

**ATTITUDES TOWARDS AND PRACTICE OF BIRTH  
SPACING AMONG COUPLES IN NIGERIA**

**By**

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**CERTIFICATION**

This is to certify that **AKINOLA VICTORIA JUMOKE** of the Department of Demography and Social Statistics, Faculty of Humanities and Social Sciences, Federal University, Oye-Ekiti, carried out this research "Attitudes towards and Practice of Birth Spacing among Couples in Nigeria" in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc.) in Federal University, Oye-Ekiti under my supervision.

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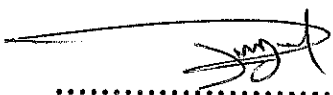
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## **DEDICATION**

I dedicate this project work to Almighty God who protected and guided me throughout my undergraduate programme and my parent, Mr. and Mrs. Akinola for their immeasurable support.

## ACKNOWLEDGEMENT

I return all glory to Almighty God for his protection and guidance. I appreciate my parent for everything invested throughout my undergraduate programme and to also see that the project was completed. I also want to thank my sister, Moyosoluwa Adeyemi for her moral and financial support. I appreciate the effort of my brother, Oladayo Akinola for his financial support and Olayinka Akinola for his motivational technique which had guided my academic.

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## ABSTRACT

High population growth due to high fertility and closely spaced birth is inimical to development in developing countries. This can endanger the lives of both mothers and children. Closely spaced birth may sap women of necessary energy, put the newly born babies in disadvantage position and also put the family in bad economic position. Therefore, this study examined the attitudes towards and practice of birth spacing among couples in Nigeria.

The study used 2013 NDHS couples recode data set with a sample size of 7,727. Three levels of analyses were employed – univariate in form of percentage frequency distribution, bivariate in form of cross-tabulations and Chi-square test and multivariate analyses using binary logistic regression model. Findings revealed that 52.71% approve the practice of birth spacing for two years and more and 54.30% had birth interval of two and more years. Multivariate analyses revealed that religion, education and wealth index were characteristics of couples that influenced their attitudes towards birth spacing while joint decision making and number of living children were significant characteristics of couples influencing the practice of birth spacing. The study concluded that intervention programmes that would influence attitudes towards and practice of birth spacing among couples should put religion, education, wealth index, joint decision making and number of living children into consideration.



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Birth spacing is a process by which couple space the conception, pregnancy and child bearing at intervals mutually agreed on by both husband and wife (couples). Birth interval is a relevant health intervention for both child and mother, studies on pregnancy timing and birth spacing had been sponsored by United States Agency for International Development (USAID) as a relevant intervention to improve the child's and mother's health. Birth timing can be achieved through the use of family planning methods. According, to Owuamanam (1988), birth spacing is a method employed by couples to decide the number of children and space the children. Orubuloye (1987) also defined family planning as a method used by couples to determine the interval of birth and to select the method to be used in order to obtain their desired family size. The goal of family planning method is to be able to obtain the desired number of children with appropriate spacing and timing to ensure ideal growth and development of family member (Hatcher, 1977). Failure to adequately time pregnancy can affect the health of individual, child and the family as a whole.

In an important decision in reproductive health, the World Health Organization recommends waiting for at least 24 to 36 months between births to reduce infant and child mortality and improve maternal health. United States Agency for International Development in 2002 has suggested that optimal birth spacing of three to five years might be more advantageous.

Previous studies had shown that children born three to five years after the last birth were about 2.5 times more likely to survive that child born two years or less after the last

delivery. Mothers with 27 to 32 months birth intervals were found to be 2.5 times more likely to survive child birth compared to women with 9 to 14 month birth interval. (Population reports, 2002). Short birth interval causes poor health and mortality for mothers and children and the risk of child mortality increases if the timing between the first child and subsequent ones is less than two years. On the other hand, Long birth intervals increase the chances of survival of both the mothers and the child. Short birth interval may give mother's insufficient time to recover from the nutritional burden of pregnancy (King, 2003) and also affect the older child because the mother may wean the child earlier since she is pregnant again. Based on the assertion, sufficient time allows for the mother's recovering of the nutritional status before the next birth. Fertility depends not only on couple's decision but also on socio-demographic factor. The factor affecting fertility may also have a varying effect on birth spacing.

This study therefore seeks to ascertain the Attitude towards and investigate the practices of birth spacing among couples in Nigeria. This study also seeks to examine the effects of demographic and socioeconomic factors on birth spacing among couples in Nigeria.

## **1.2 Statement of Research Problem**

Nigeria has one of the highest Total Fertility Rates (TFR) in the world (PRB, 2013). According to the 2013 Nigerian Demographic and Health Survey (NDHS), the TFR stood at 5.5 children per woman. High fertility rate directly translates to large family size and increase in population as a result of an overall low use of contraceptives and associated short birth intervals. Low contraceptive use and short birth spacing have contributed to the prevailing high rates of fertility thereby exposing Nigerian mothers and infants to a high risk of death from pregnancy.

Birth spacing has a direct implication on women's health and well-being as well as the outcome of each pregnancy. Birth spacing less than two years has significant health effects

on both mothers and children. Low birth weight and premature birth are among its consequences. Healthy spacing of birth is a family planning intervention to help couples delay and time births to achieve the healthiest outcomes for women and children. It had been documented that perinatal outcomes and child survival can be improved mainly by lengthening inter birth intervals.

Birth spacing remains a relevant factor in the societies especially in developing countries. Inadequate spacing contributes to both maternal and infant mortality. The work focused is inspired by the rate of inadequate birth spacing among couples which endanger the lives of both the mother and the child through negative attitudes leading to poor practice on the use of birth spacing method.

According to NDHS 2013 spacing children at least 36 months apart reduces the risk of infant death. Infants born less than two years after a previous birth has high under-five mortality rates (213 deaths per 1,000 live births compared with 103 deaths per 1,000 live births for infants born three years after the previous birth). Nearly one-quarter of all children are born less than two years after their siblings.

Most researchers and policy makers focused mainly on women in their studies of family planning with little or no reference to their male partners thereby, underestimating the role of men as the husbands, family heads and major decision makers in the family and society in general (Abanihe, 2003). Involving men in birth spacing would make the practice easier for women. The joint efforts of husbands and wives (couples) may go a long way to reduce child and maternal mortality.

Couples' roles are very important. Husbands and wives have roles to play in responsible reproductive behavior. Therefore, the couples need to plan together in order to foster adequate and responsible birth spacing within the families.

### **1.3 Research Question**

- What are the attitudes of couples towards birth spacing in Nigeria?
- What is the extent of birth spacing practice among couples in Nigeria?
- Do socio-demographic factors influence attitudes towards and practice of birth spacing among couples in Nigeria?

### **1.4 Main Objective**

- To examine the attitude towards and practice of birth spacing among couples in Nigeria.

#### **1.4.1 Specific Objectives**

- To ascertain the attitudes of couples towards birth spacing in Nigeria.
- To know the extent of birth spacing practice among couples in Nigeria.
- To examine factors influencing the practice of birth spacing among couples in Nigeria.

### **1.5 Justification for the Study**

Previous studies read dwell mainly on the maternal and infant implication of birth spacing. Such studies include Rutstein (2005), he studied the effects of birth spacing on infant and child mortality and nutritional status. Few studies dwells on birth spacing involving the couples there by forgotten that the choice of whether to become pregnant or not and the effort of planning for a family cannot be achieved by women alone. The 1994 International Conference on Population and Development (ICPD) reminded the world audience that good reproductive health is the right of all people, men and women alike and that together they share responsibility for reproductive matters.

Birth spacing helps in the proper planning of household resources for each child and enough time for the parents to dedicate to each child. High fertility are linked to short birth interval thereby resulting to poverty, which add to poor school performance through poor nutrition and the inability of parents financial status to provide for each child's needs. If couples could achieve at least two years intervals, child and maternal mortality would fall.

Optimal birth spacing reduces abortions and unintended pregnancies among couples thereby providing the greatest health, economic and social benefits for the family which also enhance child's health, nutrition and development. Couples who space their births at least two years increase the chances of the survival of both the mother and child. Timing of birth allows the mother to recover both physically and emotionally before she conceive again and faces the demands of another pregnancy, birth, breast feeding and child care.

In conclusion, Couple decisions about the timing and number of child helps to adequately plan for the parenthood. Though, all pregnancies are not welcomed by the couple this thereby leads to the need of family planning measures to prevent unintended pregnancies and to bring about wanted pregnancies. Spacing of birth is an essential factor in reproductive life to enhance the health and well-being of mother and child. Spacing children at least two years gives the child a healthier start in life, and the mother has adequate time to regain from physiological and psychological stress from previous pregnancy, delivery and stress of taking care of the child.

## **1.6 Definitions of Terms**

**Attitude:** Attitude refers to inclinations to react in a certain way to certain situations; to see and interpret events according to certain predispositions, or to organize opinions into coherent and interrelated structure (Bankowski and Bryant, 1985). Attitude in relation to the study refers to the views and opinions of the couples on birth spacing. Attitudes means

whether couples accept birth spacing or not; whether couples support, like and encourage birth interval or not.

