PATTERNS OF UTILIZATION OF MATERNAL HEALTH SERVICES IN PRIMARY HEALTH CARE FACILITIES IN NIGER STATE, NIGERIA.

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SEPTEMBER, 2015

DECLARATION

I declare that the work reported in this dissertation entitled Patterns of Utilization of Maternal Health Services in Primary Health Care Facilities in Niger State, Nigeria was carried out by me in the Department of Sociology, Ahmadu Bello University, Zaria. The information derived from literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another Degree or Diploma at this or any other Institution

Saleh Ngaski GARBA ---------- ----------

Signature **Date**

DEDICATION

This work is dedicated to the memories of my late father, Mal. Usman Wakili and my late elder brother, Alhaji Garba Ngaski both of who wished to see me through to this level but could not live to witness it. It is also dedicated to my late cousin, Hon. Usman Bahago Nasko; a nurse per excellence.

CERTIFICATION

This dissertation entitled **PATTERNS OF UTILIZATION OF MATERNAL HEALTH SERVICES IN PRIMARY HEALTH CARE FACILITIES IN NIGER STATE, NIGERIA** by SALEH NGASKI GARBA meets the regulations governing the award of Doctor of the degree Philosophy (PhD) degree in Medical Sociology of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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ABSTRACT

Women in most parts of Niger State face constraints in obtaining and utilizing quality maternal health services. This study was carried out to identify the availability, quality and patterns of utilization of maternal health services in Primary Health Care (PHC) facilities in Niger State, Nigeria. Utilizing the cross-sectional survey design, the political economy and the Health Belief Model theoretical perspectives, data were collected from 903 women of childbearing age, 69 married males and 24 maternal health care providers in 24 Primary Health Care centres located in six Local Government Areas in the state. The women of childbearing age were selected through a combination of cluster, systematic and purposive sampling techniques while the married males were selected based on availability and willingness to participate. The Primary Health Care facilities and the maternal health services providers were selected based on their location and service provision in the selected study communities. Data were obtained from the women of childbearing age through the questionnaire. In-depth interview and focus group discussions were utilized to collect data from the maternal health services providers and married males in the study communities respectively. Primary Health Care facilities were assessed with the aid of a United States Agency for International Developments' adapted maternal health services evaluation tool. In addition, focus group discussions elicited information on perceived causes of maternal health problems, maternal health behaviour of mothers and men's responsibilities in maternal health care. Findings revealed that most of the PHC centres were dilapidated. Some of the roofs were blown off and leaking, while the doors, windows and floors of some PHC clinics were damaged. There was shortage of medical equipment, consumables and drugs for basic maternal health services. Most of the clinics (75%) had only low level trained health personnel like Community Health Extension Workers and Environmental Health Officers as only six clinics had trained midwives provided through the Midwifery Service Scheme and the SURE-P programmes of the Federal Government. It was observed that the available facilities were poorly managed while the 2-way referral system was poorly implemented and in some instances non-existent. Similarly, there was poor community participation in the health facility management. More than 90% of the women of childbearing age were 18-41 years old, 84.9% had 1-4 children and only 44% practiced family planning. From the findings, 33.7% had no formal education and 15.8% had only primary education. Similarly, 29.7% and 10.3% of their husbands had no formal education and primary education respectively. Women and husbands' level of formal education was found to have influenced the utilization of maternal health services by women. Prolonged labour (19.3%), hypertension in pregnancy (18.9%), bleeding in pregnancy (12.6%), anaemia (11.5%), postpartum haemorrhage (8.8%) and retained placenta (6.8%) were common maternal health problems reported by women during their most recent pregnancies. Some women (3.3%) required 3-5 hours of walking to reach the nearest Primary Health Care centre and only about 50% always get attended to in the clinics. Provision for emergency obstetrics care (EmoC) was non-existent in most Primary Health Care facilities. Although most women utilized the antenatal care services (83.1%), only 60.5% delivered in the clinics. Very few utilized the postnatal, family planning and immunization services because many felt that these services are not necessary. Injectable contraceptives were the commonly utilized method of family planning.

Although husbands usually pay for services utilized by their wives and occasionally gave other supports for services utilized, their consent was a strong condition for service utilization by women. Most women attended the antenatal clinics more than the recommended four times because of the health workers' inadequate knowledge of the new approach. Younger women utilized maternal health services more than the older women. Male dominance had significant impact on maternal health service utilization as most women required the permission and financial support of their husbands for service utilization. Similarly, ability to pay for maternal health services significantly influenced utilization of the services. Women who were gainfully employed utilized the services more than those not gainfully employed on account of their economic strength. It is therefore recommended that actions should be taken by members of the community, government and non-governmental organizations to renovate Primary Health Care facilities. The facilities should be adequately supplied with basic medical equipment, consumables and drugs to improve service delivery. The State and Local Governments should employ and equitably distribute more midwives Primary Health Care facilities to improve the quality of services at various levels of care. Also, public enlightenment on maternal health services utilization and male responsibilities should be effectively carried out in all communities especially among the Nupe and Hausa whose wives hardly utilize the ANC services. Women empowerment programmes should be put in place to improve the women's economic power, maternal health services should be made free as earlier proclaimed by the government. There should be effective community participation in facility management and other health care activities to encourage service utilization.

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ABBREVIATIONS

ANC – Antenatal care

CDC- Centre for Disease Control

CEDAW – Convention on Elimination of all forms of Discrimination Against Women

CHEW – Community Health Extension Worker

CHO – Community Health Officer

DRF – Drug Revolving Fund

EC – European Commission

EmOC – Emergency Obstetric Care

FGD – Focus Group Discussion

FMOH – Federal Ministry of Health

FP- Family planning

HBM – Health Belief Model

HND – Higher National Diploma

IDI – In-depth Interview

JCHEW – Junior Community Health Extension Worker

LGA – Local Government Area

LSS – Life Saving Skills

MCH – Maternal and Child Health

MDGs – Millennium Development Goals

MSS – Midwifery Service Scheme

MVA – Manual Vacuum Aspiration

NCE – National Certificate in Education

NDHS – Nigerian Demographic and Health Survey

OND – Ordinary National Diploma

PHC – Primary Health Care

PMTCT – Prevention of Mother to Child Transmission of HIV

PNC – Postnatal Care

SCHEW – Senior Community Health Extension Worker

SURE-P – Subsidy Reinvestment and Empowerment Programme

TBA – Traditional Birth Attendant

UN – United Nations

UNICEF –United Nations Children's Fund

UNFPA – United Nations Fund for Population Activities

USAID – United States Agency for International Development

WHO - World Health Organizations

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Reduction in maternal mortality and morbidity has been the focus of several international conferences and programmes. From the introduction of primary health care in 1978 through the Bamako Initiative, Safe Motherhood and the Millennium Development Goals, most programmes were aimed at improving quality, access and utilization of health services by all the people with special attention given to women and children (Hiluf and Fantahun, 2008). Instead of improving access, quality and utilization of health services, the introduction of various health policies and programmes in many developing countries resulted in inequalities in terms of coverage of citizens and quality of services available to the people (Ha, Berman and Larson, 2002).

Maternal health care service encompasses family planning, preconception, antenatal, delivery and postnatal care. Goals of preconception care include providing education, health promotion, screening tests for various health problems and interventions for women of reproductive age to reduce risk factors that might affect future pregnancies. Women who begin prenatal care early in their pregnancies have better birth outcomes than those who receive little or no care during their pregnancies. Postnatal care issues include recovery from childbirth, concerns about newborn care, nutrition, breastfeeding, and family planning (Mwaniki, Kabiru and Mbugua, 2002).

Maternal health care services (MCH) are essentially promotive and preventive and provide avenues for the early detection of mothers at high risk of illness and mortality during pregnancy, labour and postnatal periods (Al-Nahedh, 1995; Lucas and Gilles, 2003; Olugbenga-Bello, Asekun-Olarinmoye, Adewole, Adeomi and Olarewaju, 2013). As the majority of patients

utilizing the MCH services are usually not ill, and pregnancy is most frequently an uneventful physiological process, it is logical to hypothesize that, given the slightest constraints, maternal health services would be underused. The objective of maternal health care is to ensure that expectant and nursing mothers have normal delivery, and bear healthy children and maintain good health. This process starts at the time of conception of the child (Rogan and Olvena, 2004). While antenatal care ensures that the health of expectant mothers, especially their nutritional status is safe guarded and avoidable complications of pregnancy are prevented, the natal care also includes the care for expectant mothers during childbirth, preferably by a nurse, midwife or a doctor. The postnatal care covers maternal health care services after delivery including health monitoring of the newborn baby while family planning ensures full recovery of the woman from previous childbirth and improves the child's chance of survival (Digambar and Sahoo, 2011).

Thus, the United Nations Fund for Population Activities (UNFPA, 2006) stated that the main objectives of the maternal health care services are the provision of antenatal care, skilled assistance for normal deliveries, appropriate referral for women with obstetric complications and postnatal care. Other objectives are provision of family planning and other reproductive health services such as infertility care services and emergency obstetric care including provision for caesarian section and emergency blood transfusion. These services are to be provided in the community within the scope of the primary health care services by skilled health personnel.

It has been reported that maternal health reflects the level of social justice and the degree of respect for women's rights in a given society (United Nations, 2001). Women's right to receive quality health services is guaranteed when their basic human rights to education, good nutrition, safe environment, access to economic resources and to participation in decision-making are met (WHO/UNICEF/UNFPA, 1999; USAID, 2013). Although, the Primary Health Care (PHC) adopted by the WHO in 1978 as the best strategy for the provision of health care

services includes maternal and child health as one of its components, it was at the Nairobi Safe Motherhood Conference in 1987 that the magnitude of problems women go through as a result of pregnancy and childbirth were brought to the fore (Starrs, 1997). The Safe Motherhood Initiative that resulted from the Nairobi conference articulated strategies for the promotion of safe motherhood in consonance with the principles of primary health care. These principles include equitable distribution of health care services, prevention rather than cure and community participation in health care services. The WHO (1987) stated that promotion of maternal and child health is also the emphasis of the Bamako Initiative that was articulated by the African Ministers of Health in 1987 as a strategy for ensuring access to essential drugs.

Despite the introduction of the various measures to curb maternal mortality and morbidity, the use of maternal health services was found to be disproportionate among the people. In a study, Swenson, Thang, Nhan and Tieu (1993) and Toan, Hoa, Thach, Hoer and Perrsson *(*1996) reported that socio-demographic characteristics such as education, occupation, traditional beliefs and number of children are related to the use of antenatal care in Vietnam. The Federal Ministry of Health (2008) reported that the health behaviour of Nigerian women regarding pregnancy-related care remains poor and poses one of the greatest challenges to maternal mortality reduction in the country where less than two-thirds of pregnant women received antenatal care in 2005.

It has been reported that the utilization of maternal health care services is lower in Nigeria especially in the Northwest and parts of the north-central regions like Nasarawa and Niger states (Azuogu, Azuogu and Nwonwu, 2011). While the social, political and economic context of the health care system influences access to maternal health care, and therefore affects maternal mortality and morbidity, maternal health-seeking behaviour also plays a key role in the

utilization of maternal health services in parts of Niger State (Garba, Hellandendu, Ajayi, Suleyman and Oluwabamide, 2011). Common problems that contribute to the low utilisation of health services include the lack of compliance of services with defined standards, the shortage of supplies, infrastructural problems like poor roads and lack of facilities, deficiency in detection and management of complications or emergency cases, and poor client-provider interaction. WHO/UNICEF/UNFPA (2001) added that maternal health services are also underutilized when they are perceived to violate women's rights and needs, or are not adapted to the cultural contexts of the people**.** Therefore, the provision of good-quality care is one of the most effective ways of ensuring that maternal health services are used, and that women's lives are saved. This can be achieved by ensuring high standards of care, decreasing barriers to care, ensuring the empowerment and satisfaction of users and motivation of providers by involving them in decision-making. Thus, improving provider responsiveness to cultural and social norms is an important tool towards ensuring the provision of good quality and women friendly services and as well ensures effective utilization for maternal health services. This "women-friendly" approach focuses on the rights of women to have access to quality care for themselves as individuals and as mothers, and for their infants. It is part of a broader strategy to reduce maternal and neonatal morbidity and mortality and requires strong partnerships between governments, health systems and communities. These burdens of maternal mortality and morbidity have been variously reported to be influenced by ignorance, access to care, quality of care, poverty, cultural and religious factors among other things. The study is thus, set to investigate how these factors influences the utilization of maternal health services in primary health care facilities in Niger State.

1.2 Statement of the Problem

Vast discrepancies continue to exist in access to and utilization of maternal health services in both the developed and the developing countries. These discrepancies are said to occur between the rich and poor women, between the young and the old women, between the urban and rural women and between the literate and non-literate women. While many of the barriers to the use of maternal health services such as educational status of women, low economic status and religion are not directly linked with access and quality of maternal health services, there are many barriers that maternal health systems interventions could address. These include financial and geographic access, perceived and actual quality of care as well as the knowledge and attitudes of the people on the importance of maternal health services (Freedman *et al*, 2005). Most of these barriers are responsible for the differences in the utilization of maternal health services among women in many parts of the world. Despite the fact that maternal health care utilization is essential for further improvement of maternal and child health, little is known about the current magnitude of use and factors influencing the use of maternal health services as provided within the scope of primary health care in rural areas of most parts of Nigeria.

