# HOUSEHOLD HEADSHIP, DOMESTIC DECISION MAKING AND PERINATAL MORTALITY IN NIGERIA

BY

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## CERTIFICATION

This is to certify that OGUNDELE Olukunle Isaac of the Department of Demography and Social Statistics, Faculty of Humanities and Social Sciences, carried out a Research on HOUSEHOLD HEADSHIP, DOMESTIC DECISION MAKING AND PERINATAL MORTALITY IN NIGERIA in partial fulfillment of the award of Bachelor of Science (B.Sc) in Federal University Oye-Ekiti, Nigeria under my Supervision.

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## DEDICATION

The project is dedicated to God Almighty and all family members who contributed to my success.

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I give all the Glory, Honour and adoration to the Almighty God, the Alfa and Omega, the King of kings, the Lord of lords, my Help from ages past, who carried me through and made this a success. I can't achieve anything without Your Help, all glory to God.

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## Table of content

Certif	cation		<b>i</b> i
Dedic	ation		iii
Ackno	wledgement	\$ <sup></sup>	iv
Table	of content	•	v
Abstra	act		vii
Chap	er One		
1.0	Background to the study		. 1
1.1	Statement of the problem		3
1.2	Research Questions		3
1.3	Objectives of the study		4
1.4	Significance of the Study		4
1.5	Definition of Terms	<i>3</i> '	5
Chapt	er Two		
2.0	Literature review		8
2.1	Female headed households and Poverty		. 8
2.1.1	Socio economic determinants of use of health care	services	10
2.1.2	Household decision making and child's health outc	come	12
2.1.3	Perinatal mortality		15
2.1.4	Causes and consequence of perinatal Mortality		17
2.2	Conceptual Framework	<i>;</i>	18
2.3	Statement of hypothesis		19
Chapt	er Three		
3.0	Introduction		20
3.1	Research Design		20

3.2	Study Location	21
3.3	Study Population	. 22
3.4	Sample Size and Sampling Procedure	22
3.5	Data Collection Methods	23
3.6	Methods of Data Analysis	24
3.6.1	Measurement of variables	25
Chapt	ter Four	
4.0	Introduction	27
4.1	Socio-demographic variables	27
4.2	Table of relationship showing variables of perinatal mortality	. 32
4.2.1	Hypothesis testing	35
4.3	Logistic regression predicting perinatal mortality	38
Chapt	er Five	
5.0	Introduction	43
5.1	Summary of Findings	43
5.2	Conclusion	45
5.3	Recommendations	46
Refere	ences	47

#### Abstract

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The study examines the relationship between household headship, domestic decision making and perinatal mortality in Nigeria.

Both primary and secondary data were used. Secondary data was obtained from the 2013 Nigeria Demographic and Health Survey (NDHS). This study made used of data on women of reproductive ages (15-49 years) who had experienced pregnancy loss or death of a child within the first week of birth in the last five years preceding the survey. To complement the results from the secondary source, primary data was obtained through 10 in-depth interviews (IDIs) from women of child bearing age who had at least a child within the last five years. Ekiti State was purposely selected from all the state in Nigeria and Oye Local government was also purposely selected. Three levels of analysis; univariate, bivariate and multivariate was conducted. The analyses focus on loss of pregnancy and child death within the first week of birth as the dependent variable. Bivariate analyses showing associations between the outcome variable and the socio-demographic variable were measured using Chi-square, while logistic regression was utilized to assess the independent effect between independent variables and dependent variable.

The result from this study showed the perinatal level in Nigeria, 10.56% had experienced perinatal mortality in Nigeria. The socio-demographic characteristics of mothers examined against perinatal mortality showed significance relationship with p<0.05 among age, , wealth index, household size, employment status, marital status, children ever born, religion, education, decision maker and sex of household. The adjusted effect of women household decision making on perinatal mortality is significant at p<0.05.

This study concluded that more intervention are needed to address the level of perinatal in Nigeria. The women status must be addressed to aid domestic decision making in order to reduce perinatal death in Nigeria.

#### **CHAPTER ONE**

#### INTRODUCTION

## 1.0 BACKGROUND TO THE STUDY

Nigeria is the most populous country in Africa, faced with high rate of maternal and child mortality. Perinatal mortality remains one of the major world health challenges faced by the world today most especially the developing countries and this has also contributed to the current high fertility rate in Nigeria (WHO, 2006) as the replacement hypothesis still holds in some part of the country.

In Nigeria, women and men differ in their economic activities and access to resources and this has effect on household decision making and their health. It is no doubt that women constitute about half of Nigeria population and play vital roles as mothers (Makama, 2013).

Women face job discrimination, segregation and consistently find themselves in low-status, low-paying jobs with few opportunities for advancement compared to men and this affects their decision making and health during pregnancy and after birth. Women are responsible, in addition to seeking livelihoods, for keeping their homes and providing for their children, and so bear a disproportionate burden, attempting to manage household consumption and production under conditions of increasing scarcity (United Nations, 1995).

Much of women's work goes unpaid; in fact, women perform 67% of all unpaid work, women face job discrimination and segregation. They are overrepresented among

part-time workers and informal sector operators. Moreover, the kind of paid work that women are more likely to be involved in pays less than the jobs that are predominantly male oriented because women are socialized into low paying job (Buvinic, 1997).

Most of the female households consist of abandoned wives, young widows, victims of teenage pregnancy and refugee with children (Zarhani, 2011). Women lack the resources that might help them overcome poverty; these include lack of access to education, social equality, paid employment, land, capital and credit facilities. An increasing number of female headed households are unable to secure economic opportunities, basic requirement of life and access to health care services compared to the male headed household.

It is no doubt that large number of children die soon after birth. Over 130 million babies are born every year, and almost 8 million children dies before their first birthday. Neonatal deaths and stillbirths stem from poor maternal health, inadequate care during pregnancy, inappropriate management of complications during pregnancy and delivery, poor hygiene during delivery and the first critical after birth and lack of new born care. (WHO, 2006).

The perinatal mortality indicator plays an important role in providing the information needed to improve the health status of pregnant women, new mothers and newborns. Perinatal mortality has been used to include deaths that might somehow be attributed to obstetric events, such as stillbirths, foetal and neonatal deaths in the first week of life. Household headship and the pattern of decision making as a factor has a great influence

on the rate of perinatal death in Nigeria, household headship and decision making in Nigeria has been attributed to the cause of most perinatal mortally because of the poor nutrition and poor hygiene during pregnancy and the inability of the household head to make some certain decision which has implication on the health of the mother and the child. The implication of household headship according to sex is that the household head is mainly responsible for the economic well-being of the house and decision making especially on health related decisions.