**Knowledge:** knowledge is the ability to acquire, retain and use information. Knowledge within the context of this study refers to what the research subjects know about birth spacing and the various methods used for birth spacing (Bankowski and Bryant, 1985).

**Practice:** Practice means the application of roles and knowledge that leads to action. Practice is linked to the progress of knowledge and attitude and is executed in an ethical manner (Bankowski and Bryant, 1985). Practice here refers to how the couples apply their knowledge about birth spacing into use.

**Birth spacing:** Refers to figuring out when couples want to have their first baby and subsequent ones.

**Traditional Family Planning:** Refers to birth spacing methods based on the understanding of the body mechanism without the use of any artificial means.

**Modern Family Planning:** Modern family planning is technological advances designed to overcome biology. In this regard, modern methods enable couples to have sexual intercourse at any mutually desired time

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

Literature review are past studies which are in line with research aim relating to the attitudes towards and practice of birth spacing among couples in Nigeria and other areas with illustrations of couples understanding, practices, and attitudes about family planning.

##### 2.1.1 History of Birth Spacing

Changes in birth intervals have been studied since 1960s in United States (Whelpton, 1964), and the gap between preferences and actual birth intervals and its implication on level of fertility were examined for sub-Saharan Africa utilizing DHS information about a decade ago (Rafalimanana and Westoff, 2001). In the DHS Surveys which range from 1985 to 2008, Yemen had the shortest birth intervals, with median of 25.3 months, and Ukraine had the longest, with a median of 44.1 months. By locale, however, the Central Asian States had the shortest intervals (29.2 months) and South and South East Asia had the longest (33.6 months). Likewise the district with the highest percentage of births with an interval of under 24 months is the Central Asian States (33 percent), and the locale with the least rate is sub-Saharan Africa (20 percent). By nation, Yemen had the highest percentage of births with an interval of under 24 months (42 percent), and Zimbabwe had the least (11 percent).

Children born after intervals of under 36 months are likewise considered to have an elevated risk of mortality and malnutrition. More than half (57 percent) of children are conceive after such intervals. There is not much variation by locale, but there is significant variation by nation, from 40 percent or less of births in Indonesia, Ukraine, South Africa,

and Lesotho to more than 70 percent in Comoros, Guatemala, Uganda, Yemen, and Tunisia.

### **Global Views on Birth Spacing**

A cross sectional study conducted among 436 women's of aged 15-50years in AlKhabar on Birth intervals perceptions and practices among urban based Saudi Arabian women's found that all had less than or equal to 2 children's within the past 10 years. 5.2% of preferred birth interval had <2 years, 28.2% preferred birth interval had 2 to 3 years interval while other respondent supported over three years or equivalent to 3 years. Education and employment status were the predictors of birth spacing preference. About half of the respondent did not know about the advantages of longer birth spacing. 26.3% had mean birth interval less than 2 years. Employment status and age were statistically significant positive indicators of longer birth spacing. Oral contraception was the well-known method adopted for birth spacing.

A qualitative study conducted on India in 2003 on Birth spacing utilizing focus group discussions (FGDs) and Mini-group discussions (MGDs) found that absence of decision making powers on women, lack of awareness of methods available, religious prohibition, apprehension of social disapproval are the hindrances beyond adoption of birth spacing. The attitude of the woman to self and spacing, cultural factors that determine the extent of support lent by the family (or the lack of it) to the woman and Institutional infrastructure are the main factors contributing to adoption of birth spacing. Contraceptives pills are the mostly used method for spacing.

### **African Views on Birth Spacing**

A qualitative study was conducted utilizing FGD at Egypt on Knowledge, Attitudes and Practices. The study was actualized in two peri-urban locations found that optimal spacing



until the next pregnancy for Egyptian women is generally understood to refer to a 2-3 year “resting period” between pregnancies that permit the mother time to recover from pregnancy, labor and lactation. The health of the mother, the wellbeing of the last child and the family’s financial situation were believed to influence the decision for spacing the following birth.

A descriptive cross sectional study conducted on Kirtipur Municipality of Kathmandu on study on birth spacing and its determinants among women utilizing proportionate random sampling technique in which 3 ward were chosen. The study found that 4.05 years is the mean interval. Few women had <2 years birth spacing while 24.3% had birth interval of >5 years. The average birth spacing is in decreasing trend with increase in birth order. Birth interval is found dependent on the various factors such as education, socioeconomic factors, sex, no of children, abortion and child death, previous obstetric history and menopause, education.

### **National Views on Birth Spacing**

According to the 2011 National demographic Health Survey (NDHS) data, birth intervals are slightly longer in urban 40.3 months than in rural 35.9 months areas. There are no differences in median birth intervals by ecological zones. The median birth interval of the western region is 43.3 months which is the longest and Far-western region median birth interval is 33.2 months and it is the shortest. Birth spacing is longer in the Western Terai and Western Hill sub regions than in the other sub regions. Birth interval increases with education from 35.1 months among women with no education to 42.2 months among women with a school leaving certificate (SLC) or above. Similarly, birth interval increases with wealth. The birth interval for the highest wealth quintile is nearly 46.2 months, whereas for all other quintiles it is 37.2 months or less.

### **2.1.2 Benefits of Birth Spacing**

Birth spacing programs have reduced maternal and child mortality rate by decreasing the total fertility rate. The Guttmacher Institute estimated that if birth spacing utilization increases in developing countries there will be rapid reductions in unintended pregnancies and maternal deaths (Singh, 2009).

Childbearing is one of the predominant expectancies of currently married couples. Culture often dictates that young couples reproduce early in the union. The recommendation of birth-to-birth interval in Uganda is two years. Similarly in Jordan, the recommended birth-to-pregnancy interval is two years (HCP, 2007). Consequently, Programs established with emphasis on timing of pregnancies to improve mother and child health.

Birth Spacing provides one or multiple modern contraceptive options depending on availability of skilled providers. One of the least expensive and most acceptable birth spacing methods has been breastfeeding. Breastfeeding was one of the earliest traditional methods linked to increased birth spacing, with benefits not only for contraception but also for delivery of passive immunity to the newborn (Saadeh & Benbouzid, 1990).

Modern contraceptive use (i.e., condoms, injectable, implantable, oral contraceptives, etc.) has been estimated to have averted 250,000 maternal deaths globally in 2008 by reducing unwanted pregnancies (Ahmed et al., 2012). Cleland J., Bernstein S., Ezeh A., Faundes A., Glasier A., Innis J. (2012) explained the benefit of increasing contraceptive use globally and predicted a reduction in maternal mortality rate of 4.8/100,000 live births for each 1% increase in contraceptive use (Cleland et al., 2012).

This poor reproductive health situation provided a rationale for this research to focus on the attitudes towards and practices of birth spacing among couples in Nigeria.

### **2.1.3 Birth Spacing, Mortality and Associated Risks**

#### **Birth Spacing, Maternal Morbidity and Mortality**

According to Danel et al., (2003), maternal morbidity can be defined as a condition that adversely affects a woman's health during childbirth beyond what would be expected in a normal delivery. Maternal mortality is one of the leading causes of death for women in developing countries (UNIFEM, 2008). The World Health Organization estimates that quarter a million maternal deaths occur each year, 99% of which are in developing countries. WHO, (2000) also considers maternal mortality as an indicator of disparity and inequity between men and women, between communities and among countries. Birth timing shorter than 36 months had been shown to increase the risk of mortality, malnutrition, and pregnancy morbidity (Gribble et al., 2008; Rutstein, 2008).

Every year, over 54 million women suffer from complications during pregnancy and child birth. Of those, about 1.5 million die; 99 percent of these maternal deaths occur in the developing countries. It is obvious this is related with the effects of pregnancy spacing on maternal morbidity and mortality (World Health Organization, 1993; and United Nations Children's Fund, 1996). They further clarified that while very short intervals may be associated with some types of morbidities, very long intervals may be associated with poorer outcomes also.

According to Raphael (2008), he corroborates with the fore going statistics and he asserts that Nigeria's maternal mortality rate is the second highest in the world, after India with 1,100 maternal deaths per 100,000 live births. Nigeria has only 2 percent of the world's population, but 10 percent of all maternal mortality take place there.

DaVanzo et al., (2007) used data from the Matlab demographic surveillance system in Bangladesh to study the effects on pregnancy outcomes of the preceding inter-pregnancy

interval and the type of pregnancy outcome that began the interval. In respect to socioeconomic and demographic covariates controlled in multivariate analysis, inter-pregnancy intervals that began with a live birth and of less than six months in duration were associated with a 7.5-fold increase in the odds of an induced abortion, a 3.3-fold increase in the odds of a miscarriage, and a 1.6-fold increase in the odds of a stillbirth when compared with 27- to 50-month intervals. Inter-pregnancy intervals greater than or equal to 75 months were associated with increased odds of non-live birth outcomes but were not as risky as very short intervals. Women whose pregnancies occurred between 15 and 75 months after a preceding pregnancy outcome had a lower likelihood of fetal loss than those with shorter or longer inter-pregnancy intervals.

Limiting fertility and increasing birth spacing has resulted in a decrease in the maternal and neonatal morbidity and mortality in developed countries. Reproductive services had helped individuals achieve their desired number of children and proper spacing of pregnancies (Tuladhar et al., (2008)).

