05) chi-square test statistics was used.**

### 4.5.2 Attitude towards the Government Recommended Population Policy

More than half, (54.7%) reported "Yes", they are aware of the government policy of maximum of four (4) children per family. Majority, (75.3%) reported "Yes" in support of government on maximum of 4 children per family.

More than two third, (66.7%) reported "No" when asked whether they cannot adopt the government policy of maximum of 4 children per family. When asked whether the government should not have a say on the number of children one should give birth to more than half. (57.1%) said "No".

Majority, (64.3%) reported that "Yes" influence of government on fertility desire is necessary to help in government developmental policies. Majority, (60.5%) said "No" when asked whether the government policy on 4 children per family is an outdated policy. (See table 4.15 for details).

**Table 4.15 Attitude towards the government recommended population policy**

| STATEMENTS | YES (%) | NO (%) |
|---|---|---|
| I am aware of the government policy of maximum of four (4) children per family (N=203) | 111(54.7) | 92(45.3) |
| I am in support of government on maximum of 4 children per family (N=198) | 149(75.3) | 49(24.7) |
| I cannot adopt the government policy of maximum of 4 children per family (N=201) | 67(33.3) | 134(66.7) |
| Government should not have a say on the number of children one should give birth to (N=198) | 85(42.9) | 113(57.1) |
| The influence of government on fertility desire is necessary to help in government developmental policies (N=199) | 128(64.3) | 71(35.7) |
| The government policy on 4 children per family is an outdated policy(N=190) | 75(39.5) | 115(60.5) |

# CHAPTER FIVE

# DISCUSSION, CONCLUSION AND RECOMMENDATIONS

## 5.1 Discussion

### 5.1.1 Demographic characteristics of the respondents

This study was conducted to investigate the knowledge and attitude towards fertility desire among postgraduate female students at the University of Ibadan, Ibadan North Local Government, Ibadan Oyo state.

This chapter addressed the following; socio-demographic information; knowledge level of knowledge of postgraduate students on fertility desire, attitude towards fertility desire, attitude towards the government recommended population policy and factors influencing attitude of postgraduate students towards fertility desire. Other sub-sections are the implication of the findings to health promotion and education, conclusion and recommendations.

Majority of the respondents in this current study are of the Christian faith with a mean age for the study is 28.2±5.6 yearsand mostly of Yoruba ethnic group . These findings are similar to that of a study conducted by (Adeyemi, Olugbenga-Bello, Adeoye, Salawu, Aderinoye, Agbaje, 2015) where the mean age was 27.6±6.3 Years.

Almost all, (99.1%) of the respondents in this study had an average income of less than 10,000 per month. This findings could be attributed to the fact that majority of the respondents are not gainfully employed and could probably depend on their parents and significant others for financial support.

In this study almost half, (59.1%) of respondentsare married for less than 5 years of which. 36.8 desired to have about 3 children with the mean age of the last child being 4.7±5.0 .This findings is similar to that of the study conducted by Adebimpe, Asekun-Olarinmoye, 2012 where the national fertility rate was estimated at 5.7 children per women.

In this study, more than two thirds of the respondents reported that the husband is the household income head and another half, reported that the husband was the major fertility decision maker and almost one third of the respondent reported that their spouse desired for 4 and 3 children which reflects the partriachal systems of the nation. This finding is consistent with that of the study conducted by (Olugbenga-bello, Asekun-olarinmoye, Adewole, Adeomi, Olarewaju. 2013) where male involvement was identified as a key factor influencing

female contraceptive usage and fertility desire of women in Nigeria (Odusina, Ugal, Olaposi, 2012)

### 5.2 Opinion on Fertility Desire

More than one third of the respondents had a low contraceptive usage. This finding is similar to that of the studies where low contraceptive uptake were established (NPC and ICF, 2014; Gbodekwe,Oladimeji, Adeoye, Akpa, Lawson, 2014). The low contraceptive uptake is surprising as stressful educational activities in the institution that could impact negatively on

Findings of the study showed that more than one third, of the postgraduate students reported that the fertility desire of the man is more important than that of the woman because he is the head of the family which shows a low level of mental empowerment among the respondents despite their advanced level of education this findings is similar to that of a study conducted by (Eko, Osonwa, Osuchukwu, Offiong, 2013).

