DETERMINANTS OF MATERNAL HEALTH CARE UTILIZATION AMONG WOMEN IN DEKINA LOCAL GOVERNMENT AREA, KOGI STATE.

BY

OKOLI SIDNEY

SPS/11/MSO/00031

SUPERVISOR:

Dr. Aminu Mohammed Fagge

A THESIS SUBMITTED TO THE DEPARTMENT OF SOCIOLOGY, FACULTY OF SOCIAL AND MANAGEMENT SCIENCES, BAYERO UNIVERSITY, KANO, FOR THE AWARD OF M.SC SOCIOLOGY

(DEMOGRAPHY)

JANUARY, 2018

CERTIFICATION

This research project has been read and appr	roved as meeting part of the requirements of
the Department of Sociology, Bayero Uni	versity, Kano for the award of Master of
Science of Sociology (Demography) in the I	Department of Sociology, Bayero University,
Kano.	
Dr. Aminu Mohammed Fagge Supervisor	Sign: Date:
Dr. Ibrahim Bello	Sign:
Head of Department	Date:
Professor James Godswill	Sign:
External Examiner	Date:
Dr. Kabir Dumbulun	Sign:
Internal Examiner	Date:

DECLARATION

I declare that this project has been written by me, and that it is a record of my own research work. To the best of my knowledge and belief, it has not been previously presented in any form whatsoever in any applications for MSc in Sociology (Demography). All sources of information collected and materials used have been duly acknowledged by means of reference.

Okoli, Sidney Uchenna (Student)	Date

ACKNOWLEDGEMENT

I have been encouraged by persons too numerous to mention and to whom I am severally and collectively indebted. I want to begin by thanking my late father, Engr. H.M. Okoli, and my late mother, Madam Rose Okoli (nee Anyakwo) for the tremendously indescribable roles they played during my formative years. I thank my elder brother, Dr. B.J. Okoli, former Head of Department, Chemistry Department, Bingham University, for been a leading light in the family. Furthermore, I am sincerely indebted to Prophet T.B. Joshua, and also my wife, Mrs. Chioma Okoli (nee Obibuaku), who had believed in my vision, supported it and thus provided an enabling environment for me to soar.

I also owe an immense gratitude to my energetic supervisors, Dr. Aminu Mohammed Fagge and Dr. Kabir Dumbulun for their encouragement and patience as they guided me through this research work. Very special thanks to Prof. Zango for being the key to this entire journey. I acknowledge also the encouragement of Mal. Isa Ahmed (mni) for his love, kindness and multifarious support to me times without number. My highest regards to my brother from another mother, Gaddafi Muazu of the Department of Sociology, BUK for been a source of hope every now and then. To Yusuf Wayo, I cannot but say thank you for hosting me times without number in the course of this programme. I want to thank the Directors of Ketsu Academy, Lugbe, Abuja, Pastor and Mrs. Leye Aderinto, for their moral support and understanding. And lastly, to the many others too numerous to mention who had in one way or the other supported me, I say thank you and God bless!

Table of Contents

Title	page	
Certi	fication	i
Dedi	cation	ii
Ackı	nowledgement	iii
Tabl	e of Contents	iv-vi
List	of Tables	vii
Abst	ract	viii
Map	of Kogi State	ix
CHA	APTER ONE: INTRODUCTION	
1.1	Introduction	1-3
1.2	Statement of the Research Problem	3-7
1.3	Research Questions	7
1.4	Aim and Objectives	7-8
1.5	Research Hypothesis	8
1.6	Justification of the Study	9-10
1.7	Scope and Limitation the Study	10
1.8	Operationalization of Concepts	10-11
CHA	APTER TWO: LITERATURE REVIEW AND THEORETICAL FRAM	IEWORK
2.1	Introduction	12
2.2	Women Income and Maternal Health Care Utilization	12-13
2.3	Marriage Type and Maternal Health Care Utilization	13-14
2.4	Mother's Education and Maternal Health Care Utilization	14-16
2.5	Age of Mothers and Maternal Health Care Utilization	16-17
2.6	Women Decision Making and Maternal Health Care Utilization	17-22

2.7	Theoretical Framework	22-23
2.7.1	Liberal Feminist Theory	23-24
2.7.2	Rational Choice Theory	24-27
2.8	Conceptual Framework	27-28
CHA	PTER THREE: METHODOLOGY	
3.1	Introduction	29
3.2	Location of the Study Area	29-31
3.3	Target Population	32
3.4	Sample Size	32-33
3.5	Sampling methods	33-34
3.6	Methods of Data Collection	34-35
3.7	Data Presentation and Analysis	35
CHA	PTER FOUR: DATA PRESENTATION AND ANALYSIS	
4.1	Introduction	36
4.2	Background Characteristics of Respondents	36-39
4.3	Percentage Distribution of Women's Decision Making Variables	
		39-41
4.4	Bivariate Analysis	41-54
4.5	Multivariate Analysis	54-59
4.6	Discussion of Major Findings	59-66
CHA	PTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION	
5.1	Summary	67-69
5.2	Conclusion	69
5.3	Recommendations	69-71
Refere	ences	72_83

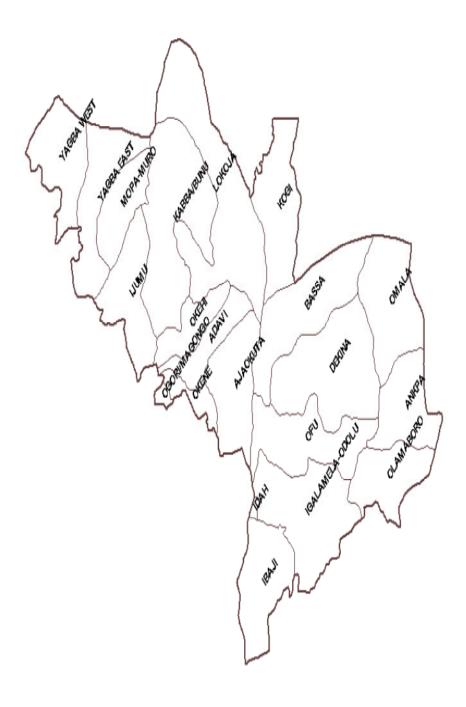
Appendix A: Acronyms	84
Appendix B: Questionnaire Instrument	85-89
Appendix C: Focus Group Guide	90
Appendix D: In-depth interview Guide	91

LIST OF TABLES

Pages
Table 4.2.1: Percentage Distribution of Respondents by Socio-economic and Demographic
characteristics37
Table 4.2.2: Percentage Distribution of Respondents by Decision making characteristics39
Table 4.3.1: Percentage Distribution of Respondents by Decision Making Variables40
Table 4.4.1: Relationship between Women's Decision Making and Place of Delivery42
Table 4.4.2: Relationship between Age of Respondents and Place of Delivery43
Table 4.4.3: Relationship between Level of Mother's Education and Place of Delivery44
Table 4.4.4: Relationship between Women's Income and Place of Delivery45
Table 4.4.5: Relationship between Marriage type and Place of Delivery46
Table 4.4.6: Relationship between Women's Decision Making and Ante natal care visits47
Table 4.4.7: Relationship between Age of Respondents and Ante natal care visits48
Table 4.4.8: Relationship between Level of Mother's Education and Ante natal care visits49
Table 4.4.9: Relationship between Women's Income and Ante natal care visits50
Table 4.4.10: Relationship between Marriage type and Ante natal care visits51
Table 4.5.1: Odds Ratio from the General Binary Logistic Model the Likelihood of Use of
Maternal Health Facility for Delivery Controlling for Selected Socio-Economic and
Demographic Characteristics54
Table 4.5.2: Odds Ratios from the General Binary Logistic Regression Model for the Likelihood
of Antenatal Care Visits, Women's decision making variables, controlling for selected
background characteristics56

ABSTRACT

The extent of the influence of the determinants of maternal health care utilization among women in Dekina Local Government Area of Kogi State has been recognized by the public as well as scholars, but no comprehensive study has been carried out prior to this. This study, therefore, examined the impact of the determinants of maternal health care utilization on women's ability to access maternal health care services in the study area. Hence, this research was prompted partly because of the dearth of empirical data as regards the factors affecting the utilization of maternal health care services among women and as well as a result of the high rate of maternal mortality and morbidity observed in the study area. It aims to study; the effects of women income, marriage type, levels of mother's education, age of mothers and the levels of women decision making on the utilization of maternal health care services. To achieve this, the study employed the use of multistage sampling method to gather a sample size of 360 residents of the study area on which questionnaire data collection instrument was used to collect quantitative data. The study also sought for qualitative data where Focus Group Discussion and, In-depth Interview were conducted with 10 special respondents who were selected using purposive sampling technique. Quantitative data were analyzed using simple frequency, chi square and percentages, while qualitative data were transcribed, interpreted and used to support the quantitative data. The determinants as correlates of maternal health care utilization among women in the study area (Dekina) include: women income, mother's age, mother's education, marriage type and women's decision making status. However, this study thus revealed that women who fell into any of the following dichotomies; wealthy, educated, in monogamous marriage, women who are about to give birth or has just given birth (between the ages 15-29), and who have a high decision making status are more likely to utilize maternal health care services. In view of the findings, the study therefore, recommends a huge involvement of the government, local and international NGOs as well as other relevant stake holders in tackling all the problems militating against the utilization of maternal health care services by women in the study area.



CHAPTER ONE

1.1 INTRODUCTION

Despite the various national and international initiatives to improve maternal health, more than half a million women from developing countries die each year as a result of complications related to pregnancy and childbirth. With approximately 247,000 maternal deaths per year, sub-Saharan Africa shares nearly half of the toll. Thus maternal morbidity and mortality is a serious threat to every society and ensuring quality and accessible maternal healthcare should be foremost among the goals of every society. This is one of the reasons why the United Nations (UN) in the Millennium Development Goals (MDGs) adopted improving maternal health as goal number 5, a move, which according to World Health Organization, has decreased global maternal mortality to 47%. Despite the wide recognition that one major factor contributing to high maternal mortality is the low use of maternal health services for delivery, the proportion of assisted deliveries in Sub-Saharan Africa have remained very low and progressed marginally from 42% in 1990 to 46% in 2004 (UNFPA, 2004).

Maternal health has emerged as global priority because of a great gap in the status of mother's well-being between the rich and the poor countries. Maternal healthcare encompass the healthcare a mother receives during pregnancy, delivery and postnatal periods, from trained healthcare providers. It includes antenatal care (ANC) which encompasses early detection and treatment of diseases and complications in pregnant women; immunization and micronutrient supplementation; birth preparedness and complication preparedness; health counseling including information and sensitization on proper nutrition and sanitations. At least four ANC visits are recommended for women with no complications, as early detection of complications leads to timely treatment and referral which can go a long way in reducing the risk of maternal morbidity.

Delivery care includes delivery by skilled birth assistants and availability of emergency obstetric care. Skill birth assistants include doctors, mid wives and nurses who were educated and trained in skills required to manage normal pregnancies, childbirth and the immediate postpartum periods, including trained traditional birth attendants (TBAs). Postnatal care includes postnatal checkups; immunization for both the mother and the new born; and family planning services (UNFPA, 2004).

Like in every traditional African society, the issue of health and maternal healthcare notwithstanding had always been handled by either herbalists or those referred to as 'native doctors'. Sequel to changes in society modern ways of treating ailments evolved; clinics, maternity homes and hospitals etc. were established to cater for the increasing number of people that believed in the efficacy of modern medicine.

However, in Dekina precisely, many of the factors responsible for low utilization of maternal healthcare services abound. These factors like women level of income, education, age etc., thus, contributes to the seeming poor utilization of maternal health care services and the resultant increasing maternal mortality and morbidity rate in the study area despite the massive government investments on maternal healthcare in the aforementioned area.

It is important to note that with the return of democracy, Kogi State government through the State Ministry of Health had embarked on massive publicity and awareness campaign, made hospitals affordable and accessible especially to the rural women, introduced a plethora of incentives to encourage increased use of health facilities and services especially by pregnant women (Dekina is a beneficiary) etc.

In addition, in 2004, Governor Ibrahim Idris had set up a Commission of Inquiry, made up of eminent personalities in the state along with some top ranking officials of the State Ministry of Health to move round the entire state with the sole responsibility of collating necessary information that could assist in resolving the problem of poor utilization of maternal health care services in the study area. Furthermore, in 2010, the Kogi State Health Development Plan was equally launched the then Commissioner for Health. In spite of all these efforts by the state government and the State Ministry of Health, health generally viz-a-viz maternal healthcare and utilization especially in Dekina Local Government Area of Kogi State still remains poor. For this reason, this study used Dekina Local Government Area of Kogi State as its area of study.

Therefore, the study views its subject (determinants of maternal healthcare utilization) as a key factor in the utilization of maternal health care services in Dekina Local Government Area. It is against this background that this research, seeks to find out the extent to which these determinants influence the ability of women to utilize maternal health care services in Dekina Local Government Area of Kogi State.

1.2 STATEMENT OF THE RESEARCH PROBLEM

Worldwide, despite the substantial increase in access to healthcare, maternal healthcare is still not sufficient. This is especially so in Sub-Saharan African countries where the goal of safe motherhood and provision of quality maternal healthcare eludes many governments. The probability of 15 year old dying because of pregnancy related diseases is 1 in 3,800 in developed countries compared to 1 in 150 in developing countries (Suwal, 2008) This is not only because of the high fertility in developing countries, but also because of the huge difference in the accessibility and utilization of quality maternal healthcare services between the developed and

developing countries. Maternal morbidities are preventable and treatable; however they linger in societies with low accessibility and utilization of quality maternal healthcare.

According to the NDHS (2013), more than half of women report facing challenges with at least one of the determinants in this study thus preventing them from utilization of maternal health care services. For instance, four in ten women were concerned about getting money for treatment. Forty-eight (48%) percent of women from all over Nigeria do not participate in any of the levels of decision making (NDHS, 2013). Even in instances where women wish to make decisions regarding household consumption, expenditures, or healthcare, they may need help and agreement from other family members, particularly the husband or mother-in-law, in actually conducting these transactions.

The implication of all these are, Nigeria has one of the highest numbers of death resulting from maternal morbidities, in the World, with an estimated maternal mortality rate (MMR) of 576 per 100, 000 live births. But for every woman who dies, at least 30 more women by estimation suffers from short or long term disabilities. Complications of pregnancy and childbirth are the leading causes of disability and death among women between the ages of 15-49 (Basu,1993). Maternal mortality is one of the many consequences of maternal morbidity. More often than not, pregnancy related complications are severe and can impair women for life, resulting in lifelong physical and psychological sufferings - a fact, which is devastating for the women and their families.

Some of the problems associated with victims of maternal morbidity are marital problems, marriage dissolution, social isolation, psychological distress, suicide and maternal mortality.

Another consequence of maternal morbidity is poverty, which is induced by loss of productivity

and the cost of medical care due to the illness. These consequences can also spill over to the fetus the mother is carrying resulting in preterm birth, low birth weight or still birth. The danger of maternal morbidities is not only limited to the fetus and the expectant mother alone, but also other members of the family, especially infants who depends on their mothers for physical and emotional needs, consequently resulting in the disruption of the wellbeing of the entire family.

There are still thirty-four percent (34%) of women in Nigeria who had no ANC during pregnancy, the situation is, however, worst in the North West region where 55.4% of women had no ANC compared to the 4.2% and 5.7% in the South East and South West respectively. In Kogi State, 15.6 % of women still had no ANC visits during their last pregnancies. Only 38% of women in Nigeria had their childbirth assisted by skilled birth assistants, 36% of which are in health facilities. Four in five births in the South West and South East are attended by a skilled health provider as compared to the 22% in the North Central region (Adekunle, 1990).

For the postnatal care which is very important in determining maternal morbidity, as this is the period where complications may arise especially immediately after delivery. 42% of women in the North Central region which include Dekina Local Government Area had no postnatal care by skilled health provider as compared to the 24% who did in the South West (Adamu, 2003). Despite the severity of maternal morbidity, it can be avoided if quality maternal healthcare is ensured. It has been widely known that better use of maternal health care facilities will reduce maternal mortality.

It is a constant source of worry when nations or countries have high MMR as is found in many developing nations including Nigeria. In addition, despite the preoccupation of stakeholders with maternal health, there seems not to be any robust data on the multifarious factors (as identified in

this study) affecting the utilization of maternal healthcare, thus making the consequences; little or no understanding of the relationship between the determinants vis a vis the utilization of maternal healthcare services poorly understood both in quality and magnitude, as researches on the aforementioned are scanty. As a result, the extent to which these determinants influence the utilization of maternal healthcare services is still unknown due to lack of documentation, especially in low income countries. This accounts for the persistence of maternal mortality in the study area and Nigeria as a whole. In developed countries, this does not really post serious problem as health information are collected routinely, but in low income countries such as ours, many childbirth still occurs at home and do not get recorded, making it impossible to have accurate and reliable data.