### **Birth Spacing and Infant and Child Mortality**

According to CSO et al., (2007), infant and child mortality have been defined as the probability of an infant dying before the 1st birthday and the probability of dying between the 1st and 5th birthday respectively. As indicated by UNFPA (2004), there is a relationship between maternal, infant and child mortality as maternal deaths have a significant impact on infant and child mortality. The reason is that, the chances of survival of the baby become slim after the death of the mother. Other evidence links short birth spacing to increased child morbidity and mortality (Rosmans, 1996; Zhu & Le, 2003; Conde-Aguedo, 2007).

Zhu & Le (2003), demonstrated an association between short birth intervals and low birth weight and suggested that increasing birth spacing should be strategized to address low birth weight deliveries. Short birth interval had resulted in maternal depletion, the overall change in maternal nutritional status over one reproductive cycle, by affecting the depletion and repletion phases in relation to initial nutritional status (Winkvist, 1992). According to USAID (2006), evidence revealed that a child born between three to five years after a sibling is 2.5 times more likely to survive than the child born after a shorter interval.

The United Nations (2004) reports that infants that are spaced at least 3 years are more than 3 times likely to survive than those born less than one and half years. Considering that each year 10 million children under 5 years die primarily from preventable causes, developing countries as an additional half a million mother's death in childbirth or pregnancy, it is clear that birth interval must remain on top of any development agenda. This goal clearly focuses on child spacing for survival of children, and their right to live. Developing country like Nigeria, the mortality rate of children is very high when considered against two of the very basic indicators that are used in measurement- infant mortality rate, expressed as the proportion of children who die before their first birthday and under-five mortality rate, expressed as the proportion of children who die before they reach five years of age (Ndolo, (2005), p.55). UNICEF, (2002) also reported that there is higher incidence of low birth weight and prematurity among babies conceived within six months of previous birth, compared to those conceived 18 to 23 months following the last baby.

## **2.1.4 Factors Influencing Birth Spacing**

### **Communication among Couples**

According to Orji et al., (2007), in their article on spousal communication on family planning at Ile-Ife, they discovered that most of the female respondents expressed fear of rejection and lack of support from their husbands should they voice out their views about birth spacing methods matters. Discussion of birth spacing stimulates contraceptive use (Furuta & Salway, 2006). Also, they argued that the closeness of the husband-wife bond and the degree of communication between spouses is one of the important dimensions of increased in contraceptive use by couples (Furuta & Salway, 2006). It's believed that there is minimal communication between couples of Sub Saharan Africa regarding family planning (Bawah, 2002).

Couples experiencing unintended pregnancies reported less marital satisfaction, along with lower levels of positive marital interaction, such as communication skills and support while compared with couples who planned their pregnancy (Cox MJ et al., 1999). Also, according to Guzzo and Hayford (2012) noted that if couples were effective communicators, these might be able to both prevent unintended pregnancy and maintain a stable relationship. The transition to parenthood and the addition of more children adds to the demands on social and economic resources. Couples who intentionally have additional children are likely to postpone childbearing until they feel equipped to handle the challenges; for the unplanned parenthood the challenges may be detrimental to relationship quality, functioning, and stability.

## **Gender and Spousal Involvement in Birth Spacing**

Nigerian Women were noted to be faced with a lot of challenges which hinder them from equal right and independence with their male spouse. Women lack the ability to execute changes that will lead to effective legislation which is as a result of their poor representation in the national assembly (Olisemeka, 2011).

Efforts should be made to emphasize that men's shared responsibility and actively involved in responsible parenthood, sexual and reproductive health and behavior, including family planning and other reproductive health issues which enhance the recognition of equal value of children of both sexes (United Nations, 1994:27).

Male involvement in sexual and reproductive health is not only important but also a must for the health and demographic transitions in Nigeria (Isiugo-Abanihe, 2003). He also said that men need to change their behavior and orientation which serves as a prelude to a positive change in family relationships. It is important that health programmes should include male stereotypes and learn more about their needs and concerns, as partners in progress and not as competitors with women over limited resources available for health services. Practice of birth spacing should be encouraged among couples for its benefits, including fostering of good relationship between couples.

According to Orji et al., (2007) in their study, in South Western part of Nigeria involving 3073 couples of four Nigerian cities and one semi-urban settlement were used to examine reproductive decision making and male motivation for large family size. They concluded that, in patrilineal traditional society, male dominant support large family size and men's reproductive motivation to a large extent thereby affecting the reproductive behavior of their wives. The factors influencing men's reproductive outcome and intentions for fertility transition in Nigeria are male education, age of marriage, monogamy, inter-spousal communication and intention not to rely on children for old age support are significantly

related to smaller size and preferences for smaller families, while being in a male dominant family setting has a strong relation with large family size and preferences for large families.

### **Decision Making as Regard to Birth Spacing**

In the Women's Studies Project, Indonesian women sought their husbands' opinions on most decisions, including household finances and contraception. This is because the women often felt caught up between cultural expectations of wives' subordination to husbands (Barnett & Stein, 1998).

Undermines women's human rights has led to unequal power relationships between men and women. Social, economic and political factors were also among the factors which prevent women from attaining good health and thereby limiting women's decision-making ability and their freedom to access health care (Thompson, 1999).

The United Nations Population Fund reports that the level of unintended pregnancy is lowest in countries with greatest access to effective methods of contraception and where women play a major role in family decision making (UNFPA, 2004). Decision making on reproductive health by a woman is determined mainly by cultural norms and religious orientation according to the conclusion in the study on Decision making and reproductive issues of expectant married mothers at Chainama Clinic in Lusaka by Mungaila (2007). He found out that although socioeconomic status of women influenced their role at home, it was negligible when it came to major reproductive health decisions. This is because, marriages in the African setting are largely influenced by cultural norms in which men are considered as the major decision makers in a home (Djamba, 1994). Since men are viewed as the major decision-makers in homes, there is need for services that include counseling to promote gender balance in reproductive decision which could improve couple communication and enhance women greater household autonomy, (Kim, 2000).



### **2.1.5 Attitude towards and Practice of Birth Spacing among Couples in Nigeria**

Available studies had shown that Africans have various forms of birth spacing methods basically the traditional before the development of the modern methods and that most of the modern methods is a scientific modification of the traditional methods (Delano, 1990).

In Nigeria, the Findings from 1981 to 1982 fertility survey shows that out of the women interviewed only 34% reported that they have heard of birth spacing methods. In 1990 Nigerian demographic health survey, it was shown that the proportion of women who had knowledge of birth spacing method increased to 46%. An information, education and campaign launched to create awareness from 1992 to 1993 aimed at changing the Nigerians attitude towards birth spacing with the belief that the message relayed through mass media can influence contraceptive behavior.

The 2004 national policy on population for sustainable development was developed by Nigerian government to deal with issues relating to birth spacing. This policy outlined strategies which aimed at reducing total fertility rates in the country through increasing access to contraceptives (USAID, 2009).

Inaccessibility to health care professionals is one of the reasons for the widespread lack of awareness of appropriate behavior and preventive health measures to adopt during pregnancy and after pregnancy. Women need adequate knowledge of the benefit of birth spacing thereby influencing their attitudes towards birth spacing methods effective use for child-spacing and limiting the number of children. Also, involvements of couples will go a long way to encourage and motivates practice of birth spacing.

limited understanding of birth spacing of men are due to cultural norms linking the number of offspring with social status especially in traditional societies which may not support fewer children. The progress as indicated by the Centre for population and Development

Activities (CEPDA), observed that the recent attitudes towards birth spacing methods in the north have improved as men are beginning to accept and encourage the practice of birth spacing (Abese, 2011).

In Nigeria, The value placed on motherhood and children limit the control women have over their reproductive and maternal health thereby causing high fertility rate and damage to the health of mother and children (Godswill, 2008). This can also account through the low utilization of birth spacing method.

In the quest to restrict the population growth, the government of the Federal Republic of Nigeria in 2002 came out with a population policy paper on family planning and fertility regulation. According to the policy paper, the value of family planning and child spacing on the stability and wellbeing of families shall be promoted and family services shall be incorporated in maternal and child health care. This is to help reduce maternal and infant morbidity and mortality as well as reduce rapid population growth in the shortest possible time. This will invariably lead to the attainment of good quality life and high standard of living in the country. It is perhaps because of the foregoing that made world leaders in 1974, accepted family planning as a human right of individuals and couples.

Article 14 (F) of the World Population Plan of Action states that:

All couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so; the responsibility of couples and individuals in the exercise of the right takes into account the needs of their living and future children, and their responsibility towards the community.

## **2.2 Theoretical Orientation**

### **2.2.1 Theory of Planned Behavior**

The Theory of planned behavior is an extension of the earlier theory of reasoned action which is a social psychological model (Fishbein & Ajzen, 1975a, 1975b). Intentions are formed from three sets of factors which are attitudes, perceived behavioral control and subjective norms as indicated by theory of planned behavior. Attitudes represent a person's internal evaluation that performing the behavior or attaining the goal will have positive or negative outcomes for them.