Nigeria, the most populous country in Africa, has one of the highest maternal mortality rates in the world and like in most countries in the developing world, maternal mortality rate in Nigeria is on the increase (Ujah, Aisien, Mutihir, Vanderjag, Glew and Uguru, 2005). In most areas of sub-Saharan Africa, restructuring of public health facilities such fragmentation of health care services, specialization of health care services and increasing concentration of health resources in the urban areas have promoted dangerous inequality, social upset and disintegration of all forms of infrastructure that were built in the 1960's and 1970's including those of the

health care services. It has been observed that poverty and ignorance are on the increase in most parts of the sub-Saharan Africa with Nigeria grossly affected. The cumulative effect is seen on education and maternal and child health. It has been argued by Harrison (1997) that maternal mortality ratio of a country reflects not only the adequacy of obstetric care but also the general level of social and economic development. Although a large number of publications have been made on maternal mortality in Nigeria, there are only few of these that report on the situation in north-central region of the country where Niger State is located. The region is peculiar because it is inhabited largely by the ethnic minorities of the Middle Belt of Nigeria with their distinct cultures and customs.

Maternal mortality is one of the major health challenges currently confronting Nigeria. As a result of its recognition by the member states of the United Nations as one of the priority development challenges that need to be urgently addressed, the global community has endorsed the reduction of maternal mortality as one of the eight Millennium Development Goals (United Nations, 2000). Estimates have shown that more than 99% of global maternal deaths occurred in the developing countries. Nigeria with an estimated 150, 000 -165,000 annual maternal deaths is ranked 2nd as the country with the highest number of maternal deaths in the world. Most of these deaths are said to be occurring in the rural areas where two-thirds of the country's population lives require in-depth studies and quick interventions (WHO, 2006). According to the 1999 Multiple Indicators Cluster Survey, the maternal mortality ratio in rural areas is more than 828 maternal deaths per 100,000 live births which is more than double that of the urban areas of 351 maternal deaths per 100,000 live births. With an estimated national maternal mortality ratio of 704-1,000 per 100,000 live births, and with about 2.4 million live births annually, some 170,000

Nigerian women die as a result of complications associated with pregnancy and child birth (Federal Office of Statistics/UNICEF, 2000; UNFPA, 2001).

The Niger State Millennium Development Goals (MDGs) Committee (2006) reported that as against the national target of less than 75 per 100,000 live births, Niger State had a maternal mortality ratio of 800 per 100,000 live births in 2003. This is said to have reduced to 548,000 per 100,000 in 2010 (Niger State Ministry of Health, 2012). In addition, percentage of births attended to by trained health personnel was low at 45 % as at 2003. This was reported to have improved to 61% in 2010 (Niger State Ministry of Health, 2012). During the same period, only one fifth of women who delivered went for postnatal care. The National Demographic and Health Survey (NDHS, 2008) reported an annual population growth rate of 3.4% and a total fertility rate of 5.9 for the state as against the national annual population growth rate of 3.2% and fertility rate of 5.7. The report added that poor condition of the health facilities and health services which are being provided by the primary health care in the state and the low patronage of health care system accounted for the high maternal mortality rate. In fact, only 8.1 % of the people were reported to have patronized health facilities in the State in general.

It has been observed that multiple factors underlie women's capacity to survive pregnancy and childbirth. These factors include women's health and nutritional status, their access to and use of health services, household practices and people's behaviours with regard to women's health in the society. All these are linked to the low status of girls and women in the society.

The situation is worse in Nigeria due to inadequate access to modern health services and poor utilization. For, despite the government's commitment to deliver health facilities at the doorsteps of common people through innovative approaches, such as the introduction of Primary

Health Care, the utilization of health services in some parts of Nigeria is still far below acceptable standard (FMOH, 2005). One of the public health challenges in Nigeria is how to access vulnerable groups with the needed preventive and curative health services. Most Nigerian women resident in the rural areas especially in the northern part of the country where literacy level among women is low do not have access to reproductive health education that they need (Ejembi *et al*, 2006). Thus, in many developing countries, complications of pregnancy and childbirth mostly at the level of preconception and prenatal care are the leading causes of death among women of reproductive age (Ramachandran, 1989). Therefore, reducing maternal mortality requires coordinated, long-term efforts at the household and community levels as well as at the level of national legislation and policy formation especially in the health sector.

Despite the introduction of the various measures to curb maternal mortality and morbidity, the use of maternal health services is found to be disproportionate among the people. In a study, Swenson, Thang, Nhan and Tieu (1993) and Toan, Hoa, Thach, Hoer and Perrsson *(*1996) reported that socio-demographic characteristics such as education, occupation, traditional beliefs and number of children are related to the use of antenatal care in Vietnam. The Federal Ministry of Health (2008) reported that the health behaviour of Nigerian women regarding pregnancy-related care remains poor and poses one of the greatest challenges to maternal mortality reduction in the country where less than two-thirds of pregnant women received antenatal care in 2005.

It has been reported that the utilization of maternal health care services is lower in Nigeria especially in the Northwest and parts of the north-central regions like Nasarawa and Niger states (Azuogu, Azuogu and Nwonwu, 2011). While the social, political and economic context of the health care system influences access to maternal health care, and therefore affects

maternal mortality and morbidity, maternal health-seeking behaviour also plays a key role in the utilization of maternal health services in parts of Niger State (Garba, Hellandendu, Ajayi, Suleyman and Oluwabamide, 2011). Common problems that contribute to the low utilisation of health services include the lack of compliance of services with defined standards, the shortage of supplies, infrastructure problems, deficiency in detection and management of complications or emergency cases, and poor client-provider interaction. WHO/UNICEF/UNFPA (2001) reported that maternal health services are also underutilised when they are perceived to be disrespectful of women's rights and needs, or are not adapted to the cultural contexts**.** Therefore, the provision of good-quality care is one of the most effective ways of ensuring that maternal health services are used, and that women's lives are saved. This can be achieved by ensuring high standards of care, decreasing barriers to care, ensuring the empowerment and satisfaction of users and motivation of providers by involving them in decision-making.

According to the Niger State Ministry of Health (2013), reports from some health personnel providing maternal health services in some health facilities across the state indicated poor attendance at antennal clinics and high rates of child deliveries at home. Some of the children delivered at home were eventually presented in the hospitals and clinics with complications either affecting the mothers or the children or both at various times while the few that delivered their babies in the hospitals/clinics usually arrived the health facilities late and in distress. The information added that many maternal deaths occurred at homes in various communities across the state. Few of the deaths occurred in the hospitals and clinics mainly made up of mothers who arrived the clinics when it was too late to remedy their conditions. Most of these deaths and complications were occurring as result of the fettered access to the maternal health services provided by the primary health care as a result of several socio-cultural factors such as ignorance, traditional practices and poor transportation system in many rural areas of the

state while poverty and poor quality of the services are said to be important factors contributing to the poor utilization of the services.

Current health reform efforts in Nigeria have reiterated the centrality of Primary Health Care in health development. However, given the slow pace of progress of PHC implementation in the country, the goal of attainment of health for all Nigerians using the PHC approach appear to be a mirage. There is therefore, an urgent need to assess and review the strategies and methodologies of PHC implementation in the country with a view to improving the services and investing in systems development and building the capacities of communities and LGA to plan and implement PHC programmes.

Despite the availability of few records concerning utilization of maternal health services in Niger State, no documented research evidence is available to show the pattern and level of utilization of the services among women in the rural areas across the state. In addition, no documented cross-sectional study has been conducted to identify the levels of utilization of various components of the services by women in the rural areas. This study is therefore, aimed at assessing the quality of modern maternal health services provided at the primary health care level, the women's access to and utilization of modern maternal health services and to identify the factors that serve as barriers to quality, access and utilization of modern maternal health services among women in Niger State, Nigeria.

From the above statement of the research problem, the following research questions are raised:

1. What is the current state of maternal health services in primary health care facilities in Niger state?

2. Do the women have access to maternal health services in the primary health care facilities in the State?
3. What are the common maternal health problems affecting women in Niger State?
4. What is the level of utilization of modern maternal health services at the primary health care facilities in Niger State?
5. What are the socio-cultural factors associated with utilization of modern maternal health services in Niger State?

1.3 Objectives of the study

The main aim of the study is to assess the quality of modern maternal health services provided at the primary health care level and to determine women's access to and utilization of modern maternal health services in the PHC facilities. In addition, the study is aimed at identifying the factors that serve as barriers to quality, access and utilization of modern maternal health services among women in Niger State, Nigeria.

The specific objectives of this study are:

1. To evaluate the current state of modern maternal health services in primary health care facilities in Niger State.
2. To determine whether women of childbearing age have access to maternal health services in Niger State.
3. To identify the common maternal health problems in Niger State.
4. To determine the level of utilization of maternal health services in Niger State.
5. To identify the socio-cultural factors influencing the utilization of various modern maternal health services by women of childbearing age in Niger State.

1.4 Significance of the study

The poor state of maternal health in many parts of northern Nigeria especially in Niger state is partly due to inadequate modern health services and poor utilization of the available ones by women of childbearing age. Despite the Niger State's government's commitment to deliver health services at the doorsteps of common people through innovative approaches such as the Primary Health Care (PHC), the availability and utilization of health services is still far below any acceptable standard in many parts of Niger State. This problem is more visible in the rural areas where literacy rate is low, poverty and cultural practices are high and access to health care services is low. It is therefore, necessary to identify the vulnerable groups and the factors responsible for their vulnerability. This is necessary especially in Niger State where most of the basic social amenities such as road network, clinics, water supply and schools are inadequate since an important proximate determinant of maternal mortality is access to and use of quality health care services.

Since access to quality reproductive health services is crucial for improved maternal health and child survival, the identification of individual and group factors that may facilitate or impede the effective use of health care services for preventing and treating maternal morbidity may help the government, health personnel and people of Niger State to identify the women who may be particularly vulnerable to maternal mortality and morbidity, and provide information that policy makers can use to target services to those in greatest need. This will in turn help in reducing maternal mortality and morbidity and improve child survival in the State. Findings from this study could therefore serve as bases for improved maternal and child health services within the context of primary health care services and subsequent reduction in maternal morbidity and mortality.

Findings of this study will improve the scope for sociological studies especially in the areas of health behaviours, community participation in health care programmes, women empowerment programmes across ethnic groups and effective utilization of health services among the rural people. It would also serve as bases for sociological studies of effects of cultural sanctions on men that neglect the health care of their wives. Findings will provide bases for public enlightenment on the need for male support to females in reproduction and child rearing.

1.5 Scope and Delimitation of the Study

The study was conducted in the three senatorial districts of Niger State, Nigeria. It investigated availability, access, quality and patterns of utilization of maternal health services in the primary health care centres in Niger State. The study specifically identified the quality of maternal health services provided at the primary health care level and the socio-cultural factors that influenced their utilization among women of childbearing age in Niger State.

The study investigated patterns of utilization of existing maternal health services across age, level of educational attainment, ethnic and religious divides of the women in Niger state. It was conducted in Niger State because of the State's ethnic, cultural, religious and economic plurality. The State is poor in terms of social amenities like schools, hospitals, road network and water supply. In addition, the state is among those with poor maternal health indicators especially in the North-central geopolitical zone of Nigeria.

1.6 Definition of Terms

Antenatal Care – This is the health care women receive throughout the period of pregenancy inorder to ensure that the women and their newborns survive pregnancy and childbirth (Fraser, 2006).

Antepartum haemorrhage – This refers to bleeding from or into the genital tract occurring from 24th weeks of pregnancy and prior to the birth of the baby (Royal College of Obstetricians and Gynaecologists, 2008).

Eclampsia- Is the onset of seizures (convulsions) before, during or after childbirth in a woman with high blood pressure and large amount of protein in urine during pregnancy (Richards, Graham and Bullock, 1989).

Emergency Obstetrics Care – It is a set of health interventions called signal functions that should be available in a health care facility that provides immediate care for women with pregnancy-related complications (UNFPA, 2011).

Intranatal Care- Intranatal care refers to health care services provided to a woman while in labour (Fraser, 2006).

Maternal Health Services- these are comprehensive health services concerned with the entire maternity cycle i.e. care given to a woman during antenatal, intranatal, postnatal and the inter-conceptional periods (Assfaw,2010).

Maternal Mortality- It is the dealth of a woman while pregnant or within 42 days after termination of pregnancy, irrespective of the durationand site of pregnancy, from any cause related to or aggravated by the pregnancy or its management (WHO, 1993).

Maternal Morbidity- This refers to physical and psychological conditions that results from or are aggravated by pregnancy and have an adverse effect on a woman's health (CDC, 2014).

Millenium Development Goals (MDGs)- These are a set of eight time-bound development objectives that seeks to address issues of poverty, education, gender equality, health, environment and global partnerships for development agreed by international community to be achieved by the year 2015 (UN, 2007).

Postnatal Care- Health care given to the mother and the newborn baby immediately after childbirth through the first 42 days after childbirth (Park, 2006).

Post-Partum Haemorrhage- According to Weeks (2008) is the loss of more than 500mls of blood within the first 24 hours following childbirth.

Primary Health Care (PHC)- It is an essential care based on practical, scientifically sound and socially acceptable methods ans technology made universally accessible to individual, families and community, through their full participation and at a cost that the country and community can afford to maintain at aevery stage of their development in the spirit of self reliance and determination (WHO, 1978).