## 1.1 STATEMENT OF THE PROBLEM

Every year about 10.2 million children die before they reach their fifth birthday, most of them during the first year of life. Most of these deaths are due to poor nutrition and poor hygiene during pregnancy and the inability of the household head to make some certain decision which directly affects the health condition of the mother and child during and after birth. Female headed units experience greater extremes of poverty than male-headed units, while attentions are needed to alleviating their condition.

## 1.2 RESEARCH QUESTION

- What is the level of perinatal mortality in Nigeria?
- > How will the pattern of domestic decision making be influenced by household headship?

> What is the relationship between household headship, domestic decision making and perinatal mortality in Nigeria?

## 1.3 OBJECTIVE OF THE STUDY

## 1.3.0 GENERAL OBJECTIVE OF THE STUDY

The general objective of the study is to examine the relationship between household headship, domestic decision making and perinatal mortality in Nigeria.

## 1.3.1 SPECIFIC OBJECTIVES

The Specific objectives of the study are to:

- > Examine the level of perinatal mortality in Nigeria.
- Examine household headship influence on the pattern of domestic decision in Nigeria.
- Examine the relationship between household headship, domestic decision making and perinatal mortality in Nigeria.

## 1.4 SIGNIFICANCE OF THE STUDY

Despite various interventions to reduce maternal mortality rate in Nigeria, studies continue to show that existing strategies to save mothers' and babies' lives had been less successful. This may be due to less emphasis placed on the factors that surround household headship and decision making. Maternal and child health are important indicators for describing reproductive health and socio economic wellbeing of a country.

This study aimed at investigating the effect of household headship and various pattern of decision on perinatal death in Nigeria. There will be a great saving for the lives of mothers; new-borns and children if women household are more strengthened and empowered.

Gender inequality and poverty are some of the causes for the death of mothers, new-born and child deaths. Nearly 99% of global maternal and deaths occur in low and income countries (Lamoontagne, Engle & Zeitlin, 1998). Gender discrimination, low education levels and lack of empowerments prevent women from seeking care and making the best choices for themselves and their children's health, which results in critical delays and unnecessary death s. The effect of mother's status on child health care decision is remarkable, since the gender of the household head may influence the decision making process for child's health outcome.

Poverty and gender inequality are the underline causes for mothers, new-born and child deaths in developing nations. More emphasis needs to be made to the issue of household headship and different pattern of domestic decisions in each household as it directly and indirectly contribute to maternal and perinatal mortality in Nigeria.

## 1.5 DEFINITION OF TERMS

Household head: this refers to the chief economic provider, the chief decision maker, the person designated as the head. An individual who control the affairs of the household, most often the oldest male or female.

Domestic decision making: this entails the household decision main on food to cook, making household purchases, visiting family members, child and maternal health, spending income generated. It includes any decision made within the household, which often involves the husband and wife, sometimes grandparents in rare case.

De jure female heads of household: this is a household headed by a woman, where means women in such households are in charge of all activities in the household and are solely responsible for child health and care even their own health and care. They are the bread winner.

**Perinatal motality**: The sum of stillbirths and neonatal deaths in the first week of life per 1000 total birth.

**Fetal death**: death before the complete expulsion or extraction from the mother of a product of human conception, irrespective of the duration of pregnancy that is not an induced termination of pregnancy.

**Infant death**: A live birth that results in death within the first year. Infant deaths are further subdivided as early neonatal, late neonatal, neonatal, or post neonatal.

Neonatal mortality: Number of deaths during the first 28 completed days of life per 1000 live births in a given year or period.

**Household:** In the 2013 NDHS, a household was defined as a person or group of persons, related or unrelated, who usually live together in the same dwelling unit, have common cooking and eating arrangements, and acknowledge one adult member as the head of the

household. A member of the household is any person who usually lives in the household.

**Female Household Heads:** This refers to female in the family system who is responsible for the daily needs and decisions of a household.

Male Household Heads: This refers to male in the family system who is responsible for the daily needs and decisions of the household.

WHO: World Health Organization.

Low birth weight: This is defined as a weight of less than 2,500 grams at birth

Perinatal mortality rate: still deaths and early neonatal deaths × 1000

Total births

#### **CHAPTER TWO**

#### LITERATURE REVIEW

Almost every day in the world, a woman dies from complications related to pregnancy or childbirth. Most perinatal deaths occur in the developing world making maternal mortality a differentiating factor between developed and developing countries. This chapter critically reviews previous works on the concepts of household headship, domestic decision making, perinatal mortality and the relationship between them.

## 2.1 FEMALE HEADED HOUSEHOLDS AND POVERTY

Female Headed Household exists as a result of absence of any steady male partner whereby the female become the primary economic supporter of the household. It is as a result of a variety of causes: widowhood, divorce and de-facto headship, arising, for instance, from the illness of a spouse or his migration to an urban area to find work (Sara & Pramila, 2006).

It is well documented that women almost everywhere are disadvantaged relative to men in their access to assets, credit, employment, and education. These differences have created a lot of gap and discriminations between men and women in their access to economic opportunities which could enhance their domestic decision as a head of the household, and often suspected that female-headed households are poorer than male-headed households, and are less able to make certain decisions and invest in the health and education of their children (Folbre, 1991; UNDP, 1995; United Nations, 1996; World

Poverty has been the main attribute of the female headed household in Nigeria which has also denied them in making certain decision in the household and invests in the health of the family and the children. Haddad and Pena (2001) find that the relationship between female headship and poverty is strong in only two out of ten countries in their sample. Haralambos and Holborn (2004) concluded that women started taking full time paid employment during the twentieth century, maintaining that women concentrates in the lowest paid sector of non-manual work. Women were working only for their husbands or other elderly male family members which are not paid for, most of their contributions are not recognize and did not have any impact on the economy of the country. The literature on gender, development and planning gives prominence to woman-headed households as households in need of special attention because of the observed relationship between female headship and poverty (Buvinic and Gupta, 1997). The poverty of female-headed nouseholds has effectively become a proxy for women's poverty, if not poverty in general (Chant, 2003).

Women constitute over 50% of the Nigerian population, make up about 37% of the formal sector (World Bank, 2001); however, because of their relative powerlessness both economically and politically, are unable to exercise control over resources. Some cultures in Nigeria, through marriage and inheritance practices also prohibit women from owning certain properties.

The incidence of female headship has increased worldwide and, a high proportion of these households are found to be poor. Thus female-headed households have become an easily identifiable group on which to target poverty alleviation measures. Female headship is typically expected to increase the likelihood of the household being found among the poor. (UNDP, 1995, UNDP, 1996, Chant, 1997, Bibars, 2001, Bridge, 2001, Quisumbing et al 2001, Chant, 2003; Horrell and Krishnan, 2006).