The Theory of Planned Behavior distinguishes between two types of external variables which are Individual background factors and environment factors. Individual background factor such as education, income and, birth spacing may influence the construction of intentions by affecting attitudes. Aspects of the environment such as decision maker and spousal involvement are characterized as the actual control factors and constraints. The existence of external factors that prevent an individual from carrying out their intention may be reflected in perceived behavioral control. This type of external factor can also act as a real barrier to realization of intentions if it prevents a person with a clear intention from acting on it.

Within demography, research is directed towards explaining or predicting intention to have a child, much of it within the reasoned action tradition of the Theory of Planned Behavior (Billari, Philipov, & Testa, 2009; Jaccard & Davidson, 1975). This research has focused on birth spacing with the Theory of Planned Behavior suggest that it is also important to understand the timing of the intention.

Child-timing intentions among couples are the most important predictors for fertility behavior over a 3½ year period (Miller and Pasta, 1995). Also, the importance of the

timeframe of intentions was underlined by Schoen, Astone, Kim, & Nathanson (1999). They observed that an intention with a shorter time frame led more often to actual births than long-term intention. The issue of the temporal stability of intentions is also raised in general terms by Fishbein and Ajzen (2010) who specify that the longer the time interval between forming an intention and performing the behavior (or attaining the goal), the more likely it is that intentions change in response to other events. This study focused on the timing of the intention to have a child, and examine the attitudes of people who intend to have a child in the very short term and those of people whose intention to have a child is longer term.

### **2.2.2 Health Belief Model**

This theory is needed to understand birth spacing behavior and related reproductive health issues. The purpose of this study was to examine the Health Belief Model for explaining and predicting birth spacing attitudes which influence the practice. This theory was developed by Rosenstock and colleague and can be used to predict and explain variations in birth spacing attitudes.

Birth Spacing behavior is towards limiting and spacing of children within a family. Contraceptive behavior refers to the activities involved in the process of identifying and using a contraceptive method for spacing of birth to prevent maternal and infant mortality. Short birth interval and can include some specific action such as birth spacing method initiation, continuation or discontinuation of birth spacing method, misuse (interrupted, omitted or mistimed) of birth spacing methods and nonuse of birth spacing method.

The key construct of Birth Spacing are

- Perceived threat: perceived threat arising from maternal or infant mortality which provides the incentive to use birth spacing method. This construct considers

personal feelings of the seriousness of becoming pregnant based upon subjective assessment of medical and social consequences of birth interval. This construct may include factors like nutritional deficiency, maternal and infant health which can therefore increase the likelihood of birth spacing method use.

- **Cost-Benefit Analysis:** This is divided into Perceived Barriers and Perceived Benefits

Perceived Barriers are negative consequences of using a contraceptive method that influence birth spacing such as the perceived side effect of hormonal birth spacing method, physiological risks of hormonal birth spacing method use, inconvenience. All of these potential contraceptive disadvantages have been found to inhibit contraceptive use thereby influencing birth spacing.

Perceived Benefits relates to the perceived effectiveness, feasibility and other advantages of using a contraceptive method for limiting and spacing birth. It helps to determine the preferred and specific contraceptive action and method for birth spacing.

- **Cues to Action:** Cue to action are the external and internal stimuli that trigger a consciousness of the perceived maternal and infant health threat which facilitate consideration of using birth spacing method to remedy the threat to health.
- **Modifying and Enabling factors:** Modifying or Enabling factors interact with an individual's perception of birth spacing and decision making of the spouse which influence the use of birth spacing method.

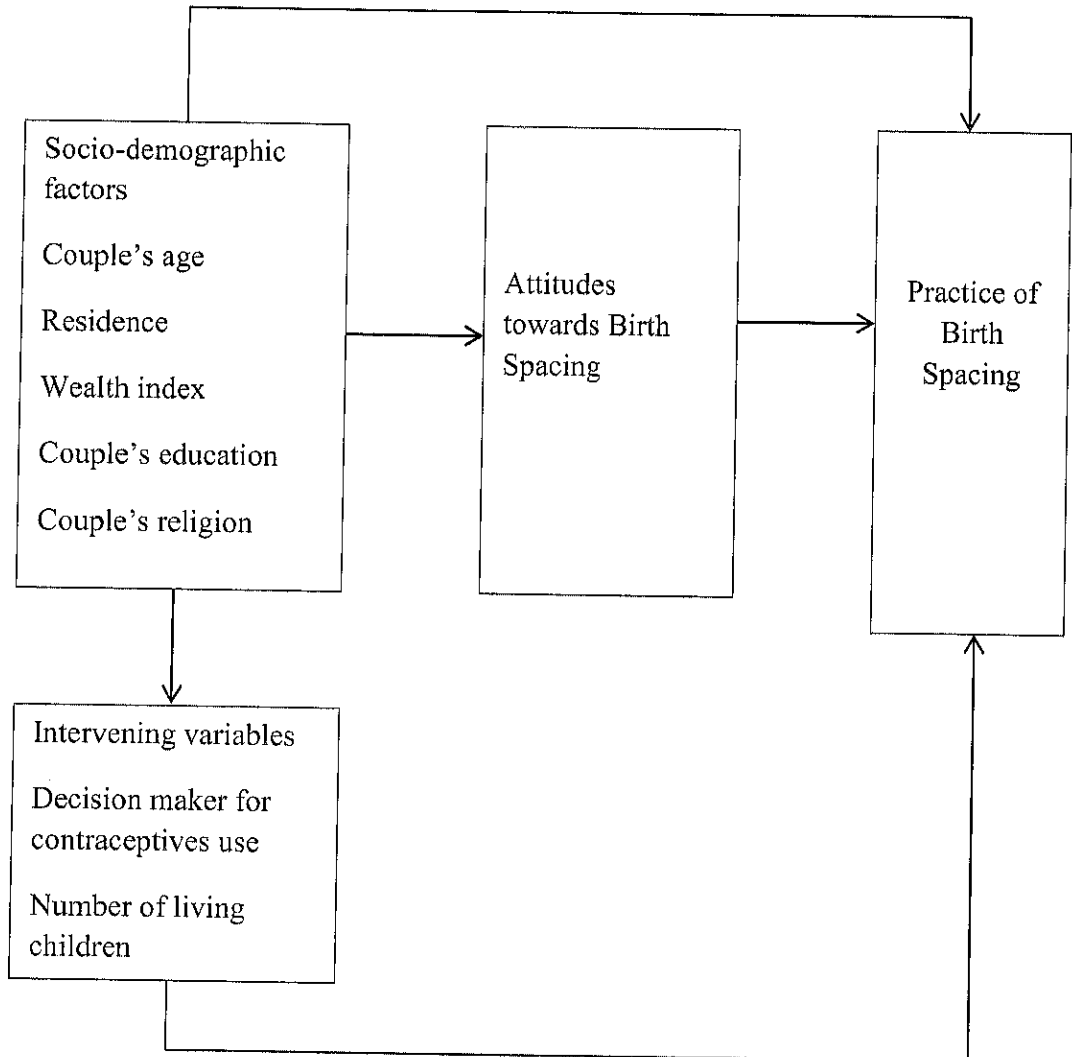
### **Application of Health Belief Model to Birth Spacing**

The Health Belief Model focused on the role of motivation to prevent maternal and infant mortality which would predict the compliance of the birth spacing method use. The Health care providers can use the Health Belief Model to understand patient interviewed. For

example the health history around birth spacing initiation visit should focus not only on the fertility intentions but also on existing perception of the methods. The Health care professionals can structure birth spacing education and counseling sessions by the framework to ensure comprehensiveness of approach and content.

The Health Belief Model offers a robust theory to direct birth spacing attitudes and practice. Comprehensive application of the Health Belief Model employing all constructs, evaluating diverse variables and focusing on the most pertinent reproductive health contexts, birth spacing behaviors and methods are indicated. The Health Belief Model provides a framework for predicting and explaining the complex system of modern birth spacing behavior determinants and for promoting strategies to improve birth spacing outcomes.

### 2.3 Conceptual Framework



The conceptual framework above explains the interrelation between the independent variables and the dependent variable. The independent variables (couple's age, couple's education, Wealth index, Place of Residence and couple's religion) can influence attitudes towards birth spacing thereby determining the practice of birth spacing. The Attitudes is measured by a proximate variable which is family planning and the Practice is measured by the preferred waiting time. The Intervening variables are variables that interact with the

independent variables to affect the outcome, the dependent variable and they tend to either weaken or strengthen the dependent variable. The direction of the arrow indicates that as the independent variables move to influence dependent variables (attitudes and practice), the intervening factors will either weaken or strengthen the relationship.

#### **2.4 Statement of Hypothesis**

- H0: Socio-demographic factors (age, education, residence, income, etc.) do not influence attitude towards birth spacing among couples in Nigeria.
- H1: Socio-demographic factors (age, education, residence, income, etc.) influence attitude towards of birth spacing among couples in Nigeria.
- H0: Socio-demographic factors (age, education, residence, income, etc.) do not influence the practice of birth spacing among couples in Nigeria.
- H1: Socio-demographic factors (age, education, residence, income, etc.) influence the practice of birth spacing among couples in Nigeria.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter outlines the research methodology that was used in this study. The following sub-topics were considered, the target population, sampling design, sample size, questionnaires, sources of data, data processing and analysis.