In the study area, there are so many factors affecting the utilization of maternal health care services and they include: patriarchy, religious values, cultural values, early marriage, competitive fertility etc. Notwithstanding, the level of women income, mother's education, age of mother, the marriage type and women decision-making status in Dekina LGA is of grave concern considering its impact on the utilization of maternal health care service. Hence, the prevalence of all these determinants influences in no mean proportion the utilization of maternal health care services. Available statistics, however, show that the reproductive health (RH) situation in Nigeria (Dekina LGA inclusive) is still poor because there is low access to and utilization of quality RHE and RHS: in spite of the increased public expenditure on the provision of modern health care.

Thus, this study will therefore aim to find out the relationship between the determinants and maternal healthcare utilization among women in Dekina Local Government Area. The study seeks to answer the following- What is the relationship between women income and the

utilization of maternal health care in Dekina local Government area? Is there any relationship between marriage type and the utilization of maternal health care in Dekina local Government area? What is the relationship between levels of mother's education and the utilization of maternal health care in Dekina local Government area? What is the relationship between the age of women and the utilization of maternal health care in the study area? What is the relationship between levels of women decision making and the utilization of maternal healthcare in the study area?

1.3 RESEARCH QUESTIONS

This study seeks to answer the following questions:

- 1. What is the relationship between women income and the utilization of maternal health care services in Dekina local Government area?
- 2. Is there any relationship between marriage type and the utilization of maternal health care services in Dekina local Government area?
- 3. What is the relationship between levels of mother's education and the utilization of maternal health care services in Dekina local Government area?
- 4. What is the relationship between the age of mothers and the utilization of maternal health care in the study area?
- 5. What is the relationship between levels of women's decision making and the utilization of maternal healthcare services in the study area?

1.4 AIM AND OBJECTIVES

The general aim of the study is to examine the determinants of maternal health care utilization as well as their implications on women's ability to access maternal health care services in the study area. The specific objectives are:

- 1. To study the effects of women income on the utilization of maternal health care services in Dekina local Government area.
- 2. To examine the relationship between marriage type and the utilization of maternal health care services among women in Dekina Local Government area.
- 3. To investigate the relationship between the levels of mother's education and the utilization of maternal health care services in Dekina Local Government area.
- 4. To examine the relationship between the age of mothers and the utilization of maternal health care services in Dekina Local Government Area.
- 5. To investigate the relationship between levels of women's decision making and the utilization of maternal healthcare services in Dekina Local Government Area.

1.4 RESEARCH HYPOTHESES

This study's working hypotheses is centered on the H₁ level of measurement

HYPOTHESIS 1:

H₀: there is no significant relationship between women income and the utilization of maternal healthcare services.

HYPOTHESIS 2:

H₀: there is no significant relationship between marriage type and the utilization of maternal healthcare services

HYPOTHESIS 3:

H₀: there is no significant relationship between levels of mother's education and the utilization of maternal healthcare services

HYPOTHESIS 4:

H₀: there is no significant relationship between the age of mothers and the utilization of maternal health care services

HYPOTHEIS 5:

H₀: there is no significant relationship between levels of women's decision making and the utilization of maternal healthcare services

1.5 JUSTIFICATION FOR THE STUDY

In Nigeria, studies on the determinants of maternal health care utilization are scanty (Desai and Johnson, 2005). The Government of Nigeria has invested in the public health system, with an emphasis on increasing the availability of maternal and child health services and encouraging women to obtain adequate health care during pregnancy and delivery. However, the MMR has not yet dropped appreciably and the strategies so far put forward have not brought the desired results. Underutilization of maternal health care service by pregnant women in Nigeria put them at the greatest risk. The utilization requires voluntary participation; however, there are multifarious factors that make women most likely not to utilize health care.

The importance of maternal health care services in reducing maternal mortality and morbidity has received a significant recognition. Implementation and utilization of effective maternal health care services in the developing world is not an easy task. In Nigeria, as in other

developing countries, most childbearing women are poor and live under harsh conditions (Defo, 1997).

Besides, there is a dearth of empirical evidence on the extent to which these determinants influence women's ability to utilize maternal health care services (Desai and Johnson, 2005). Current research on women's utilization of maternal health care services in developing countries focused primarily on institutional barriers. Little attention is placed on women level of income, mother's level of education, age of mother, type of marriage and women decision making status, especially as it relates to uptake of maternal health care services.

Despite the efforts of the Federal Government to promote gender equality, improve standard of living; eradicate extreme poverty and achieve sustainable development, much less research has been conducted to explore this situation in Nigeria. It is based on this premise that this research effort should be reinforced to achieve the major goals of the policy. This research effort will hope to explore the basis for and the extent of influence of the determinants of maternal health care utilization on women vis a vis the utilization of maternal health care services. The results are expected to form the basis for policy that enhance gender equality and espouse adequate uptake of maternal health facilities.

1.6 SCOPE AND LIMITATION OF STUDY

The scope of this study covers the effects of the determinants of maternal health care utilization among all ever married women between the ages of 15-49 who have had at least a child within the last five years in Dekina Local Government Area, Kogi State. However, the utilization of maternal health care services itself is influenced by so many other factors not covered in this

study which include: institutional, behavioural and cultural factors i.e. lack of medical equipment, aversion to hospital, religious beliefs, early marriage etc.

1.7 OPERATIONALIZATION OF CONCEPTS

- 1. **Determinants:** Determinants as used in this research refers to all those factors that influence the utilization of maternal healthcare services. In this study it is measured in terms of level of women income, level of mother's education, age of mother, marriage type and level of women decision making.
- 2. **Decision making:** Decision making as used in this research refers to the ability of women to initiate actions within the household with or without the prior consent of the husband as regards household purchases, healthcare and freedom to visit friends and relatives. Women with high decision making status tend to enjoy higher utilization of maternal healthcare service than women with low decision making status. This concept is measured in terms of high, medium and low decision making.
- 3. **Income:** Income as used in this research refers to money received by a mother, especially on a regular basis through trading, work or investment. Women with high income status have a greater tendency to utilize maternal healthcare services than low income women. This concept is measured in terms of low, medium and high income.
- 4. **Education**: education as used in this research refers to the knowledge acquired by a mother. Highly educated women have a greater tendency to utilize maternal healthcare services than uneducated women. This is measured in terms of islamic, primary, secondary or tertiary education.

- 5. **Maternal health**: maternal health as used in this research refers to the wellbeing of a woman during pregnancy, childbirth and postpartum period. It is measured in terms of delivery care, antenatal care coverage and postnatal care for mothers.
- 6. Marriage type: marriage type as used in this research refers to either monogamy (a marriage practice where a man marries one wife) or polygyny (a marriage practice where a man has more than one wife). Women from monogamous households with one wife tend to have greater utilization of maternal healthcare services than women from polygynous homes with two or more number of wives. It is measured in terms of the number of wife (ves) i.e. one wife or two or more wives.
- 7. **Age:** age as used in this research refers to women of reproductive age (15-45 yrs. old). Younger mothers are most likely to utilize maternal healthcare services than older women.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. INTRODUCTION

This section focuses on reviewing existing literature on the determinants of maternal health care seeking behaviour; the relationship between income, marriage type, levels of mother's education, age of mothers, levels of women decision making and the utilization of maternal health care services.

2.2. WOMEN INCOME AND MATERNAL HEALTH CARE UTILIZATION

Women access to income may provide some insight into the utilization of maternal health care services. It is expected that income is more likely to empower women. The literature indicates that steady, well-paid work has a positive effect on women's lives. The degree to which a woman earns an income is assumed to be reflective of (and in turn influence) other dimensions of the couple's relationship most especially the utilization of maternal health care services (Mason, 1995).

Women involved in work for the purpose of earning an income are known as working women. It is usually understood that fertility behaviour of women is influenced by the income level of the woman. (Dinesh, Darmstadt, Bhutta, 2008). Like education, income can also be a source of empowerment for women, especially if women were in control of it. The 2013 NDHS asked women several questions to ascertain their income status: how much they were currently earning during the last 12 months proceeding to the survey. It is expected that employment and income are more likely to empower women and it was found that women whose incomes were low are

less likely to utilize maternal health care services than women who fell into the medium and high income category.

Arbor (1993) conducted a research in Ghana on women's income and the utilization of maternal health care services using data derived from 1980 Ghana survey among 4,436 married women who are either working or not working. His study found out that those women with higher income were more likely to utilize maternal health care services. Arbor suggested that this is possible because of access to financial resource and greater ability to afford the cost of maternal health care services.

Moreover, a number of empirical studies have clarified factors hampering women's access to reproductive health care in developing countries and women's income have been a prevalent factor(Bhatra and Cleland, 1995). Hence, a woman's income status is to be found as an important indicator of access to health care services. Utilization of maternal care services is expected to be substantially higher among mothers in the upper quintiles of the wealth index (Bell and Sian, 2003).

2.3 MARRIAGE TYPE AND MATERNAL HEALTH CARE UTILIZATION

A woman married to one husband (monogamy) had a higher odd of delivering in a health facility. Similarly, many women married to one husband had a lower odd of receiving antenatal care and postnatal care. These findings correspond to prior evidence indicating that women in polygynous relationships are less likely to receive pregnancy and delivery care compared to women in monogamous relationships (Celik and Hotchkiss, 2000; Obermeyer and Potter, 1991; Stephenson and Tsui, 2002).

According to the 2003 Kenya Household Health Expenditure and Utilization Survey, the Northeastern Province, which was mainly characterized by large polygynous family units, had the lowest utilization of maternal health care services rate, with 63.4% of the women never seeking maternal health care, whereas Nairobi, which is characterized by monogamous family units had the highest rate (90.6%). When the marriage type is a polygyny, the chances of maternal healthcare utilization are low when compared to a monogamous marriage.

This is very true of developing countries like Nigeria where it is characteristic to have polygynous relationships, and as a result a large chunk of the family /household economic resources are mostly expended on meeting daily basic necessities like feeding, clothing and when issues of reproductive health is involved; the household will usually resort to either herbalists, experience(s) of older wife (ves) or the TBAs. A polygynous family unit puts enormous pressure on scarce family resources thus making it very difficult for family members, women inclusive, to access quality healthcare as at when the need arises (Stephen and Tsui, 2002).

2.4 MOTHER'S EDUCATION AND MATERNAL HEALTH CARE UTILIZATION

The Programme of Action adopted at the International Conference on Population and Development (ICPD), held in Cairo, Egypt, in September 1994, reaffirms everyone's right to education and gives special attention to women and the girl child. Terming the eradication of illiteracy 'one of the prerequisites for human development', the Programme of action recognizes education as a key factor in sustainable development and in the empowerment of women and gives paramount importance to the elimination of illiteracy among women. Education is an important factor which determines development in general. It is associated with fertility, use of health care facilities and use of contraceptives. For every one thousand girls who get an

additional year of education, two fewer women will die in childbirth (World Bank Reports, undated). Generally in the northern Nigeria, there are high percentages of women who do not have access to education beyond secondary level, especially in the rural areas; even at the primary school level, difference exists between girls and boys in favor of boys (DFID, 2002)

Women with better and moderate amounts of schooling respectively are more likely than uneducated women to make use of the hospital for delivery and to go for regular ANC visits (Jejeebhoy, 1995). Many researchers have also attributed maternal ill health and death to illiteracy. Seventy percent (70%) of all maternal deaths occur with women who had no formal education (Ujah , Dada , Elo , 2005). This is because according to Rayston (1989) educated women are likely to have more understanding of the physiology of reproduction and are less likely to accept the complications and risks of pregnancy as inevitable when compared with the uneducated or illiterate women.

Educated women are also more likely to utilize modern health care facilities than those who are not. Education is directly connected to utilization of ante-natal care (ANC) services; as 97% of all women with more than secondary education received care from a skilled health worker compared with 31% of those with no education (NPC, 2009). Celik and Hotchkiss (2002) also found a positive association between educational attainment and lower parity in their study in Turkey; they reported that a significant relationship exists between educational attainment and lower parity, including the decision of whether to opt for hospital delivery or home delivery (Bala, 2009). Education also empower women, educated women are more likely to have paid jobs, that enables them to afford health care when needed (Kristoff and WuDunn, 2009). As expected, educated young women were better users of skilled professional assistance. This is consistent with findings elsewhere (Sunil, Rajaram and Zottarelli, 2006; Hounton et al, 2008;

Simkhada et al, 2008; Stekelenburg et al, 2004). Educated women have higher autonomy to make decisions on the quality of health care they receive (Nigeria Federal Ministry of Health, 2005; Harrison, 1997; Nigerian Central Bank, 2004).

However, in some societies, women are not given equal opportunities as men; in terms of education and economic liberation. In such societies, it is believe that exposing women to western education is a waste of resources, when in the long run she will be under the protection of a husband and this account for the poor utilization of maternal health care services thus resulting in high mortality and morbidity rate in such areas (Okoye, 2011).

2.5 AGE OF MOTHERS AND MATERNAL HEALTH CARE UTILIZATION

One important demographic variable that affects the utilization of health seeking behaviour is mother's age at the time of birth. Studies show that lower utilization of maternal care services is observed among mothers who are over 35 years of age (Bell and Sian, 2003). Since older and younger women have different experience and, influence, their behavior on seeking health care are also vary. Invariably, younger women are more likely to utilize modern health care facilities than older women, as they are likely to have greater exposure and knowledge to modern health care, also more access to education. Older women, on the other hand, have accumulated knowledge on maternal health care and therefore likely to have more confidence about pregnancy and childbirth or they may be less comfortable with modern medicine and more reluctant to take advantage of available services; consequently, they may give less importance to obtain institutional care (Raghupathy,1996). In contrast, experience and skills acquired by older women should have a positive influence on the use of health services.

Women's age showed expected inverse associations with delivering in a health facility, indicating that younger women were more inclined to seek care relative to older women. This is in agreement with other studies that show young pregnant women are eager to attend maternal health services in fear of obstetric complications as compared with older women that might be used to the procedure of child delivery (Chiwuzie and Okolocha, 2001; Audu and Ekele, 2002). Bhatia and Cleland (1995) found a weak association between age and place of delivery in South India but the association of pregnancy order was strong, indicating that primigravidae have a higher odds of delivering in a health facility, relative to women having a second to fourth pregnancy. According to a research conducted in Pakistan among ever married women between the ages of 15-24 shows they were less likely to use ANC, had an increased likelihood of delivery by unskilled medical providers and had a higher likelihood of delivering at home (Nasrullah, Zakar, Kramer, 2013). Similarly, a research conducted by Yarzever and Said (2013), in Kano shows that 44.2% of the young women use skilled professional assistance at hospital during delivery as against 32.1% of older women. This finding supports those of several studies which confirmed that younger women beginning child bearing tend to fear home deliveries as they consider themselves a high risk group. As a result, such young women seek professional assistance from skilled professionals in hospitals (Filippi et al, 2009; Rööst et al, 2004).

2.6 WOMEN DECISION MAKING AND MATERNAL HEALTH CARE UTILIZATION

The male-female disparity in health and wellbeing has been well documented in developing countries and particularly in the Asian context (Das Santo, 1995). High levels of morbidity and mortality in women and girl children can often be indicative of female disadvantage relative to males. Much research on care seeking and its association with decision making has focused on

child health problems (Hussain, George, Gregson, 2000), with only a few studies on reproductive health care seeking for women themselves (Bhatia and Cleland, 1995). The association between women's position and the uptake of contraception has been studied in many settings. The impetus for this has been the strong and persistent relationship found between levels of women's education and fertility (Jejeebhoy, 1995). However, the lack of consistency among relationships found between reproductive behavior and female education or employment has led many analysts to measure women's decision making directly, rather than using education or employment as proxies for their decision making power (Jejheebhoy, 1995).

There have been a number of more recent studies that have divided decision making into dimensions such as women's physical freedom of movement, their participation in decision making, their access to resources, and their ability to visit their natal kin in the Asian context (Bhatia and Cleland., 1995). Most have found relationships between various aspects of decision making and contraceptive use, but there are many complexities and contradictory findings among these studies, with different aspects of decision making showing surprising relationships with family planning uptake in different settings and under different research designs. This has led some researchers—particularly those who have carried out in-depth qualitative studies on the realities of women's empowerment in family situations—to question the validity of the concept of women's decision making, especially in Asia, and to investigate alternative explanations for differences in women's reproductive behaviors (Jeffery and Jeffery, 1997).