Female-headed households were classified as the 'poorest of the poor' on grounds of their allegedly greater likelihood of being poor, and of experiencing more pronounced degrees of indigence than male-headed units. If female-headed households are the 'poorest of the poor', then attention needs to be directed to alleviating their condition (Bridge, 2001).

## 2.1.1 SOCIO ECONOMIC DETERMINANTS OF USE OF HEALTH CARE SERVICES

There are many factors that determine the use of health care services. Most people find it intuitively plausible that the effects of income on health, if it exists at all should be greater among the poor people than among the rich (Deaton, 2003).

The responsiveness of the poor and non-poor individuals to changes in prices of health care may be different. While some studies have found that the poor are not affected differently from the non-poor, when prices of health services are increased (Akin et al,1995; Lindelow,2005), some other studies gives evidence that the magnitude of the

price effect varies with changes in an individual's welfare status. This suggests that households' poverty status will impact on their demand for health care services.

Studies have revealed that socio-economic factors such as income, mother's education, other community factors such as food prices, availability of skilled personnel in the community all affect health status. However, according to Addai, (2000) in developing countries, it is estimated that over 500,000 women die each year from complications arising from pregnancy and childbirths. The access to health facility or maternity home can play a vital role in improving the quality of maternal health. The usefulness of a maternal health care system also depends on how women at risk are prepared to comply with compulsory health care. It is argued that the use of maternal health services is a function of demographic, cultural, and socio-economic factors, such as age of woman, birth order, size of household, education, ethnicity, place of residence, religious background, marital status, employment, income level and accessibility. An increasing number of women who dies every year during pregnancy, delivery and the postnatal period suggest insufficient overall progress toward reproductive health, including maternal health (WHO, 2010,).

## 2.1.2 HOUSEHOLD DECISION MAKING AND CHILD'S HEALTH OUTCOME

Many decisions made at the household level influence the welfare and health of the individuals living in the household. Decisions such as where to live, how to generate income, how much to invest and consume, and how many children to have constitute common dilemmas faced by households. The outcomes of such decisions are often linked to child's health outcome.

In households with scarce opportunities, the intra-household dynamics of decision making and resource allocation may have an even greater impact on the welfare outcomes of family members. Within households, many factors like age, marital status, culture, income level, and education-influence the dynamics of intra-household decision making. If various household members (including male, as opposed to female members) have different preferences, it is expected that households will behave differently according to who controls household resources.

In sub-Saharan Africa, women's status and child's health status are linked. Women household decision making power is extremely important for better maternal and child health outcome (ICPD 1994), and as an indicator of women empowerment. If women and men enjoyed equal status, child mortality will reduce in a noticeable percentage.

There is a general agreement among anthropologist that the household acts as a context for the child as well as a mediator that provides the support associated with

positive child well-being outcomes (Noughani, Bagheri. 2001). Different types of households, however, have different outcomes for children; single parent, two-parent households, male headed households, female headed household, extended family households and cohabiting households. Households are not homogeneous in terms of their discharge of duties and there are significant variations between households, within households as well as between different settings with respect to how households use time and resources for children's well-being (Cox, Anderson, Reyholds, Mela, Lean, 1997).

Household head can be an adult male, adult female or even a household can be headed by an adolescent as it can be found in some African countries especially parts battered with HIV/AIDS epidemic like South Africa which results into death of the supposed male/female head or such households and headship will be conditionally transferred to the eldest child. Adolescents headed households are also common in countries ravaged by war or disaster like Rwanda, Haiti etc. but this is not common in Nigeria. Female household heads have on average fewer financial resources and greater demands on their time, and have been linked with worse health outcomes for children (Bronte-Tinkew and DeJong, 2004).

Researchers have found that household headship influences access to and allocation of resources influences access to and allocation of resources for child health. It has been hypothesized that children in some contexts, may benefit more from expenditure in female rather than male headed households, since there is evidence that women invests more resources into health of their child (Bruce, 1989).

According to Nigeria Demographic and Health survey 2013, a total of 20% households are headed by female. Women-headed households are anomalies, because they are required to fend for themselves.

The formation of female headed households is often determined by several factors such as; women with migrant worker husband, divorced women, abandoned women and widows. But basically the formative process is in two forms; women may become household heads for specific periods of time during which their husbands migrate for work. This kind of female headship is often referred to as 'de facto' since it suggests that women are not the official or legal head of the household, but would possibly experience some level of autonomy in decision-making during periods in which their husbands were absent. Alternatively, women may be single mothers as in the case of an adolescent, who engage in premarital sex and was abandoned with the child, widowed or divorced and therefore have legal, or official status as the household head is often referred to as 'de jure' female head household. De jure female heads of household are likely to bear the sole responsibility for income-earning, which may undermine the possible benefits they and their children derive from experiencing higher levels of sole decision making. While it cannot be assumed that de facto female heads would always receive remittances from absent husbands, the possibility that this might occur suggests that they might benefit both from greater levels of income (in comparison with de jure household heads) and greater level of participation in the household decision making (in comparison with women and children in male-headed households) (onyango, Tucher and Eisemon 1994).

## 2.1.3 PERINATAL MORTALITY

The term "perinatal mortality" has been used to include deaths that might somehow be attributed to obstetric events, such as stillbirths and neonatal deaths in the first week of life. The World Health Organization defines perinatal mortality as the "number of stillbirths and deaths in the first week of life per 1,000 live births. The perinatal period commences at 22 completed weeks (154 days) of gestation and ends seven completed days after birth. The NDHS also defined perinatal mortality as Pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths).

Although being newborn is not a disease, large numbers of children die soon after birth: many of them in the first four weeks of life (neonatal deaths), and most of these death occurs during the first week (early neonatal deaths). For every baby who dies in the first week after birth, another is born dead (stillbirths). In many societies, neonatal deaths and stillbirths are not perceived as a problem, largely because they are very common. Many communities have adapted to this situation by not recognizing the birth as complete, and by not naming the child, until the newborn infant has survived the initial period.

Most women do not have access to the health care and sexual health education services that they need. In many developing countries, complications of pregnancy and childbirth are the leading causes of death among women of reproductive age. More than

one woman dies every minute from such causes; 585,000 women died every year (WHO, 2010). According to WHO 2006, every year over 4 million babies die in the first four weeks of life; 3 million of these deaths occur in the early neonatal period. Moreover, it is estimated that more than 3.3 million babies are stillborn every year; one in three of these deaths occurs during delivery and could largely be prevented. 98% of the deaths take place in the developing world.