The findings from this study showed that more than half of the respondent correctly said having less than 2 years interval before the next child has negative effect on a mother's health. This findings is similar to that of the study conducted by (Dibaba, 2010; Venugopal, Upadhyay, 2002) where it was demonstrated that child spacing is beneficial for infant survival and improved maternal health. This might due to their prior exposure to family pallnning messages or previous observations from friends or relatives.

### 5.3 Attitude towards fertility desire.

In this study, the overall attitude score of the respondents showed that more than half, (52.6%) of the respondents had positive attitude towards fertility desire. This finding is similar to that of a study conducted by (Tilahun et. al, 2013). Where almost all (91.0%) had a positive attitude.Almost four-fifth of the postgraduate students reported that they are comfortable discussing "my fertility desire with my fiancé/husband". This findings is similar to that from a study conducted by (Duze and Mohammed, 2006) in Nigeria.

More than half of the respondents in this study agreed with the statement that they are in support of having few number of children as it helps the mother to be healthy and more than half, disagreed that only the man should determine the number of children desired because he is the head of the family which shows a level of confidence on the part of the respondents. This finding is similar to that of a study conducted by Ibrahim, Mohammed, (2014).The finding in this study showing an association between the attitude towards fertility desire and the age of the respondents [statistically significant (p=0.000)] is similar to that of the study conducted by (SemachewKasa, Tarekegn and Embiale, 2018) in Ethiopia.

**5.4 Awareness and uptake of family planning methods**

Almost all of the respondents have heard of contraceptive before. This finding is not surprising as all of the respondents were postgraduate students who must have had enlightenment on contraceptive methods in the course of their university education or from health talk and seminars.This study revealed the low level of awareness on the following methods pills (39.7%) condoms (33.1%) and lower for intrauterine contraceptive device (IUCD15.7%), injection (4.1%), implants(3.3%), withdrawer (1.7%), family planning (0.8%), Vasectomy (0.8%) and subcutaneous (0.8%) These findings are similar to that of the study conducted by (Bello, 2016).conducted in Ibadan among female tertiary students. This may be due to inadequate educational programmeson contraceptives from the health care providers in the university during students orientation programmes or when they visited the university clinic for consultation or treatment .

Also this study showed that not many students were contracepting as current contraceptive methodswere post pill (47.1%) and condoms (41.2%) but lesser for injection (5.9%), IUCD (2.9%) condoms(2.9%) methods. This is not surprising because of the inadequate knowledge illustrated above and the finding showing that about one third were unwilling to use contraceptive to prevent future pregnancy.All these findings are similar to that of the study conducted by Wong (Atefi, Majid and Su, 2014)

Moreover, the findings show that more than half reported that 2 years was appropriate spacing year between child birth. This is encouraging because it is likely to have a better health effect

on the women .This finding is similar to that of the study conducted by (Conde-Agudelo, Belizan, 2000) where it was found out that child spacing makes mother healthier.

The findings from this study also showed that 4,5% of the respondents were willing to terminate their pregnancy (4.6%) if mistakenly pregnant. This is disturbing as contracepting should have prevented unwanted pregnancy in the first place rather than risk the complications from abortions. This finding is similar to that of the study conducted by (Ndifon, Ogaji and Etuk, 2006) where about 54% resorted to aborting the unplanned pregnancy.

### 5.5 Attitude towards the Government Recommended Population Policy

The findings from this study showed that more than half were aware of the government policy of maximum of four (4) children per family. While this good , it also shows that the awareness programme is limited. This finding is similar to that of the study conducted by (Umoh, Abah and Ekanem, 2012) in Uyo, Nigeria. Where 66.7% reported having knowledge of the government policy on the number of children one should have.

Moreover, from this study findings revealed that about one third of the postgraduate female reported that they cannot adopt the government policy of maximum of 4 children per family. This finding is consistent with the national fertility rate among women of reproductive age where the fertility desire was 5.7 children per woman (Total Fertility Rate) at the national level (NPC and ICF Macro, 2009). However majority were in support of the influence of government policy. However, more than one third reported that the government policy on 4 children per family is an outdated policy which points to a deep rooted desire for large families even among postgraduate female students in Ibadan, Nigeria.