Puerperium- It is the time from the delivery of the placenta through the first few weeks after delivery usually within six weeks (Fraser, 2006).

Quality Maternal Health Services- According to USAID (2007), this refers to maternal health services provided with specific considerations given to physical environmemtal of the health facility, technical competence of the personnel, facility management and continuity of care.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter critically reviews the concept and empirical studies on primary health care, concepts and paradigm of maternal health services, maternal mortality, factors affecting the utilization of maternal health services in Nigeria and other countries. It also provides the theoretical framework for the study in which the Marxist political economy of health and the Health Belief Model were adopted and reviewed for the study.

2.2 Primary Health Care

Primary Health Care (PHC), the key for achieving the goal of health for all and a strategy for achieving affordable universal health services coverage represents one of the major health reforms in the last century (WHO, 2000). Realising the inequalities in health services of many developing countries, the WHO in a world conference at Alma-Ata held in 1978 introduced the primary health care whose uniqueness lies in its proposed comprehensiveness, global coverage, community participation and application of all relevant resources in pursuit of health for all (Whitehead and Dahigren, 2006). The philosophy of primary health care represented and continues to represent a radical strategic shift in the way people think about health and health care, implying as it does the use of strategies such as intersectoral collaboration, legislative reform, reassessment and reallocation of human resources and the application of cost-effective health interventions (WHO/UNICEF, 2008). Since 1978, the primary health care movement has had tremendous influence on the way national health systems in many developing countries view health development and provides health services to the

people (Wagstaff and Claeson, 2004). It will continue to be a valid approach to the provision of health care services regardless of the terminologies that may be applied to the tools and strategies of its implementation in different places and at various times.

The main premises of the 1978 declaration of Primary Health Care at Alma-Ata are that disparities in access to health services and in the health status of the people are unacceptable. Thus, the declaration specified that by the year 2000 A.D, everybody would have attained a level of health which will make them lead productive lives through PHC which was defined as:

> …..essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individual, families and community, through their full participation and at a cost that the country and community can afford to maintain at every stage of their development in the spirit of self reliance and determination (WHO, 1978).

The fundamental aim of PHC is to ensure universal access to available resources in order to provide adequate coverage of the basic health needs of the (Ejembi, *et al*, 2002; Abdulraheem *et al*, 2012). In addition, the declaration of PHC specified its main areas of concern as:

> ….primary health care should include at least education concerning prevailing health problems and the methods of identifying, preventing and controlling them, promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care including family planning; immunization against the major infectious diseases; appropriate treatment of common diseases and injuries; promotion of mental health and provision of essential drugs (Hellandendu, 1991).

Primary Health Care is founded on the concept that health is a fundamental human right and the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector. The declaration identified health as a fundamental human right for which national governments and the international community should be responsible, citing inequalities

in health between nations as a matter for the utmost concern (Rogers and Veale, 2003). The thrust of PHC has been to extend health services coverage to especially the underserved rural populations through the expansion and strengthening of primary health care services provision at local government level and promotion of community participation aimed at raising awareness, harnessing local resources to augment government funding and promoting increased demand for health services (Ransome –Kuti, Sorungbe, Oyegbite and Bamisaiye, 1990, Mike 2010). It is a universal concept with infinite adaptability to any region, culture and stage of development (Basavanthappa, 2008). It is adaptable to every stage of development because it begins with the admission that the prevalent pattern which emphasizes sophisticated and costly tertiary health institutions and highly specialized professionals does not work in the provision of the needed health care services to the people.

The fundamental aim of PHC is to ensure universal access to available health resources in order to provide adequate coverage of the most important health needs of the people (Ejembi *et al*, 2002). WHO/UNICEF (2008) explained that the drive towards primary health care requires careful determination of priorities such as the need for clean water before antibiotics, the need for food before vitamin pills, vaccination before kidney machines, basic literacy and education before computers and basic health care services before expensive hospitals. These priorities emphasized the creation of healthy nations comprising health-conscious individuals, families and communities that are free from social, economic, cultural and political ills.

It is pertinent to note that it is possible to identify three elements within the WHO description of primary health care (Rogers and Veale, 2003). The first element is that primary health care represents a philosophical approach to health and health care which is characterized by a holistic understanding of health as wellbeing rather than the absence of disease. This

concept emphasizes that the presence of good health is dependent upon multiple determinants such as good housing, adequate supply of safe water, education, industry, agriculture, communication, public works and health services. This element also identifies that the health status of a community is both a function of and a reflection of development of that community and that equity is a crucial aspect of health care services which must be met in the spirit of fairness. The second element explains that primary health care involves a set of strategies aimed at creating health care which is consistent with the underlying philosophy. These strategies includes needs based planning of decentralized health services, education of individuals and communities on health and other development issues, intersectoral collaboration in health care, integrated approach and the involvement of the people in their health care programme so as to achieve self reliance. The third element of primary health care describes the kind of services provided as a set of activities and as a level of service provision. These services must be free from financial, cultural and religious barriers as well as geographic barriers to ensure accessibility to all and to serve as the first level of health care to the people.

While PHC identified maternal and child health including family planning as one of the its essential service components, it was until 1987 with the Nairobi Safe Motherhood Conference that the magnitude of problems women go through as a result of pregnancy was brought to the fore. According to the WHO/UNICEF (2008), the thrust of PHC has been to extend health services coverage to especially underserved rural populations through the expansion and provision at local government level and promotion of community participation aimed at raising awareness, harnessing local resources to augment government funding and promoting increased demand for health services. It is pertinent to state that PHC is implemented from the grass root to the LGA headquarter with the village health posts (dispensaries) manned by trained health

personnel permanently based in the village providing integrated health services controlled by the village health committee. The main functions of the village health worker include identification and treatment of minor illnesses and injuries, maternal and child health services, health education, immunization and referral services (WHO, 1978). The activities of the village health worker are regulated by the standing order and supervised by the community health workers from the district level of health care. While the district level of health care services are usually provided in the Basic Health Centres which doubles as referral centres for the village health posts in addition to offering higher level preventive and curative health services including basic obstetric services, the Primary Health Care Centre at the Local Government headquarter provides more advanced health services in addition to coordinating the health activities at the district and village levels.

The WHO has identified the district as the operational level for PHC implementation. In consonance with the WHO recommendation, Nigeria identified the LGA as the level with responsibility for PHC implementation and each LGA was directed to conduct a situation analysis to generate baseline data for the formulation of its PHC implementation plans to ensure evidence-based planning (Ejembi *et al*, 2002).

Nigeria, as a member state of the WHO was a signatory to the PHC declaration in Alma-Ata in 1978, but despite the political commitment to the implementation of PHC, the machinery for full implementation at the grass root level was set in motion only in 1986 (Federal Ministry of Health; FMOH, 2005). The country was divided into four health zones for the implementation while some LGAs were selected in each state in all the zones to serve as models for the implementation of PHC from which others will eventually copy. On completion of base-line assessment of health problems and health resources in the LGA as directed, the selected model

LGAs were given Five hundred thousand naira (N500, 000) each by the Federal Ministry of Health to implement PHC programmes. This was to facilitate the implementation of PHC in all its ramifications such as health education, community participation, maternal and child health, drug revolving funds and immunization services. The LGAs were directed to take responsibility for other community based programmes like basic sanitation, water supply and provision of schools. Nine (9) LGAs; Agaie, Chanchaga, Gbako, Lapai, Lavun, Magama, Mariga, Rafi and Suleja were selected and directed to develop model PHC centres in the state.

The Nigeria's national health policy has the primary health care as its foundation and since 1986, the country has been reorienting her health care delivery system towards the primary health care approach. The country has been emphasizing the strengthening of primary health care services provision at local government level, encouraging community participation aimed at raising awareness, harnessing local resources to augment government funding and promoting increased demand for health services (Ejembi *et al*, 2002). Since the introduction of primary health care in Nigeria, maternal and child health as a service component has received considerable attention in programme implementation as in the life saving scheme (LSS) and the midwifery service scheme programmes (MSS) of the Federal Government.

The main objectives of maternal health services in the primary health care programme are to ensure that every expectant mother maintains good health upto normal time of delivery, bear healthy children and receives antenatal, intranatal, postnatal and child spacing services as well as prevent and treat sub-fertility (Alakija, 2000, Gupta and Nadehswar, 2012). These objectives can be achieved through adequate provision of accessible, affordable, quality, integrated and sustained maternal health services to the people and effective health education programme to improve acceptability and utilization. These services should include early recognition of target

population, development of an effective system of early booking for antenatal care, management of normal pregnancy and referral of risk groups to appropriate health facilities for proper management. These services which should be made available to all women of reproductive age at the community level are referred to as comprehensive maternal services (Whitehead and Dahigren, 2006; Fournier, Dumont, Tourigny, Dunkley and Drame, 2008).

Primary health care is built on the principles of equity in the distribution of health care services, use of appropriate technology at all levels of health care services, multisectoral approach, active community participation in health care programmes and emphasis on the prevention of illnesses rather than cure (WHO, 2008). This is to ensure that everyone has access to health care services at all times, is well informed about health and health care services, actively and willingly participate in health care activities with full involvement of other sectors and that there is less emphasis on the treatment of diseases. Ensuring full community participation in health care programmes enables individuals, families and communities to take greater control over their health and provide avenues for the establishment of partnership between government, non-governmental organizations and the local communities in the planning, implementation and utilization of health services for the benefit of the people.

The Nigerian national health care system is built on the basis of the three-tier responsibilities of the federal, state and local governments with the local governments given the responsibility for primary health care while the states and federal governments are assigned responsibilities for secondary and tertiary health care services respectively with supportive, coordinating and supervisory roles for primary health care programmes at local government levels (Federal Ministry of Health, 2004; Abiodun, 2010). The Nigerian National policy on health describes the primary health care as the basic philosophy and strategy for national health

development. This is to ensure access to quality and affordable health care services as well as to guarantee equity in health care.

Perhaps the most notable commitment Nigeria has made in support of the PHC is through her 1988 National Health Policy which is based on PHC philosophy of social justice and equity. This national health policy was drawn up with the aim of rectifying the anomalies in the formulation and execution of former health policies stipulates an integrated and well coordinated approach to the pursuit of health in all it ramifications (Hellandendu, 1991). This policy provides for a good referral system, effective ways of procuring drugs and equipment, community participation and cooperation with non-governmental organizations which provide health care services.

Despite the success the PHC has recorded by contributing to the recognition of the social value of health systems in most parts of the world which has radically changed the health policies of many countries, the implementation of primary health care has been faced with many problems (WHO, 2006). PHC is based on western modern medicine which has been implemented mainly from the curative perspective. In the developing countries in particular, the high prevalence of diseases make people more preoccupied with seeking for treatment than the prevention of diseases thereby strengthening the curative component of health care more than the preventive aspect of medicine (Hellandendu, 1991; Hughes and Leethongdee, 2007). This perception has relegated the socio-economic factors which are primarily responsible for the high morbidity and persistence of poverty and environmentally induced diseases like malnutrition, diarrhoeal diseases, tuberculosis and malaria fever.

Poor funding of health care services, lack of qualified health personnel, poor community mobilization, lack of basic infrastructures like roads and water, low level of education,

corruption and conflicts among the different professional groups have significantly contributed to the poor implementation of PHC programme in Nigeria (Alakija, 2000; Uzochukwu *et al*, 2004). It is worth mentioning here that lack of political will, poor organizational structures and in some instances, poor planning, duplication of agencies and responsibilities for PHC implementation have variously affected the implementation of PHC programme in the country.

To address the problems affecting the implementation of PHC programmes in many parts of the world especially in the developing countries, the WHO (2008) proposed four sets of reforms in the health system. The first set of reforms is to ensure that health systems contribute to health equity, social justice and the end of exclusion hence, moving towards universal access and social health protection. This could be achieved by removing health inequalities such as making the services available, accessible, ensuring quality of care and removing health barriers like cultural, financial, gender discrimination and ignorance.

The second sets of reforms is aimed at making the delivery of health care services people oriented i.e. health care service oriented around the people's needs and expectations so as to make them more socially relevant and more responsive to the changing world while producing better outcomes. There is also the need for a leadership reform that will make health authorities more reliable. This is aimed at replacing the disproportionate reliance on command and control by the state with inclusive, participatory, negotiation-based leadership that the contemporary health systems require. The fourth set of reforms is aimed at changing public policy to promote and protect the health of the communities through the integration of public health actions with primary health care and guaranteeing continuous supply of qualified health personnel at all levels of primary health care services, food security, improved sanitation, water supply, improving the literacy levels of the people and effective intersectoral collaboration. Governments and agencies

concerned with health should ensure that these reforms are adapted to specific national contexts and constraints and in-line with the overall national interests of individual countries.