Each year in Nigeria almost one million children die before their 5th birthday. Nigeria has the highest number of neonatal deaths in Africa and the second highest in the world (Federal Ministry of Health, 2011). The World Health Organization estimated that of the 133 million babies delivered each year worldwide, more than 10 million die before the age of five years, with almost 80% dying before their 1st birthday (WHO, 2006), 44% of these deaths occur in the neonatal period, of which early neonatal deaths account for 76% (WHO, 2014). Furthermore, 3 million babies are stillborn each year resulting in over 5.9 million perinatal deaths per year (Ahman and Zupan, 2007). In Nigeria, of the 5.3 million babies born in the year 2004, there were 425, 000 perinatal deaths giving a perinatal mortality rate (PNMR) of 76 per 1000 births, a stillbirth rate (SBR) of 43 per 1000 births and ENMR of 35 per 1000 births with regional variations (World Health Organization, 2005).

## 2.1.4 CAUSES AND DETERMINANTS OF PERINATAL MORTALITY

Babies die after birth because they are severely malformed, they are born very prematurely, suffer from obstetric complications before or during birth, have difficulty adapting to extra uterine life, or because of harmful practices after birth that lead to infections. Low birth weight has long been debated as one of the causes of neonatal deaths. It is associated with the death of many newborn infants, but is not considered a direct cause. Around 15% of newborn infants weigh less than 2500g, the proportion ranging from 6% in developed countries to more than 30% in some parts of the world. The main "culprit" is preterm birth and the complications stemming from it, rather than low birth weight per se. There is, however, no doubt that maternal health and nutrition at conception are important determinants of weight at birth, neonatal health and frequency and severity of complications, and that maternal infections such as malaria and syphilis contribute to adverse pregnancy outcomes and thus to mortality.

Neonatal deaths and stillbirths stem from poor maternal health, inadequate care during pregnancy, inappropriate management of complications during pregnancy and delivery, Poor hygiene during delivery and the first critical hours after birth, lack of newborn care, women's status in society, women nutritional status at conception, early childbearing, prolonged pregnancy, congenital malformations, birth trauma, spontaneous pre term birth, maternal causes, syphilis (and a few other fetal infections), birth asphyxia, stillbirth, illiteracy, too many closely spaced pregnancies, harmful practices (WHO).

## 2.2 CONCEPTUAL FRAMEWORK

SOCIO DEMOGRAPHIC **INTERVENING** HOUSEHOLD **VARIABLES FACTORS VARIABLE** Birth interval Sex of household Age of respondents head Residence Household decision Wealth index power Household size Employment status Marital status Children ever born Religion Education of respondent **Dependent Variables** Perinatal death

**Independent Variables** 

Figure 1: Conceptual frame work on the relationship between household headship, domestic decision making and Perinatal mortality

(Modified from UNICEF Conceptual frame work for nutritional status 1998).

## 2.3 STATEMENT OF HYPOTHESIS

- 1. There is a significant relationship between household headship and Perinatal mortality in Nigeria.
- 2. There is a significant relationship between household decision making and Perinatal mortality in Nigeria
- 3. There is a relationship between household headship, domestic decision making and perinatal mortality in Nigeria.

## CHAPTER THREE

## RESEARCH DESIGN AND METHODOLOGY

This chapter focuses on the various techniques and procedures used in carrying out this research work. It provides relevant information on the following: Background information of the study area, sampling design technique, sample size, data processing procedures, variable definition, data analysis procedures as well as the study limitations.

## 3.1 SAMPLE DESIGN

The sample for the 2013 NDHS was nationally representative and covered the entire population residing in non-institutional dwelling units in the country. The survey used as a sampling frame the list of enumeration areas (EAs) prepared for the 2006 Population Census of the Federal Republic of Nigeria, provided by the National Population Commission. The sample was designed to provide population and health indicator estimates at the national, zonal, and state levels.

Administratively, Nigeria is divided into states. Each state is subdivided into local government areas (LGAs), and each LGA is divided into localities. In addition to these administrative units, during the 2006 population census, each locality was subdivided into census enumeration areas. 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 2013 NDHS sample was selected using a stratified three-stage cluster design consisting of 904 clusters, 372 in urban areas and 532 in rural areas. A representative sample of

40,680households was selected for the survey, with a minimum target of 943 completed interviews per state. A complete listing of households and a mapping exercise were carried out for each cluster from December 2012 to January 2013, with the resulting lists of households serving as the sampling frame for the selection of households. All regular households were listed.

A fixed sample take of 45 households were selected per cluster. All women age 15-49 who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed. In a subsample of half of the households, all men age 15-49 years who were either permanent residents of the households in the sample or visitors present in the households on the night before the survey were eligible to be interviewed.

## 3.2 STUDY LOCATION

The study was carried out in Nigeria, officially the Federal Republic of Nigeria, is a federal constitutional republic comprising 36 states and its Federal Capital Territory, Abuja. The country is located in West Africa and shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea on the Atlantic Ocean. There are over 500 ethnic groups in Nigeria, of which the three largest are the Hausa, Igbo and Yoruba. There are also 774 constitutionally recognized Local Government Areas (LGAs) in the country.

The British colonization of the region from the late nineteenth to early twentieth century resulted in the emergence of Nigeria, an amalgamation of two neighbouring British protectorates in western Africa (the south Nigeria protectorate and Northern Nigeria protectorate). Nigeria is roughly divided in half between Christians, who mostly live in the south and central parts of the country, and Muslims, concentrated mostly in the north. A minority of the population practice traditional and local religions, including the Igbo and Yoruba religions. Nigeria, knows as "the Giant of Africa", is the most populous country in Africa, the first with the population figure of 274,507,539million (July 2013 estimates, UNFPA 2013). Nigeria has a very young population, 43.8% of the populations are under 5 years of age, and 19% are within 15-24 years. 30.1% are within 25-54 years, and 3.8% are within 55-64 years while only 3% are over 64 years. The total dependency ratio is 89% with a population growth rate of 2.54 (2013 estimates).

## 3.3 STUDY POPULATION

The population of interest was drawn from NDHS 2013. Women of reproductive age (15-49) who recorded pregnancy loss occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths) in the last five years preceding the survey.

## 3.4 SAMPLE SIZE AND SAMPLING PROCEDURE

The NDHS 2013, which served as the secondary data source was used in this study. With 38,948 women interviewed of the reproductive aged 15-49 years who recorded pregnancy losses occurring after seven completed months of gestation

(stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths) in the last five years preceding the survey. The sampling for the qualitative method was done purposively, selecting 10 women of reproductive ages who have had pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths).

The survey for the 10 in-depth interviews was also conducted to complement the study.