Apart from a study by Bloom, Wypij, Das Gupta (2001) set in Uttar Pradesh and another by Bhatia and Cleland (1995) set in Karnataka, maternal health-care-seeking behavior, as opposed to contraceptive adoption, has not been studied in relation to decision making measures in India. Education has been found to be correlated with maternal care seeking in many regions (Bhatia

and Cleland, 1995), and Bloom, Wypij, Das Gupta (2001) have found that female decision making is a major determinant of maternal health care utilization in Uttar Pradesh. These findings focus on the effect of freedom of movement and close ties on care seeking in pregnancy, and the authors support the use of direct measures of decision making to pinpoint use of maternal health care. A study by Kishor (2000) found women's decision making to be an important explanatory factor in child survival and child health in Egypt. Using DHS data from Zimbabwe, Becker (1997) examined the relationship between women's role in household decision-making and the extent of prenatal care and contraceptive use and found a strong association with prenatal care, but not with contraceptive use.

It is clear from the literature that the relationship between different aspects of women's decision making and reproductive behaviour has not always been consistent across or within populations. Several factors may account for inconsistent relationships between women's decision making and health or fertility outcomes. The definition and measurement of decision making have led many researchers to use indirect women's status indicators, such as educational attainment, employment, spousal age-difference, family type, etc. for women's decision-making in the analysis of reproductive behaviour (Jejeebhoy, 1991). For instance, Safilos-Rothschild women's reproductive health-seeking behaviour was found to be associated positively with freedom of movement and decision-making power in South India, but these effects were reduced when confounding factors were taken into account (Bhatia and Cleland, 1995b). Using data from Zimbabwe, Zambia and Malawi, Hindin (2005) showed that women with lower household decision-making were at an increased risk of having chronic energy deficiency in Zambia and Malawi, but not in Zimbabwes.

Tfaily (2004) has used both socio-economic factors and decision-making indicators and suggests that socio-economic indicators have direct effects as well. Yet critiques of available literature argue that women's socio-economic indicators such as education and employment are often not sensitive enough to capture the nuances of gender power relations and the ways in which they influence women's and men's reproductive behaviour (Presser and Sen, 2000). It is argued that simply looking at schooling is not sufficient, but that the content of education, which often reinforces gender ideology, must be incorporated as well (Mason, 1994).

A number of studies examine women's decision making and its relationship with reproductive health outcomes. According to Bloom, Wypij, Das Gupta (2001) women's decision making is a major determinant of maternal health care utilization. Women with greater freedom of movement are more likely to receive antenatal care and to use delivery care. Kishor (2000) found women's decision making to be an important explanatory factor in child survival. Women who score greater decision making are more likely to use antenatal and delivery care for their last birth than women with lower decision making autonomy (Basu, 1992). Better health care utilization rates reflected women as they have greater decision making autonomy.

A study conducted in Mumbai, India, "Village in the City: Autonomy and Maternal Health-Seeking among Slum Populations of Mumbai" by Mathews, Neupane, Hindin (2001); examines the role that direct measures of women's decision making plays in women's timely use of maternal health services in different populations in Mumbai. The nature of the decision making/care seeking relationship between slum and non-slum areas of Mumbai is compared to see how this differs from the situation in rural areas. Women in Mumbai slums are found to have higher decision making power and more timely use of maternal care services compared with women in rural Maharashtra. These women, who are often recent migrants from rural areas, also

have higher decision making power and better access to timely maternal care than women in urban areas of Maharashtra outside of Mumbai. The role that women's decision making plays in women's use of and access to maternal health care varies by whether women have meaningful health care choices or not. Women's decision making becomes more important where women's health care choices are not as constrained, as in urban areas (Jejeebhoy, 1991).

Results of a recent retrospective survey of decision making and maternal care seeking in the Eastern slums of Mumbai show that 50 (%) percent or more of women who have recently given birth enjoy high levels of decision making but that substantial minorities remain in low decision making categories. Previous qualitative research suggests that the widespread reproductive ill health is for the most part silently endured by women. These problems are placed within a context of household dynamics, where the status of women is reliant on family size, female age hierarchies, levels of male employment, and coping strategies against male domestic violence (Singh, 2001).

Makinwa and Jensen (1995) stated that even though women in sub-Saharan African countries are often perceived to exercise little or no control over resources and to have little say on reproductive decisions, this should not be over-generalized since the amount of control men have over their wives and the disparity between men and women vary from place to place, change over time, and are influenced by several factors. When married women are main supporters of the family and responsible for all activities of the household they are likely to gain more access and control over resources than in other situations. But, it is also likely that women's access to resources (health, education, and other social services) might have been negatively affected as resources of the country were diverted instead to defense purpose. Women decision making

when it encouraged will not only enhance women's status but also will increase their worth, participation in family decision making including reproductive decision.

Bloom (2001) examined the determinants of women's decision making in three areas which include control over finances, decision making power and freedom of movement. In the analysis, Bloom affirmed that a woman with closer ties to natal kin were more likely to have greater decision making power in each of the three areas, and that women with greater freedom of movement obtained higher level of antenatal care and more likely to use safe delivery care. Also, the study found that a woman that has control over her resources or a woman that brings resources into the home in her marriage may strengthen her position in the household, even if she exercises little control over the resources, e.g. a woman's assets at marriage or participation in a micro credit program may help establish her bargaining position in the conjugal relationship even if the actual resource utilization is in the hands of her husband (Hashemi, Joel, Eugene, 1996).

In contrast, some other studies also find that female decision made within the household has only a weak or no effect on women's health care use (Simkhada and Fotso, Ezeh, 2009). The problem entailed in the above studies is the conception that female decision making is exogenous to household decision-making on women's use of reproductive health services. Because female decision making is likely to be determined through negotiation processes among family members which reflect the socioeconomic background of both wife and husband, empirical models which do not take into account this simultaneous relationship would yield bias results.

Several recent economic literatures explicitly tackle this endogeneity problem in the analysis on intra-household decision-making. Basu (2006) proposed an endogenous power theoretical model

in which female decision making is determined endogenously through negotiation processes within the household. Following this framework, Lancaster, Kamiya, Matsumura (2006) confirmed statistically significant effects of a gender balance of power on household expenditure patterns under the assumption of an endogenous balance of power within the household for micro data sets from India.

2.7 THEORETICAL FRAMEWORK

A theory is defined as a system of generalized statements or a proposition about phenomena (Appelrouth and Edles, 2008). Therefore, this section reviews some relevant theories to enhance a better understanding of the subject matter, but one among (the theories) provides the main theoretical framework used by the study. These theories include Liberal Feminist Theory and the Rational Choice Theory. The Rational Choice Theory and its arguments served as the theoretical bases used by the study.

2.7.1 LIBERAL FEMINIST THEORY

The word 'liberal' connotes freedom, emancipation or liberty. Liberal feminism is one of the theories that emerged to provide explanation to women's discrimination and to provide a way forward to ensure women's freedom and participation. Liberal feminism is rooted in the social contract theories of the 16th centuries when scholars like Jeremy Bentham, John Stuart Mill, David Hume emerged and started emphasizing that all humans are equal, rational and free. Liberal feminism therefore advocate for fundamental equality of all men and allegedly equal capacity to reason. Hence they promoted the social ideals of liberty and equality to guarantee individual autonomy.

Liberal feminism's explanation of gender inequality begins with the identification of the sexual division of labour existence of separate public and private sphere of social activity. Men's primary position is in the public sphere and female in the private, and the systematic socialization of children so that they move and fit into adult roles appropriate to their gender.

Liberal feminist theory see nothing of a particular value about the private sphere (household) except perhaps that it permits emotional openness, instead the private sphere consist of what they see as the demanding, mindless, unpaid and undervalued task associated with house work, childcare, emotional pressure and sexual servicing of adult men. The true reward of social life, money, power, status, freedom, opportunities for growth and self-esteem are to be found in the public sphere (society). The system that restrict women access from this venture is burdened by private sphere (household) responsibilities which produce what constitute gender inequality.

The factor inherent in this inequality is sexism. It is an ideology which consists partly of prejudice and discriminatory practices meted out to the women folk and the basis of natural differences between men and women that suit them to their different social destinies. Because of sexism, female (girl child) from childhood are socialized so that they can move into adulthood mindless, dependent, subconsciously depressed, and borne by the constraints and requirement of their gender specified roles. The liberal feminist theory argued that the above scenario reduces talents available in the population, diminishes women and poses a constant denial of individual worth freedom. As a result liberal feminist theory maintained that change must come, to eliminate sexism and they believe that people can be educated to see the worth of feminist critique.

Despite the fact that the Liberal feminist theory has its own shortcomings because it assumes that men are given preferential treatment at the expense of women; but it was able to explain the fact that men are the decision makers who are in control of all the resources, and decide when and where women should seek health care; and also the fact that, the low status of women prevents them from recognizing and voicing their concerns about their health needs.

From this theory, women should be incorporated into the mainstream of public life i.e. political office, industry, education, self-reliance which will in turn lead to an increased decision making power (over the three specified indicators) and a subsequent rise in the utilization of maternal healthcare services.

2.7.2. RATIONAL CHOICE THEORY

Economics plays a huge role in human behavior. That is, people are often motivated by money and the possibility of making a profit, calculating the likely costs and benefits of any action before deciding what to do. This way of thinking is called Rational Choice Theory.

Rational choice theory was pioneered by sociologist George Homas, who in 1961 laid the basic framework for Exchange Theory, which he grounded in assumptions drawn from behavioral psychology. During the 1960s and 1970s, other theorists (Blau, Coleman, and Cook) extended and enlarged his framework and helped to develop a more formal model of rational choice.

Economic theories look at the ways in which the production, distribution, and consumptions of goods and services is organized through money. Rational choice theorists have argued that the same general principles can be used to understand human interactions where time, information, approval, and prestige are the resources being exchanged.

According to this theory, individuals are motivated by their personal wants and goals and are driven by personal desires. Since it is not possible for individuals to attain all of the various things that they want, they must make choices related to both their goals and the means for attaining those goals. Individuals must anticipate the outcomes of alternative courses of action and calculate which action will be best for them.

In the end, rational individuals choose the course of action that is likely to give them the greatest satisfaction. One key element in rational choice theory is the belief that all action is fundamentally "rational" in character. This distinguishes it from other forms of theory because it denies the existence of any kinds of action other than the purely rational and calculative. It argues that all social action can be seen as rationally motivated, however much it may appear to be irrational.

Also central to all forms of rational choice theory is the assumption that complex social phenomena can be explained in terms of the individual actions that lead to that phenomenon. This is called methodological individualism, which holds that the elementary unit of social life is individual human action. Thus, if we want to explain social change and social institutions, we simply need to show how they arise as the result of individual action and interactions.

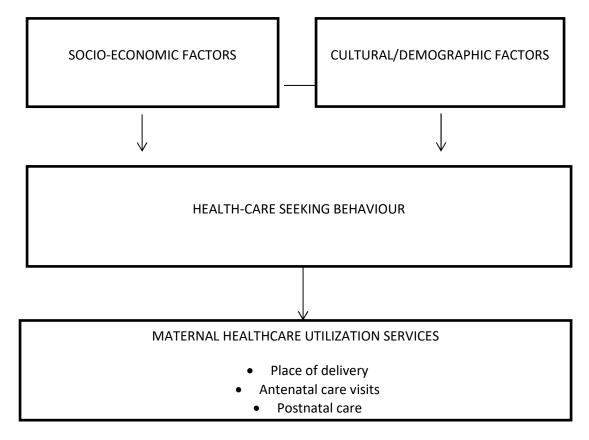
Critics have argued that there are several problems with rational choice theory. The first problem with the theory has to do with explaining collective action. That is, if individuals simply base their actions on calculations of personal profit, why would they ever choose to do something that will benefit others more than themselves? Rational choice theory does not address behaviors that are selfless, altruistic, or philanthropic. Related to the first problem just discussed, the second problem with rational choice theory, according to its critics, has to do with social norms. This

that lead them to act in selfless ways or to feel a sense of obligation that overrides their self-interest. The third argument against rational choice theory is that it is too individualistic. According to critics of individualistic theories, they fail to explain and take proper account of the existence of larger social structures. That is, there must be social structures that cannot be reduced to the actions of individuals and therefore have to be explained in different terms.

Despite the fact that the Rational Choice Theory has the following aforementioned shortcomings, it has helped to explain the fact that the decision by women to utilize maternal healthcare services are based on economic actions: whereby people are motivated by the rewards and costs of taking such decisions and by what they expect to gain by utilizing maternal health care services. The theory is also relevant in the sense that it was able to explain how human inactions as regards the uptake of maternal healthcare can predispose women to the risk of maternal morbidity. However, despite the importance of this theory in explaining the role of women decision making viz a viz the utilization of maternal healthcare services but it did not explain the role of maternal healthcare as one of the factors associated with maternal morbidity.

2.8 CONCEPTUAL FRAMEWORK

Figure 2.1: A conceptual model for understanding the determinants of maternal health care utilization.



The conceptual framework of this study is shown in figure 2.1 above. From the figure, it is lucid that socio-economic and demographic characteristics of women can directly affect women's utilization of maternal health care services (Tfaily, 2004). Insofar as the challenges militating against the utilization of maternal health care services among women as discussed in this study are not remedied women's use of health care services irrespective will remain poor.

As typical of many developing society, women rarely go to school, engage mostly in very low-income yielding occupation especially agriculture, are in polygynous households etc. (UNFPA 2004). All these to a large extent, will affect negatively the achievement of enhanced

reproductive health. This research work will, however, bring to the limelight, the correlates of these determinants on the utilization of maternal health care services in the study area.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter presents a general picture of the study area as well as the methodology used. It describes the nature, economic and social life of the population of the study area. The methodology consists of the population under study, sample size, sampling method, method of data collection, and technique of data analysis.

3.2 LOCATION OF THE STUDY AREA

Kogi State is found in the central region of Nigeria. The land is bounded on the West by River Niger, on the east by Enugu State, the south by Anambra State, on the north by Benue/Nassarawa States. It is 120 kilometres wide and 160 kilometres long. It is popularly called the Confluence State because the confluence of River Niger and River Benue is at its capital, Lokoja, which is the first administrative capital of modern-day Nigeria. The state was formed in 1991 from parts of Kwara State and Benue State. The state, as presently constituted, comprises the peoples of the Kabba Province of Northern Nigeria (Oguagha, 1981).

There are three main ethnic groups and languages in Kogi: Igala, Ebira, and Okun with other minorities like the Bassa, a small fraction of Nupe mainly in Lokoja, the Ogugu subgroup of the Igala, Gwari, Kakanda, Oworo people, Ogori magongo and the Eggan community under Lokoja Local Government. The boundary of the land was by far larger than it is in our time. The traditional limits of the land included: "The greater part of Idomaland, Nsukka area, Kogi,

Anambra area (North of Onitsha)....The Attah of Igala formerly exercised suzerainty over them (Oguagha, 1981).

The actual origin of the Igala people is not quite known. However many scholars have concluded that the Igala kingdom originated from within their immediate vicinity, namely West Africa. As a matter of fact, before the advent of the colonial masters, about seven very prominent black kingdoms were noticeable in the forest belt, thus, Ashanti, Dahomey, Ife, Bini, Igala, and Jukun kingdoms. Different people present many versions of legends of immigration. The Igala are an ethnic group of Nigeria. The home of the Igala people are situated east side of the River Niger and Benue confluence and astride the Niger to form the confluence in Lokoja. Igalaland is approximately between latitude 6°30 and 8°40 north and longitude 6°30 and 7°40 east and cover an area of about 13,665 square kilometers(Oguagha, 1981) .The Igala population is estimated at two million, they are the major ethnic group in Kogi State but can be found in Delta, Anambra and Edo States of Nigeria (NPC, 2014).

The Igalas are ruled by a king called the Attah. One of the most revered Attahs of the Igala kingdom is Attah Ameh Oboni. The present attah is highness, Attah Aliyu Obaje, who is a descendant of the aforementioned. "Atta", as the name implies is the father or custodian of the entire Igala people's culture. Tradition holds that "The Atta of Igala was a priest – king. Idah, the cultural centre or headquarters of the Kingdom is where the Attah resides. From there he cares for the kingdom. Attaship is hereditary and it is ascended to by those who belong to the royal lineage. It is by a rotating system of succession in which three other linages hold the royal office in turn before the cycle is complete and a son succeeds his father.

Dekina Local Government area is located in the Eastern Senatorial Zone of Kogi State, Nigeria. The indigenous inhabitants of the area are the Igala speaking people. Other ethnic nationalities within and outside Nigeria are also found in the area for commercial and educational pursuits. The people of Dekina Local Government Area -are largely rural dwellers who are engaged in farming, fishing, trading and other commercial activities such as commercial motor cycle riding, commercial bus driving, sales of provisions and the operation of chemist stores. According to the 2006 population census, Dekina Local Government Area has a population of about 260,312 people (Official Gazette, Federal Republic of Nigeria, 2007) and a total land area of 7, 691km2. The Local Government Area is characterized by dispersed settlements such that most of the houses and streets in the four Districts are neither named nor numbered.