Despite several constraints in the implementation of PHC that varies from country to country, it is instructive to state here that there is growing hope for improvement in the implementation of PHC in many countries. First, the four sets of reforms suggested by the WHO are driven from shared values that enjoy large support and challenges globally. In many countries, there has been increase in the financing of health care services with the aim of re-invigorating the PHC in particular so as to ensure universal coverage, improve the quality of services and reduce exclusion. In addition, people are becoming more aware about their health and health care services while literacy level, democratic governance and private sector participation in the provision of health care services have also improved globally (Ezekiel, 2008). To enjoy the maximum benefits of quality primary health care services including maternal health services, there is need for reduction of social stratification and income inequalities through policy changes and good governance. These could be achieved through the introduction of special taxes for health care, creation of job opportunities with adequate pay and subsidized public services, reduction of vulnerabilities by providing social security for the unemployed, policies that protect mothers, protection against exposure to health hazards through legislations, provision of safe water and sanitation and the promotion of healthy lifestyles. There is need for the establishment of healthy housing policies, promoting equal opportunities for women, making free education available and protecting the sick from poor quality health care and unfair dismissal from their jobs. The provision of effective PHC will improve maternal health and drastically reduce maternal mortality and morbidity.

The implementation of PHC varies from country to country. In India, long before the Alma Ata Declaration of 1978, a PHC model based on the principle that inability to pay should not prevent people accessing health services. Health care services were concentrated on the rural people with programmes like national family planning programme and the policy of one community health worker per 1,000 people put in place in early 1970s (Vlassof, Tanner, Weis and Rao, 2010). With the introduction of PHC, the health services were structured into village health post, district health centres and state hospitals to improve access to quality health care, increase equity and decentralize health services. Each health facility have some levels of administrative and financial independence (Varatharajan, Thankappan and Jayapalan, 2004).

In Zimbabwe, the implementation of PHC was said to be affected by the dwindling economy of the country. Although, the health care system was tailored towards improved access, equity, community involvement and quality services, most of the government owned health centres in the rural areas are not functional because of paucity of funds, poor equipment and lack of qualified health personnel (Kevany, Murima, Singh, Hlubinka, Kulich, Morin and Sweat, 2012). These have affected the organization of the health care system with only those that can afford to pay for health services deciding where they obtain their services from.

The Kenyan government first introduced selective PHC services where priority was given to priority diseases like childhood diseases, maternal health problems such as bleeding in pregnancy and communicable diseases like malaria, tuberculosis and diarrhoeal diseases (Obimbo, 2003). Emphasis was placed on the rehabilitation and expansion of community health centres. However, a major weakness of the selective PHC approach was that the impact of poverty, lack of clean water, sanitation, food supply and low literacy level on health was ignored. Similarly, the health of the adult members of the population was also ignored. The government's

realization of the weakness led to the introduction of comprehensive PHC programme. This expanded and strengthened the health care system and organized it into community, district and central health care services with the PHC as the philosophy and strategy (Obimbo, 2012).

According to Visagie and Schneider (2014), the philosophy and principles of PHC forms the basis of South Africa's health policy and provides guidance for health care service delivery. It is instructive to state here that although the policy identified access, equity and community participation as key to quality care, the provision of health services to people in the rural areas have been affected by physical, demographic, economic, social and cultural factors like climatic conditions, poor transport system, cultural practices and financial constraints (Schaay and Sanders, 2011).

These variations in the implementation of PHC is designed to allow each country to provide affordable, acceptable and accessible health services to the people. Each country adopted strategies could assist it to achieve the main objectives of the PHC which is health for all citizens.

2.3 Maternal Health Services

Maternal health services are comprehensive health care services concerned with the entire maternity cycle. It is concerned with the care of the woman during antenatal, intranatal, postnatal and the inter-conceptional periods (Park, 2006; Assfaw,2010). Ideally, every pregnant woman should have access to a minimal module of maternal health services. WHO, UNICEF and UNFPA (2001) explained that the state of maternal health reflects the level of social justice and the degree of respect for women's rights in a society. Women's right to receive good-quality health services is guaranteed when their basic human rights to education, nutrition, safe

environment, economic resources and to participation in decision-making are met. Maternal health services are essentially promotive and preventive avenues for early detection of mothers at high risk of illness and mortality (Al-Nahedh, 1995; Olugbenga-Bello *et al*, 2013).

Maternal health is an issue that not only affects the woman, but also has a direct bearing on the health of the newborn because many complications and subsequent poor outcomes for women and newborn can be prevented or minimized with early recognition of problems and appropriate interventions during the maternity cycle (Lubbock and Stephenson, 2008). Ram and Singh (2006) added that since all pregnant women are at risk of developing complications and many of these complications are unpredictable, it is important to ensure that all pregnant women have access to preventive interventions, early diagnosis and treatment for problems, and emergency care when needed especially at the primary level of health care. These services should include provisions for basic obstetric care, emergency obstetric care, post abortion care and care of the newborn. The key components of maternal health services include antenatal care, obstetrics services and postnatal care (Alakija 2000, Lucas and Gilles, 2003).

Over 30 million women in the developing world suffer from serious diseases and disabilities which include uterine prolapse, pelvic inflammatory disease, obstetric fistula, incontinence, infertility and pain during sexual intercourse (dyspareunia) as a result of inadequate or inappropriate care during pregnancy, delivery or the postnatal period (WHO, 2005, Fournier *et al*, 2008). In addition maternal death has serious impact in the health and well-being of families, communities and in general, in the social and economic situation of the societies because each year an estimated 15.5 billion US dollars is lost in potential productivity when mothers and newborns die (WHO, 2005). Millions of women in the developing countries experience life threatening and other serious health problems related to pregnancy or childbirth.

Complications of pregnancy and childbirth cause more deaths and disability than any other reproductive health problems (EC/UNFPA, 2000). Rogan and Olvena (2004) reported that 80% of maternal deaths all over the world are directly attributable to the combination of haemorrhage, anaemia, sepsis, eclampsia, obstructed labour and unsafe abortion. It is observed that these direct factors are similar in both the rural and urban settings. These poor health outcomes among women are partly attributed to non-availability and non-use of modern health services by a sizeable proportion of women (Nigussie, Haile-Mariam and Mitike, 2004).

2.3.1 Antenatal Care

Antenatal care is the care women receive throughout the period of their pregnancies in order to ensure that the women and their newborns survive pregnancy and childbirth (Fraser, Cooper and Nolte, 2006). Antenatal care should be received from qualified health care professionals (nurses, midwives or doctors) during pregnancy with the aim of tracking the progress of the baby as well as to monitor the health of both the mother and the baby (Karanja, 2009). UNICEF/WHO (2003) outlined the main functions of antenatal care as:

a. Preparing the pregnant woman and her family for childbirth.
b. Educating the pregnant woman, her family and the community about pregnancy, childbirth and general health promotion.
c. Assessing and monitoring the health status of the woman and the progress of the pregnancy.
d. Providing appropriate preventive measures such as nutritional supplements like iron and folic acid, provision of tetanus immunization, malaria prophylaxis/treatment as indicated.
e. Diagnoses and treatment of complications of pregnancy.

This care is provided on scheduled visits unless complications necessitate otherwise. The usual approach to antenatal care, which is based on European models developed in the early 1900s, assumes that frequent visit to the clinics is desirable for pregnant women. Frequent visits to the antenatal clinic were the norm, and the women are classified by risk categories to determine their chances of complications and the type of care they need. Many developing countries have adopted this approach although, apparently oblivious of long distance to clinics and inability of poor women to afford the transport fare. The scheduled visits recommended by Cicekliogluu, Soyer and Ocek (2005) are; the first (booking) appointment which should take place before 12 weeks of pregnancy and should give opportunity for patient assessment, health education and baseline investigations; the second visit at 16 weeks of pregnancy to assess the progress of pregnancy and initiate iron and calcium supplements to the pregnant woman; the third visit at 20 weeks of pregnancy during which an ultra sound scan is recommended to check for any structural abnormalities affecting the baby, while the fourth visit is at 24 weeks of pregnancy for routine medical examination of the mother and the expected baby, the fifth visit at the 28th week of pregnancy is to treat any case of haemoglobin level below 10g/dl and to provide anti - D prophylaxis for mothers with rhesus factor negative.

The sixth visit as explained by Cicekliogluu *et al* (2005) is usually carried out at the 36th week of pregnancy for routine medical checks of the mother and baby while the seventh visit often carried out at the 40th week of pregnancy for routine assessment of the mother and baby and the eighth visit is also for routine checks. Azuogu, Azuogu and Nwonwu (2011) explained that this schedule was not evidence-based and often discouraged the women because of its frequency. They explained that a good antenatal care should be able to separate the women into those eligible for the basic antenatal care and those at risk. According to Azuogu *et al* (2011)

those at risk should be seen at more frequent intervals, referred to higher levels of care to ensure their safety and that of the unborn child. Karanja (2009) explained that these schedule of visits and activities are usually modified based on the health status of individual women and the baby.

Considering the need to modify the antenatal care so as to ensure compliance and make it more practicable, the WHO (2005) introduced the concept focused antenatal care and recommended that a minimum of four (4) antenatal visits is necessary for a pregnant woman and that the guideline for antenatal visits in all countries should include at least, the measurement of blood pressure, testing of urine for disease germs, glucose and protein and blood tests to detect syphilis, HIV and severe anaemia and to provide to the mothers information that will improve their health and prevent complications associated with pregnancy and childbirth. For a normal pregnancy, these visits should take place within the first 12 weeks of pregnancy, at 26 weeks, 32 weeks and 36 weeks of pregnancy.

Babalola and Fatusi (2009) explained that while available evidence indicates limited benefit from traditional antenatal care services, focused antenatal care provides opportunity for early detection of diseases and timely treatment. It also provides opportunities for preventive health care services such as immunization against neonatal tetanus, prophylactic treatment of malaria through the use of intermittent presumptive treatment approach, and HIV counselling and testing. Furthermore, antenatal care exposes especially the less knowledgeable pregnant women to counselling and education about their own health and the care of their children. Thus, antenatal care may be particularly advantageous in resource-poor developing countries, where both health services and health seeking behaviour are inadequate. According to the UNICEF (2008), the antenatal care period presents important opportunities for reaching the pregnant woman with a number of interventions that may be vital to their health and well-being and that

of their babies. Regular contact with the doctor, nurse or midwife allows the health personnel to manage the pregnancy and provide a variety of services which include treatment of hypertension to prevent eclampsia, tetanus immunization, intermittent preventive treatment for malaria and distribution of insecticide-treated mosquito nets, prevention of mother-to-child transmission of HIV, micronutrient supplementation and birth preparedness including the provision of information about danger signs during pregnancy and childbirth. Lucas and Gilles (2003) added that the antenatal care period also provides opportunity for the supply of information on birth spacing which is recognized as an important factor in improving infant survival.

According to the latest estimates from a Multiple Indicator Cluster Survey, the WHO (2009) reported that 78% of women in the developing world receive antenatal care from skilled health care providers at least once during pregnancy as against more than98% in the developed countries while the regional averages in Central and Eastern Europe/Commonwealth of Independent States ranges from 68% to 95%. It has been reported that more than 9 in 10 pregnant women that are attended to at least once in Latin America and the Caribbean and in East Asia and the Pacific (Stephenson, Baschieri, Clements, Hennik and Madise, 2006). In a study in Southeastern Nigeria, Shiffman and Okonofua, (2007) found that less than half of all women in the developing countries benefit from the minimum recommended four (4) antenatal visits while in South Asia, just one third of pregnant women receive care at least four times (WHO, 2009). In Nigeria, about 64% of women receive antenatal care from qualified health care provider but only 28% from the Northwest which shares some characteristics with people in parts of Niger state, 54% from the Northeast and 56% from the Northcentral geopolitical zones (Health Reform Foundation of Nigeria-HERFON, 2006). These suggest that the remaining

women either do not receive antenatal care at all or receive care from untrained traditional birth attendants, herbalists or prayer houses.

2.3.2 Intranatal Care

Childbirth is fraught with risks for both the mother and the child. Timely and adequate medical care for women who experience obstetric complications is an option for mitigating the risk (Schmidt, 2000). The modern trend is for an increasing proportion of births to take place in maternity centres, hospitals and clinics, although home delivery may be considered for normal delivery especially in the developed countries provided that the person attending the delivery is suitably trained and equipped and that referral to a higher level of care is available in case of complications (Lucas and Gilles, 2003). Home delivery could be considered after the first pregnancy especially if the pregnant woman has clear history of uncomplicated delivery and there are no contrary indications with the existing pregnancy. However, the situations could change dramatically in the course of delivery. Therefore, there is need for the provision of emergency services regardless of the initial estimate of the risk or place of childbirth (Alakija, 2000).

Intranatal care refers to the health care services provided to a woman while in labour (Fraser et al, 2006). This type of maternal care emphasizes the need for the woman to deliver her baby under the care of skilled health personnel in clean environment, following safe and hygienic delivery practices and maintaining the highest standards of sterility of tools and instruments (Wagle, Sabroe and Nielsen, 2004). Shiffman and Okonofua (2007) explained that the main aims of intranatal care are to ensure clean and hygienic childbirth conditions for safe delivery for both the mother and the baby. This includes preparedness to deal with complications

of childbirth such as prolonged labour, antepartum haemorrhage, convulsions, malpresentation of baby, prolapse of the umbilical cord and to provide care for the baby immediately after birth.

According to Park (2006), in developed countries like the United States of America and Britain, mothers with normal obstetric history may be advised to have babies in their homes under the care of skilled health personnel provided that the home conditions are satisfactory. This type of confinement is referred to as 'domiciliary midwifery'. Alakija (2000) added that although, domiciliary midwifery is mostly practiced in the developed countries such as Britain, there is need for its introduction in the developing countries especially in the rural areas because of lack of access to health care facilities. However, domiciliary midwifery may not be feasible in many developing countries because of lack of skilled health workers like the medical doctors, nurses and midwives that could render maternal health services at home.