## 3.5 DATA COLLECTION METHOD

Both Primary and Secondary data sources were used; quantitative data and basically secondary data from 2013 NDHS. To complement the Secondary data, a well structured in-depth Interview was carried out among women of reproductive age (15-49) who recorded pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths) in the last five years preceding the survey.

The population covered by the NDHS 2013 is defined as the universe of all women age 15-49 in Nigeria. A sample of households was selected and all women age 15-49 identified in the households will be interviewed. Approximately half of the selected households for the women sample were used to interview the eligible men age 15-59, and estimates were computed for the same domains of study. Female and household questionnaires were used to collect data from respondents. The household Questionnaire was used to list all the usual members and visitors of selected household.

Some basic information was collected on the characteristics of each person listed, including his or her age, sex, education, and relationship to the head of the household. The data on the age and sex of household members obtained in the household Questionnaire was used to identify women who were eligible for individual interview. Additionally, the household Questionnaire collected information on characteristics of the household's dwelling unit.

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The women's Questionnaire was used to collect information on all women ages 15-49 years. These women were asked questions on their socio-demographic characteristics, Birth history and childhood mortality.

The qualitative data collection was done using an in-depth interview of women of child bearing ages who had recorded pregnancy loss occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths) in the last five years preceding the survey. An oral informed consent was gotten from the respondents before the interview could commence. The use of a notice taking and tape recording of the interview was employed to avoid loss of vital information.

## 3.6 METHOD OF DATA ANALYSIS

This study employed the weighting factor in the dataset as provided by Measure NDHS to balance for oversampling. The dataset was analyzed in three levels; Univariate, Bivariate and Multivariate. The frequency and percentages distributions of all variables will be depicted under the Univariate analysis, while cross tabulations reporting chi-

square values and significant figure will be used under the Bivariate analysis. Logistic

regression model will be employed to test the variables at multivariate level using

STATA statistical package. Content analysis was done to extract most critical

information from the in-depth interview on the questions asked.

MEASUREMENT OF VARIABLES

The variables to be used are classified into independent intervening, and

dependent variables, they are briefly discussed below:

Dependent variables: this study examine pregnancy losses occurring after seven

completed months of gestation (stillbirths) and deaths to live births within the first seven

days of life (early neonatal deaths) in the last five years preceding the survey as the

outcome variable

INDEPENDENT VARIABLES

The independent variables were categorized into 3 in this study which include; socio

demographic characteristics, household variables and the intervening variables.

The socio-demographic characteristics are measured as follows:

Age of respondents: this variable is coded as (1) 15-19 years (2) 20-24 years (3) 25-29

years (4) 30-34 years (5) 35-39 years (6) 40-44 years (7) 45-49 years

Residence: this variable is coded as (1) rural (2) urban

Wealth index: this variable is coded as (1) poor (2) middle (3) rich

25

**Household size**: this variable is coded as (0) 10 members and below (1) 11 members and above

Employment status: this variable is coded as (0) working (1) not working

Marital status: this variable is coded as (1) never in Union (2) married (3) living with partner (4) widow (5) divorced

**Children ever born**: This variable is coded as (1) 5 children and below (2) 6 children and above

Religion: this variable is coded as (1) Christianity (2) Islam (3) Traditional (4) others

Education of respondents: this variable is coded as (1) no education (2) primary

(3) secondary (4) higher

## HOUSEHOLD VARIABLES

Sex of household: This variable is coded as (1) male (2) female

Household decision maker: (0) husband (1) wife (2) both husband and wife

## INTERVENING VARIABLES

**Birth interval**: this measure the difference in months between the current birth and the previous birth. This variable is coded as (0) 2 years and below (1) 3-5 years (2) 6 years and above

## DEPENDENT VARIABLES

**Perinatal mortality**: this variable is measured with the question 'have you ever had perinatal mortality' (1) yes (2) no

## CHAPTER FOUR

## ANALYSIS, PRESENTATION AND INTERPRETATION

## 4.0 SOCIO- DEMOGRAPHIC VARIABLES OF RESPONDENTS

This chapter aims at examining the Socio-demographic characteristics of the respondents of reproductive ages who had experienced pregnancy loss and death to live births within the first seven days of life that occurred in the five years preceding the survey. The result of the analysis at uni-variate level, bi-variate level and also the multi-variate level are shown.

## 4.1 Socio- Demographic Characteristics of Respondents

The Socio-demographic characteristics include; Residence, Wealth index, Household size, Employment status, Marital status, Children ever born, Religion, Education of respondent and Age of mother.

# 4.1 Table 1 : Distribution of Respondents by Socio-demographic Characteristics by weighted percentage

VARIABLES	FREQUENCIES	PERCENT
AGE		
15-19 years	7,905	20.30
20-24 years	6,714	17.24
25-29 years	7,037	18.07
30-34 years	5,373	13.80
35-39 years	4,701°	12.07

40-44 years	3,663	9.40
•	3,555	9.13
45-49 years		
TOTAL	38,948	100.00
SEX OF HOUSEHOLD HEADSHI	P	
Male	31,838	81.74
Female	7,110	18.26
TOTAL	38,948	100.00
PLACE OF RESIDENCE		
Urban	15,545	39.91
Rural	23,403	60.09
TOTAL	38,948	100.00
RELIGION		
Christian	19,838	51.15
Islam	18,578	47.90
Traditionalist	352	0.91
Others	14	0.04
TOTAL	38,782	100.00
WEALTH INDEX		
Poor	14,117	36.25
Middle	8,001	20.54
Rich	16,830	43.21
TOTAL	38,948	100.00

OCCUPATION	ŧ	
Not working	14,262	36.77
Working	24,524	63.23
TOTAL	38,786	100.00
NUMBER OF HOUSEHOLD MEMBER	S	
10 members and below	34,283	88.02
11 members and above	4,665	11.98
TOTAL	38,948	100.00
MARITAL STATUS		
Never in union	9,820 <sup>±</sup>	25.21
Married	26,403	67.79
Living with partner	871	2.24
Widowed	993	2.55
Divorced	432	1.11
No longer living together/separated	429	1.10
TOTAL	38,948	100.00
HIGHEST EDUCATIONAL LEVEL		
No education	13,717 '	35.28
Primary	7,094	18.24
Secondary	14,383	36.99
Higher	- 3,689	9.49
TOTAL	38,883	100.00
IVIII		