### 5.6 Perceived factors influencing fertility desire

Findings from this study showed that less than one third, agreed that parents want them to have as many children as possible, and they intend to do so but Spousal desire for many children can override parental expectations. Similar finding has been reported by Olaitan, 2011.

## 5.7 Implication for Health Promotion and Education

Based on the findings of this study, there was a high level of knowledge on fertility desire there is a need to adopt different health promotion strategies in addressing these identified challenges on fertility desire among the postgraduate students.

### 5.7.1 Training

There is a need to review the current postgraduate training program in other to adequately prepare them for reproductive health challenges as many of the respondents reported that they would terminate an unwanted pregnancy which is a disappointing finding for the postgraduate level of education hence the need for more effort to ensure ease of availability and accessibility, of modern contraception. Efforts should also be devoted towards training of more family planning providers and proximal location of family clinics at strategic locations as well as male involvement in family planning campaign in other to defeat the barriers towards female independence on fertility desire decision making process.

### 5.7.2 Awareness and health education

There is a need for more awareness programme on fertility regulation using all available medium including the use of social media, class room special reproductive health seminal, health talks in other to raise the critical consciousness of the postgraduate students on their right to determine their preferred regulated number of children devoid of societal, cultural and religious limitations. Such trainings should be coupled with negotiations skills in other to co-opt their husbands and convince them on safe child spacing practices, regulated number of children correct misconception about having a male child and asserting their role in family decision making processes.

### 5.7.3 Advocacy

There is a need to advocate for the inclusion of family planning health education in the university training curriculum for masters students in other to address these identified challenges as these female postgraduate students are the change agent and the link to the larger Nigerian community hence a defective knowledge could have negative implication on the attainment of the family planning 2020 target.

## 5.8 Conclusion

The findings of this study revealed that there was a positive attitude but low uptakeof contraceptive attributed to multiple social, parental, community, peer and cultural barriers to fertility regulation aspiration and contraceptive uptake. Thus, there is a need for concerted effort to address these identified challenges.

## 5.9 Recommendations

In light of the finding from this study,

The following recommendations were made:

1. Large number of the respondents still want additional children despite their level of advanced level of education. In other words, in order to control population growth, it is imperative to change the peoples' attitude toward large family size and the desire for such through extensive media campaign and individual contact.
2. There is a need for political prioritization to provide large scale family planning programs to enhance the existing community-oriented approaches and communication programs, to help change the cultural and parental barriers and desire for large family and the totems, and mythical believes about having a male child in the society.
3. There is a need to revisit the guideline for the Nigerian Population Policy and consult all stakeholders including public health professionals in the contraceptive campaign and family planning initiative efforts in other to ensure maximum coverage and sustainable results.
4. There is a need to embark on encourage male involvement in fertility and reproductive health initiatives from inception, providing joint enlightenment, and educating the couple regarding the advantages of birth spacing contraception and female autonomy in fertility decision may help to increase the uptake of contraceptives.

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APPENDICES

APPENDIX I

QUESTIONNAIRE

**FERTILITY DESIRES, ATTITUDE TO POPULATION POLICY AND WILLINGNESS TO ADOPT CONTRACEPTION AMONG FEMALE POST GRADUATE STUDENTS OF UNIVERSITY OF IBADAN, IBADAN, NIGERIA**

Dear Respondent,

I am a postgraduate student of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. I am conducting a study that investigates the **"fertility desire, attitude to population policy and willingness to adopt contraception among female postgraduate students of University of Ibadan, Ibadan, Nigeria**". Fertility desire is a psychological state in which someone has the personal motivation to have a child. This study will yield information that may be used in developing health intervention programs. There is no right or wrong answers to the questions asked or the statements made, what is desired of you is your truthful and honest responses. Please note that the completion of this questionnaire is entirely voluntary. All information gathered as a result of your participation in this study will be treated with utmost confidentiality and will be used strictly for research purposes only.

Thank you.

I have read and understood the consent form and voluntarily agree/disagree to participate in the study by ticking [√] in the appropriate box below:

1. Agree [ ] 2. Disagree [ ]

**SECTION A: SOCIO-DEMOGRAPHIC INFORMATION**

Please tick (√) any of the responses that apply to you in the options provided or complete the blank spaces provided as applicable.