Hiluf and Fantahun (2008) reported that in some developed countries like the United States and most countries in Europe, almost all deliveries take place in hospitals with physicians attending all normal and complicated deliveries .In countries like Sweden and the United Kingdom, significant numbers of deliveries take place at home by trained midwives with physicians attending to only women with complications and those at high risk of developing maternal or child complications during or immediately after delivery. They added that in developing countries like Nigeria most women deliver at home alone or attended to by traditional birth attendants, unskilled health workers, and family members. This may lead to maternal and child mortalities since the woman may not be taken to the health facility when complications develop or she may be taken to the health facility late.

2.3.3 Emergency Obstetric Care (EmOC)

Emergency obstetric care involves a set of interventions called 'signal functions' that should be available in a health care facility that provides emergency care for women with pregnancy-related complications (Kusiako, Ronsmans and Van Der, 2000; UNFPA, 2011). These signal functions must be performed at a facility in order for such a facility be recognized as an emergency obstetric care (EmOC) facility. A facility can either be classified as a basic EmOC or a comprehensive EmOC facility. The basic EmOC signal functions are administration of parenteral antibiotics, oxytocic drugs and anticonvulsants; manual removal of placenta; manual vacuum aspiration of retained products of conception; and assisted vaginal delivery while the comprehensive emergency obstetric care (comprehensive EmOC) includes the six basic signal functions, plus performing caesarean section and blood transfusion (Isaac, 1998; Lawn, Cousens and Zupan, 2005). The signal functions include administration of parenteral antibiotics, parenteral oxytocic drugs the administration of parenteral anticonvulsants for pre-eclampsia and eclampsia. Others are manual removal of placenta, removal of retained products of conception and assisted vaginal delivery.

In a study on maternal health seeking behaviour and associated factors in Nigerian rural communities, Osubor, Fatusi and Chiwuzie (2006) estimated that 15% of women often develop complications requiring medical interventions with approximately seven per cent of them having serious complications requiring referral from primary care level and that the average time until death with postpartum haemorrhage, the most common cause of maternal death, is only two hours. Therefore, basic and comprehensive emergency obstetric care should be available for every delivery, with as short a delay as possible. This basic EmOC includes parenteral antibiotics, magnesium sulphate for eclampsia, parenteral oxytocics, manual removal of placenta,

removal of retained products and assisted vaginal delivery while comprehensive EmOC also includes Caesarean section and blood transfusion (Telfer, Rowley and Walraven, 2002). Carlough and McCall (2005) added that there should be a minimum of four basic EmOC facilities and one facility providing comprehensive EmOC per 500,000 populations.

2.3.4 Postnatal Care

Postnatal period is the time beginning immediately after the birth of a child and extending to 42 days (Fraser *et al*, 2006) while postnatal care is the health care given to the mother and the newborn immediately after delivery through the first 42 days after childbirth (Park, 2006). Biologically, the postnatal period is the time after delivery in which the mothers body including the hormonal levels and the uterus (womb) returns to the pre-pregnancy state. Rosman and Graham (2006) outlined the following objectives of postnatal care:

i. Prevent postpartum complications such as puerperal sepsis.

ii. Rapid restoration of the mother to optimum health.

iii. Check the adequacy of the breast feeding.

iv. Provide family planning services.

v. Provide basic health education to the mother and the family.

The postnatal period is critical to the health and survival of a mother and her newborn. The most vulnerable time for both the mother and child is during the hours and days after birth. Lack of care in this period may result in death or disability as well as missed opportunities to promote healthy behaviours affecting women, newborns, and children (Stephenson *et al*, 2006). In a study on maternal mortality and access to obstetric services in West Africa, Rosmans, Etard, Walraven, Hoj, Dumont and Bernis (2003) reported that half of all postnatal maternal deaths occur during the first week after the baby is born and majority of these occur during the first 24

hours after childbirth. Rosman *et al* (2003) added that the leading cause of maternal mortality in Africa is haemorrhage which accounts for 34% of maternal deaths. The majority of these occur during the postnatal period. Falkingham (2003) reported that puerperal sepsis and infection claim another 10% of maternal deaths. Virtually all of these occur during the postnatal period.

Despite the importance of postnatal care to both the mother and the child, it has been reported by NDHS (2003) that only about 23% of women who gave birth outside a health care facility receive postnatal care within two days of birth and 3% have medical check-up within the first week after childbirth while about 70% of women that deliver outside a health facility receive no modern postnatal care. Variation has been recorded between attendance for antenatal care and postnatal care among women in some parts of Nigeria. Galadanci, Ejembi, Iliyasu, Alagh and Umar (2007) found that only 11.4% of women who received antenatal care returned for postnatal care after 6 weeks of childbirth in the UNICEF zone D made up of Adamawa, Bauchi, Borno, Gombe, Jigawa, Kano, Nasarawa, Plateau, Taraba and Yobe states of Nigeria. This has added to the increased maternal mortality and morbidity in these parts of the country (Babalola and Fatusi, 2009).

2.4 Maternal Mortality

Maternal mortality is a crucial and complex measure of a country's overall health and development status but in many developing countries, complications of pregnancy and childbirth are leading causes of deaths among women of reproductive age (WHO/UNICEF, 1999). WHO (1993) define maternal mortality as the death of a woman while pregnant or within 42 days after termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management. This excludes accidental or incidental causes.

Globally, maternal mortality rate is about 400 per 100,000 live births. However, the figure is 22/100,000 live births for more developed countries and as high as 1,000/100,000 live births for the least developed countries such as Pakistan, Afghanistan, Nigeria and Democratic Republic of Congo (AbouZahr and Wardlaw, 2000; UNICEF, 2003). According to WHO (2007), approximately 536,000 maternal deaths occur annually, 95% being in sub-Saharan Africa and Asia. WHO added that Africa has the highest burden of maternal mortality in the world. Sub-Saharan Africa is largely responsible for the dismal state of maternal death figure for that region. It contributes approximately 98% of the maternal deaths. It has also been reported that everyday, at least, 1,600 women die worldwide from the complications of pregnancy and childbirth, 90% of which occur in Asia and sub-Saharan Africa (WHO/UNICEF, 2001).

The leading causes of maternal mortality in the developing countries include bleeding, obstructed labour, hypertensive disorder, unsafe abortion and infections, a combination of which contributes for up to 80% of maternal deaths (Nigussie *et al*, 2004). Prata (2004) explained that 18% of the total burden of diseases for women of childbearing age in low-income countries resulted from these problems. An estimated 40% of pregnant women in the developing countries require the assistance of trained providers and 15% require medical care to avoid death or disability (Dayaratna, Winfrey, McGreevey,Hardee, Smith and Mumford, 2000).

In a study of the determinants of use of maternal health services in Nigeria, Babalola and Fatusi (2009) reported that the lifetime risk of maternal death in sub-Saharan Africa is 1 in 22 mothers compared to 1 in 210 in Northern Africa, 1 in 62 for Oceania, 1 in 120 for Asia and 1 in 290 for Latin America and the Caribbean. In the developed countries, women have only a 1 in 2,800 chance of dying in childbirth and as low as 1 in 8,700 chance in countries like Sweden (UNFPA,2006). With a maternal mortality ratio of 1,100 per 100, 000 live births, Nigeria's

maternal mortality ratio is higher than the regional average of 748/100,000 live births (FMOH, 2005). Although, the country has only 2% of the world's population, it contributes about 10% of the world's maternal deaths (FMOH, 2005). This figure varies from region to region in the country. While in the North-Central geo-political region the maternal mortality rate was reported to be 1060/100,000 live births (Ujah, Uguru, Aisen and Otubu, 1999), it was 1700/100,000 in Sagamu, South-Western Nigeria (Olatunji *et al*, 2001), 1406/100,000 in Enugu, South-Eastern Nigeria (Okoro *et al*, 2001) and 1549/100,000 in the North-Eastern part of Nigeria (Babalola and Fatusi, 2009). This variation is said to be as a result of a number of socio-economic and cultural factors including ignorance, lack of access and poverty (Adamu and Salihu, 2002). According to the NDHS (2013), the Nigerian maternal rate is 576/100,000 live births. This figure is an increase over the 2008 NDHS figure of 545/100,000 births.

In recent years, there has been increased recognition that reducing maternal mortality is not just an issue of development, but also an issue of human rights. Preventable maternal mortality occur where women's right to health are violated (Wirth, 2006). Wagstaff and Claeson (2004) reported that maternal mortality and morbidity are connected to a number of human rights. This right to the highest attainable standard of health is legally protected by international human rights treaties including the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) which is aimed at ensuring for women appropriate services during pregnancy, confinement and the post-natal period. Services are granted free where necessary.

2.5 Factors Affecting Utilization of Maternal Health Services

Utilization of health services is a complex behavioural phenomenon greatly influenced by several factors. Empirical studies of preventive and curative services in many parts of the world

have often found that the use of health services is related to the availability, quality and cost of services, as well as the social structure, health beliefs and personal characteristics of the users (Andersen and Newman, 1973; Kroeger, 1983; Becker, Peters, Gray, Gultiano and Black, 1993; Sarin, 1997). Babalola and Fatusi (2009) reported that several studies in India, Pakistan, Bangladesh, Kenya, Ethiopia, Nigeria and Sudan have assessed the individual and household determinants of utilization of maternal services although, the studies did not yield a consistent pattern of relationships between service utilization, individual and household predictors. In some cases, even when a strong association was reported, such as in the case of the positive relationship between education and the use of skilled attendants at delivery, the extent and nature of the relationships are not uniform across social settings. For example, whereas some studies in Peru and Guatemala showed that women with primary level education were more likely to utilize maternal health services than those without any formal education (Falkingham, 2003), some studies in Thailand and Bangladesh did not record any significant difference between the two educational groups (Osubor *et al*, 2006). They therefore argued that availability, access, cultural and economic factors are likely to influence utilization more than level of education of the women.

Studies conducted in Turkey and southern India however, did not show any significant difference in the use of antenatal care between urban and rural women (Celik and Hotchkiss, 2000; Navaneetham and Dharmalingam, 2002). Association between age and service utilization has also been inconsistent across studies. Whereas many studies found a positive correlation between age and the use of skilled attendants at child birth, others have found a curvilinear relationship (Obermeyer and Potter, 1991; Gage, 1998, Koria, Banker and Nayak, 2012). Gyimah, Takyi and Addai (2006) reported that in Ghana, religion has also shown variable pattern

of association with service utilization, with significant association in some settings but not in some others while in contrast, parity has been consistently shown to be negatively correlated with the use of skilled attendants. For instance, among the followers of traditional religion in Ghana, most women receive maternal health services from traditional healers while most Christians visit clinics for maternal health services. A number of studies in many developing countries have reported positive association between economic status and use of medical settings for delivery whereas others have not found such an association (Stock, 1983, Glei, Goldman and Rodriguez, 2002; Stephenson *et al*, 2006).

A number of cultural factors such as the use of traditional birth attendants and home remedies have severally acted as barriers to utilization of maternal health services in many developing countries (Khan, 2000; Abel, Francoise, Michele and Phillipe, 2012). Letamo and Rakgoasi (2003) identified six independent variables responsible for the utilization of maternal health services which they categorized into (i) the individual factors which comprises of age, parity, education, marital status and place of residence and (ii) household factors made up mainly of socioeconomic status of the woman and the family. Shaikh and Hatcher (2004) explained that poor utilization of maternal health services is usually caused by cultural, demographic, women's autonomy, economic, physical accessibility and the people's health and disease belief patterns. Therefore, a thorough investigation and good understanding of these factors is necessary for effective implementation of maternal health services in individual communities since they differ from place to place and among people in the same community. In addition, availability and access to maternal health services especially among the poor and rural women should be a priority since the most important variable associated with utilization of MCH services are

availability and physical accessibility of these services (Abbas and Walker, 1986; Marchie, 2012).

The Nigerian FMOH (2005) reported that long distances to health services and especially in rural locations have been generally reported to be strongly and negatively associated with the use of maternal health services in most parts of Nigeria. A study by Lawoyin (2000) on utilization of antenatal care services in Zaria, Kaduna State revealed that formal education was the most consistent factor associated with the acceptance of antenatal care services. The study revealed that all those that had formal education irrespective of their religion, ethnic group, place of residence, age and parity received antenatal care at least once during their last pregnancies. In another study on determinants of utilization of antenatal care services in Kumbotso, Kano, Kabir, Iliyasu, Abubakar and Sani (2005) found that 59% of the respondents utilized antenatal care services during pregnancy, 86% had secondary school education, all the women with post secondary school education utilized the services while 83% of women whose husbands had post secondary school education utilized the services.

It has been reported that in Nigeria, many women avoid the modern health care facilities for fear of being subjected to operative delivery (Caesarian section) which they believe are performed unnecessarily in hospitals (Federal Ministry of Health, FMOH, 2008). The report added that this fear is so great that in most hospitals, over 25% of patients who have attended antenatal care delivered in largely unsupervised environments but listed the factors affecting utilization of maternal health services as accessibility, affordability, availability, cultural beliefs, inappropriate location of health facilities, poor road and communication networks and lack of means of transportation. Therefore, a good understanding of the factors affecting the utilization of modern maternal health services among women of childbearing age especially in rural

communities will help improve the use of the services and reduce maternal and child morbidity and mortality.