Education wise, the Local Government Area is the home of the Kogi State University, Ayangba; Federal Government College, Dekina; Boys Secondary School, Ochaja; Girls Secondary School; Ochaja, Government Secondary School, Egume among several others. These educational institutions offer the people opportunity to acquire western education. However, some members of the local Government area are not educated in the western sense. The Local Government Area, which was established in 1976, has four districts namely; Okura District, Dekina District, Biraidu District and Iyale/Ogbabede District.

Dekina Local Government Area, there are fifteen (15) private hospitals, one hundred (100) PHCs and seven (7) state government hospitals (KSMH, 2009). Prominent among which are Grimad Hospital, Ayangba; Diagnostic Hospital, Ayangba; Specialist Hospital, Ochadamu; Catholic Health Care Center, Egume and Primary Health Center, Dekina.

Dekina Local Government Area is chosen as the location of the study because of the existence of the problem of high maternal morbidity and mortality rate due to the poor utilization of maternal health care services by women and as well as the researcher's familiarity with the area; which allows for easy access to the information needed to undertake the study.

3.3 TARGET POPULATION

The target population of the study is all ever married women aged 15-49 years that have had at least a child within the last five years, and who have been both users and non-users of maternal healthcare services in Dekina Local Government Area of Kogi State.

The rationale behind all women who are ever married aged 15-49 years that have at least a child within the last five years is to capture as much as possible the necessary information such as: age of mothers, women income, mothers' education, marriage type etc. The target population also includes maternal health personnel and an official of a non-governmental organization concerned with maternal health.

3.4 SAMPLE SIZE

A sample size is usually selected to be a representative of the population. The sample size drawn must reflect the nature of the population and the type of information required in the study. The nature of the target population is largely of ever married women who have had at least a child within the last five years. The sample drawn is based on responses from these target women living within Dekina area.

The sample size of 360 was determined by putting into consideration the population of the study area, the intended confidence level and interval respectively. The confidence interval was

assumed to be between 4 and 57% and the confidence level at 95%. The sample consisted of respondents who are strictly females. In this regard, a sample size of 360 respondents was chosen all of which were ever married women who have had at least a child within the last five years in the area (Dekina) where 360 questionnaires were allocated and respondents were drawn from: a Chief Medical Director CMD; a Gynecologist; 2 General Practitioners (one for public health centers and the other for private); nurse; midwife; CHEW; JCHEW, a TBA (serving or retired); and an official of a Non-governmental organization vast in maternal health issues in Dekina Local Government Area. Each of these 10 respondents provided qualitative data to support the quantitative data. The 360 respondents were individuals residing within Dekina since most of the women of the area (Dekina) live and work within the area. Hence, respondents were chosen based on availability and accessibility.

3.5 SAMPLING METHODS

The study is divided into two halves i.e. quantitative data (questionnaire) and qualitative data (Focus Group Discussion and In-depth interview). For the quantitative data, a multistage sampling method was employed. Therefore, at the first stage, because it is impossible to compile an exhaustive list of the target population, Dekina was divided into 3 districts (clusters) based on existing political units: Dekina, Birdu, and Okura Egume. At the second stage, the 3 clusters were further broken down into 11 wards with Dekina cluster having – Dekina, Anyigba, Ojikpadala and Emewe; Bridu cluster having – Okura, Odu 1, Odu 2 and Oganenigu; and Okura Egume cluster having – Abocho, Egume, and Iyale. At the third stage, 2 wards were further selected randomly from each cluster using the lottery technique, making a total of 6 wards. At the fourth stage, systematic sampling technique was used to select 1 street each from each of the 2 selected wards making a total of 6 streets. At stage five, 10 households were selected

randomly from each street making a total of 60 households. Lastly at stage six, 6 respondents (ever married women who have had at least a child within the last five years in the study area) were selected using purposive sampling technique from each of the 60 households, totaling 360. The multistage sampling method was used because it allowed easy access to the survey sample as the search was confined to the clusters which eased locating the sampled population. The method is also speedy in covering the sampled population.

For the qualitative data, purposive sampling technique was also used to select 9 maternal health personnel and 1 official from an NGO concerned with maternal health, making up a total of 10 for Key Informant interview (KII). This include, the Chief Medical Director CMD; a Gynecologist; 2 General Practitioners one for public health centers and the other for private; nurse; midwife; CHEW; JCHEW, a TBA (serving or retired); and an official from Nongovernmental organizations that are concerned with maternal health in Dekina Local Government Area. In addition, 1 session of Focus Group Discussion (FGD) was conducted in each of the 3 randomly selected wards so as to corroborate the quantitative data; thus, making a total of 3 FGDs. Participants were selected from the respondents of the quantitative data based on availability and accessibility.

3.6 METHODS OF DATA COLLECTION

Survey method was used by the study where the use of questionnaire and interview (focus group discussion and in-depth interview) were employed. The questionnaire, focus group discussion and in-depth interview were used as the study's data collection methods. The questionnaire consisted of a set of preset questions administered on the respondents within the study area (Dekina). The questionnaire was divided into four sections, i.e. a section on demographic and

socio-economic characteristics; a section on information on husband; a section on respondents' decision making capacity; and a section on likert scale. It was structured in both closed and open ended questions.

Close ended questions were employed to save time, minimize effort, and to provide a uniformity of responses for easy evaluation, as well as other problems of understanding of questions on the part of the respondents. The in-depth interview and the focus group discussion were also used to collect data from medical experts, other professionals in the medical field, traditional birth attendants, a non-governmental organization officer; and also selected participants who are respondents of the quantitative data respectively: so as to gather their opinions/views on the impact of the determinants of maternal health care utilization among women in the study area. In both cases, interviews/discussion was conducted on the subject matter with each of the groups/experts and responses were recorded and later transcribed based on research themes.

These methods (FGD and IDI) were used in order to allow respondents' expression of their opinion towards the subject matter, and the qualitative data obtained were used to support the quantitative data during analysis.

3.7 DATA PRESENTATION AND ANALYSIS

The questionnaires were retrieved, and processed using the Statistical Package for the Social Science (SPSS). The output was presented in tabular forms using frequency tables, percentages and Chi square, so as to measure the association between the main variables at a level of significance of 0.05. Data generated from the IDI and FGD were recorded, transcribed and also utilized in the data analysis. The data was used to complement the responses of the respondents

from the quantitative data; and was categorized based on the study with reference to the study objectives.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

This chapter presents the analysis of responses gathered by the study. A total of 360 questionnaires were administered but 349 were collected. The quantitative data collected were analyzed using the simple frequency tables, chi square and percentage tables and interpretations were carried out. These were followed by cross tabulations of relevant variables in order to establish associations that could exist between the variables. These variables include age of mothers, level of mother's education, income, marriage type and women's decision making indicators. The qualitative data sourced were also interpreted and used in relevant contexts to support findings of the quantitative data. The chapter is, therefore, concluded by the discussion of the major findings of the study.

4.2 BACKGROUND CHARACTERISTICS OF RESPONDENTS

This section presents the univariate analysis of the data. The section discusses the socio economic and demographic characteristics of the respondents based on the information collected in the field. Discussion of the background characteristics of the respondents is essential for survey findings on the determinants of maternal health care services utilization among women. The relevant variables are age, marital status, religious affiliation, educational qualification, income, employment status, and partner's education.

Table 4.2.1 Percentage Distribution of Respondents by Socio-economic and Demographic characteristics

Age in years	Frequency	Percentage
Less than 20	103	31.23
20-29	109	29.51
30-39	48	13.8
40-49	89	25.5
Total	349	100.0
Educational level	Frequency	Percentage
No education	95	27.22
Primary	80	22.92
Secondary	94	26.93
Tertiary	80	22.92
Total	349	100.0
Monthly Income level	Frequency	Percentage
No income	95	27.22
15,000 - 19,000	146	41.8
20,000 -24,000	40	11.5
25,000 – 29,000	33	9.5
30,000 - 34,000	25	7.2
35,000 and above	10	2.9
Total	349	100
Employment status	Frequency	Percentage
Not working	240	68.8
Working	109	31.2
Total	349	100.0
Partners' education	Frequency	Percentage
No education	47	13.5
Primary	90	25.9
Secondary	133	38
Tertiary	79	22.6
Total	349	100.0
Religion	Frequency	Percentage
Islam	190	54.4
Christianity	135	38.7
African Traditional	17	4.9
Worship		
Atheist	Nil	0
Total	349	100.0
	1	ı

Source: Survey, 2015

This section presents the univariate analysis of the data. In all, 349 women of child bearing ages 15-49 were sampled in Dekina, Kogi State. One-fourth of the respondents (31.23%) were aged less than 20; 29.5% of the respondents were between the age bracket 20-29 and almost 3 in 5 of the respondents reported age between 30-49. Also, almost 27.9% of the respondents reported no education, almost one-fourth of the respondents reported primary education and a substantial proportion reported secondary education (26.9%). A handful of the respondents (22.9%) reported tertiary education. As regards this study, women who reported between no income and a monthly income of 15,000 naira or less fell into the low income category and accounted for 69.02% of the respondents. 21% of the respondents reported an average monthly income while 10.1% reported a high monthly income. The findings in table 4.2.1 reveal that a large proportion of the respondents (68.8%) reported not working or engaged in a paid job whereas one-third of the respondents reported working (31.2%). The data reveal that a high percentage of the respondents' husbands were of at least secondary education (38%), 13.5% affirmed not educated; 23% affirmed tertiary education and one-fourth of the respondents reported primary education. The finding in table 4.1 further reveals that 54.4% of the respondents reported Islam; 38.7% reported Christianity; 0% reported atheism and 4.9% reported Traditional African Worship.

In conclusion, from the above table, one can readily observe that majority of the respondents in the study area are young Muslim women below the age of 20 years, most of who are uneducated and are predominantly either full housewives or working class mothers with a low monthly income of between 15,000 to 19,000 naira. Lastly, a large proportion of the husbands' of the respondents have had at least a secondary school education.

Table 4.2.2 Percentage Distribution of Respondents by Decision making characteristics

Decision making	Frequency	Percentage
Low	195	55.0
Medium	89	25.5
High	65	18.6
Total	349	100.0

Source: Survey, 2015

According to this table, almost half of the respondents scored low in decision making (55.0%), more than one-third of the respondents reported average in decision making (25.6%). And not more than 1 in 5 respondents (18.6%) scored high in decision-making. This, therefore, means that majority of the respondents in the study area do not take decisions by themselves.

4.3 PERCENTAGE DISTRIBUTION OF WOMEN'S DECISION MAKING VARIABLES

Women's decision making, being one of the major explanatory variables of the study is presented to show the percentages of its indicators as used in the study. The indicators as used in the study are: respondents' final say on household purchases, freedom of movement to visit relatives, and final say on own health. The indicators were selected from the 2013 NDHS. The majority of scholarly studies in literature used similar indices to measure women's decision making.

Table 4.3.1 Percentage Distribution of Respondents by Decision Making Variables

Decision making	Frequency	Percentage
variables		
Final say on own health		
care		
Respondents alone	94	27.0
Respondents and	134	38.3
husband/partner		
Husband/partner alone	121	34.7
Total	349	100.0
Final say on making		
household purchases		
Respondents alone	11	3.0
Respondents and	172	49.4
husband/partner		
Husband/partner alone	166	47.6
Someone else	0	0
Total	349	100.0
Final say on visits to		
family/relatives		
Respondents alone	134	38.3
Respondents and	128	36.6
husband/partner		
Respondents/partner alone	88	25.1
Total	349	100.0

Source: Survey, 2015

Table 4.3.1 reveals that almost one-third of the respondents make decision on their own health care alone, 38.3% of the respondents make decision together with husbands. The data reveal that 34.7% of the respondents' husband/partner decides for their wives on her health care. As regards women's decision making variable, final say on household purchases, a substantial proportion of the respondents (49.4%) make decisions with their husbands/partners on her household purchases; 47.5% of the respondents' husbands/partners make decision for their wives on her

household purchases. A handful of the respondents (3%) make the decision on their own, none of the respondents (0%) that decision is made through someone else.

For the women's decision making variable freedom to visit family/relatives, 38.3% of the respondents decide on their own. 36.6% of the respondents decide together with their husbands on such decision and one-fourth (25.1%) of the respondents' husband/partner make the decision alone. With regard to women's decision making variable control over own earnings, a large proportion of the respondents (61.5%) make decision over their earnings, more than one-third (33.9%) of the respondents decide jointly with their husband/partner, and a handful of the respondents' partner/husband decides alone.

In conclusion, according to the above table, the decision on the respondents' health shows that the decision is made together with husbands. Similarly, on the issue of who has the final say on household purchases majority of the respondents say they make such decisions together with husbands. While the responses of the respondents on who makes the final decision to visit relatives shows that majority of the women decide on their own. However, from the analysis of the women decision making variables above, it is obvious that women are dominated by their husbands in making vital household and reproductive health decisions in the study area.

4.4 BIVARIATE ANALYSIS

The section presents the bivariate relationship between the socio-economic/demographic characteristics of the respondents and maternal health care services utilization on the one hand and relationship between decision making variables and maternal health care services on the other hand. The maternal health care service is measured by antenatal care visits dichotomized into less than 4 visits and 4 visits or more while place of delivery (another indicator of maternal

health care service) is dichotomized into home and health facility. Women's decision making, the major explanatory variable, is measured by women's final say on household purchases, final say on own health care, and freedom to visit family or relatives. The selected women's decision making variables were categorized into high, medium and low. The relationship test was carried out using chi-square and all the relevant variables are presented in various tables below:

Table 4.4.1: Relationship between Women's Decision Making and Place of Delivery

	Place of Deliv	ery	
Decision Makin level	Clinic	Home	Total
Low	85(46.7%)	110 (65.9%)	195(55.9%)
Medium	57(31.3%)	32(19.2%)	89(25.5%)
High	40(22%)	25(14.9%)	65(18.6%)
TOTAL	182(100%)	167(100%)	349(100 %)

Source: Field Survey, 2015.

$$X^2 = 11.877$$

Degree of Freedom = 2

Level of significance (beta B) = 0.05

Critical value = 5.9912

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value).

DECISION: Since tabulated X^2 : 5.9912 is less than the X^2 calculated 11.877. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between women decision making and the place of delivery. Furthermore the responses from the FGD and the KII also agree with the finding above:

My husband does not take all the decisions at home. He respects my decisions and he also will not take decisions without first consulting me. In fact, before the day of delivery I had already told my husband the hospital I would want to deliver my baby and that was where we went .I, personally, chose my hospital of delivery-(FGD: Housewife, 2015)

This is in line with Ochako R et al (2011), which stated that various studies have found that women of higher decision making were more likely to use health services. Similarly, Suwal J. (2008) also reported that the low decision making power in household among women is responsible for the delay in seeking health care.

Table 4.4.2: Relationship between Age of Respondents and Place of Delivery

	Place of Delivery		
Age in group	Clinic	Home	Total
Less than 20 years	90(38.1%)	13(11.5%)	103(29.5%)
20-29 years	81(34.3%)	28(24.8%)	109(31.2%)
30-39 years	45(19.1%)	32(28.3%)	77(22.1%)
40-49 years	20(8.5%)	40(35.4%)	60(17.2%)
Total	236(100%)	113(100%)	349(100%)

Source: Survey, 2015

 $X^2 = 18.587$

Degree of Freedom (df) = 3

Level of significance (beta B) = 0.05

Critical value = 7.8140

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 7.8140 is less than the X^2 calculated 18.587. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between age of women and the place of delivery. Furthermore, the responses of the FGD and the KII agree with the finding above:

When I was younger, I use to be scared of getting pregnant and I have always told myself that when that time comes I would want to be in the best possible hands. Hence, I could not have imagined delivering anywhere else apart from the hospital if I were still in my twenties – (FGD: Housewife, 2015)

Similarly, this is supported by the Key Informant Interview with a nurse:

It is important mothers; especially the young mothers still in their early twenties deliver in hospitals where they can obtain special care. To avoid any complication that might arise during delivery especially, in most cases been their first experience of labour, young mothers would most likely want professional hands from the hospital- (KII: Nurse, 2015)

This is in line with the argument of Abosse et al (2010) that age is significantly associated with accessing and utilizing health services. The older the respondents, the lesser they would utilize the services. This is further corroborated by the findings of Onasoga A.O et al (2014) who have shown that younger mothers are more likely to deliver in health facilities than their older counterparts.