Moreover, In-depth Interview was carried out to compliment the data collected through quantitative interview.

#### **3.1 Study Area**

Couples of the reproductive age 15-49 years were interviewed in this study. This study used couples 15-49 years who had birth interval less than two years and two years and above in Nigeria and their approval and disapproval to birth spacing. The sample size is 7,727 with 2,612 from urban areas and 5,115 from rural areas. Couples of reproductive age (15-49) residing in all region, were covered by the NDHS 2013. This study used NDHS 2013 couples recode dataset to examine attitudes towards and practice of birth spacing among couples in Nigeria.

In-depth Interview was conducted in Oye Ekiti. It is located in Ekiti state, Nigeria and 5 couples were interviewed. The main reason for selecting the study area was that the location represents a part of Nigerians population.

#### **3.2 Target Population**

The study was based on Nigeria Demographic and Health Survey (NDHS) 2013 couples' recode dataset. The data set contained matched couples of reproductive ages 15-49 years. The target populations were the couples in monogamous relationship because birth spacing

may be difficult to ascertain with men in polygamous relationship. The 2013 NDHS couples' recode data set contained 7,727 matched couples.

For the in-depth interview, the target population for respondent interviewed was 5 couples.

### **3.3 Sample Design and Sample Size**

The quantitative design makes use of the NDHS. The primary sampling unit (PSU), referred to as a cluster in the 2013 NDHS, is defined on the basis of EAs from the 2006 EA census frame. The sample for the 2013 NDHS was nationally representative and covered the entire population. The sample was designed to provide population and health indicator estimates at the national, zonal, and state levels. A complete listing of households and a mapping exercise were carried out for each cluster and with the resulting lists of households serving as the sampling frame for the selection of households. All couples aged 15-49 years in these household were eligible to be interviewed during the survey. A representative sample of 7,727 couples was selected for the survey.

For the in-depth interviews, target population was all married couples who were in the 15-49 age range. The sample comprised of 5 couples who were purposively sampled to save time and cost. In Oye Ekiti Local Government Area, The inclusion criteria were as follows: 1) being a married couple (2) being in a monogamous relationship and (3) being in the age range of 15-49 years.

### **3.4 Sources of Data**

The study was based on secondary data analysis of the Nigeria Demographic Health Survey (NDHS) 2013 database of couples in reproductive age group (15-49). The 2013 Nigeria Demographic and Health Survey (NDHS) were implemented by the National Population Commission. It is the fifth in the series of Demographic and Health Surveys

conducted so far in Nigeria; previous surveys were conducted in 1990, 1999, 2003, and 2008.

The essential goal of the 2013 NDHS was to provide up-to-date information on fertility levels, marriage, fertility preferences, awareness and use of family planning methods, child feeding practices, nutritional status of women and children, adult and childhood mortality, awareness and attitudes regarding HIV/AIDS, and domestic violence. This data is proposed to help policymakers and programme managers in evaluating and designing programmes and strategies for improving health and family planning services in the country.

Three of the survey main objectives were:

- To ascertain the attitudes of couples towards birth spacing in Nigeria.
- To know the extent of birth spacing practice among couples in Nigeria.
- To examine factors influencing the practice of birth spacing among couples in Nigeria.

### **3.5 Variables Description and Measurement**

This analysis focused on the attitudes towards and practice of birth spacing among couples in Nigeria. Couples socio-demographic factors include independent variables such as couples age, education, wealth index, residence and religion. The dependent variables for practice of birth spacing (couples preferred waiting time) and attitudes of birth spacing (family planning). The intermediate variables include number of living children and decision maker. Couples information is collected based on the reproductive age 15-49 in the 2013 NDHS. For the couples analysis, the sample size was restricted to reproductive age 15-49 ages at the time of the survey (N= 7,727).

Birth spacing practice was measured by the preferred waiting time for another birth and was coded as a dummy variable, where -0 means less than two years and -1 means two years and above and the attitudes of birth spacing was measured by family planning -0 means disapprove and -1 means approve.

Ages of respondents were recoded as same age -0, husband 3 years older -1 and wife 3 years older -2. Couple's education categories are both have no formal education, both have formal education and either has formal education were recoded as -0, -1 and -2 respectively. Others were as follows: Residence: urban -1 and rural -2, couples Religion was also recoded: both Christian -0, both Islam -1, both traditionalist -2 and different religion -3, Wealth index was recoded to three categories – Poorer, Middle, and Rich coded as -0, -1, and -2 respectively, number of living children was recoded into: 0 children -0, 1-4 children -1, 5+ children -2 and decision maker for contraceptives use: wife -0, husband -1, joint decision -2.

### **3.6 Data Processing and Analysis**

STATA software was used to process data which were gotten from the NDHS 2013 couples recode dataset and the data were analyzed at three levels. The first level was the frequency distribution of socio-demographic variables (that is the univariate analysis). The second level was the cross tabulation of dependent variables (attitudes and practice) with independent variables (socio-demographic data and other selected variables) which is also known as the bivariate analysis. The third level is the multivariate analysis in which binominal logistics regression models was employed to establish the relationship between independent and dependent variables.

For the In-Depth interview, an interviewer's guide was used to collect data from the participants the length of each interview was between 30 to 45 minutes. Participants were

interviewed in Oye Ekiti, Nigeria. The couples were interviewed in their house. Interviews were written verbatim. Transcripts were assigned code numbers for identification.

Content analysis of the data was carried out. The word repetitions, key indigenous terms, and key words in the contexts were identified. In addition, themes were identified through a careful reading of larger blocks of texts, comparing and contrasting information and searching for missing information. Themes were also developed by conducting a comparative analysis of concepts coded in different participants group or setting codes. Demographic data were analyzed manually using descriptive statistics.

## CHAPTER FOUR

### 4.0 Introduction

The chapter analyses the socio-demographic attributes of respondents, attitude of couples towards birth spacing and their practice of birth spacing. The Nigeria Demographic and Health Survey Couples Recode data set was used with the total 7,727 couples. Five in-depth interviews were also conducted to compliment data from the secondary source. Analysis and interpretation were based on the five in-depth interviews conducted and the NDHS couples data set.

### 4.1 Socio-Demographic Attribute of Respondents

This section examines the socio-demographic attributes of respondents such as their age, education, place of residence, religion, wealth index, etc. these attributes are necessary as it is useful to see what influence they have on attitude towards and practice of birth spacing.

Table 4:1 shows that majority of husband are 3 years older than the wife (90.11%). The table also revealed that majority of the couples were both formally educated (53.06%), 57.05% of couples practice Islam and 42.84% of couples were poor. 66.20% of couples lived in the rural areas. 52.02% of the husbands were the major decision maker and 65.72% of couples had 1-4 numbers of living children.

**Table 4.1: Socio-Demographic Characteristics of Respondents with Weighted Percentages**

Variable	Frequency	Percentage (%)
<b>Couple's age</b>		
Same age	757	9.80
Husband 3 years plus older	6,963	90.11
Wife 3years plus older	7	0.09
Total	7,727	100.00
<b>Couples education</b>		
Both have no formal education	2,083	26.96
Both have formal education	4,100	53.06
either have formal education	1,544	19.98
Total	7,727	100.00
<b>Couples religion</b>		
Both Christian	2,986	38.64
Both Islam	4,408	57.05
Both Traditionalist	31	0.40
Different religion	302	3.91
Total	7,727	100.00
<b>Wealth index</b>		
Poor	3,310	42.84
Middle	1,408	18.22
Rich	3,009	38.94
Total	7,727	100.00
<b>Place of residence</b>		
Urban	2,612	33.80
Rural	5,115	66.20
Total	7,727	100.00
<b>Decision</b>		
Wife	106	1.37
Husband	4,012	52.02
joint decision	3,594	46.60
Total	7,712	100.00
<b>Number of living children</b>		
0	849	10.99
1-4	5,078	65.72
5 and above	1,800	23.29
Total	7,727	100.00

Source: Author's Work, 2016 (Data from NDHS, 2013)

#### 4.2 Distribution of Respondents by Their Attitude towards and Practice of Birth Spacing

This section examines the distribution of respondents by their attitude towards and practice of birth spacing such as attitudes towards birth spacing, practice of birth spacing and the length of birth spacing interval. Table 4:2 shows that 47.29% of couples approve birth spacing, 54.30% practice birth spacing and 54.30% had birth interval of 2 years and above.

**Table 4.2: Distributions of Respondents by Their Attitude towards and Practice of Birth Spacing**

Variable	Frequency	Percentage (%)
<b>Attitude towards family planning (proximate variable for birth spacing)</b>		
Disapprove	4,073	52.71
Approve	3,654	47.29
Total	7,727	100.00
<b>Practice of Birth Spacing</b>		
No	2,748	45.70
Yes	3,265	54.30
Total	6,013	100.00
<b>Length of birth spacing interval</b>		
Less than 2 years	2,748	45.70
2 years and above	3,265	54.30
Total	6,013	100.00

Source: Author's Work, 2016 (Data from NDHS, 2013)



### 4.3 In-Depth Interviews on the Attitudes towards and the Practice of Birth Spacing Among Couples in Nigeria

#### 4.3.1 Knowledge of birth spacing

This section examined the knowledge of respondents about birth spacing.