DECISION MAKER		
Wife	1,744	6.43
Husband	8,970	33.07
Both	16,407	60.50
Total	27,121	100.00
CHILDREN EVER BORN		
5 children and below	30,566	78.48
6 children and above	8,382	21.52
TOTAL	38,948	100.00
BIRTH INTERVAL		
2 years and below	5,207	22.69
3-5 years	14,846	64.71
6 years and above	2,891	12.60
Total	22,944	100.00
EVER HAD PERINATAL DEATH		
No	34,733	89.44
Yes	4,102	10.56
Total	38,835	100.00

Source: authors' work, 2016(data from the 2013 NDHS)

Table 1 shows that 20.30% of the respondents belong to the age group of 15-19 years, while 17.24% of them belong to the age group of 20-24 years, and 18.07% of the

respondents belong to the age group of 25-29 years, 13.80% of the respondents belong to the age group of 30-34 years, while 12.07% belong to the age group of 35-39 years, 9.40% of the respondents belong to the age group of 40-44 years, while 9.13% belong to age group of 45-49 years. This suggests that the population is relatively decline as ages increases. The percentage distribution of the respondent according to the sex of household head revealed that the larger proportions of the household heads are male with 81.74%, while female household heads are 18.24%. The percentage distribution of place of residence revealed that the larger proportions of the respondent are rural dwellers with 60.09%, while 39.91% are urban dweller. The percentage distribution of the respondent according to religion revealed that 51.15% of the respondents are Christian, 41.90% practices Islam, 0.91% are traditional worshipper, while 0.04% practices other religion. The percentage distribution of the respondent marital status shows that the largest proportion of the respondent are married with 67.79%, followed by those who are single with 25.21%, while those who are Cohabiting, Widowed, Divorced and Separated are as follows; 2.24%, 2.55% 1.11% and 1.10% respectively.

The percentage distribution of wealth status indicates that 43.21% of the respondents are rich, 20.54% are in middle class, while 36.25% are classified as poor. The distribution also showed that the majority of the respondents are working with 63.33%, while only 36.77% are not working. The percentage distributions of number of household member indicate that 88.02% of the households interviewed have 10 members and below, while 11.98% of the households have 11 members and above. The

distribution also showed that the majority of decision maker are both husband and wife with 60.50%, followed by husband with 33.07% and wife with 6.43%.

The percentage distributions of respondent's children ever born indicate that 78.48% of the respondents are with 5 children and below, while 21.52% are with 6 children and above. The distribution also showed that the largest proportion of preceding birth interval falls between 3-5 years with 64.71%, followed by 2 years and below with 22.69%, and 6 years and above with 12.60%. The percentage distribution of respondents who had never experienced perinatal death are larger with 89.44%, followed by those who had experienced perinatal death with 10.56%.

4.2 Table 2: Table of Relationship Showing the Variables of Perinatal mortality

VARIABLE	EVER HAD PERINATAL DEATH		TOTAL
	N=	34,733 (%)	
	NO	YES	
AGE			
15-19 years	7,736(98.07)	152(1.93)	7,888(100.00)
20-24 years	6,226(93.04)	466(6.96)	6,692(100.00)
25-29 years	6,217(88.61)	799(11.39)	7,016(100.00)
30-34 years	4,601(85.90)	755(14.10)	5,356(100.00)
35-39 years	3,910(83.42)	777(16.58)	4,687(100.00)
40-44 years	3,024(82.83)	627(17.17)	3,651(100.00)
45-49 years	3,019(85.16)	526(14.84)	3,545(100.00)

Total	34,733(89.44)	4,102(10.56)	38,835(100.00)
Pearson chi2 (6) =	1.2e+03 Pr=0.00		
SEX OF HOUSEH	OLD	s' '	
Male	28,342(89.26)	3,409(10.74)	31,751(100.00)
Female	6,391(90.22)	693(9.78)	7,084(100.00)
Total	34,733(89.44)	4,102(10.56)	38,835(100.00)
Pearson chi2 $(1) = 5$	5.581   Pr = 0.018		
PLACE OF RESII	DENCE		
Urban	13,806(89.09)	1,691(10.91)	15,497(100.00)
Rural	20,927(89.67)	2,411(10.33)	23,338(100.00)
Total	34,733(89.44)	4,102(10.56)	38,835(100.00)
Pearson chi2 $(1) = 3$	3.328  Pr = 0.068	•	
RELIGION			
Christian	17,560(88.77)	2,221(11.23)	19,781(100.00)
Islam	16,687(90.08)	1,837(9.92)	18,524(100.00)
Traditionalist	321(91.45)	30(8.55)	351(100.00)
Others	13(100.00)	0(100.00)	13(100.00)
Total	34,581(89.43)	4,088(10.57)	38,669(100.00)
Pearson chi2 $(3) = 2$	0.471  Pr = 0.000		
WEALTH INDEX			
Poor	12,611(89.61)	1,462(10.39)	14,073(100.00)
Middle	7,183(90.05)	794(9.95)	7,977(100.00)
Rich	14,939(89.00)	1,846(11.00)	16,785(100.00)

.949  Pr = 0.031		
13,361(93.99)	855(6.01)	14,216(100.00)
21,230(86.81)	3,227(13.19)	24,457(100.00)
34,591(89.44)	4,082(10.56)	38,673(100.00)
90.942  Pr = 0.000	<u> </u>	
R BORN		
27,596(90.56)	2,875(9.44)	30,471(100.00)
7,137(85.33)	1,227(14.67)	8,364(100.00)
34,733(89.44)	4,102(10.56)	38,835(100.00)
$\frac{1}{87.8262}$ Pr = 0.000		
Œ		
30,561(89.39)	3,628(10.61)	34,189(100.00)
4,172(89.80)	474(10.20)	4,646(100.00)
34,733(89.44)	4,102(10.56)	38,835(100.00)
$\frac{1}{0.725}$ Pr = 0.394		
CR CR		
1,444(82.89)	298(17.11)	1,742(100.00)
	l .	
7,646(85.34)	1,313(14.66)	8,959(100.00)
	13,361(93.99) 21,230(86.81) 34,591(89.44) 90.942 Pr = 0.000 R BORN  27,596(90.56)  7,137(85.33)  34,733(89.44)  37.8262 Pr = 0.000  E  30,561(89.39)  4,172(89.80)  34,733(89.44)  0.725 Pr = 0.394  CR	13,361(93.99) 855(6.01) 21,230(86.81) 3,227(13.19) 34,591(89.44) 4,082(10.56) 90.942 Pr = 0.000  R BORN  27,596(90.56) 2,875(9.44)  7,137(85.33) 1,227(14.67)  34,733(89.44) 4,102(10.56)  37.8262 Pr = 0.000  E  30,561(89.39) 3,628(10.61)  4,172(89.80) 474(10.20)  34,733(89.44) 4,102(10.56)  37.25 Pr = 0.394  CR