Table 4.4.3: Relationship between Level of Mother's Education and Place of Delivery

	Place of Delivery		
Level of education	Clinic	Home	Total
Primary	50(24%)	30(49.2%)	80(29.7%)
Secondary	73(35.1%)	21(34.4%)	94(34.9%)
Tertiary	85(40.9%)	10(16.4%)	95(35.4%)
TOTAL	208(100%)	61(100%)	269(100%)

Source: Survey, 2015

$$X^2 = 9.475$$

Degree of Freedom (df) = 2

Level of significance (beta B) = 0.05

Critical value = 5.9912

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 5.9912 is less than the X^2 calculated 9.475. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between the level of mother's education and the place of delivery. Furthermore, the responses of the FGD and the KII agree with the finding above:

I believe most educated mothers can greatly influence the choice of where they deliver. Educated mothers are sensible enough to know the benefits of utilizing hospitals for delivery. Their level of education and exposure enable them to make such decisions- (KII: JCHEW, 2015)

This is similarly supported by the view of a housewife during a Focus Group Discussion:

My cousin could not go to school because she lost both parents in an accident when she was very young. As a result, she was sent to the village where she had been working at her grandmother's farm without be sent to school. When she got pregnant for her third child, she was sent to my house. But when her labour began, she insisted she does not want to go to the hospital as she delivered the last two at home. However, I insisted on going to the hospital because she had always been having complications during child birth. But she was convinced she doesn't need to go to the hospital as long as I can help her prepare a certain herb. - (FGD: Housewife, 2015)

This finding corroborates the assertion of Joyce C. et al (2014) which posits that level of education is also a factor that is associated with accessing or utilizing health services. Women with lower level of education were less likely to utilize the health services compared to those who did not have. Similar findings were found by a study conducted in Ethiopia where a community based cross sectional study cited very low institutional based deliveries (12%) as a result of low literacy (Birmeta et al 2013)

Table 4.4.4: Relationship between Women's Income and Place of Delivery

	Place of Delivery		
Income	Clinic	Home	Total
Low	20(10.9%)	85(51.2%)	105(30.1%)
Medium	63(34.4%)	52(31.3%)	115(32.1%)
High	100(54.7%)	29(17.5%)	129(37.8%)
Total	183(100%)	166(100%)	349(100%)

Source: Survey, 2015

 $X^2 = 19.565$

Degree of Freedom (df) = 2

Level of significance (beta B) = 0.05

Critical value = 5.9912

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 5.9912 is less than the X^2 calculated 19.565. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between the level of women's income and the place of delivery. Furthermore, the responses of the FGD and the KII agree with the finding above:

I do not work. It is only my husband that works and he is just a painter. How much does he make from the painting work shop? We are just managing to survive. His business is not moving. Because of that we had to change the place I initially went to deliver: the fee was on the high side, so we had to go to another place where we could afford. I eventually paid 10,000 naira. This was okay for me- (FGD: Housewife, 2015)

This is in line with the position of Bale et al (2003:21) where he stated that women often cannot afford health services that are available, thus preventing them from receiving treatment. The findings of this study also agreed with Ladipo (2008) and WHO (2010) that affordability is also an important determinant of the utilization of maternal health care services in developing countries.

Table 4.4.5: Relationship between Marriage type and Place of Delivery

	Place of Deliver	y	
Marriage type	Clinic	Home	Total
Monogamy	13(56.5%)	24(22%)	37(28%)
Polygyny	10(43.5%)	85(78%)	95(72%)
Total	23(100%)	109(100%)	132(100%)

Source: Survey, 2015

$$X^2 = 15.371$$

Degree of Freedom (df) = 1

Level of significance (beta B) = 0.05

Critical value = 3.8421

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 3.8421 is less than the X^2 calculated 15.371. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between polygyny and the place of delivery. Furthermore, the responses of the FGD and the KII agree with the finding above:

I am the third wife in this house and this is my first pregnancy. I do not think I will ever need to go the hospital to deliver when the two senior wives who have had like nine children in between them are more experienced and would bring their wealth of experience to bear whenever I am due for delivery-(FGD: Housewife, 2015)

This corroborates the assertion of Stephenson et al (2006) that evidence has shown that women involved in polygyny are less likely to utilize maternal healthcare services i.e. place of delivery. Furthermore, the findings of this study is also in line with the works of Kebebe et al. (2012) which stated that women in a larger household are less likely to deliver at health facilities.

Table 4.4.6: Relationship between Women's level of Decision Making and Antenatal Care Visits

	Antenatal visits		
Decision making level	less than 4	4 or more	Total
Low	187(67.5%)	8(11.1%)	195 (55.9%)
Medium	71(25.6%)	18(25%)	89(25.5%)
High	19(6.9%)	46(63.9%)	65(18.6%)
Total	277(100%)	72(100%)	349(100%)

Source: Survey, 2015

 $X^2 = 11.265$

Degree of Freedom (df) = 2

Level of significance (beta B) = 0.05

Critical value = 5.9912

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 5.9912 is less than the X^2 calculated 11.265. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between the level of women decision making and antenatal care visits. Furthermore, the responses of the FGD and the KII agree with the finding above:

We advise women to encourage their spouses to come along during ANC visits so that they can also learn and understand the medical needs of their pregnant wives. This will also go a long way in reducing the way most men treat issues of ANC visits by their

wives with levity. Thus, stop the incessant complaints of husbands preventing their wives from coming- (KII: Nurse, 2015)

This corroborates the position of Joseph and Uche (2012), that a woman's low decision making status in society can prevent a pregnant woman from the utilization of ANC services.

Table 4.4.7: Relationship between Age of Respondents and Antenatal Care

	Antenatal visits		
Age of	less than 4	4 visits or	Total
respondent		more	
Less than 20	27(16.1%)	76(40%)	103(29.5%)
years			
20-29 years	44(27.7%)	65(34.2%)	109(31.2%)
30-39years	60(37.7%)	29(15.3%)	89(25.5%)
40-49years	28(18.5%)	20(10.5%)	48(13.8%)
Total	159(100%)	190(100%)	349(100%)

Source: Survey, 2015

$$X^2 = 14.223$$

Degree of Freedom (df) = 3

Level of significance (beta B) = 0.05

Critical value = 7.8140

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 7.8140 is less than the X^2 calculated 14.223. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between the age of respondent and antenatal care visits. Furthermore, the responses of the FGD and the KII agree with the finding above:

I cannot even imagine that any young pregnant woman would not want to attend ANC. I did it constantly for three of my children but with this one I am presently carrying I don't think I will attend as much because from experience of the previous visits I know all the necessary information I need at this time in terms of drugs, food etc. to avoid or not to - (FGD: Housewife, 2015)

This is in line with a study conducted on utilization of antenatal care services in Hadiya, Ethiopia where it was found out that age was a factor influencing the utilization (Abosse, Z. et al, 2010). Similarly, earlier studies had shown that the use of ANC services was found higher among women of younger age group than the older age group (Tsegay et al., 2013).

Table 4.4.8: Relationship between Mother's Educational Level and Antenatal Care Visits

	Antenatal visi		
Educational level	less than 4	4 visits or more	Total
Primary	51(46.4%)	29(18.2%)	80(29.7%)
Secondary	36(32.7%)	58(36.5%)	94(34.9%)
Tertiary	23(20.9%)	72(45.3%)	95(35.4%)
Total	110(100%)	159(100%)	269(100%)

Source: Survey, 2015

$$X^2 = 17.182$$

Degree of Freedom (df) = 2

Level of significance (beta B) = 0.05

Critical value = 5.9912

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 5.9912 is less than the X^2 calculated 17.182. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between mother's educational level and antenatal care visits. Furthermore, the responses of the FGD and the KII agree with the finding above:

I did my secondary school but didn't go further for reasons best known to me. I always try to meet up with the ANC dates because it is very important but my spouse thinks it is not that necessary after having three children. However, I always try to educate him on some of the things we are told and that it is even important for him to make out time and come with me once in a while .But he thinks we just go there to sing, clap and gossip.-(FGD: Housewife, 2015)

This is in line also with the assertion of Bale et al (2003), that where education is available to women, maternal and reproductive education has proven highly beneficial to both mother and child, as women become aware of available family planning services, what to do and not to do during pregnancy, and what danger signs to look out for during pregnancy and labour. Furthermore, this finding also agrees with the study that revealed that level of education is a significant predictor to utilization of antenatal care. Women who had less education were less likely to use antenatal care (Ejike et al., 2006). Earlier study from China (Ye et al., 2012) also showed that the significant predictors of ANC utilization were the level of education.

Table 4.4.9: Relationship between Women's Income and Antenatal Care Visits

	Antenatal visits		
Income Level	less than 4	4 visits or more	Total
Low	80(41.9%)	25(15.8%)	105(30.1%)
Middle	68(35.6%)	47(29.8%)	115(32.1%)
High	43(22.5%)	86(54.4%)	129(37.8%)
Total	191(100%)	158(100%)	349(100%)

Source: Survey, 2015

$$X^2 = 15.543$$

Degree of Freedom (df) = 2

Level of significance (beta B) = 0.05

Critical value = 5.9912

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 5.9912 is less than the X^2 calculated 15.543. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between women's income level and antenatal care visits. Besides, the responses of the FGD and the KII did agree with the finding above:

The closest hospital to this community is this private clinic and it is quite expensive here to register for ANC. However, most people in this community are just petty traders and thus cannot afford the exorbitant fees being charged for their series of tests during the ANC visits. But you should know that no hospital will attend to anyone if that person cannot pay for the services that will be rendered during ANC visits. Nonetheless, pregnant women are free to receive ANC services from any hospital they feel they can afford to pay for- (KII: Midwife, 2015)

This is in line with the position of Joseph and Uche (2012) who stated that many pregnant women in Nigeria do not receive the care they need either because there are no services where they live, or they cannot afford the services because they are too expensive or reaching them is too costly. Similarly, Ye et al (2010) stated that women's income is a significant predictor of ANC utilization.

Table 4.4.10: Relationship between Marriage type and Antenatal Care Visits

	Anten		
Marriage type	less than 4	4 visits or more	Total
Monogamy	54(72.1%)	41(70.7%)	95(71.1%)
Polygyny	20(27.9%)	17(29.3%)	37(28.9%)
Total	74(100%)	58(100%)	132(100%)

Source: Survey, 2015

 $X^2 = 13.204$

Degree of Freedom (df) = 1

Level of significance (beta B) = 0.05

Critical value = 3.841

DECISION RULE: Reject the null hypothesis (H_0) if X^2 computed value is greater than X^2 tabulated value (critical value)

DECISION: Since tabulated X^2 : 3.841 is less than the X^2 calculated 13.204. We reject the null hypotheses (H₀) and accept the alternate hypotheses. Hence, from the available data, we conclude that there is a significant relationship between polygyny and antenatal care visits. Besides, the responses of the FGD and the KII agree with the finding above:

Because the first wife had only gone for ANC sessions when she had her first child and since then had delivered four more children without any regular ANC visits; consequently, my husband is now always comparing me with the first wife anytime I say I want to go for ANC, saying she had successfully delivered without going for ANC and does not see any reason why I always insist on going for ANC as if there is something special – (FGD: Housewife, 2015)

This corroborates the position of Stephenson et al (2006) that evidence has shown that women involved in polygyny are less likely to utilize maternal healthcare services i.e. ante natal care services.

4.5 MULTIVARIATE ANALYSIS

In this section, the research examines the impact of the various determinants (see page 8, section 1.7) on the utilization of maternal health care services in Dekina LGA. Some selected variables relevant to the study were examined using Binary Logistic Regression Model. The dependent variable is measured by two indicators. Antenatal care visits and place of delivery were dichotomized. Antenatal care visits, one of the indicators, was dichotomized into less than four visits and four visits or more. And place of delivery, home and health facility.

Apart from that, women's decision making was categorized into three classes, low, medium and high. Three indices were extracted from the 2013 NDHS dataset. These indices include women's

final say on household purchases, freedom to visit family or relatives and control over own health. Women who can only take decisions on only 1 out of the 3 above indices are regarded to fall into the low decision making status; those who can take decisions on only 2 out of the 3 are regarded to fall into the medium decision making status; while those who can take decisions on all the 3 indices are regarded to fall into the high decision making status. Another variant of the explanatory variable are the socio-economic and demographic factors. These include: age of respondents, income, marriage type, and educational level of respondents.

The variables were used for the testing of the levels of decision making among women in the study area, assess whether demographic and socio-economic characteristic influence the utilization of maternal healthcare services and ascertain the relationship between levels of decision making and utilization of maternal health care.

Table 4.5.1 Odds Ratio from the General Binary Logistic Model the Likelihood of Use of Maternal Health Facility for Delivery Controlling for Selected Socio-Economic and Demographic Characteristics

		Model 1		Model 2		
Decision making	Odds Ratio	P-value	СІ	Odds Ratio	P-value	CI
Low	RC					
Medium	15.37**	0.002	3.11-75.91			
High	19.18**	0.000	5.56-66.09			
Age						
Less than 20 yrs				RC		
20-29 yrs				0.98	0.98	0.06-14.36
30-39 yrs				0.34	0.40	0.02-4.76
40-49 yrs				0. 15	0.30	0.02- 5.34
Educational level of respondent						
No education				RC		
Educated				0.68	0.47	0.23-1.98
Income level						
Low				RC		
Medium				2.03	0.40	0.36-11.34
High				1.48	0.60	0.31-7.04
Marriage type						
Monogamy				RC		
Polygyny				0.08	0.09	0.004-1.61

Source: Survey, 2015 (RC) denotes reference category

In the table 4.5.1, the binary logistic model is used to estimate the likelihood of use of maternal health facility for delivery controlling for selected socio-economic and demographic characteristics as presented in the table above. Model 1 controlled for women's decision making against place of delivery.

As in bivariate analysis, the data reveal that women with medium and high decision-making are 15.6 times and 19.1 times more likely to choose their own place of delivery when compared with women in the low decision making category. As can be seen in model 2 of the table 4.5.1 above, women in age group (20-29), (30-39) and (40-49) have higher odds of utilizing formal health facility for delivery compared with women age 20 and below. The odds of making use of place of delivery in formal health facility are 0.9 times, 0.3 and 0.1 times more likely for women age (20-29), (30-39) and (40-49) respectively compared with women age less than 20.

For education, respondents who are educated are 68% more likely to utilize a formal health facility during delivery compared with women who are uneducated. In addition, as regards income and place of delivery, women who reported average income are 2 times more likely to give birth to a baby in formal health facility than women who reported low income. The distribution shows that women who reported monogamy are almost 8 percent more likely to utilize formal health facility for delivery than women who reported polygyny.

Table 4.5.2 Odds Ratios from the General Binary Logistic Regression Model for the Likelihood of Antenatal Care Visits, Women's decision making variables, controlling for selected background characteristics

		Model 1		Model 2		
Decision making	Odds Ratio	P-value	CI	Odd Ratio	P-value	CI
Low	RC					
Medium	55.7**	0.000	26.34-11.15			
High	69.15**	0.000	31.92.149.77			
Age						
Less than 20 yrs				RC		
20-29 yrs				4.63	0.09	0.76-27.94
30-39 yrs				0.74	0.76	0.09-5.59
40-49yrs				0. 22	0.37	0.59- 9.34
Education						
No education				RC		
Primary				2.57**	0.005	1.38-4.78
Secondary or more				0.93	0.82	0.50-1.72
Income Level						
Low				RC		
Medium				1.03	0.930	0.45-2.36
High				3.13**	0.000	1.92-5.08
Marriage type						
Two wives				RC		
Three or more				1.79	0.46	0.35-9.11

wives			

Source: Survey, 2015 (RC) denotes reference category

Two logistic models were simulated for correlation of women's decision making and utilization of antenatal care services. According to the distribution in the table 4.5.2, women who scored high and average in decision-making are 69% and 55% likely to complete antenatal visits than women who scored low in decision making respectively.

Controlling for selected background characteristics in model 2 of table 4.5.2, it is evidently clear that age of respondents, 20-29, 30-39 and 40-49 is 4.6 times, 0.7 times and 0.2 times respectively likely to go for antenatal care visits. Education of respondents shows that respondents who reported primary education are 2.5 times more likely to make complete antenatal care visits than the uneducated. The women who reported educated visit hospitals for antenatal care than women who are uneducated. Secondary or higher education is almost 1% times likely to make complete antenatal care than uneducated women.

Apart from that, the distribution shows that women who reported high income are 3 times more likely to make use of complete antenatal care than women who reported low income. Regarding marriage type, those women who reported monogamy are 1.7 times more likely to make use of complete antenatal care service relative to women who reported polygyny.