Most of the maternal deaths and disabilities occurring in the developing countries can be prevented through increased access to and utilization of quality basic care during pregnancy including referral for complications and the provision of essential obstetric care as well as family planning to prevent unwanted pregnancy (Koblinsky and Campbell 2003; Nanda, Switlick and Lule, 2005). It has been reported by Adam, Lim, Mehta, Bhutta, Fogstad and Mathai (2005) that attendance at antenatal care, delivery in a medical setting and having a skilled health worker at delivery improves maternal health. The WHO (2007) reported that the availability and use of these services vary within the developing countries. The intra country differences are usually between affluent and poor women, and between women living in urban and rural areas (Magadi, Zulu and Brockerhoff, 1993; Wirth, Balk, Delamonica, Storeygard, Sacks and Minujin, 2006).

Male involvement in maternal health services has been reported to have significantly influenced service utilization by women especially in the developing countries like Ethiopia, Zambia and Malawi (Medhanyie, Spigt, Kifle, Schaay, Sanders, Blanco, Geertjan and Berthane, 2012; USAID, 2013). In a study on male involvement in maternal health care and determinants of utilization of skilled birth services in Kenya, USAID (2012), found that women who were accompanied by their husbands to at least one ANC visit utilized skilled birth attendant services than women who were not accompanied at all by their husbands. Similarly, it was reported that the involvement of men in maternal health services increased the women utilization of ANC, delivery, postnatal and family planning services in many communities (Medhanyie *et al*, 2012; Abel *et al*, 2012; Koria *et al*, 2012).

The unavailability and inaccessibility of qualified maternal health care and the logistic problems of providing emergency obstetric care where and when it is needed are important factors in the development of maternal complications and deaths. Wagle *et al* (2004) explained that access to quality care during pregnancy and especially at delivery seems to explain the disparity in maternal mortality and morbidity between the developing and the industrialized world.

It has been reported by Schmidt (2000) and Starrs (2006) that key health-care interventions can largely prevent women from dying of pregnancy-related causes. Attendance of antenatal care, delivery in a modern medical setting and having a skilled health worker at delivery are some of the health care interventions that have been proved to improve maternal health and subsequently reduce maternal deaths (Starrs, 2006). Despite significant changes recorded in the standard of living in most parts of the world, it has been reported that there has been little change in reproductive health-care-seeking behaviour in recent years, as observed in various demographic and health surveys of many developing countries (Acharya and Cleland, 2000). Reports have shown that health service utilization is determined not only by its availability but by a number of other factors such as place of residence and poverty, the women's age, ethnicity, education, religion, culture, clinical need for care and decision-making power. The costs, location and quality of health services are also important in determining the use or otherwise of maternal health care services among the people (Al-Nahedh, 1995, Adam *et al*, 2005, Say and Raine, 2007).

There is need therefore, to investigate the determinants of maternal health services in the rural communities in order to remove the bottlenecks affecting the utilization of the services.

This will improve service utilization by women in the rural areas thus, improving maternal health and reducing maternal mortality.

2.6 Theoretical Framework

This study is an investigation into the provision of accessible and quality maternal health services as well as the patterns of utilization of maternal health services provided in PHC facilities in Niger State. While the introduction of PHC was mainly aimed at improving and ensuring access to modern health services especially to the rural poor, some scholars see its introduction as a means of creating a rural-urban divide or rich-poor divide in the provision of health care services to the people. This is the case in many developing countries like Nigeria where the PHC has been neglected and confined to the rural areas. This scenario can be explained within the context of Marxist political economy perspectives while the utilization of services aspect is explained using the Health Belief Model (HBM).

2.6.1 The Political Economy of Health

The political economy perspective is traceable to the work of Adam Smith and David Ricardo and latter, that of Karl Marx (Ritzer and Stepnisky, 2014). It was developed as a critical response to functionalism in the context of larger changes in social thought occurring in the 1970s (Aina, 1986; Anselin, 1988). It is seen both as an approach as well as a realistic methodology with a holistic perspective to the analysis of social development (Aina, 1986; Alubo, 1995; Onimode, 1995). Under this approach, good health is defined in political terms not only as a state of physical or emotional wellbeing but as access to and control over the basic material and non-material resources that sustain and promote life at a high level of satisfaction. With the assumption of unequal distribution of resources, wealth and power, the political

economy theoretical framework provides a valuable context in which to consider the socio-economic and political determinants of health. It is particularly useful when considering the health status of the historically marginalized groups which includes the ageing, the physically disabled, the women, non-whites, the rural and the unemployed partly because of restricted access to health care services.

There are two basic variants within the political economy school of thought i.e. the liberal and the radical comprising the classical and the Marxist approaches (Owumi, 2002; Godswill, 2008). While the liberal school of thought stresses the role of market forces in the distribution and allocation of resources including those of health care, the radical school upholds production and production relations. The Marxist political economy perspectives emphasizes the importance of material conditions in understanding and explaining social existence and in finding solutions to individual and group problems of man. The theory explains how people derive their livelihood (their mode of production) and maintain that in virtually all societies with the exception of the communal mode, classes have been developed. This class difference produces unequal access to means of livelihood including health care services. In addition, the inequality created by the class difference also produces exploitation between the rich and the poor, the ruling class and the ruled. The top class did not only control the resources but also control the state machineries of power to facilitate or help the rich to maximize their profits and put them under perpetual control.

The Marxist political economy asserts the strong link between capitalism and health such that health status and the organization of health care are the results of a capitalist economy and class relations. It analyzes imperialistic power relations and the exploitation of labourers, emphasizing the socioeconomic politics of medicine and the unequal distributions of the

commodity to the people. Health care is distributed according to its ability to improve the productivity of labour and consequently, those considered to have low economic worth would have unequal access to health care services and programmes (Besley and Burgess, 2002).

The main Primary Health Care users are the poor people mostly living in the rural areas. The introduction of primary health care could be viewed as a way of upholding inequality and social stratification created by the capitalist economic system among the people because the ruling class and the rich hardly use the primary health care facilities especially in the developing countries partly because most of the PHC facilities lack adequate skilled personnel and equipment to provide quality health care. The powerful few often avail themselves quality health care services provided by highly skilled and specialist health care personnel in health care facilities mostly based in urban areas that usually charge heavily for their services. These services could not be afforded by the poor, lower class and marginalized people because of scarce resources and competing demands. They are therefore forced to receive health care services from the poorly staffed and ill-equipped PHC facilities in many parts the developing countries like Nigeria.

It is also argued that the ruling class needs strong labour force to provide the necessary labour and raw materials for their economic growth and that of the country. Thus, there is the need to provide the poor with a form of health care service that will treat some minor ailments in the society. The introduction of PHC is therefore seen as a way of ensuring that the lower class/proletariats can be very healthy and serve as strong labour force for the rich who in turn will continue to grow richer and stronger for their continuing dominance and control of power in the society.

Most of the equipment, drugs and other health care materials utilized by PHC facilities are manufactured by multinational companies assisted by their national collaborators who are in control of the state machineries in the country. Thus, the establishment and expansion of PHC facilities is an attempt to expand the markets for their goods and services which in turn perpetuate the exploitation of the poor downtrodden people in the society. It is instructive to state here that most of the diseases and health care programmes of PHC are health issues affecting the poor, marginalized and lower class people who may not afford quality health care services provided by health care facilities located in urban areas that are adequately equipped and staffed to serve the rich and highly placed individuals and members of their family.

The exploitation of the poor by the powerful few in the society is further promoted by the introduction of PHC through the embezzlement of the funds budgeted for PHC programmes and the money received from foreign donors. This partly is responsible for the poor infrastructures, lack of drugs and equipment in the PHC facilities. PHC is therefore seen as a means by which the most powerful in the society try to deceive the least powerful into accepting inequality and to make them believe that the powerful in the society are genuinely interested in their welfare and survival by providing them with basic health care facilities that are of less quality as the ones provided for the powerful in the society. Thus, claiming legitimacy and support from the people who in turn give their loyalty to the ruling class with the belief that they are concerned about their welfare

2.6.2 The Health Belief Model (HBM)

The Health Belief Model (HBM) is a conceptual framework used to understand health behaviour and possible reasons for non-compliance with recommended health action (Becker and Rosentock, 1984). It provides guidelines for programme development and allows health planners to understand and address reasons for non-compliance. The frustration as to why the public was not responding to the Federal Government offerings of free preventive health programmes in the 1950s in USA that sparked the research of three psychologists ; Irwin Rosentock, Godfrey Hochbaum and Stephen Kegels with the aim of identifying the reasons for the health behaviour and to possibly resolve the problem (Mikhail, 1981; Burns, 1992).

The HBM breaks down health decisions into a series of stages and offers a catalogue of variables that influence health action. These series of stages are regarded as the four major components for compliance with recommended health action (Hochbaum, 1958). They are:

i. Perceived susceptibility of the disease – This refers to the person's judgement of his or her personal risk of contracting the disease or health condition. The greater the perceived risk, the greater the likelihood of engaging in behaviours to decrease the risk. Thus, when women and their husbands perceive the health threats posed by pregnancy and childbirth processes, they are likely to seek maternal health services like antenatal care, family planning, childbirth, postnatal and immunization services in the PHC facilities located in their communities.

ii. Perceived severity or seriousness of the condition - The construct of perceived seriousness refers to an individual's belief about the seriousness or severity of a disease or the clinical consequences, disability, pain or death and its impact on life style including working ability, social relationships and psychological state of

the individual. When women develop pregnancy and childbirth related health problems like anaemia, bleeding in pregnancy and after childbirth as well as sepsis and they perceive them as serious or severe, they are likely to go for routine or emergency obstetrics care. However, when pregnancy and its related health problems are perceived as normal processes that require only home care, they are likely not to utilize the available maternal health services in the existing PHC facilities in their communities.

iii. Perceived benefits of action – This is the person's opinion of the value or usefulness of a new behaviour in decreasing the risk of developing a disease. It is the person's belief rather than factual evidence that influences this component of the HBM. Deciding on a course of action is shaped by the options available and accessible to the individual and the belief in their effectiveness. Perceived benefits of health action play important role in the adoption of secondary prevention behaviours such as screening activities conducted during antenatal and postnatal care visits as well as family planning. People tend to adopt healthier behaviours when they believe that the new behaviour will decrease their chances of developing a disease.

iv. Perceived barriers – This is an individual's own evaluation of the obstacles in the way of his or her adopting a new behaviour. According to Janz and Becker (1984), perceived barriers are the most significant in determining behaviour change. Modern maternal health services like the ANC, PNC and childbirth in the clinics are new behaviours introduced by the West to improve maternal and child health status of the people. This behaviour is seen as alien to the people and in disagreement with some cultures that encourages care of the pregnant woman at

home by the TBAs and older women as well as childbirth at home. Utilization of the modern services has to do with change in behaviour and change is not something that comes easily to most people. Thus, in order for a new behaviour to be adopted, the person needs to believe that the benefit of the new behaviour outweigh the consequences of continuing the old behaviour

According to Hochbaum (1958), the four major constructs of perception presented above are influenced by what he called "modifying factors" or other variables like age, gender, ethnicity, culture, education, past experiences, skills, distance from health facility, motivation, personality and socioeconomic status among others. These according to him, are individual characteristics that influence personal perceptions and could change behaviour. In addition to the four beliefs, the HBM suggests that behaviour is also influenced by "cues to action" which are events, people or things that move people to change behaviour. These cues to action include mass media campaigns, advice from others, illness of family members, health education programmes and explanation by health care providers.

In 1988, the HBM was expanded and the concept "self-efficacy" was added to the original four perceptions or beliefs of the HBM. Self-efficacy was described as the belief in one's own ability to do something when there is perceived threat to health (Rosentock, Strecher and Becker, 1988). This was based on the belief that people generally do not try to do something new unless they think they can do it. Thus, if someone believes that a new behaviour is useful (perceived benefit) but does not think he or she is capable of doing it (perceived barrier), the chances are that he/she will not try to do it. This is the case when the woman, her husband or members of her family could not afford the cost of maternal health services or have difficulties in

accessing the services as a result of cultural factors and distance despite having knowledge of the benefits. In such instances, utilization of the services could either be poor or completely none.

The combination of perceived susceptibility and seriousness is termed "perceived threat" and usually creates pressure to act but does not determine how the person will act. It is usually the balance between perceived efficacy and cost of alternative actions that determines action. Perceived threat is usually influenced by available information. The balance between benefits and cost may suggest the person's likelihood of acting and their preferred course of action but do not necessarily determine that they will act.

The HBM posits that people will take action to undergo a health prevention or treatment behaviour when they are ready, when they see it as beneficial and when the difficulty is not greater than what is to be gained. While readiness is determined the consequences a health risk like refusal to go for ANC may impose and by the degree to which one believes an illness is likely, perceived susceptibility may be influenced by proximity to an illness such as anaemia in pregnancy, prolong labour, retained placenta and abortion affecting a family member. Thus, when perceived susceptibility is seen as likely and perceived severity of an illness is high, motivation to seek health care increases.

From the reviewed theories, it could be seen that while the political economy of health addresses issues related to the provision of maternal health services including the facilities, the HBM explains the utilization of the services and factors affecting it. It is instructive to note that the study investigated issues associated with both the provision and utilization of maternal health services in PHC facilities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methods and materials for the study. It presents the research design, population for the study, sample size and sampling techniques. The chapter presents explanation on the instruments and methods of data collection, data analysis, problems encountered during the research and ethical considerations.