Total	23,502(86.76)	3,587(13.24)	27,089(100.00)
Pearson chi2 (2)=58	3.245  Pr = 0.000		
LEVEL OF EDUC	ATION		
No education	12,284(89.89)	1,381(10.11)	13,665(100.00)
Primary	6,138(86.82)	932(13.18)	7,070(100.00)
Secondary	13,020(90.86)	1,310(9.14)	14,330(100.00)
Higher	3,217(87.37)	465(12.63)	3,682(100.00)
Total	34,659(89.45)	4,088(10.55)	38,747(100.00)
Pearson chi2 $(3) = 1$	01.748  Pr = 0.000		
BIRTH INTERVA	AL		
2 years and below	4,537(87.40)	654(12.60)	5,191(100.00)
3-5 years	12,791(86.42)	2,010(13.58)	14,801(100.00)
6 years and above	2,443(84.89)	435(15.11)	2,878 (100.00)
Total	19,771(86.45)	3,099(13.55)	22,870(100.00)

Source: authors' work, 2016(data from the 2013 NDHS)

# 4.2.1 HYPOTHESIS TESTING

# HYPOTHESIS I

Ho: There is no significant relationship between household headship and Perinatal mortality in Nigeria.

Hi: There is significant relationship between household headship and Perinatal mortality in Nigeria.

**CRITICAL REGION:** At 0.05 level of significance, Reject  $H_0$  if P-value < 0.05. Hence, accept if otherwise.

Pearson $chi2(1) = 5.580$	Pr = 0.018

**DECISION:** Since P-value (5.580) < 0.05, therefore we accept the alternate hypothesis and conclude that there is significant relationship between household headship and perinatal mortality in Nigeria.

## HYPOTHESIS II

H<sub>O</sub>: There is no significant relationship between women's household decision making and Perinatal mortality in Nigeria.

Hi: There is significant relationship between women's household decision making and Perinatal mortality in Nigeria.

**CRITICAL REGION:** At 0.05 level of significance, Reject  $H_0$  if P-value < 0.05. Hence, accept if otherwise

Pearson chi2(1) = $58.2445$	Pr = 0.000

**DECISION:** Since P-value (58.2445) < 0.01, therefore we accept the alternate hypothesis and conclude that there is significant relationship between women decision making and perinatal mortality in Nigeria.

### HYPOTHESIS III

Ho: There is no relationship between household headship, domestic decision making and perinatal mortality in Nigeria.

H i: There is a relationship between household headship, domestic decision making and perinatal mortality in Nigeria.

### Conclusion

Since the calculated p-value of both household headship and domestic decision making in the chi-square shows a significant relationship between them and perinatal mortality with  $(X^2=5.580, Pr=0.018 \text{ and } X^2=58.2445 \text{ Pr}=0.000)$  respectively. Therefore the results indicate that there is a significant relationship between household headship, domestic decision making and perinatal mortality in Nigeria. The head of household determine the household decision maker which influences the health outcome of the mother and child during the pregnancy period and after birth.

In the in-depth interview conducted, it was revealed that most of the household heads are responsible for decision making in the house.

4:3 Table 3: LOGISTIC REGRESSIONS OF SOCIO-DEMOGRAPHIC VARIABLES, HOUSEHOLD HEADSHIP, DECISION MAKING AND PERINATAL MORTALITY IN NIGERIA.

,	Odds Ratio	P- Value	95% Conf. Interval
Age (15-19 years)	1.00(RC)	-	-
20-24 years	2.93	0.01.1	1.28 6.71
25-29 years	4.35	0.000	1.92 9.85
30-34 years	5.24	0.000	2.31 11.88
35-39 years	6.42	0.000	2.82 14.57
40-44 years	6.89	0.000	3.03 15.66
45-49 years	6.22	0.000	2.73 14.17
Sex of household(male)	1.00(RC)	=	-
Female	.88	0.079	.76 1.01
Place of residence(urban)	1.00(RC)	-	-
Rural	.91	0.101	.83 1.01
Religion(Christian)	1.00(RC)	-	-
Islam	.93	0.236	.84 1.04
Traditionalist	.75	0.188	.49 1.14
Others	1	(omitted)	
Wealth status(poor)	1.00(RC)	-	-
Middle	.87	0.028	.77 .98
Rich	.81	0.002	.71 .93
Occupation (not working)	1.00(RC)	-	-

Working	1.13	0.017	1.02 1.26
Children ever born(5 children and below)	1.00(RC)	-	-
6 children and above	.96	0.548	.87 1.07
Household size(10 members and below)	1.00(RC)	-	-
11 members and above	1.08	0.159	.96 1.22
Decision maker(wife)	1.00(RC)	-	-
Husband	.79	0.003	.67 .92
Both	.87	0.106	.74 1.02
Level of education (no education)	1.00(RC)	-	-
Primary	1.40	0.000	1.24 1.58
Secondary	1.57	0.000	1.37 1.81
Higher	1.82	0.000	1.50 2.20
Birth interval (2 years and below)	1.00(RC)	-	-
3-5 years	1.05	0.299	.95 1.16
6 years and above	1.04	0.576	.90 1.20

Source: authors' work, 2016(data from the 2013 NDHS)

The likelihood ratio of the logistic regression in the table above revealed that age contributes to the likely perinatal mortality in Nigeria. In addition, taking 15-19 years as a reference point (1.00), the age group of 20-24 years, 25-29 years, 30-34 years, 35-39 years, 35-39 years, 40-44 years and 45-49 years with (OR=2.93772, p<0.05), (OR=4.353037,p=0.00), (OR=5.243095,p<0.01),(OR=6.421634,p=0.00), (OR=6.890316,

p=0.00) and (OR=6.421634,p=0.00) respectively are more likely to influence perinatal mortality in Nigeria significantly.

The likelihood ratio of the logistic regression in the table above revealed that sex of the household head contributes to the likely perinatal mortality in Nigeria. In addition, taking male household head as a reference category (1.00), the female household head are less likely to influence perinatal mortality in Nigeria with (OR=0.8813848, p>0.05).

The likelihood ratio of the logistic regression in the table above revealed that place of residence contributes to the likely perinatal mortality in Nigeria. In addition, taking urban dwellers as a reference category (1.00), the rural dwellers are less likely to influence perinatal mortality in Nigeria with (OR=0.9192495, p>0.05).

Also the likelihood ratio of the logistic regression in the table above revealed that religion contributes to the likely perinatal mortality in Nigeria. In addition, taking Christian as a reference point (1.00), but the Islam and traditionalist are less likely to influence perinatal mortality in Nigeria with (OR=0.9380916,p>0.05) and (OR=0.7554605, p>0.05) respectively.