4.6 DISCUSSIONS OF THE MAJOR FINDINGS

The findings of this study have been able to reveal some major issues relating to women's decision-making as a correlate of the utilization of maternal health care services. The major findings of this study are thus:

- 1. That there is a significant relationship between women's level of income and the utilization of maternal healthcare services. In other words, the study found that women with high level of income had more frequent number of antenatal care visits and were most likely to deliver in the hospital than women with low income level.
- 2. That there is a significant relationship between marriage type and the utilization of maternal healthcare services. This study found that women in monogamous marriage had more frequent number of antenatal care visits and were more likely to deliver in the hospital than women in polygynous households.
- 3. That there is a significant relationship between mother's education and the utilization of maternal healthcare services. This study found that educated women had more frequent number of antenatal care visits and were more likely to deliver in the hospital than uneducated women.
- 4. That there is a significant relationship between age of the mother and the utilization of maternal healthcare services. This study found that younger women were most likely to have a higher number of antenatal care visits and were most likely to deliver their babies in a formal health facility than older women.
- 5. That there is a significant relationship between women decision making level and the utilization of maternal healthcare services. This study found that women with high decision making status were most likely to have a higher number of antenatal care visits and were most likely to deliver their babies in a formal health facility than women with low decision making status.

However, these aforementioned major findings of this study are hereby further discussed below:

According to the study, the relationship between women income level, the place of delivery and the frequency of antenatal visits, at a 0.05 level of significance shows that there is a significant relationship between women income level, the place of delivery and the number of antenatal visits as indicated by the tabulated and computed values of 5.9912 to 19.565 respectively for place of delivery; and 5.9912 to 15.543 respectively for the number of antenatal care visits. Furthermore, the odd ratio for likelihood of use of maternal health facility for place of delivery controlling for women income level shows that women who reported average income are 2 times more likely to give birth to a baby in a formal health facility than women who reported low income. And women who reported high income have the same result. This is in line with the position of Bale et al (2003: 21) where he stated that women often cannot afford health services that are available, thus preventing them from receiving treatment. The findings of this study also agreed with Ladipo (2008) and WHO (2010) that affordability is also an important determinant of the utilization of maternal health services in developing countries.

The odd ratio for the likelihood of antenatal care visits shows that income is a significant correlate of antenatal care visit; women who reported high income are 3 times more likely to make use of complete antenatal care than women who reported low income. The plausible reason for this result is that possession of pecuniary resources or any form of resources places women in a better position to seek maternal healthcare services. This is in line with the position of Joseph and Uche (2012) who stated that many pregnant women in Nigeria do not receive the care they need either because there are no services where they live, or they cannot afford the services because they are too expensive or reaching them is too costly. Similarly, Ye et al (2010) stated that women income is a significant predictor of ANC utilization.

According to the study, the relationship between marriage type, the place of delivery and the frequency of antenatal visits, at a 0.05 level of significance shows that there is a significant relationship between marriage type, the place of delivery and the number of antenatal care as indicated by the tabulated and computed values of 5.9912 to 15.371 respectively for place of delivery: and 5.9912 to 13.204 respectively for the number of antenatal care visits. The study shows that women who reported monogamy are almost 8% more likely to utilize formal health facility for delivery than women who reported polygyny. This corroborates the assertion of Stephenson et al (2006) that evidence has shown that women involved in polygyny are less likely to utilize maternal healthcare services i.e. place of delivery. Furthermore the finding of this study is also in line with the works of Kebebe et al. (2012) which stated that women in a larger household are less likely to deliver at health facilities.

Furthermore, regarding the effect of marriage type on the antenatal care visits, those women who reported monogamy are 1.7 times more likely to make use of complete antenatal care service relative to women who reported polygyny. This data showed that the higher the number of wives the less likely they will utilize maternal healthcare services. This is because polygynous households in the study area would prefer to expend the available scarce resources to meeting basic family needs i.e. feeding, clothing etc. Hence, are most likely to resort to the help of TBA's or herbalists when the need arises because they are cheaper. Besides, another factor which seem to have contributed to the low utilization of maternal health care services among polygynous households in the study area is the fact that most of the women especially the younger wives often benefit from the wealth of experience(s) of older wives especially when it comes to issues of maternal healthcare (pregnancy and delivery). This corroborates the assertion of Stephenson et

al (2006), that evidence has shown that women involved in polygyny are less likely to utilize maternal healthcare services i.e. ante natal care services.

According to the study, the relationship between mother's education, the place of delivery and the frequency of antenatal visits, at a 0.05 level of significance shows that there is a significant relationship between mother's education, the place of delivery and the number of antenatal visits as indicated by the tabulated and computed values of 5.9912 to 9.475 respectively for place of delivery; and 5.9912 to 17.182 respectively for the number of antenatal care visits.

The odd ratio for likelihood of use of maternal health facility for place of delivery shows that respondents who are educated are 68% more likely to utilize a formal health facility during delivery compared with women who are uneducated. This finding corroborates the assertion of Joyce et al (2014) which posits that level of education is also a factor that is associated with accessing or utilizing health services. Women with lower level of education were less likely to utilize the health services compared to those who did not have. Similar findings were found by a study conducted in Ethiopia where a community based cross sectional study cited very low institutional based deliveries (12%) as a result of low literacy (Birmeta et. al 2013;Teferra et.al, 2012).

The study further revealed that respondents who reported primary education are 2.5 times more likely to make complete antenatal care visits than the uneducated. The women who reported educated visit hospitals for antenatal care than women who are uneducated. Secondary or higher education is almost 1 percent times more likely to make complete antenatal care than uneducated women. Educated women thus possess adequate reproductive health experience. This is line also with the assertion of Bale et al (2003), that where education is available to women, maternal and

reproductive education has proven highly beneficial to both mother and child, as women become aware of available family planning services, what to do and not to do during pregnancy, and what danger signs to look out for during pregnancy and labour. Furthermore, this finding also agrees with the study that revealed that level of education is a significant predictor to utilization of maternal health care services. Similarly, education was the strong predictor of utilization of antenatal care (Eijk et al., 2006; Neupane and Doku, 2012). Women who had less education were less likely to use antenatal care (Eijk et al., 2006). Earlier study from China (Ye et al., 2010) also showed that the significant predictors of ANC utilization were the level of education.

According to the study, the relationship between the age of the mother, the place of delivery and the frequency of antenatal visits, at a 0.05 level of significance shows that there is a significant relationship between mother's age, the place of delivery and the number of antenatal visits as indicated by the tabulated and computed values of 5.9912 to 18.587 respectively for place of delivery; and 5.9912 to 14.223 respectively for the number of antenatal care visits.

The odd ratio for likelihood of use of maternal health facility for place of delivery also shows that age of respondents has a significant effect on place of delivery, women in age group (20-29), (30-39) and (40-49) have higher odds of utilizing formal health facility for delivery compared with women age 20 and below. However, the odds of making use of place of delivery in formal health facility are 0.9 times more likely for women age (20-29) compared to women age (30-39) and (40-49). This is in line with the argument of Abosse (2010) that age is significantly associated with accessing and utilizing health services. The older the respondents, the lesser they would utilize the services. This is further corroborated by the findings of Onasoga (2014) that have shown that younger mothers are more likely to deliver in health facilities than their older counterparts.

The odd ratio for the likelihood of antenatal visits revealed that age of respondents has a significant effect on the number of antenatal care visits; women in age group (20-29) had the highest odds of antenatal care visits compared with women ages less than 20, 30-39 and 40-49 years respectively. The odds of the number of antenatal care visits is 4.6 times more likely for women age (20-29) compared to women age (30-39) and (40-49). The data showed that younger women are most likely to have a higher number of antenatal care visits and are most likely to deliver their babies in a formal health facility than older women. This is because older women in the study area are more experienced when it comes to child bearing issues and are thus less likely than younger women to utilize maternal health care services. This is in line with a study conducted on utilization of antenatal care services in Hadiya, Ethiopia where it was found out that age was a factor influencing the utilization. (Abosse, 2010). Similarly, earlier studies had shown that the use of ANC services was found higher among the women of younger age group than the older age group (Furuta & Salway, 2006).

Lastly, the study revealed that the relationship between women decision making level, the place of delivery and the frequency of antenatal visits, at a 0.05 level of significance shows that there is a significant relationship between women decision making level, the place of delivery and the number of antenatal visits as indicated by the tabulated and computed values of 5.9912 to 11.877 respectively for place of delivery; and 5.9912 to 11.265 respectively for the number of antenatal care visits. The data suggest that respondents who scored average in decision making are 15 times more likely to deliver at health facility than women who scored low in decision making. It is pertinent to state that women who made independent household decisions utilized maternal health care services than women who scored low in decision making, i.e. household decisions taken by husband alone or other family members. This is in line with Ochako et al (2011), which

stated that women of higher decision making were more likely to use health services. Similarly, Suwal (2008) also reported that the low decision making power in household among women is responsible for the delay in seeking health care. Also, the study reveals that the respondents who scored high in decision making are 19 times more likely to use formal health facility for place of delivery than women who scored low in decision making. Thus, it is suffice to say, decision making variable is a significant predictor of the use of maternal health care service (place of delivery). Women who scored high and average in decision-making are 69% and 55% more likely to complete antenatal visits than women who scored low in decision making respectively. This is premised on the fact that women who scored high or average in decision making could negotiate with their partner/husband to make independent household decisions and in other areas of life. They are not dominated by their partners/husbands in making vital household and reproductive health decisions.

Findings of the study showed that women's decision making is highly significant with the complete use of antenatal care services. This corroborates the position of Joseph and Uche (2012), that a woman's low decision making status in society can prevent a pregnant woman from the utilization of ANC services. The discussion of the major findings, thus, shows that there is a consistency in the reported findings across all the methods used i.e. frequency/chi-square and the model of odds ratio in retrospect with qualitative data.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

The general aim of this study was to examine the relationship between those determinants that affects maternal health care utilization among women while the specific objectives of the study was to: study the effects of women income on the utilization of maternal health care service; examine the relationship between marriage type and the utilization of maternal health care service; investigate the relationship between levels of mother's education and the utilization of maternal health care service; and examine the relationship between the age of mothers and the utilization of maternal health care services.

This study had employed both qualitative and quantitative methods. Data was collected using questionnaires, Key Informant Interview guides and Focus Group Discussion guides from a total of 370 respondents, which constituted the 360 for the quantitative data and 10 for the qualitative data respectively which were selected through purposive sampling. Of the 360 questionnaires randomly distributed to the target respondents, only 349 were returned. For practical purpose, the multi stage sampling technique was used to select the sample size and the political wards that made up the study area were divided into three clusters on the basis of proximity and similarities. The secondary data was analyzed using both descriptive and inferential statistics while the primary data was analyzed, recorded, transcribed and also utilized in the data analysis. The data was used to complement the responses of the respondents from the quantitative data; and was categorized based on the study with reference to the study objectives. The questionnaires retrieved were processed using the SPSS and the output was presented in tabular forms, while

Chi square was employed to measure the association between the main variables at a level of significance of 0.05.

The study not only presents the bivariate relationship between the socio-economic/demographic characteristics of the respondents and maternal health care services utilization on the one hand and relationship between decision making variables and maternal health care services on the other hand; it also through multivariate analysis examines the impact of women decision-making as a correlate of utilization of maternal health care services in the study area by using odds ratio from both the binary logistic models for the likelihood of use of maternal healthcare services and the likelihood of antenatal care visits; while controlling for selected background characteristics respectively.

The study shows that the various determinants considered under this study were major factors affecting the utilization of maternal healthcare by women in the study area. Women seeking health care during period of pregnancy in Dekina LGA were found to be low; and so also is its figure of institutional delivery when compared to other local government areas in Kogi state. According to the study, using the three major indices of decision making among women, it was found that men (the husbands) in Dekina dominated all the decision making variables except on that, that had to do with the final say on visits to relatives/family; and since the issues of decision making as shown were pre-dominated by men, majority of the women, as a result, generally fell into the low decision making category which thus serves as one of the hindrances to maternal health care utilization in the study area. The study had also shown that young and middle aged mothers were more likely to seek maternal health care than older women who most times prefer to rely on their 'wealth of experience(s)' as against the utilization of maternal health care services for delivery and ante natal issues. The study also found that mothers' likely utilization of

maternal health care services is largely determined by her level of education. Mothers who have had up to secondary and tertiary level of education were found to have utilized maternal health care services more than those with only primary level of education. Furthermore, the study had also found that women who earn little or no income in the study area find it extremely difficult to assess reproductive health care when compared with those with middle and high levels of income. Lastly, women in monogamy, according to the study, have greater utilization of maternal health care services than women in polygyny because most of such women most times either prefer to rely on the experiences of the other wives, especially the older ones or as a result of the fact that there other basic necessities of survival to contend with within the household considering the scarce family resources.

In general, the users of maternal health care services in Dekina are largely young and middle aged mothers in monogamous relationships who are either middle or high level income earners, with secondary or post-secondary educational qualification.

5.2 CONCLUSION

This study provides important insights about the extent to which the determinants of maternal health care utilization as discussed in this study affects/impacts women's ability to access maternal health care services in Dekina LGA. The extent of influence of the determinants was strongly associated with the use of antenatal and delivery care services. This study thus revealed that women who fell into any of the following dichotomies; wealthy, educated, in monogamous marriage, women who are about to give birth or has just given birth (between the ages 15-29), and who have a high decision making status are more likely to utilize maternal health care services.

5.3 RECOMMENDATIONS

The determinants of maternal health care utilization are the most important elements related to maternal health. The findings of this study imply that the determinants of maternal health care utilization in the study area needs to be improved for the better use of maternal health care services which results in low morbidity and mortality among the women of reproductive age. Hence, the recommendations of this study are as follows:

- 1. Government agencies, private bodies/organisations, local NGOs etc. should launch massive campaigns and publicities aimed towards encouraging women to engage in gainful employment as well as discouraging women from the idea of full housewives, where they solely depend on their husbands, who in most cases are usually financially over burdened with responsibilities as the entire house depends on the little money made from their farm produce for sustenance. In addition, these organizations and agencies should work together also to provide well-paying jobs with certain quota reserved for women in the study area. Similarly, women in the study area who are in one form of business or the other already that are not that profitable should be guided to explore other more viable business options that will help to enhance their income while those with no source of income should be trained in vocations of their choice to enable them engage in profitable business ventures that could provide them with the much needed income in the study area.
- 2. It is a fact that the practice of polygyny in the study area is a core religious/cultural practice. However, the government, local NGOs, religious bodies and other important stakeholders should work together through enlightenment/awareness campaigns, marriage seminars etc. to educate both men and women as to the effect of polygyny (marriage between a man and two or more

wives) on maternal healthcare utilization in the study area. Hence, men should be encouraged to practice monogamy.

- 3. The Government through its agencies should give preference to girl-child education in the study area by making education free for girls across all levels of education, giving scholarships, and by introducing a policy of gradated incentives to families that allows their female child (ren) to go to school. Furthermore, important stakeholders in the study area should also be carried along by local NGOs, private bodies etc. in creating awareness about the import of girl-child education.
- 4. The government should partner with local NGOs and other relevant interest groups to launch sensitization campaigns targeting especially women ages (30-49) on the import of the consistent use of maternal healthcare services, and to also come up with pragmatic incentives: these incentives could be in form of free delivery and antenatal care services with particular preference for older women (30-49) within the reproductive age in the study area so as to motivate them to continue to utilize maternal health care services during pregnancy and delivery.
- 5. There should be a collective all-encompassing effort by relevant stakeholders geared towards re-socialization of members of the community, especially the men in order to stamp out all stereotypes characteristic of societies with patriarchal orientation that is militating not just against the status of women but also impeding their participation as important stakeholders on all three aspects of decision making i.e. final say on own healthcare, final say on making household purchases and final say on visits to family/relatives. According to the World Health Organisation (2005), the utilization of maternal healthcare services by women is greatly constrained by their lack of decision making, especially in Africa, where there is strong

patriarchal system, which greatly hinders women's decision making power. Furthermore, private bodies, local NGOs etc. should introduce empowerment schemes targeted at women, precisely women within the reproductive age so as to combat the scourge of high maternal mortality and morbidity through the increased utilization of maternal health care services in the study area.