2. Age (in years) at last birthday_____

3. Religion: 1. Christianity [ ] 2. Islam [ ] 3.Traditional [ ] 4. Others (specify)_____

4. Department: _____

5. Ethnic Group: 1. Yoruba [ ] 2. Hausa [ ] 3.Igbo [.] 4. Others (specify)_____

6. Occupation: _____

7. Average monthly Income from all sources:_____

8a. Marital status: 1.Married [ ] 2. Single [ ] 3. Separated [ ] 4. Divorce [ ] 5.Widowed[ ]

**if not married, move to question 11**

8b. If married, How long have you married?_____

9. Is your husband the major breadwinner for your household? Yes 2. No

**SECTION B: FERTILITY DESIRE**

**Instruction:** The table below contains a set of statements/questions to assess fertility desire of respondents. Please fill in your responses.

10a. How many children have you had previously?_____

10b. What is the age of your last child?_____

10c.What is the age of your last child? _____

11. How many children do you prefer to have in your lifetime?_____

12. Number of gender preferred: Male(s) _____Female(s)_____

13. How many biological children would you like to have in your life time?

(Please specify)_____ **if not married move to question 19**

14. Was your last pregnancy wanted or unwanted ? 1. Wanted 2.Unwanted

15. Are you pregnant now?

16. Do you want to be pregnant in the future?

17a.If yes, how many children do you desire more to have in the future?_____

17b. How many children does your husband or spouse desire to have in the future?_____

18. Who has the greatest decision on the number of children you should have?

1. Husband
2. Mother
3. Mother-in-law
4. Friends
5. others_____

| S/N | Question | YES | .NO |
|---|---|---|---|
| 19 | Having more children makes me feel fertile | | |

| | | | |
|---|---|---|---|
| 20. | Women have no control at all over the number of children they desire to have. | | |
| 21. | The fertility desire of the man is more important than that of the woman because he is the head of the family. | | |
| 22. | Family planning can help women to control the number of children they wish to have. | | |
| 23. | Having less than 2 years interval before the next child has no negative effect on a mother's health. | | |

**SECTION C: ATTITUDE TOWARDS FERTILITY DESIRE**

Instruction: Please tick (√) the most appropriate column to indicate the extent to which you agree or disagree with the statements below.

| No | Attitudinal Statement | Agree | Undecided | Disagree |
|---|---|---|---|---|
| 24. | I am comfortable discussing my fertility desire with my fiancé/husband | | | |
| 25. | I am against having few children because of my religion | | | |
| 26. | I am in support of having few number of children as it helps the mother to be healthy | | | |
| 27. | I feel comfortable having few number of children as it helps reduce my expenses | | | |
| 28. | I am not comfortable with having few number of children as it can lead to infidelity of my partner | | | |
| 29. | I feel only the man should determine the number of children desired because he is the head of the family. | | | |

**SECTION D: WILLINGNESS TO ADOPT CONTRACEPTION**

**30**. Have you heard about contraceptives? Yes ( ) No ( )

**31**. If yes what methods do you know? (Please List)

**I.** _____

**II.** _____

**III.** _____

**IV.** _____

**V.** _____

**32**. Have you used any form of contraceptive during the last two years? 1. Yes ( ) 2No ( )

**33(a)** If yes why?_____

33**(b)** If Yes what type of contraception have you used? _____

**33c)** If No why have you not been contracepting?

33d. Are you willing to use contraceptives to prevent future pregnancies? 1. Yes 2. No

**if not married move to question 38**

**34**. Did your husband ever say that you need to prevent or delay having the next baby by using contraceptive?

**A.** during your last pregnancy? 1. Yes ( ) 2. No ( )

**B**. within 2 years after the birth of your last child? 1. Yes 2. No ( )

35a. Have your husband used any form of contraceptives during the last two years?