During an in-depth interview the couple said

*Birth spacing means to give gap between children, some are two years, and three years depending on the way individual wants it. (Res1 husband 37 years, Christian, B.sc, Civil servant; wife 35 years, Christian, NCE, civil servant)*

Another couple added

*Birth spacing is an agreement between husband and wife which helps to limit the family size. (Res2 husband 39 years, Islam, NCE, Civil servant; wife 35 years, Islam, NCE, civil servant)*

The above results showed that couples that partake in this interview have general understanding of birth spacing as given gap, limit family size and interval between one child to the other.

#### 4.3.2 Approval of birth spacing

This section assessed the attitude towards and the practice of birth spacing; the issues examined include the respondents approval or disapproval of birth spacing practices, the reasons for their stand, and their opinions on what other people around them think of birth spacing practices. Also, the socio-cultural belief and values in their community that influence their attitude towards and the practice of birth spacing were examined.

During an in-depth interview the couple said

*Yes, spacing is good in order to cater for the child. Like if the first is 2 years older than the second one and so they will have proper education. Nigeria situation does not warrant that, so we must not have many children in this computer era (Res2 husband 39 years, Islam, NCE, Civil servant; wife 35 years, Islam, NCE, civil servant)*

Another couple added

*Yes, omo beere osi beere (it means that much children leads to poverty). Poverty will be rampant. How will the man be able to succeed? In the olden days, hardly will you see a man to enjoy the fruit of his labor. There will be crises in the family and if there is no spacing, they will be gauging the food. At the initial stage I wanted 4 or 5 children. But my husband said omobibi ki n se achievement (child bearing is not an achievement). There must be a plan to cater for their future. (Res3 husband 40 years, christian, B.sc, public servant; wife 37 years, Christian, NCE, civil servant)*

These results showed that all the couples in the interview approved birth spacing because of the perceived benefits. The perceived benefits of supporting birth spacing includes; ability to cater for the child, good education and nutritional benefit. If birth spacing is not practiced, it can cause poverty and violence.

#### **4.3.3 Extent of Gender and Spousal Involvement in the Practice of Birth Spacing**

This section examined the extent of gender and spousal involvement in the practice of birth spacing by finding out if couples discuss birth spacing with one another, which among the couples makes major decisions on child spacing. Opinion on who among the couples is more involved in birth spacing practices and the socio-cultural beliefs and values that influence gender/spousal involvement in birth spacing practices.

During an in-depth interview the couple said

*Hardly will you see when both will seat and talk about the spacing. It is the wife that decides, it is her that knows her safe period thereby being the major decision maker and to persuade the husband.” (Res3 husband 40 years, Christian, B.sc, public servant; wife 37 years, Christian, NCE, civil servant)*

Another couple added

*Joint decision, so that we can be able to sit and talk on how to cater for the children. In Nigeria the economy is not so good so we need to put those in consideration so that it will not affect us.” (Translated) (Res4 husband 40 years, Islam, secondary, trader; wife 35 years, Islam, secondary, trader)*

The above findings clearly showed that some couples believe that joint decision making is the best so that they can both cater for child's future and because of the economic situation and some couples claim that the wife is the major decision maker for birth spacing because she is the one that knows her safe period and can rightly advise the husband.

#### **4.3.4 Preferred waiting time for birth spacing**

This section examined the preferred waiting time for birth spacing by finding out what birth interval is appropriate for couples to time their birth and the reasons for the birth interval preferred.

During an in-depth interview the couple said.

*Two years is preferable. Ti olorun wa pese (if God provides) and also because breast milk is nutritious for the baby, if there is no enough breast milk such child can be sick and breast feeding create love between child and mother than child and father. (Res3 husband 40 years, Christian, B.sc, public servant; wife 37 years, Christian, NCE, civil servant)*

Another couple added,

*Two years, because the first will have breast feeding and will be able to give the child support before the second came in. (Translated) (Res5 husband 40 years, Catholic, secondary, mechanic; wife 39 years, Catholic, secondary, hair dresser)*

The above findings clearly showed that the preferred waiting time for some couples are two years or three years in order for the child to be well breastfed, receive adequate child support and finances.

#### **4.3.5 Contraceptives use for spacing**

This section is examined the contraceptive use for spacing among couples.

During an in-depth interview the couple said

*Yes, we both use condom, withdrawal and then family planning. I have done it and it is very good. I have not changed in size, in fact the health provider should make it house to house and it should be free." (Res1 husband 37 years, Christian, B.sc, Civil servant; wife 35 years, Christian, NCE, civil servant)*

Another couple added

*No, because it causes the stomach to swell up and leads to fibroid." And also causes women to have their period twice in a month and this can cause delay in return to fertility when they want to give birth)."Therefore we use calendar method." (Traditional method accepted but modern method not accepted.) (Translated) (Res5 husband 40 years, Catholic, secondary, mechanic; wife 39 years, Catholic, secondary, hair dresser)*

The above finding clearly showed that the modern contraceptives are accepted by some couples while other couples who are catholic member accept the traditional method. The contraceptive used for birth spacing are condom, withdrawal, family planning and calendar method.

#### **4.3.6 Sex preference in birth spacing**

This section is to examine the sex preference in birth spacing and the factor that contributes to the sex preference.

During an in-depth interview the couple said

*Sex preference affects birth spacing because they want a particular sex. Men do prefer male child and women do prefer female child. Therefore there can be conflict of interest." (Res3 husband 40 years, Christian, B.sc, public servant; wife 37 years, Christian, NCE, civil servant)*

Another couple added

*Yes preference affect especially when the couples are seeking for a male child and the first born is female." (Translated) (Res5 husband 40 years, Catholic, secondary, mechanic; wife 39 years, Catholic, secondary, hair dresser)*

The above finding clearly showed that some couples claim that sex preference influences birth spacing while other claim that there is no differences. Couples that claim sex preferences influence birth spacing based their assertion on the following reasons; replication of its own kind, particular sex and continuous lineage.

#### **4.3.7 Factors Influencing Birth Spacing**

This section examined the factors responsible for the differences in the birth interval preferred and the actual birth interval.

During an in-depth interview the couple said

*Some couples have financial issues, which are why there might be differences. (Res1 husband 37 years, Christian, B.sc, Civil servant; wife 35 years, Christian, NCE, civil servant)*

Another couple added

*It might be as a reason that the husband business involves travelling. (Translated) (Res4 husband 40 years, Islam, secondary, trader; wife 35 years, Islam, secondary, trader)*

The above finding clearly showed the factors influencing birth spacing include occupation, wealth index and place of residence.

#### **4.4 Background Characteristics of Couples and Attitudes towards Birth Spacing**

Background characteristics of couples by attitudes towards birth spacing are examined. Table 4.4 revealed the Attitudes towards birth spacing among couples in Nigeria. From the table, majority of couples with the same age approve birth spacing (54.82%). Distribution of couples' level of education by attitudes towards birth spacing shows that 56.22% of either of couples with formal education approves birth spacing. Distribution of attitudes towards birth spacing by religion shows that couples practicing traditional religion approve birth spacing (54.84%). Distribution of attitudes towards birth spacing by wealth status reveals that 55.23% of couples that have poor wealth status approve birth spacing. Residential distribution of couples by attitudes towards birth spacing reveals that couples residing in rural area approve birth spacing (50.13%). Also, Husbands that are the major decision maker approve birth spacing (50.25%). Lastly, Couples which have no children approve birth spacing (51.47%).

**Table 4.4: Bivariate Analysis Showing the Relationship between Socio-Demographic Variables and Attitudes towards Birth Spacing**

Variables	Attitudes			$\chi^2$	P value
	disapproval	approval	Total		
	(n = 4,073)	(n = 3,654)	(N = 7,727)		
<b>Couple's age</b>				20.0054	0.000***
Same age	342 (45.18%)	415 (54.82%)	757 (100.00%)		
Husband 3 years plus older	3,726 (53.51%)	3,237 (46.49%)	6,963 (100.00%)		
Wife 3 years older	5 (71.43%)	2 (28.57%)	7 (100.00%)		
<b>Couple's education</b>				171.5016	0.000***
Both have no formal education	950 (45.61%)	1,133 (54.39%)	2,083 (100.00%)		
Both have formal education	2,447 (59.68%)	1,653 (40.32%)	4,100 (100.00%)		
Either have formal education	676 (43.78%)	868 (56.22%)	1,544 (100.00%)		
<b>Couple's religion</b>				232.7224	0.000***
Both Christian	1,895 (63.46)	1,091 (36.54%)	2,986 (100.00%)		
Both Islam	2,003 (45.44%)	2,405 (54.56%)	4,408 (100.00%)		
Both Traditional	14 (45.16%)	17 (54.84%)	31(100.00%)		
Different religion	161 (53.31%)	141 (46.69%)	302 (100.00%)		
<b>Wealth index</b>				184.0627	0.000***
Poor	1,482 (44.77%)	1,828 (55.23%)	3,310 (100.00%)		
Middle	731 (51.92%)	677 (48.08%)	1,408 (100.00%)		
Rich	1,860 (61.81)	1,149 (38.19%)	3,009 (100.00%)		
<b>Place of residence</b>				48.9051	0.000***
Urban	1,522 (58.27%)	1,090 (41.73%)	2,612 (100.00%)		
Rural	2,551 (49.87%)	2,564 (50.13%)	5,115 (100.00%)		
<b>Decision</b>				29.4002	0.000***
wife	60 (56.60%)	46 (43.40%)	106 (100.00%)		
Husband	1,996 (49.75%)	2,016 (50.25%)	4,012 (100.00%)		
joint decision	2,009 (55.90%)	1,585 (44.10%)	3,594 (100.00%)		
<b>Number of living children</b>				7.5798	0.023*
0	412 (48.53%)	437 (51.47%)	849 (100.00%)		
1-4	2,720 (53.56%)	2,358 (46.44%)	5,078 (100.00%)		
5+	941 (52.28%)	859 (47.72%)	1,800 (100.00%)		