REFERENCES

- Abdulkarim, M. et al (2008). Community Perception of Maternal Mortality in Northeastern Nigeria. *African Journal of Reproductive Health*. Vol. 12 (3)
- Abdulraheem, I. S. et al (2012). Primary Health Care Services in Nigeria: Critical Issues and Strategies for Enhancing the Use by the Rural Communities. *Journal of Public Health and Epidemiology*. Vol. 4(1):5-13.
- Abosse, Z. Woldie, M. and Ololo, S. (2010). Factors Influencing Antenatal Care Utilization in Hadiya Zone, *Ethiopian Journal of Health Science*.20 (2):75–82
- Abou-Zahr C.L., and Wardlaw, T. (2008). Antenatal Care in Developing Countries.in: Promises, Achievements and Missed Opportunities: An Analysis of Trends, Levels, and Differentials, Cambridge University Press, pp. 190-200.
- Acharya, L. B. and Cleland, J. (2000). Maternal and Child Health Services in Rural Nepal: Does Access or Quality Matter More? Katmandu, Health Policy Plan., Vol.15, 223-229.
- Adamu, Y. M. et al (2003). Maternal Mortality in Northern Nigeria: A Population Based Study. European Journal of Obstetrics and Gynecology and Reproductive Biology. Vol. 109:153-159.
- Addai, I. (2000). Determinants of Use of Maternal-Child Health Services in Rural Ghana. Journal Biosocial Science. 32(1):1-15.
- Adekunle, C. et al (1990). Patterns of Maternity Care among Women in Ondo State, Nigeria. In: Determinants of Health and Mortality in Africa Matter. *Journal of Health and Social Behavior*, Vol. 36, No 1, pp. 1-10.
- Anonymous . Factors Affecting Maternal Healthcare in Kenya. In: Kenya Household Health Expenditure and Utilization Survey, Nairobi, Odegaard Publishers ,2003.
- Appelrouth, S. and Edles, L.D. (2008). Classical and Contemporary Sociological Theory: Text and Reading. Pine Forge Press.
- Arbor, A. and Michigan, S. (1993). The Place of Women in Patriarchal Societies. Word Press Limited, Gaborone, Botswana.
- Ashford, L. (2008). Ensuring a Wide Range of Family Planning Choices. Washington D.C, New York: *Population Reference Bureau Publication*, 256 p.

- Bala, B.S. Constraints to Accessing Obstetric Care and the Psycho-Social Consequences of Obstetric Fistula: Study of Three VVF Centers in North-Western Nigeria. Being a Ph.D thesis in demography proposal for the Department of Sociology, Faculty of Social and Management Science, Bayero University of Kano, 15 October, 2000.
- Bale, J. R. et al (2003). Improving Birth Outcomes: Meeting the Challenge in the Developing World, Washington, D. C.: The National Academies Press.
- Barbara, S. (1997). Family Planning Saves Lives. 3rd Edition, Washington D.C: *Population Reference Bureau Publication*.67 p.
- Basirka, I. A. A Study of Factors Associated with Maternal Mortality in Three Remote Villages of Gwaram Local Government Area, Jigawa State (2006-2010). Being a dissertation submitted to the Department of Sociology, Bayero University Kano in partial fulfillment of the requirement for the award of Masters of Science (M.Sc.) Sociology with specialization in Demography.
- Basu, K. (1993). Women's Position within the Household as a Determinant of Maternal Health Care Use in Nepal. *International Family Planning Perspectives*. 32 (1): 17-27.
- Basu, K. (2001). Gender and Sex: A Model of Household Behavior with Endogenously Determined Balance of Power, Cornell University, Oklahoma.
- Becker, S. et al (1993). The Determinants of Use of Maternal and Child Health Services in Metro Cebu, the Philippines. Health Transition Review. 3, 77-89.
- Bell, J., Sian, L. et al (2003). Trends in Delivery Care in Six Countries. *DHS Analytical Studies*. ORC Macro, Philadelphia. No. 7:45-60.
- Bhatia, J.C. and Cleland, J. (1995). Determinants of Maternal Care in a Region of South India. Health Transition Review. 5:142.
- Birmeta, K., Dibaba, Y. et al (2013). Determinants of Maternal Health Care Utilization in Holeta Town, Central Ethiopia, *BMC Health Services Research*, 13:256.
- Bloom, S. et al (1999). Does Antenatal Care Make A Difference to Safe Delivery. A Study in Urban Uttar Pradesh, India. Health Policy Plan, 14, 38-48.
- Bloom, S. et al (2001). Dimension of Women's Autonomy and the Influence on Maternal Health Care Utilization in a North Indian City, *Demography*, Vol. 38, No 1, pp 67-78.
- Boerma (1987) in Yahaya (2002). Analysis of Women's Reproductive Health Situation in Bida Emirate of Niger State, Nigeria. *African Journal of Reproductive Health*. Vol. 6 (1):50-64.

- Caldwell, J. C. (1997). The Global Fertility Transition: The Need for Unifying Theory. *Population and Development Review*. Vol. 23(4): 803-812.
- Celik, Y. and Hothkiss, D.R. (2000). The Socio-Economic Determinants of Maternal Health Care in Turkey. *Social Science and Medicine*. Vol. 50, Pp. 1797-1806.
- Collins, D.H. et al (1996). Health Financing Reform in Kenya: The Rise and Fall of Cost Sharing, 1989–1994. *National Journal for Quality in Health Care*. 8(2):131–139.
- Das Santo, R. (1995). Fertility and Contraception Decision-Making in Developing Countries. Brooklyn, U.S.A.: Harmsworth Publishers.
- Defo, B.K. (1997). Effects of Socioeconomic Disadvantage on Women's Status and Health in Cameroon. *Journal of Social Science*.44 (7): 1023-1042.
- Desai, A. and Johnson, H. (2005). Women's Autonomy and Child Survival: A Comparison of Muslims and Non-Muslims in Indonesia. Oxford Press, Nottingham. 40 (3):419-436.
- DFID (2002) cited in Bala, B. S. Constraints to Accessing Obstetric Care and the Psycho-Social Consequences of Obstetric Fistula: Study of Three VVF Centers in North-Western Nigeria. Being a Ph.D in Demography Proposal for the Department of Sociology, Faculty of Social and Management Science, Bayero University of Kano, 2000
- Duze, M. C. and Mohammed, I. Z. (2006). Male Knowledge, Attitudes, and Family Planning Practices in Northern Nigeria. *African Journal of Reproductive Health*. Vol.10(3).
- Eijk, A.M. et al (2006). Use of Antenatal Services and Delivery Care among Women in Rural Western Kenya a Community Based Survey. *Reproductive Health*; 3(2).
- Ellsberg, M. et al (2000). Candies in Hell: Women's Experience of Violence in Nicaragua. *American Journal of Sociology*. Vol. 6(7) 56-80.
- Furuta, M. and Salway, S. (2006). Women's Position within the Household as a Determinant Of Maternal Health Care Use in Nepal. *International Family Planning Perspectives*; 32(1):17–27.
- Gribble, J. (2008). Family Planning in West Africa. *Population Reference Bureau*. www.prb.org/article/2008. retrieved July 22, 2013.
- Griffiths, P. and Stephenson, R. (2001). Understanding Users' Perspectives of Barriers to Maternal Health Care Use in Maharashtra, India. *Journal of Biosocial Science*.Vol.33, pp. 339-359.

- Gupta, M. D. et al (2004). Decentralized Delivery of Primary Health Services in Nigeria: Survey Evidence from the States of Lagos and Kogi. Washington D.C., 345 p.
- Gwatkm, H. et al (2000). The Economy of Third World Countries. Collins Educational Press, Leeds, United Kingdom. p 43-70.
- Haddad, S. and Fournier, P.(1995). Quality Cost and Utilization of Health Services in Developing Countries: A Longitudinal Study in Zaïre. *Social Science and Medicine*. 40(6):743–753.
- Haque, S.E. et al (2012). Reproductive Health Care Utilization among Young Mothers in Bangladesh: Does Autonomy Matter? Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health. *Jacobs Institute of Women's Health*; 22(2):171–80.
- Harrison, K. (1997). Maternal Mortality in Nigeria: The Real Issues. *African Journal of Reproductive Health*. 1(1):7-13.
- Hashemi, K. et al (1996). Provision and Use of Maternal Health Services among Urban Poor in Kenya: What Do We Know and What Can We Do? *Journal of Urban Health*.85 (3): 428-442.
- Heise, L. et al (1999). Ending Violence against Women. Population Reports, Series L. Population Information Prgroamme. Johns Hopkins University School of Public Health, Baltimore, No. 11.
- Heise, L. (1994). Violence against Women: The Missing Agenda. In Koblinsky, J et al (ed.), The Feminist Idealogy. Washington D.C., West River Press.
- Helton, E. et al (1997). Bargaining Power within Couples and the Use of Prenatal and Delivery Care in Indonesia, Jakarta, Olaery Publisher.
- Hindin, M. (2000). Women's Autonomy, Women's Status and Fertility Related Behavior in Zimbabwe. *Population Research and Policy Review*. 19:255-282.
- Högberg, U. (2004). The Decline in Maternal Mortality in Sweden: The Role of Community Midwifery. *American Journal of Public Health*. Available on http://www.ajph.org/cgi/reprint/ [Accessed on 20th September].
- Hotchkiss, D. R. (2001). Expansion of Rural Health Care and the Use of Maternal Services in Mozambique. OYT Press. pp 343-405.

- Hussain, K. et al (2000). Assessing For Abuse during Pregnancy: Severity and Frequency of Injuries and Associated Entry into Prenatal Care. *Journal of the American Medical Society* (23): 76-80.
- Igala Association, USA (2007). Igala History. Retrieved From On 2 April, 2014.www.igalaassociationusa.com on 2 April, 2014.
- Iyun, J. (1988) cited in Abdulraheem I. S. et al (2012). Primary Health Care Services in Nigeria: Critical Issues and Strategies for Enhancing the Use by the Rural Communities. *Journal of Public Health and Epidemiology*. Vol. 4(1): 5-13.
- Jean, C.F. and James, O.A. (2011). Frequency and Timing of Antenatal Care in Kenya: Explaining the Variations between Women of Different Communities, Nairobi. Kenya Press Ltd.
- Jeffery, M. and Jeffery, H. (1997). Do Schooling and Work Empower Women in Developing Countries? Gender and Domestic Decisions in Sri Lanka. *Sociological Forum.* 12 (4): Retrieved May 6th April, 2014 from www. scforum/int/services/sociological analysis/en.
- Jejeebhoy, S.J. (1991). Women's Status and Fertility: Successive Cross –Sectional Evidence from Tamilnasco, India. Studies in Family Planning.Vol. (22): pp 217-230.
- Jejeebhoy S.J. (2000). Women's Autonomy in Rural India: Its Dimensions, Determinants and Context. In Presser, H.B. and Sen, G. (ed.), Women's Empowerment and Demographic Process: Moving Beyond Cairo. New York: Oxford University Press.
- Jejeebhoy S.J. (1998). Association between Wife Beating and Infant Death: Impressions from a Survey in Rural India. *Studies in Family Planning*.29:300-308.
- Jejeebhoy, S.J (1995). Women's Education, Autonomy, and Reproductive Behavior: Experience from Developing Countries, Oxford, Clarendon Press. 207p.
- Joseph, N.M. and Uche, I. (2012). Maternal Mortality in Nigeria: Examination of Intervention Methods. Department of Actuarial Science and Insurance, Faculty of Business Administration, University of Lagos, Akoka, Nigeria. *International Journal of Humanities and Social Science. Vol. 2 No. 20.*
- Joyce, C., Moses, G., et al (2014). Barriers to Access and Utilization of Maternal and Infant Health Services in Migori, Kenya. School of Health Sciences, Department of Research, Dedan Kimathi University of Technology. *Developing Country Studies*.224-607:Vol.4, No.15.

- Kalizer, G. and Kidd, A. (1981). Culture, Maternal Health and Women' Status: A Comparison of Morocco and Tunisia. *Studies in Family Planning*. Vol. 24, No 6, Pp. 354-365.
- Kebebe, E. et al (2012). Determinants of Community Based Maternal Health Care Service Utilization in South Omo Pastoral Areas of Ethiopia. *Journal of Medical Science*. 3(2):112-121.
- Kishor, S. (2000). Empowerment of Women in Egypt and Links to the Survival and Health of their Infants. In: Presser, H.B. and Sen, G. (ed.) Women's Empowerment and Demographic Processes: Moving Beyond Cairo. Oxford University Press.
- Kishor,S. et al (1999). Women's Empowerment and Demographic Outcomes Examining Links Using Demographic and Health Survey Data. Cairo. Oxford University Press, 7-10.
- Koblinsky, M. et al (2012). Maternal Morbidity and Disability and Their Consequences: Neglected Agenda in Maternal Health. *Journal for Health, Population and Nutrition*. Vol. 30(3):124-130. Available at http://www.ncbi.nlm.nih.gov. Retrieved: 18th of January, 2015.
- Kogi State Ministry of Health (2010). Kogi State Health Development Plan 2010-2015.
- Konje, J. C. et al (1990). Ruptured Uterus in Ibadan: A 12 Year Review. *International Journal of Gynaecology and Obstetrics*. Vol:32:207–13.
- Kristof, N. D. and WuDunn, S. (2009). Half the Sky: Turning Oppression into Opportunity for Women Worldwide. New York: Alfred A. Knopf.
- Kwast, D and Liff, E (1998). Fertility Goals and Use of Contraception the Influence of Gender Context, Demography Vol. 37 No 2.
- Labiran, A. (2008). The Health Workforce Profile for Nigeria. Human Resources for Health Country Profile. Ibadan, University of Ibadan Press.
- Ladan, M. T. Review of Existing Reproductive Health Policies in Nigeria, One-day Stakeholder's Forum on Reproduction in Nigeria, 2nd July 2006. Available at www.gamji.com retrieved: 13th December, 2014.
- Ladipo, O.A. (2008). Delivery of An Effective Maternal and Child Health Services In Nigeria.www.ngnhc.org/.../delivery%20of20%effective%20materna Accessed May 20, 2015.

- Llewellyn-Jones, D. (1965) cited in Koblinsky, M. et al (2012). Maternal Morbidity and Disability and Their Consequences: Neglected Agenda in Maternal Health. *Journal for Health, Population and Nutrition.* Vol.30 (3):124-130. Available http://www.ncbi.nlm.nih.gov retrieved: 28th of August, 2013.
- Magade, M.A. et al (2000).Frequency and Timing of Antenatal Care in Kenya: Explaining the Variations between Women of Different Communities. *Social Science of Medicine*. 51: 551-61.
- Maitra, P. and Ray, R. (2005). The Impact of Intra Household Balance of Power on Expenditure Pattern: The Australian Evidence. Canberra. JKL Publishers, pp44, 15-29.
- Makinwa, K. and Jensen, G. (1995).Reflections on the Measurement of Women's Empowerment: In Discussing Women's Empowerment Theory and Practice. Stockholm: Novum Grafiska.
- Mason, K.O. (1994). The Impact of Women's Social Position on Fertility in Developing Countries. *Sociological Forum* 2(4): 718-45.
- Mason, K.O. (1995). The Status of Women: A Reviewed Literature of Its Relationship to Fertility and Mortality, Washington D.C., Rockefeller Foundation Press.
- McCarthy, J. and Maine, D. (1992). A Framework for Analyzing the Determinants of Maternal Mortality: Implications for Research and Programs. *Studies in Family Planning*. Vol.23 (1):23-33.
- Mcdonagh, M. (1996). Is Antenatal Care Effective in Reducing Maternal Morbidity and Mortality? *Health Policy and Planning*. Vol. 11, No 1, Pp.1-15.
- Mcfarlane, J. et al (1992). Assessing For Abuse during Pregnancy: Severity and Frequency of Injuries and Associated Entry into Prenatal Care. *Journal of the American Medical Society* .267 (23): 3176-78.
- Mekonnen, G and Asnakech, E. (2002). Utilization of Maternal Health Care Services in Ethiopia. Calverton, Maryland, USA: ORC Macro.
- Nasrullah, F. et al (2013). Effect of Child Marriage on Use of Maternal Healthcare Services in Pakistan. www.ncbi.nlm.nih.gov/m/pubm retrieved on 1st February, 2016.
- National Population Commission (2009). Nigeria Demographic and Health Survey 2008. Calverton, Maryland: National Population Commission and ORC macro.

- National Population Commission (2014). Nigeria Demographic and Health Survey 2008.Calverton, Maryland: National population commission and ORC macro.
- National Research Council (2000). The Consequences of Maternal Morbidity and Maternal Mortality: Reports of a Workshop. Washington, DC, The National Academic Press.
- Neupane, S. and Doku, D.T. (2012). Determinants of Time of Start of Prenatal Care and Number of Prenatal Care Visits during Pregnancy among Nepalese Women. *Journal of community health*; 37(4):865–73.
- Nigeria Demographic and Health Survey (2008) National Population Commission Federal Republic of Nigeria Abuja, Nigeria. MEASURE DHS, ICF Macro Calverton, Maryland, USA,
- Nigeria Demographic and Health Survey (2013). National Population Commission Federal Republic of Nigeria Abuja, Nigeria. MEASURE DHS, ICF Macro Calverton, Maryland, USA,
- Obermeyer, C. M. and Potter, J. E. (1991). Maternal Health Care Utilization in Jordan: A Study of Patterns and Determinants. *Studies in Family Planning*, 22, 177-187.
- Ochako , R. et al (2011). Utilization of Maternal Health Services among Young Women in Kenya: Insights from the Kenya Demographic and Health Survey, 2003 BMC Pregnancy Childbirth; 11: 1. Accessed on 3/3/2015 at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3022772/
- Odimegwu, C.O. Family Planning Attitudes and Use in Nigeria: A Factor Analysis. In: International Family Planning Perspectives, Lagos, CNET Networks, 1999.
- OECD (2003). Poverty and Health in Developing Countries: Keyactions. www.oecd.org/publications/pol_brief retrieved February 19, 2014.
- Okafor, S.I. (1998). The Population Factor in Public Services Provision in Nigeria. Applied Geography. Uyo. Heinemann. Vol. 9, pp. 123-133.
- Onasoga A. O. et al (2014). Awareness and Barriers to Utilization of Maternal Health Care Services among Reproductive Women in Amassoma Community, Bayelsa State.
- Paul, B. K. and Rumsey, D. J. (2002). Utilization of Health Facilities and Trained Birth Attendants for Childbirth in Rural Bangladesh: An Empirical Study. *Social Science of Medicine*.54, 1755-1765.
- Pebley, A. R. et al (1996). Prenatal and Delivery Care and Childhood Immunization in Guatemala: Do Family and Community Matter? *Demography*. 33, 231-247.