The likelihood ratio of the logistic regression in the table above revealed that wealth index contributes to perinatal mortality in Nigeria. In addition, taking the poor quintile as a reference category (1.00), the middle and the rich quintile are less likely significant to

influence perinatal mortality in Nigeria (OR=0.8741324, p<0.05 and OR=0.8159343, p<0.01).

The likelihood ratio of the logistic regression in the table above revealed that occupation contributes to the likely perinatal mortality in Nigeria. In addition, taking the category of respondents who are not working as a reference point (1.00), those who are working are more likely to influence perinatal mortality significantly with (OR=1.138384, p>0.05)

The likelihood ratio of the logistic regression in the table above revealed that children ever born contribute to the likely perinatal mortality in Nigeria. In addition, taking 5 children and below as a reference point (1.00), those who have above 6 children and above are less likely to influence perinatal mortality in Nigeria with (OR= 0.9699027, p>0.05)

The likelihood ratio of the logistic regression in the table above revealed that household size contributes to the likely perinatal mortality in Nigeria. In addition, 10 members and below as a reference point (1.00), those who have 11 children and above are less likely to influence perinatal mortality in Nigeria with (OR= 1.08967, p>0.05).

The likelihood ratio of the logistic regression in the table above revealed that decision making contributes to the likely perinatal mortality in Nigeria. In addition, making wife as a reference point (1.00), the husband decision and joint decision are less likely to

influence perinatal mortality significantly in Nigeria with (OR= 0.7927229, p<0.05) and (OR= 0.8768705, p>0.05)

The likelihood ratio of the logistic regression in the table above revealed that level of education contributes to the likely perinatal mortality in Nigeria. In addition, taking no education as a reference point (1.00),those who have primary, secondary and higher education are more likely to influence infant mortality significantly in Nigeria with (OR= 1.404944, p=0.00, OR= 1.57816, p=0.00 and OR= 1.82195, p=0.00) respectively.

The likelihood ratio of the logistic regression in the table above revealed that birth interval contributes to the likely perinatal mortality in Nigeria. In addition, making 2 years and below as a reference point (1.00), 3-5 years of spacing are more likely to influence perinatal mortality in Nigeria with (OR= 1.054228, p>0.05) and (OR= 1.041487, p>0.05)

### **CHAPTER FIVE**

# SUMMARY, CONCLUSION AND RECOMMENDATION

The essence of this study was the influence of household headship, domestic decision making on perinatal death in Nigeria. This study has addressed three specific objectives; the level of perinatal mortality in Nigeria, examining how household headship influences the pattern of domestic decision in Nigeria and the relationship between household headship, domestic decision making and perinatal mortality in Nigeria. This was done using the Nigeria Demographic and Health Survey of 2013.

## 5.1 SUMMARY OF FINDINGS

The overall assessment of perinatal mortality in Nigeria shows that 10.56% had experienced perinatal mortality in Nigeria. This study also showed that there has been an increase in the proportion of female headed households with 20.00% of the households headed by female in Nigeria. 60.09% lives in rural areas compared to urban areas which indicate that more people lives in the rural area. The age distribution shows that the proportion of respondents in 40-44 years age group experienced a greater occurrence of perinatal death with 17.17% compared to other age group. The distribution of perinatal mortality by religion shows that 11.23% who are Christians had experienced most perinatal death in Nigeria compared to other religion. The least distribution of the respondents by place of residence shows that 10.33% of people who lives in rural area had perinatal death in Nigeria. 9.78% of households headed by female had perinatal case

while 10.74% of household headed by male had experienced perinatal death in Nigeria. Though the male headed households are larger with 81.74% compared to the female headed households with 18.26%, but the perinatal level of both household types are almost the same. The distribution of perinatal death by wealth index shows that 10.39% of those who are in rich class had most case of perinatal death in Nigeria. 13.19% of those who are working had experienced most case of perinatal death in Nigeria. Perinatal death is lowest among women with children ever born of 5 children and below in Nigeria. The distribution of perinatal death by household size shows that households with household members of 10 members and below had most case of perinatal death in Nigeria. Perinatal death is highest among households where the decision makers are the wife with 17.11%. Perinatal death is more common among those who had primary education with 13.18% in Nigeria. The distribution of perinatal death by birth interval shows that 15.11% of the respondents who spaced their birth for 6 years and above had experienced perinatal death most with in Nigeria.

The result from the in-depth interview conducted among 10 women of reproductive ages (15-49), showed that most of the households in Nigeria are headed by men. The study also revealed that majority of the women interviewed are not employed. The female household units are becoming larger which may be as a result of some factors. The in-depth interview also came up with a fact that women are responsible for almost all the domestic decisions made at the household level, even though their husband may be the head of the household. The interview also ascertained that perinatal mortality

is very common among households headed by women, and households where women are responsible for all decisions made at household level. Women economic status has a lot of influence on the decision pattern of the household which directly influence the health of the mother and child during pregnancy and immediately after birth.

### **5.2 CONCLUSION**

In this study, it was ascertained that female-headed households found it very difficult in making some certain decision relating to the wellbeing and health of the entire household members compared to the male headed households. Nigeria is known has a male controlled society, and more efforts are needed to empower and improve the condition of the female households in Nigeria.

Women are responsible for most of the decisions made at household level which include decision on how income is spent, what to cook, own health seeking, child' health care etc. When women participates more in decision making within the households, it enhances household decision making power, and decisions made on the health of the household members. It was generally observed that women spend more time with house members than men, which means that women are very close to the children and they know everything about the need of the household. Women should be given more opportunity to decide the best for the child's health as they are the closest to the child. Household sex matters in determining the perinatal level in Nigeria because the head of

the household decides income sharing and spending. The sex of the household head is significantly related to the perinatal death in Nigeria.

; '

### 5.3 RECOMMENDATION

This study provides information for government and health program planners and other policy-makers in introducing the influence of household headship on perinatal mortality in Nigeria. This study suggests interventions aimed at improving maternal health outcomes to meet the Sustainable Development Goals target in Nigeria.

For national policies to be effective, the family as a unit must be focused. The influence of mother's participation in household decision making and headship is very important to determining the child's health outcome. It is therefore recommended that the women should be consulted and be given a constituted authority to legally execute and make decisions relation to health of the child. It should be recommended and considered in maternal health policies for better result.

This study stressed the importance of gender targeting for poverty reduction and investment in maternal health, women should be given opportunities to earn income and have economic access in consumption and decision making for children's welfare.

Our culture in Nigeria has relegated the women to a very low status forgetting their role in the society and the household as a unit. There is a need to make an adjustment into our culture in Nigeria to enhance gender equality.

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