3.2 Research Design

The cross sectional survey design was adopted to identify the state of maternal health services in Primary Health Care facilities and the social factors that determine patronage of the services by women of childbearing age.

3.3 Location of the Study

Niger State is situated in the North-central geopolitical zone of Nigeria. It shares boundaries with Republic of Benin in the West, Zamfara State in the North, Kebbi State in the North-west, Kogi State in the South, Kwara State in the South-west, Kaduna State in the North-east and the Federal Capital Territory (FCT) in the South-east.

Niger State has a population of 3,950, 249 people made up of 2,032, 720 males (51.5%) and 1,917,524 females (48.5%). The annual population growth rate of the state is 3.4% (National Population Commission, 2006). Niger State occupies a total land area of 86,000 km^2 which is about 9.3% of the total land area of Nigeria. The state is ethnically and religiously heterogenous with most of the people residing in rural areas spread all over the state. The largest indigenous ethnic groups in the state include Nupe, Gbagyi, Hausa/Fulani, Kambari, Koro, Kadara,

Dukkawa, Kamuku, Bisan, Pangu and Gungawa while non-native tribes like Yoruba, Igbo and other ethnic groups are found living in all parts of the state. The predominant ethnic groups in Niger Central Senatorial District are the Gbagyi, Hausa, Koro, Kadara and Pangu while in the Niger West Senatorial District, the Nupe is the predominant ethnic group. In Niger North Senatorial District, the Hausa/Fulani and the Kambari are the predominant ethnic groups. About 80% of the people are engaged in farming especially in annual crop production such as rice, maize, millet, groundnut, beans and yam, Livestock farming in the form of cattle, sheep, goat and poultry is practiced while others are engaged in fishing, trading and civil service (Niger State Government, 2006).

3.3.1 Administrative/Political Arrangements of Niger State

As enshrined in the constitution of the Federal Republic of Nigeria in which three levels of government i.e. the Federal, State and Local Governments where the states consists of Local Governments, Niger state is made up of 25 Local Government Areas (LGAs) spread over three (3) senatorial zones; Niger West (Zone A) senatorial district made up of 8 LGAs, Niger Central (Zone B) senatorial district made up of 9 LGAs and Niger North (Zone C) senatorial district made up of 8 LGAs. In addition, there are 8 emirate councils in the state namely; Bida, Agaie and Lapai emirates which constitute the Niger West Senatorial District; Minna, Suleja and Kagara emirates that form the Niger Central Senatorial District as well as Kontagora and Borgu emirates that together formed the Niger North Senatorial District (Niger State Ministry of Information, 2010).

In line with the constitution of the Federal Republic of Nigeria, the state is administered through two levels of government; the State Government and Local Government Councils. As health is on the concurrent legislative list, the Niger State Government is directly responsible for

the provision of secondary health care services while the Local Government Councils are responsible for the provision of primary health care. Both the State and Local Government Councils are to provide maternal health services in their respective facilities (Niger State Ministry of Health, 2013).

3.3.2 Educational Attainment in Niger State

Education has been identified as the most effective instrument for social, economic, political and technological developments. Niger State is one of the Educationally Less Developed States of the country. According to the Niger State Ministry of Education (2013), there are a total of 2,992 Primary Schools with an enrolment figure of 786,893 pupils and 483 Secondary Schools with a total enrolment of 217,167 students and that about 60-65% of these enrolments are made up of males. The report added that between 2007 and 2012, gross enrolment rates for boys ranged between 77 % and 89.8 % while those of girls ranged between 51 % and 70 %.

To provide opportunity for tertiary education for the citizens of the state, there are twelve (12) tertiary institutions spread in different parts of the state. The institutions include the Federal University of Technology Minna, the Niger State owned University located in Lapai, the State College of Education located in Minna, State Polytechnic in Zungeru and a Federal College of Education located in Kontagora. There are in addition professional tertiary training institutions such as the Schools of Nursing and Midwifery, College of Agriculture and the Schools of Health Technology located in various parts of the state. In all these schools, female enrolment is said to be increasing at rates more than what was recorded in the 1990s (Niger State of Ministry of Education, 2013).

3.3.3 Health Care Services

In line with the National Health Policy (Niger State MDGs, 2006), the State provides Secondary Health Care facilities and services while each LGA provides Primary Health Care services in all parts of the state. Statistics supplied by the Niger State Ministry of Health (2013) indicated that there are 1,241 health care facilities in the state out of which 1,223 are primary health care facilities and two are tertiary health facilities i.e. the Federal Medical Centre located at Bida and a State Specialist Hospital at Minna. In addition, there are General Hospital located at Minna Bida, Kontagora, Suleja, New Bussa, Mokwa, Tungan Magajiya, Sabon Wuse, Gulu and Kagara. There are Rural Hospitals located at Agaie, Auna, Wushishi, Kuta, Kutigi, Kafin Koro, Tugunguna, Lapai, Nasko, Bangi and the Rural Hospital, Gawu Babangida that was taken over by the Federal Medical Centre Bida and converted to Family Medicine Clinic. In addition to these, there are 267 Basic/Primary Health Care Centres and Maternal and Child Health Centres (MCH) spread in all the Local Government Areas in the State. There are more than 160 private health care establishments (clinics, maternity homes, etc) located in various parts of the State.

There are four major health training institutions in the state. Located at Minna, the State capital, are the School of Midwifery and School of Health Technology; while there is one each of School of Nursing and School of Health Technology at Bida and Tugan Magajiya, respectively. These provide the middle manpower needs of the state in the health sector. All the health care facilities with the exception of the State Specialist Hospital provide maternal health services. However, four out of the 25 LGAs (Mashegu, Gbako, Katcha and Munya) are yet to have secondary health care facility.

3.4 Population of Study

The population of this study was women of childbearing age (15-49 years; the WHO recommended childbearing age) and health care personnel that are providing maternal health services in all PHC facilities in Niger State. These health care personnel include medical doctors, nurses, midwives, community health workers and medical auxiliaries working in the primary health care facilities in Niger State. All married adult males resident in all parts of Niger State also constituted the study population.

3.5 Sampling

3.5.1 Selection of Research Communities

Six LGAs were selected through a multistage cluster sampling technique. The first stage involved taking the three (3) Senatorial districts IN Niger State; Niger West, Niger Central and Niger North as clusters. The second stage involved selecting two (2) LGAs from each of the three clusters (the 3 Senatorial districts) through simple random sampling technique for each Senatorial Districtto make a total of six LGAs. The selected LGAs were Gurara and Paikoro LGAs in Niger Central senatorial district, Gbako and Lavun LGAs in Niger West Senatorial district and Magama and Mariga LGAs in Niger North senatorial district.

In each of the local government areas selected, two districts were purposively selected for the study and in each of the selected districts, the district headquarter and one village were purposively selected from where the households were drawn. Thus, in each of the selected LGAs, the Local Government headquarter and one other district that had difficult to reach villages and lacking in basic social amenities such as good road network, electricity, schools and

health care facilities were purposively selected. Thus in each LGA, four (4) communities were purposively selected to make a total of 24 communities selected for the study.

3.5.2 Selection of Households

A total of six hundred and thirteen (613) households were selected for the study through a combination of probability and non-probability sampling procedures. This comprised of 204 households in Niger West Senatorial district, 203 in Niger Central Senatorial district and 206 in Niger North Senatorial district i.e. 100 households each from three (3) LGAs and 103, 104 and 106 households from three (3) LGAs. In the 12 districts selected, 50 households were selected (25 in the district headquarter and 25 in the selected village in the district) from eight (8) districts while 52, 52, 53 and 56 households were selected from four other districts across the three senatorial zones based on the total number of households in each district selected for the study. The total figure of 613 households was purposively arrived at because there was no record to show the number of households in state. While households in the district headquarters were selected through systematic sampling technique, availability and purposive sampling techniques were applied in selecting households in the selected villages. The women of childbearing age were selected from the households.

3.5.3 Selection of Women of Childbearing age

In each household, women of childbearing age were selected purposively based on the criteria of having had a baby within the last five years or being pregnant at the time of data collection. Availability and willingness to participate in the study were also considered in their selection. In all, 1-2 women each were selected in most of the selected households depending on the number in each household that met the selection criteria. In some households, three (3)

women each were selected for the study because of the total number of women (7 and above) that met the criteria, variations in their individual characteristics like having a combination of educated, young, employed and elderly women in the same household. All together, a total of 903 women were selected from 613 households.

3.5.4 Selection of PHC Facilities and Maternal Health Care Providers

In all, a total of 24 PHC facilities located in the 24 selected communities made up of 12 Basic Health Centres that served as district referral health units and 12 PHC/Village health posts located in the selected communities were selected for the study. With regards to the maternal health care providers, 4 health care personnel directly involved in the provision of maternal health services were selected from each of the six selected LGAs. They were selected based on their being heads of the maternity units of the PHC facilities or direct providers of maternal health services in the PHC facilities. This gave a total of 24 health personnel drawn from Nurses/Midwives and Community Health Officers/Community Health Extension Workers.

In all, one maternal health service provider was interviewed in each of the selected health care facilities providing maternal health services in the area of study. The maternal health care providers provided information on the availability and quality of personnel and the types of maternal health services provided by their respective facilities, common maternal health problems reported by mothers and the women's patterns utilization of the services. They also provided information on the factors affecting the utilization of the services by women of childbearing age in their facilities. All the selected health care facilities were assessed in terms of their physical environment, equipment, professional qualifications of staff (technical competence), continuity of care and facility management using the adapted USAID developed assessment tool for quality of maternal health services in health facilities.

3.5.5 Selection of Male Respondents for Focus Group Discussion

A total of 69 married men of different age (ranging from 15 to 73 years) across ethnic and educational backgrounds in the research communities were selected for focus group discussion (FGD). A total of seven (7) FGDs were held with them in six locations across the three senatorial districts in the state. Each group was made up of 7-11 men sharing similar characteristics including age, level of education and place of residence.

3.6 Instruments for Data Collection

The instruments used for data collection were structured questionnaire, IDI and FGD guides and a quality assessment tool adapted from United States Agency for International Development (USAID). The survey questionnaire (Appendix I) which contained open-ended and close-ended questionnaire items was used for the collection of data from 903 female respondents resident in the 613 households. Information obtained from the women through the questionnaire include their socio-demographic characteristics and that of their husbands and the maternal health problems suffered during their most recent pregnancies. The questionnaire obtained information about the women's patterns of utilization of maternal health services and factors affecting services utilization.

An In-depth Interview guide (Appendix II) was used to collect data from the 24 maternal health care workers in the 24 selected health care facilities. The IDI obtained information about the socio-demographic characteristics of the maternal health care providers, characteristics of the PHC facilities and the maternal health problems presented in the clinics. The IDI guide was also used to investigate category and adequacy of qualified personnel in the clinics, type and frequency of trainings received, facility management and funding. Women's attendance at the

health centres in the communities and factors influencing services utilization were also assessed with the IDI guide.

An FGD guide (Appendix IV) was used to collect data from married males in the selected communities. Information on individual/ family characteristics, knowledge of maternal health problems and the maternal health problems affecting their wives were obtained with the aid of the FGD guide. In addition, the FGDs elicited information on perceived causes of the maternal health problems, maternal health behavior of the mothers and men's responsibilities in maternal health care. The socio-cultural determinants of utilization of maternal health services by women in the community were also investigated with the aid of the guide.

The quality assessment/observation tool adapted from United States Agency for International Development (USAID) was used to evaluate the quality of maternal health services provided in the primary health care facilities in the selected rural communities (Appendix III). This evaluation covered physical environment/equipment, technical competence of the health personnel, continuity of care and management of the 24 selected PHC centres.

3.7 Methods of Data Collection

3.7.1 Quantitative Data

The researcher engaged 18 research assistants who were trained for the household survey. Four of them are nurses, three were University graduates of Sociology, Political Science and Law, two were HND holders, one OND holder and two were undergraduate students (Education and Sociology). Others include 4 community health extension workers (CHEWs) and 2 NCE holders. They were divided into three groups and trained in three different locations one each in the three Senatorial Districts for two days each. They were trained on how to apply the

household questionnaire for the selected women of childbearing age. They assisted in administering and the retrieval of the questionnaire alongside the researcher.

On arrival in each of the 24 research communities, the researcher introduced himself to the traditional ruler (the District or Village Head) of the community and explained the research topic and the research expectations. Consent was sought for the research from the community leaders who consulted with elders of the community for consent. Where house numbering was required before selection of the households, it was carried out with the assistance of community members attached to the researcher by the community leaders.

The questionnaire was self-administered by few literate respondents while for all the non-literate respondents and some literate ones, it was directly administered and retrieved by the researcher or the research assistants. All together, 903 questionnaires were distributed and 887 were retrieved.

3.7.2 Qualitative Data

This category of data was obtained through In-depth Interview, Focus Group Discussion and institutional evaluation with the aid of modified USAID observation guide. All the IDIs, FGDs and facility evaluation were conducted by the researcher.

In-depth Interviews

One maternal health care provider was indepthly interviewed by the researcher in each of the 24 PHC facilities selected and visited for the study. The maternal health worker selected for the IDI was either the personnel in-charge of the maternity unit of the PHC facility or one of the PHC worker providing maternal health services in the PHC facility. This gave a total of 24 IDIs conducted.