1. Yes () 2. No ( )

**35b.** If yes why?----------

**35c.** If yes what kind of contraception was he using? ----------

**35d.** If No, why? ----------

**36** When you realized you were pregnant for your last child were you surprised? (Please tick)1. Yes ( ) 2.No ( )

**37a**. If yes why were you surprised?.....

**37b.** If No, why were you not surprised? ----------

**37c.** When your husband realized you were pregnant was he surprised**?** 1. Yes ( ) 2.No ( )

**37d.** If yes why was he surprised?----------

**38**. How many years interval do you think is proper to have after the birth of a child? (Please specify) ----------

The table below contains set of statements to identify the willingness of female postgraduate students to adopt contraception. Please tick (√) the most appropriate column.

| S/n | Question | Yes | No |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 39. | I am well aware of the use of contraceptives | | |
| 40. | I support family planning | | |
| 41. | The use of contraceptive is subject of communication between my fiancé/husband and I | | |
| 42. | My partner approves the use of contraceptives | | |
| 43. | The use of contraceptive will help me to achieve my desired number of children | | |

44. I use contraceptives when I want to:

*there may be more than one answer, therefore circle the numbers beside the answers)*

1. Have a child when required
2. Prevent of unwanted birth
3. Prevent sexually transmitted disease
4. Space birth
5. Improve my health (28. If there is a child by mistake, what will you do?_____

**SECTION E: ATTITUDE TOWARDS THE GOVERNMENT RECOMMENDED POPULATION POLICY**

**Instruction:** The table below contains set of statements to identify attitude of female postgraduate students towards government recommended population policy. Please tick ( √) the most appropriate column to indicate if your answer is **YES** or **NO**.

| S/N | STATEMENTS | YES | NO |
|---|---|---|---|
| 45. | I am aware of the government policy of maximum of four (4) children per family | | |
| 46. | I am in support of government on maximum of 4 children per family | | |
| 47. | I cannot adopt the government policy of maximum of 4 children per family | | |
| 48. | Government should not have a say on the number of children one should give birth to | | |
| 49. | The influence of government on fertility desire is necessary to help in government developmental policies. | | |
| 50. | The government policy on 4 children per family is an outdated policy. | | |

**SECTION F: PERCEIVED FACTORS INFLUENCING FERTILITY DESIRE**

**Instruction:** The table below contains set of statements to highlight factors that could influence females' decision on fertility desire. Please tick ( √) the most appropriate column to indicate the extent to which you agree or disagree with the statements below.

| S/N | ITEMS | Agree | Undecided | Disagree |
|---|---|---|---|---|
| 51. | My parents want me to have as many children as possible, So I will. | | | |
| 52. | My spouse wants me to have as many children as possible, So I will. | | | |
| 53. | The only child of my parent, so it is expected of me to have as many child as possible | | | |
| 54. | I would have many children because my religion | | | |

| | | | | |
|---|---|---|---|---|
| | motivates me to do so. | | | |
| 55. | I would have more than four (4) children if my friends motivate me to do so. | | | |
| 56. | I will not have more than four (4) children so as to avoid financial problem. | | | |
| 57. | I will have many children because my culture encourages it | | | |
| 58. | My parents disapproval of having few or many children can affect my decision | | | |
| 59. | I must have a male child. If not, I intend to continue to give birth until I have a male child. | | | |

Thanks for your effort

APPENDIX II

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*
Tel: 0803 326 4593, 0802 360 9151
e-mail: cfalade@comui.edu.ng lillyfunke@yahoo.com

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

**NOTICE OF FULL APPROVAL AFTER FULL COMMITTEE REVIEW**

**Re: Fertility Desire, Attitude to Population Policy and Willingness to adopt contraception among female postgraduate students in University of Ibadan, Ibadan, Nigeria.**

UI/UCH Ethics Committee assigned number: UI/EC/18/0451
Name of Principal Investigator: **Sunmisola E. Fatuase**
Address of Principal Investigator: Department of Health Promotion & Education
College of Medicine,
University of Ibadan, Ibadan

Date of receipt of valid application: 12/09/2018
Date of meeting when final determination on ethical approval was made: **N/A**

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 **01/11/2018 to 31/10/2019.** 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.*

UI/UCH EC
01 NOV 2018
APPROVED
COLLEGE OF MEDICINE, U.I.

**Professor Catherine O. Falade**
Director, IAMRAT
Chairperson, UI/UCH Ethics Committee
E-mail: uiuchec@gmail.com