- Pittin, R. I. (1979). Marriage and Alternative Strategies: Career Pattern of Hausa Women in Katsina city. Submitted for the degree of Ph.D. in Anthropology, School of Oriental and African studies. University of London.
- Population Reference Bureau (1994). Conveying Concerns: Women's Rights on Reproductive Health. Washington D.C.: *Population Reference Bureau Publication*.
- Prata, N. (2007). cited in Seyfried, L. (2011). Family Planning And Maternal Health: The Effect Of Family Planning On Maternal Health In The Republic Of Congo. Being A Thesis Submitted To The Graduate School Of Arts And Sciences Of Georgetown University In The Partial Fulfillment For The Degree of Master of Public Policy. Washington DC.
- Presser, M. and Sen, G. (2000). Reproductive Health Knowledge and Motherhood. *National Family Health Survey Subject Reports*. Number 76.
- Raghupathy, V. (1996). The Health and Fertility of Asian Women Perspective. Bombay, West Mumbai Press.
- Reerink, I.H and Sauerborn, R. (1996). Quality of Primary Health Care in Developing Countries. Nairobi. Aruay Publisher. 45p
- Royston, E. and Armstrong, S. (ed.) (1989). Preventing Maternal Mortality. Geneva, Switzerland. Great Rhine Press.
- Safe Motherhood Initiative (2003).http://www.safemotherhood.org.service viewed 28th April, 2014.
- Seyfried, L. (2011). Family Planning and Maternal Health: The Effect of Family Planning on Maternal Health in the Republic of Congo. Being a Thesis Submitted to the Graduate School of Arts and Sciences of Georgetown University in the Partial Fulfillment for the Degree of Master of Public Policy. Washington DC.
- Shaik, W. and Juanita, D. (2004). Patriarchy and Its Effects on Women's Education and Autonomy on Contraceptive Use in India and Thailand. *Population Studies*. Vol. 4: 345-400.
- Simkhada, A. et al (2009). Utilization of Maternal and Child Health Services in India. In: National Family Health Survey Subject Reports. Bombay, Mumbai Press. 204-220p.
- Singh,D. (2001). Women's Status and Reproductive Preferences in Eriteria. Max Planck Institute for Demographic Research. Germany.

- Stephenson, R. and Tsui, A. O. (2002). Contextual Influences on Reproductive Health. Accra, Ghana. Gold Coast Press.
- Sugathan, K. et al (2001).Promoting Institutional Deliveries in Rural India: The Role of Antenatal-Care Services. *National Family Health Survey Subject Reports*. Number 20.
- Suwal, J. (2008). Maternal Mortality in Nepal Unraveling the Complexity. Canadian Studies in Population; 35(1):1–26.
- Swenson, I. et al (1993). Factors Related to the Utilization of Antenatal Services in Vietnam. *Journal of Tropical Medical Hygiene*, Vol.96, No.2, Pp. 76-86.
- Teferra ,A.S. , Alemu, F.M. , et al(2012). Institutional Delivery Service Utilization and Associated Factors among Mothers Who Gave Birth in the Last 12 Months in Sekela District, North West of Ethiopia: a community- based cross sectional study. BMC Pregnancy Childbirth. 31;12:74.
- Tfaily, R. (2004). Do Women With Higher Autonomy Have Lower Fertility? Evidence from Malaysia, the Philippines and Thailand. Genus. LXL (2):7-32.
- Thaddeus, M. and Maine, I. (1994). Women Autonomy and Empowerment. Media Global Voice of the Global South. West River Press.
- Tsegay, Y. et al (2013). Determinants of Antenatal and Delivery Care Utilization in Tigray Region, Ethiopia A Cross-Sectional Study. *International Journal for Equity in Health*; 12(30).
- Ujah, I.et al (2005). Factors Contributing to Maternal Mortality in North Central Nigeria: A Seventeen Year Review. *African Reproductive Health.Vol.9 (3): 27-40.*
- UK All Party Parliamentary Report Group on Population, Development and Reproductive Health. In: Better off dead, Manchester, Oxford University Press www.appg-popdevrh.org.uk/.../... retrieved on 13 January, 2015.
- UNFPA (2013).Maternal Morbidity- United Nations Population Fund. www. unfpa.org/public/mothers/pid/438 Retrieved January, 2015.
- UNICEF (2009) cited in Basirka, I. A. (2012). A Study of Factors Associated with Maternal Mortality in Three Remote Villages of Gwaram Local Government Area, Jigawa State (2006-2010). Being a Dissertation Submitted to the Department of Sociology, Bayero University Kano in partial fulfillment of the requirement for the award of Masters of science (M.Sc.) Sociology with specialization in Demography.

- UNIFEM (2008), cited in Seyfried, L. (2011). Family Planning and Maternal Health: The Effect of Family Planning on Maternal Health in the Republic of Congo. Being a thesis submitted to the Graduate school of Arts and Sciences of Georgetown University in the partial fulfillment for the degree of Master of public policy. Washington DC.
- United Nations Development Programme (UNDP) (2008). The Millennium Development Goals Report 2008, New York. 345-367.
- United Nations Development Programs (2006). Human Development Report 2007/2008. Available at http://hdr.undp/hdr2006/report.cf retrieved on 13th April 2014.
- United Nations Population Fund (UNFPA) (2004). State of the World's Population 2004: Maternal Health, New York.
- Ushie, M. A. et al (2011). Socio-Cultural and Economic Determinants of Fertility Differentials in Rural and Urban Cross Rivers State, Nigeria. *Journal of Geography and Regional Planning*. Vol.4 (7):383-391. Available at http://www.academicjournals.org/JGRP retrieved on February 3, 2013
- Van Lerberghe, W. and De Brouwere, V. (2001). Of Blind Alleys and Things that have Worked in De Brouwere, V. and Van Lerberghe, W. (ed.), Safe motherhood strategies: a review of the evidence. Antwerp: ITG Press [Online]. Available on, http://www.jsieurope.org/safem/collect/safem/pdf/s2929e/s2929e.pdf [Accessed on 06 September 2008]
- Voorhoeve, A. M. et al (1984). Modern and Traditional Antenatal and Delivery Care. In J.K.van Ginnken and Muller, A.S. (eds.). Maternal and Child Health in Rural Kenya: An Epidemiological Study. London: Croom Helm Ltd. pp. 309-322.
- Wakili, A. (2007) cited in Yar'zever, I. B. (2011). A comparative study of the socio-cultural factors associated with maternal mortality in urban and rural areas in Kano. Being a PhD proposal for the Department of Sociology, Faculty of Social and Management Science, Bayero University of Kano.
- Wall, L. L. (1998). Dead Mothers and Injured Wives: The Social Context of Maternal Morbidity and Mortality among the Hausa of Northern Nigeria. *Studies in Family Planning* .Vol.29:341–59.
- Wong, E.L. et al (2004). Accessibility, Quality of Care and Prenatal Care Use in the Philippines. *Social. Science of Medicine.* 24:927-944.
- WHO (1998). Protecting, Promoting and Supporting Breastfeeding. The Special Role of Maternity Services. A joint WHO/UNICEF statement. WHO, Geneva.

- WHO (2003). International Statistical Classification of Disease and Related Health's Problems, 10th Rev, Geneva, Switzerland.
- WHO/UNICEF/UNFPA. Report of a Workshop Women-Friendly Health Services Experiences in Maternal Care Mexico City. 26th -28th January, 1999.
- WHO/UNICEF/UNFPA (2004). Maternal Mortality in 2000. Estimates Developed By UNICEF, WHO, UNFPA. Geneva.
- World Health Organization (1997). Maternal Mortality: A Global Fact Book. Geneva: WHO World Health Organization (2006). Measuring Progress towards the Health Millennium Development Goal. Available at www.who.int/mdg/. Retrieved January, 2015.
- World Health Organization (2012). Maternal Mortality: Fact Sheet N0 348. Available athttp://www,who.int/mediacentre/factsheets/fs348/en/ retrieved 2nd August, 2013.
- World Health Organization (2012). Meeting to Develop a Global Consensus on Preconception Care to Reduce Maternal and Childhood Mortality and Morbidity. WHO Headquarters, Geneva Meeting report. Geneva: WHO.
- World Health Organization (2007). Experiences of the GAVI Alliance Health System Strengthening Investment. The Global Fund's Strategic Approach to Health System Strengthening. http://www.who.int/ healthsystems/gf23.pdf (accessed Jan 20, 2015).
- Wunch and Olowu,(1996) cited in Abdulraheem, I. S. et al (2012). Primary Health Care Services in Nigeria: Critical Issues and Strategies for Enhancing the Use by the Rural Communities. *Journal of Public Health and Epidemiology*.Vol. 4(1), pp. 5-13.
- Yahaya Mohammed Kuta (2002). Analysis of Women's Reproductive Health Situation in Bida Emirate of Niger State, Nigeria. *African Journal of Reproductive Health*. Vol. 6, No. 1 (Apr., 2002), pp. 50-64 Published by: Women's Health and Action Research Centre (WHARC). Available at http://www.jstor.org/stable/3583146 .Accessed: 28/08/2013 17:20
- Ye, Y. et al (2010). Factors Affecting the Utilization of Antenatal Care Services. *Nagoya Journal of Medical Science*;72(1-2):23–33.

APPENDIX A

AMREF -African Medical Research Foundation

ANC- Antenatal Care

CHEW- Clinical Health Worker

DFID- Department for International Development Fund

DHS- Demographic Health Survey

FP -Family Planning

ICPD- International Conference on Population and Development

IUC -Intrauterine Devices Contraceptives (IUCs)

JCHEW- Junior Clinical Health Worker

MDGs- Millenniums Development Goals

MMR - Maternal Mortality Ratio

NDHS - National Demographic Health Survey

NSHDP - National Strategic Health Developmental Plan

OECD - Organization for Economic Co-operation and Development

PHC - Primary Health Care

PRB - Population Reference Bureau

RH – Reproductive Health

RHE-Reproductive Health Education

RHS- Reproductive Health Service

SMI- Safe Motherhood Initiative

STIs - Sexually Transmitted Infections

TBAs - Traditional Birth Attendants

TB - Tuberculosis

UN - United Nations

UNDP - United Nations Development Program

UNFPA - United Nations Population Fund

UNICEF - United Nations Children Emergency Funds

UNIFEM - United Nations Development Fund for Women

USAID- United States Agency for International Development

WHO -World Health Organization

APPENDIX B

QUESTIONNAIRE

Department of Sociology, Faculty of Social and Management Science,

Bayero University ,Kano.

Dear Research Participant,

This questionnaire would be used for gathering data for research work titled, "women decision making and utilization of maternal health care services in Dekina Local Government, Kogi State" which forms part of the requirements for the award of MSc Sociology (Demography). Please note that all information provided herein shall be confidentially treated.

Thank you.	
IDENTIFICATION:	
QUESTIONNAIRE NUMBER:	
HOUSE IDENTIFICATION NO:	_
NAME OF WARD:	
VILLAGE/ TOWN:	

No	Questions	Coding categories	Codes	Skip to
SECTION	ON ONE	. 2	•	•
Socio de	emographic information		1	
101	Sex	All female		
102	Marital status	Married		
103	Age in completed years	15-19		
		20-24		
		25-29		
		30-34		
		35-39		
		40-44		

		45-49
104	Place of residence	Urban
		Semi urban
		Rural
105	For how long have lived in this	Below 1 yr
	area?	1-5 yrs
		6-10 yrs
		11-15 yrs
		16 yrs and above
106	What is your religion	Islam
		Christianity
		Others
107	What is the highest level of formal	No schooling
	education you attained?	Qur'anic only
		Primary
		Secondary
		Tertiary/post-secondary
		Other
10	What is your status of	Working
	employment?	Not working
109	Do you receive any regular	Yes
	monetary support?	No
110	Children	Yes
		No
111	Family members	Yes

		No				
112	Others	Yes				
		No				
113	What is your annual income?	No income				
		Below N200, 000				
		N300,000–400,000				
		N500,000- 600,000				
		N700,000-800,000				
		N900,000 and above				
SECTIO	N TWO					
Informat	tion on husband		· · · · · · · · · · · · · · · · · · ·			
114	How long have you been married?	Below 1 yr				
		1-5 yrs				
		6-10 yrs				
		11-15 yrs				
		16 yrs and over				
115	State your husband's highest	No schooling				
	education attainment	Qur'anic only				
		Adult literacy				
		Primary level				
		Secondary level				
		Tertiary level				
116	State your husband's type of	Trade/ craft				
	employment	Civil service work				
		Self-employment				

		Private sector Others, specify		
		Cthers, speerly		
117	Do you know your husband's monthly income?	Yes	If no skip to 119	
		No		
11	State your husband's monthly income	15,000-19,000		
		20,000-24,000		
		25,100-29,000		
		30,100-34,000		
		35,100-40,000		
		40,000 & above		
119	Does your husband have any other wife(s) beside you?	Yes	If no skip to 121	
	whe(s) beside you:	No		
120	How many does he have including	One		
	you?	Two		
		Three		
		Four		
121	What is your rank among the wives?	First wife		
	wives:	Second wife		
		Third wife		
		Fourth wife		
SECTIO	N THREE			
Respond	ents decision making capacity			
149	Who makes decisions in the house?	Husband alone		
	nouse:	Husband and wife		
		Respondent alone		

SECTION FOUR

LIKERT SCALE: A Likert scale is actually the sum of responses to several Likert items. It is a scale used to represent people's attitudes to a topic. The researcher uses the Likert scale to represent the agreement level of the research participants in the form of Strongly Agree, Agree, Neutral and so forth. Below is the Likert Scale:

101111. 1	below is the Like	ort Scarc.	ı	1					
Strongly agree		Agree 2	Neutral 3	Disagree 4		Strongly disagree			
S/N		STATEMENT	'S	1 2			3	4	5
1	Women's decision making has an influence on the utilization of maternal health care services								
2	Age of mother has an influence on the utilization of maternal health care								
3	There is a significant relationship between women income and maternal health utilization								
4	Polygyny has an influence on the utilization of maternal health care								
5		significant relationsh d maternal health utiliza	•	her's					

APPENDIX C

INTERVIEW GUIDE

SECTION A

- 1. Do you think that women's ability to take decisions with or without the consent of their spouses can determine the choice of their place of delivery?
- 2. Do you think that the age women get pregnant can influence the choice of their place of delivery?
- 3. Do you think that women's educational level play a role in the choice of their place of delivery?
- 4. Do you think that women's income level can influence the choice of their place of delivery?
- 5. Do you think that getting married to a man with more than one wife can influence the choice of a woman's place of delivery?

SECTION B

- 1. Do you think that women's ability to take decisions with or without the consent of their spouses can determine how often women go for ANC visits?
- 2. Do you think that the age women get pregnant can influence how often women go for ANC visits?
- 3. Do you think that women's educational level play a role in determining how often women go for ANC visits?
- 4. Do you think that women's income level can determine how often women go for ANC visits?
- 5. Do you think that getting married to a man with more than one wife can determine how often women go for ANC visits?

APPENDIX D

FOCUS GROUP DISCUSSION GUIDE

SECTION A

- 1. Do you think that women's ability to take decisions with or without the consent of their spouses can determine the choice of their place of delivery?
- 2. Do you think that the age women get pregnant can influence the choice of their place of delivery?
- 3. Do you think that women's educational level play a role in the choice of their place of delivery?
- 4. Do you think that women's income level can influence the choice of their place of delivery?
- 5. Do you think that getting married to a man with more than one wife can influence the choice of a woman's place of delivery?

SECTION B

- 1. Do you think that women's ability to take decisions with or without the consent of their spouses can determine how often women go for ANC visits?
- 2. Do you think that the age women get pregnant can influence how often women go for ANC visits?
- 3. Do you think that women's educational level play a role in determining how often women go for ANC visits?
- 4. Do you think that women's income level can determine how often women go for ANC visits?
- 5. Do you think that getting married to a man with more than one wife can determine how often women go for ANC visits?