Source: Author's Work, 2016 (Data from NDHS, 2013)

#### **4.5 Background Characteristics of Couples and Practice of Birth Spacing**

Background characteristics of couples by practice of birth spacing are examined. Table 4.5 revealed the practice of birth spacing among couples in Nigeria. From the table, husbands that are 3 years older than the wife had birth interval of two years and above (55.25%). Distribution of couples' level of education by practice of birth spacing reveals that couples that are both formally educated had birth interval of two years and above (56.12%). Distribution of birth spacing practice by religion shows that couples practicing traditional religion had birth interval of two years and above (60.00%). Distribution of birth spacing practice by wealth status shows that couples with middle wealth status had birth interval of two years and above (57.16%). Residential distribution of birth spacing practice reveals that couples residing in urban area had birth interval of two years and above (55.44%). Also, wives that are the major decision maker had their birth interval of two years and above (70.77%). Lastly, couples which have 1-4 children had their birth interval of two years and above (58.07%).

**Table 4.5: Bivariate Analysis Showing the Relationship between Socio- Demographic Variables and Practice of Birth Spacing**

Variables	Practice			$\chi^2$	P value
	<2 years	> 2 years	Total		
	(n = 2,748)	(n = 3,265)	(N = 6,013)		
<b>Couple's age</b>				16.0078	0.000***
Same age	380 (52.56%)	343 (47.44%)	723 (100.00%)		
Husband 3 years older	2,364 (44.75%)	2,919 (55.25%)	5,283 (100.00%)		
Wife 3 years older	4 (57.14%)	3 (42.86%)	7 (100.00%)		
<b>Couple's education</b>				9.5372	0.008**
Both have no formal education	871 (48.47%)	926 (51.53%)	1,797 (100.00%)		
Both have formal education	1,290 (43.88%)	1,650 (56.12%)	2,940 (100.00%)		
Either have formal education	587 (46.00%)	689 (54.00%)	1,276 (100.00%)		
<b>Couple's religion</b>				4.0332	0.258
Both Christian	888 (44.33%)	1,115 (55.67%)	2,003 (100.00%)		
Both Islam	1,754 (46.65%)	2,006 (53.35%)	3,760 (100.00%)		
Both Traditional	10 (40.00%)	15 (60.00%)	25 (100.00%)		
Different religion	96 (42.67%)	129 (57.33%)	225 (100.00%)		
<b>Wealth index</b>				6.4259	0.040*
Poor	1,310 (47.22%)	1,464 (52.78%)	2,774 (100.00%)		
Middle	470 (42.84%)	627 (57.16%)	1,097 (100.00%)		
Rich	968 (45.19%)	1,174 (54.81%)	2,142 (100.00%)		
<b>Place of residence</b>				1.4806	0.224
Urban	856 (44.56%)	1,065 (55.44%)	1,921 (100.00%)		
Rural	1,892 (46.24%)	2,200 (53.76%)	4,092 (100.00%)		
<b>Decision</b>				7.9880	0.018*
wife	19 (29.23%)	46 (70.77%)	65 (100.00%)		
Husband	1,542 (46.40%)	1,781 (53.60%)	3,323 (100.00%)		
joint decision	1,184 (45.24%)	1,433 (54.76%)	2,617 (100.00%)		
<b>Number of living children</b>				195.9481	0.000***
0	554 (68.48%)	255 (31.52%)	809 (100.00%)		
1-4	1,782 (41.93%)	2,468 (58.07%)	4,250 (100.00%)		
5+	412 (43.19%)	542 (56.81%)	954 (100.00%)		

Source: Author's Work, 2016 (Data from NDHS, 2013)



#### 4.6 Binary Logistics Regression Predicting Attitude Towards and Practice of Birth Spacing Among Couples in Nigeria

Socio-demographic variables that were considered in bivariate analyses were used to further examine the relationship between attitudes towards and practice of birth spacing. Binominal Logistic regression was considered as the most suitable technique in examining the relationship because the dependent variables (attitudes and practice) have two categories. After running logistic regression, the following outputs were obtained and analyzed.

The Table 4.6 (Model 1) below presents the results of logistic regression analysis of the relationship between couple's socio-demographic factor and attitude towards birth spacing. Husband that are 3 years older than wife are 96% less likely to approve birth spacing than couples with the same age (OR= 0.04,  $p>0.05$ ) and wife 3 years older than husband are 60% less likely to approve birth spacing than couples with the same age group (OR= 0.40,  $p>0.05$ ).

The table also depicts that household in which husband makes the decision on contraceptive use are 25% less likely to approve birth spacing than the wife (OR=0.75,  $p>0.05$ ). Household in which there is joint decision on contraceptive use are 13% less likely to approve birth spacing than the wife (OR=0.87,  $p>0.05$ ).

The table, also shown that couples that have 1-4 children are 9% less likely to approve birth spacing than couples with no children (OR=0.91,  $p>0.05$ ). Couples that have 5 or more children are 11% less likely to approve birth spacing than couples with no children (OR=0.89,  $p>0.05$ ).

More so, the table also revealed that religion is associated with attitude of birth spacing. Couples practicing Islam religion are 76% more likely to approve birth spacing than the

Christian (OR=1.76,  $p<0.05$ ). Couples practicing different religion are 36% more likely to approve birth spacing than the Christian (OR=1.36,  $p>0.05$ ).

Couple's education is found to be associated with attitudes of birth spacing. The table indicates that couples that are both formally educated are 11% more likely to approve birth spacing than couples with no formal education (OR=1.11,  $p>0.05$ ) and couples in which either one of them has formal education are 24% more likely to approve birth spacing than couples with no formal education (OR= 1.24,  $p<0.05$ ).

Wealth status is another predictor of attitude towards birth spacing which shows that there is association between wealth status and attitudes towards birth spacing. It can be observed from the table that couples with average wealth status are 18% less likely to approve birth spacing than the poor (OR=0.82,  $p>0.05$ ). Couples with rich wealth status are 38% less likely to approve birth spacing than the poor (OR=0.62,  $p<0.05$ ).

Conclusively, table 4.6 revealed that couples living in rural area are 6% less likely to approve birth spacing than urban areas (OR=0.94,  $p>0.05$ ).

From the second model (Model 2), the table above presents the results of logistic regression analysis of the relationship between each of the socio-demographic variables and practice of birth spacing. Husband that are 3 years older than their wife are 83% less likely to space birth for at least two years than couples with same age (OR=0.17,  $p>0.05$ ) and wife older than husband are 40% more likely to space birth for at least two years than couples with same age (OR=1.40,  $p>0.05$ ).

The table also depicts that there is strong association between decision maker for contraceptives use and practice of birth spacing. household in which husband makes the decision on contraceptive use are 42% less likely to space birth for at least two years than the wife (OR=0.58,  $p<0.05$ ). Household in which there is joint decision on contraceptive

use are 44% less likely to space birth for at least two years than the wife (OR=0.56,  $p<0.05$ ).

The table also shows that there is strong association between couple's number of children and practice of birth spacing. couples that have 1-4 children are 3.11 times more likely to space birth for at least two years than couples with 0 number of children (OR=3.11,  $p<0.05$ ). Couples that have 5 or more children are 3.19 times more likely to space birth for at least two years than couples with 0 number of children (OR= 3.19,  $p<0.05$ ).

More so, the table also revealed that couples practicing Islam religion are 10% more likely to space birth for at least two years than the Christian (OR=1.10,  $p>0.05$ ). Couples practicing different religion are 19% more likely to space birth for at least two years than the Christian (OR=1.19,  $p>0.05$ ).

The table indicates that couples that are both formally educated are 16% more likely to space birth for at least two years than couples with no formal education (OR=1.16,  $p>0.05$ ). Couples in which either one of them has formal education are 10% less likely to space birth for at least two years than the couples with no formal education (OR=1.10,  $p>0.05$ ).

Wealth status is another predictor of birth spacing practice. It can be observed from the table that couples with average wealth status are 12% more likely to space birth for at least two years than the poor (OR=1.12,  $p>0.05$ ). Couples with rich wealth status are 8% less likely to space birth for at least two years than the poor (OR=0.92,  $p>0.05$ ).

Conclusively, table 4.6 revealed that couples living in rural area are 3% more likely to space birth for at least two years than the urban (OR=1.03,  $p>0.05$ ).

**Table 4.6: Binary Logistics Showing the Relationship between Socio-Demographic Factors and Attitudes towards and Practice of Birth Spacing**

Variables	Model 1 Attitude			Model 2 Practice		
	Odd ratio	95% CI		Odd ratio	95% CI	
<b>Couple's age</b>						
Same age	1.00 (RC)			1.00 (RC)		
Husband 3 years older	0.04	0.88	1.24	0.17	0.97	1.40
wife 3 years older	0.40	0.08	2.09	1.40	0.29	6.71
<b>Couple's education</b>						
both have no formal education	1.00 (RC)			1.00 (RC)		
both have formal education	1.11	0.95	1.30	1.16	0.97	1.39
either have formal education	1.24	1.08	1.43	1.10	0.95	1.28
<b>Couple's religion</b>						
Both Christian	1.00 (RC)			1.00 (RC)		
Both Islam	1.76	1.56	2.00	1.10	0.95	1.28
Different religion	1.36	1.06	1.73	1.19	0.89	1.59
<b>Wealth index</b>						
Poor	1.00 (RC)			1.00 (RC)		
Middle	0.82	0.71	0.94	1.12	0.96	1.31
Rich	0.62	0.53	0.72	0.92	0.77	1.09
<b>Place of residence</b>						
Urban	1.00 (RC)			1.00 (RC)		
Rural	0.94	0.83	1.06	1.03	0.89	1.18
<b>Decision</b>						
Wife	1.00 (RC)			1.00 (RC)		
Husband	0.75	0.50	1.12	0.58	0.34	1.01
joint decision	0.87	0.58	1.30	0.56	0.32	0.96
<b>Number of living children</b>						
0	1.00 (RC)			1.00 (RC)		
1-4	0.91	0.78	1.08	3.11	2.60	3.71
5+	0.89	0.74	1.08	3.19	2.57	3.97

Source: Author's Work, 2016 (Data from NDHS, 2013)

#### 4.7 Discussion

The study examined attitudes and practice of birth spacing among couples in Nigeria. The findings revealed that 47.29% approve birth spacing and 54.30% had birth interval of two years and above. At the bivariate level of the analysis of attitudes towards birth spacing, it was discovered that (education, religion, place of residence, wealth index, decision maker for contraceptive and number of living children) were significant related to attitudes of birth spacing. In the bivariate analysis of practice of birth spacing it was revealed that (education, wealth index, decision maker for contraceptives and number of living children) were significantly related to the practice of birth spacing. The multivariate level of the analysis considered from the selected independent predictor variables were included in the binary logistic regression model which are age, decision, number of children, education, place of residence, religion and wealth index,. From the multivariate analysis, the variables that approve birth spacing were religion, education and wealth index and the variables that wish to space their birth for at least two years were decision maker for contraceptives and number of living children.

Analysis of the Attitude towards and Practice of birth spacing were also done using the In-depth Interview to enhance the quantitative interview in which 5 couples was interviewed. All couples approved birth spacing. Four couples preceding birth interval is 2 years and only one couple had preceding birth interval of 3 years. Three couples had three children, one couple had two children and one couple had 4 children. This interview generally revealed that most couples approve birth spacing and had birth interval of two years and above.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.0 Introduction

This chapter consists of summary of all the findings, conclusions from the study and recommendations based on the findings.

#### 5.1 Summary

The study examined the attitudes towards and practice of birth spacing among couples in Nigeria. The study used Nigeria Demographic and Health Survey (NDHS 2013) couples recode dataset and in-depth interview for analyses. The study population was 7,727 couples and five couples were used in the in-depth interview to know their attitudes and practice. Nigeria Demographic and Health Survey, Analyses were done at three stages.

The univariate analyses use percentage frequency distribution to examine each variable involved in the study. Findings revealed that majority of husband are older than wife (90.11%). The table also revealed that majority of the respondents were both formally educated (53.06%), 57.05% were Islam and 42.84% are poor. 66.20% live in the rural areas. 52.02% of the husbands were the major decision maker and 65.72% of couples had 1-4 numbers of living children. Furthermore, 47.29% of couples approve birth spacing, 54.30% practice birth spacing and 54.30% had birth interval of 2 years and above.

The bivariate analyses show the relationship between couples socio demographic variables and attitudes and practice of birth spacing. Couple's education, religion, wealth index, region, place of residence, decision maker for contraceptive and number of children were found significant related with attitudes towards birth spacing. Also, in the practice of birth spacing, variables that were significant related to birth spacing were education, wealth index, decision maker for contraceptive and number of children.

From the multivariate analyses, seven predictor variables were considered. They were couple's age, decision maker, number of children, religion, education, wealth index and residence. In model 1, religion, education and wealth index were significant related to attitudes towards birth spacing and in model 2, decision maker for contraceptives and number of children were significant related to practice of birth spacing

Findings from In-depth interview indicated that majority of the respondents had the knowledge of birth spacing as given gap, limit family size and interval between one child to the other. The study reveals that the couples approve birth spacing and their major reason for the approval is because of the perceived benefit of supporting birth spacing which includes; ability to cater for the child, good education, economic situation and nutritional benefit. If birth spacing is not practiced, it can cause poverty and violence. Finding showed that some couples which had joint decision making for birth spacing while some couples major decision making for birth spacing is the wife. The findings indicate that most couples preferred waiting time is two or three years in order for the child to be well breastfed, receive adequate child support and finances. Moreover, findings also show that the couples make use of condom, withdrawal, family planning and calendar method for birth spacing. Furthermore, finding indicates that couples claim sex preferences influence birth spacing and based their assertion on the following reasons; replication of its own kind, particular sex and continuous lineage and some claim that there is no preference between sexes of child. Lastly, the above finding clearly shows that the factor that influences birth spacing were occupation, wealth and place of residence.

## **5.2 Conclusion**

In conclusion, the study revealed that 47.29% of the couples approve birth spacing and 54.30% had birth interval of two years and above. Also, most socio-demographic and socio-economic variables relating to the couples have majority of their birth spacing to fall

under two years and above. Furthermore, in the In-depth Interview, all the couples approved birth spacing in which some prefer two or three years birth interval.

### **5.3 Recommendation**

The study concluded that intervention programmes that would influence attitudes towards and practice of birth spacing among couples should put religion, education, wealth index, joint decision making and number of living children into consideration.



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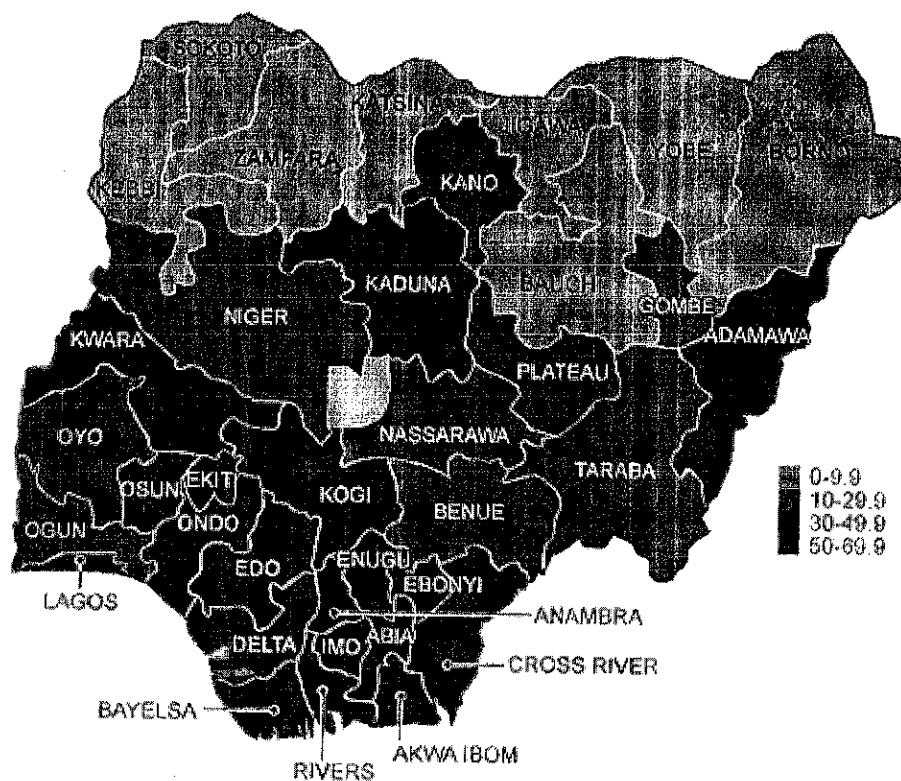
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## Appendix I



## Appendix ii

### Interviewer's Guide

- Age: husband ..... Wife.....
- Educational attainment: husband..... Wife.....
- Occupation: husband..... wife.....
- Religion: husband ..... Wife.....
- What do you understand about birth spacing?
- Do you approve birth spacing?
- Who decides on the spacing of birth?
- What is preferred waiting time for birth spacing?
- Do you use any contraceptive for birth spacing?
- Do sex preference influence birth spacing?
- What are the factors influencing birth spacing?