Focus Group Discussion (FGD)

Seven (7) FGDs were conducted with the aid of an FGD guide with adult male participants in six (6) locations of the research communities. Information from each of the FGD sessions complemented the survey data.

Institutional Evaluation/Observation

Twenty four (24) selected PHC facilities located in the research communities were visited and evaluated for quality of maternal health services offered to the clients. This was conducted by the researcher with the help of a modified USAID developed assessment tool. The evaluation covered physical environment/equipment, technical competence, continuity of care and management of the PHC centres.

3.8 Data Analysis

The survey data obtained through the questionnaire were edited, coded and entered in the computer coding sheets. They were processed with the SPSS *version 17.0* (Statistical Package for the Social Science *Version 17.0*). Appropriate statistical techniques including frequency tables and percentages presented in univariate and bivariate tables were applied in the analysis of data.

Information from the IDIs, FGDs and observation were transcribed and sorted according to the research objectives. As part of the PHC facility evaluation for maternal health services, records of ANC, delivery, postnatal and family planning attendance as well maternal and childhood immunization were analyzed to complement information on utilization.

3.9 Problems Encountered During Data Collection

In some of the PHC centres it was difficult getting the maternal health care workers at first visits as they were absent from the facilities and villages during such visits. The researcher made between 2 and 3 visits before getting the maternal health care workers for the IDI and facility evaluation despite poor road networks to some of the villages. In some instances, the researcher had to hire a motorcyclist to travel to remote villages at night in order to stay overnight in the village and get the IDIs and facility assessment conducted the following morning.

Some of the community leaders and community guides attached to the researcher demanded for money before allowing the researcher access to the respondents especially in the case of the survey respondents and the FGD participants. For instance, in three communities in Niger West Senatorial zone, some influential members of the community; most of whom were non-literate demanded for money in addition to the entertainment served before FGD sessions wereheld. The researcher had to pay before some FGD sessions could hold thus, adding to the financial constraints experienced by the researcher.

Similarly, about 17 husbands across the three senatorial districts prevented the researcher as well as the male and female research assistants from administering the questionnaire to their wives; forcing the researcher to include households that were initially not part of the households selected for the study. Although majority of the husbands in this category were non-literate, five were formally educated with two above secondary school.

In three of the PHC clinics, it was difficult getting records on arrival for data collection partly because of the inter-professional conflicts between the different categories of health care workers in the clinics. This created some doubts in the researcher about the authenticity of the records subsequently obtained.

3.10 Ethical Considerations

Permission to conduct the research was granted by the Department OF Sociology, Ahmadu Bello University, Zaria through a letter releasing the researcher to proceed for data collection. Similarly, permission was obtained for data collection in Niger State through the Director Planning, Research and Statistics of the Niger State Primary Health Care Agency who introduced the researcher to the Directors, Primary Health Care of the six Local Government Areas selected for the study in a meeting at the agency secretariat at Minna. Introductory letters to the Directors of Primary Health Care in the six selected LGAs were also given to the researcher by the Executive Medical Director of the Niger State Primary Health Care Agency through the Agency's Staff Officer. The Officers in-Charge of the selected PHC facilities were informed by the Directors about the Agency's consent for the research.

In the research communities, consent was obtained from the District Heads of all the selected districts who in turn attached their representatives to introduce the researcher to the village heads where the research was conducted. In all the selected households, informed consent was obtained from the household heads. The household heads in-turn consented to their wives' participation in the researcher and agreed to participate in the Focus Group Discussion.

Consent was also obtained from the women and the maternal health services providers who voluntarily participated in the research. All the Officers in-charge of the primary health care facilities consented to the request for facility assessment and the IDIs.

CHAPTER FOUR

STATE OF MATERNAL HEALTH SERVICES IN PRIMARY HEALTH CARE FACILITIES IN THE RESEARCH COMMUNITIES

4.1 Introduction

Maternal and child health including family planning is one of the components of Primary Health Care. These services should as a matter of right be made available to all the women in rural communities at the primary health centres located as close to the people as possible, In addition, it should be made affordable, accessible, acceptable and qualitative in all the primary health care facilities. Though PHC centres were established in both rural and urban areas in Nigeria with the intention of ensuring equity and easy access to health care services, reports have shown that most of the rural populations in many parts of Nigeria are underserved. While most PHC facilities are in the state of disrepair with equipment and infrastructure being either absent or obsolete, the referral system is almost non-existent. These cumulatively influenced the provision and utilization of maternal health services especially in rural communities of Niger State.

To evaluate the state of maternal health services in the communities, a modified quality assessment tool adapted from the United States Agency for International Development (USAID) was adapted. The instrument was used to assess physical environment/equipment, technical competence, continuity of care and management of PHC facilities.

4.2 Physical Environment and Equipment in the PHC Facilities

To provide quality maternal health services to clients, there is need for conducive physical environment in the PHC centres. This is presented in Table 4.1

Table 4.1: Physical Environment and Equipment in PHC Centres

S/ No	PHC Facility	Roofing	Waiting Area	Consulting Room	Labour room	Observation room	Storage cupboards	Refrigerator	Consumables	DRF	S &
1	PHC A	Intact	✓	✓	✓	✓	✓	✓	✓	✓	
2	,, B	Intact	X	X	✓	✓	✓	X	X	X	
3	,, C	Leaking	X	X	X		X	X	X	X	X
4	,, D	Blown off	X	X	X	✓	X	X	X	X	
5	,, E	Intact	✓	✓	✓	✓	✓	✓	✓	✓	
6	,, F	Leaking	X	X	✓	✓	✓	X	X	X	
7	,, G	Intact	✓	✓	✓	✓	✓	✓	X	✓	
8	,, H	Intact	✓	X		X		X	X	X	
9	,, I	Intact	✓	✓	✓	✓	X	X	✓	X	
10	,, J	Blown off	X	X	X	X	X	X	X	X	
11	,, K	Leaking	X	X	X	✓	X	X	X	X	X
12	,, L	Blown off	X	X	X	X	X	X	X	X	
13	,, M	Intact	X	X	X		X	X	X	X	
14	,, N	Leaking	X	X	X	X	X	X	X	X	
15	,, O	Leaking	X	X	X	X	X	X	X	X	X
16	,, P	Intact	X				X	X	X	X	
17	,, Q	Blown off	X	✓	✓	✓	✓	✓	X	✓	
18	,, R	Leaking	X	X	X	X	X	X	X	X	X
19	,, S	Intact	✓	✓	✓	✓	✓	✓	✓	✓	
20	,, T	Blown off	X	X	X	X	X	X	X	X	X
21	,, U	Intact	X	✓	✓	✓	✓	✓	✓	✓	
22	,, V	Leaking			X			X	X	X	
23	,, W	Intact	X	X	X	X	✓	✓	X	✓	
24	,, X	Leaking	X	X	X	X	X	X	X	X	X

✓ = Available X = Not available

It was observed that the roofs of five (5) of the PHC facilities visited had been blown off by windstorm while eight (8) i.e. 33.3% of the clinics had leaking roofs and damaged ceiling sheets that made the environment dirty and in some instances like when it is raining, preventing the personnel from attending to clients. In some of the clinics visited, there were no doors and windows while the floor was badly damaged making the interior of some of the clinics dusty.

Similarly, only 7 (29.2%) out of the 24 health facilities visited had waiting areas with benches for women to sit on during antenatal visits, nine had a borehole each for water supply, 13 had pit latrines, 15 had 1-2 beds for observation and rest after delivery and 16 clinics had screen for privacy during childbirth and other clinical procedures. It is instructive to note that while 15 clinics had examination couches for routine medical examinations of patients, only 11 (45.8%) clinics had appropriate storage cupboards for medicines. In addition, clients were consulted within the waiting areas in the presence of other clients who were waiting for their turns. This violates the clients' right to privacy and confidentiality.

Most of the clinics visited (79.2%) had not received any supplies of consumables like cotton wool, syringes and needles, antiseptic lotions, hand gloves, face masks and essential drugs like oxytocin, magnesium sulphate, intravenous infusion (drip), antihypertensives and antibiotics for between 6 and 18 months. In addition, basic working equipment like boilers or sterilizers, sphygmomanometer for blood pressure measurements, weighing scales for adults and babies, foetoscope, basic forceps and source of electricity/light were either in states of disrepair or completely absent in some PHC facilities. In 70.8% of the PHC facilities assessed, there were no refrigerators for the storage of vaccines and other drugs that require low temperatures.

During the In-depth interviews conducted with personnel providing maternal health services, lack of basic equipment and consumables for the provision of maternal health services

were some of the common challenges in some of the PHC centres that hindered effective service delivery. In one of the interview sessions, a trained midwife on the midwifery service scheme; a special Federal Government programme in which retired and unemployed midwives are engaged by the National Primary Health Care Development Agency and posted to rural communities in areas observed to have high maternal mortality in the country stated that:

> Since I came to this clinic, I have been working in a maternity unit without a functional sphygmomanometer, stethoscope, patograph and foetoscope. How can a midwife work without regular supply of basic midwifery drugs like oxytocin, intravenous infusion, antiseptics and even ordinary cotton wool? I am sure many women have died of pregnancy related problems like eclampsia in this environment.

Some of the equipment and consumables were provided by the personnel who in-turn charged the patients for such equipment or consumables thus, providing avenue for illegal practice. In some of the clinics where such equipment and consumables were available, they were said to be provided through the Millennium Development Goals (MDGs) and the Subsidy Re-investment and Empowerment Programme (SURE-P) of the Federal Government or through the efforts of some non-Governmental organizations like Health Systems Development Programme II (HSDP II) or both. For instance, a 52 year old non-literate married man, father of 13 children and husband of two wives stated that:

> The clinics have lots of problems ranging from lack of equipments including ordinary cotton wool to absence of staff and general poor attitude of the staff.

Some of the male FGD participants complained that sometimes when they grant their wives permission or even accompanied them to the clinic they were told by the health workers “bamu da kayan aikin irin wannan ciwon” i.e. we don’t have equipment for her kind of health problem.

Similarly, findings from survey of clients indicated that the provision of maternal health services in some of the available PHC centres was fraught with poor infrastructures, unskilled personnel as well as inadequate or lack of equipment for the provision of the services. These made the delivery of maternal health services unsatisfactory. Table 4.2 shows how the women assessed the PHC centres they visit for care.

Table 4.2: Clients' Assessment of their Respective Health Care Centres

Characteristics	Frequency	Percentage (%)
1. The personnel are always available	752	84.7
2. The personnel are not adequate for the teaming population of the area	590	66.5
3. Personnel are not proficient enough to handle the cases in the facility	533	60.1
4. The cost of services is too high in the clinic	367	41.4
5. The personnel's poor attitude discourage attendance of the clinic	355	40.0
6. The facility lacks adequate equipment to function effectively	350	39.5
7. Insufficient drugs in the facility	185	20.9
8. The personnel's good attitude always encourage people to attend	220	24.8

Note: Multiple responses recorded

Findings in Table 4.2 showed that the women of childbearing age perceived personnel as always available in the facility (84.7%), though, the personnel were considered inadequate for the people attending the facilities (66.5%) and not adequately qualified to handle maternal problems presented in the clinics (60.1%). These suggest clients' dissatisfaction with the services offered by the health centres to the clients. Other expressed flaws of the facilities were high cost

of service (41.4%), lack of equipment (39.5%) and poor attitude of the personnel to their work and the patients (40%). The cumulative effects of these are poor utilization of the facilities and eventual maternal health complications.

4.3 Technical Competence of the Personnel

It was observed that most of the PHC facilities lacked adequate and qualified personnel, equipment and drugs to effectively offer good services to the women. In fact, some of the personnel were not physically present on several visits by the researcher, giving the impression that the personnel were often not available when the women visited. As could be seen in Table 4.3, findings from both the In-depth interview and institutional assessment/observation revealed that of the 24 PHC facilities visited many are poorly staffed.

Table 4.3: Staffing, Provision of Running Cost and Provision of Special Services in PHC Centres

S/ No	PHC Facility	Number of Doctors	Number of Midwives	Number of CHEWs/ JCHEWs	Staff Training Prog.	Regular Staff Meetings	Record Keeping	Referral Services	Blood Transfusion	MVA
1	PHC A	X	3	13	Irregular	✓	✓	✓	✓	
2	,, B	X	1	6	,,	✓	✓	X	X	X
3	,, C	X	X	3	,,	X	✓	X	X	X
4	,, D	X	X	6	,,	X	X	X	X	X
5	,, E	X	6	11	,,	✓	✓	X	X	X
6	,, F	X	X	8	,,	✓	✓	✓	X	X
7	,, G	X	X	12	,,	✓	✓	X	X	
8	,, H	X	X	7	,,	X	X	X	X	X
9	,, I	X	X	15	,,	✓	✓	✓	✓	
10	,, J	X	X	1	,,	X	X	X	X	X
11	,, K	X	X	4	,,	X	✓	X	X	X
12	,, L	X	X	2	,,	X	X	X	X	X
13	,, M	X	X	4	,,	X	✓	X	X	X
14	,, N	X	X	2	,,	X	X	X	X	X
15	,, O	X	X	2	,,	✓	✓	X	X	X
16	,, P	X	X	2	,,	X	✓	X	X	X
17	,, Q	X	X	11	,,	✓	✓	X	X	X
18	,, R	X	X	3	,,	X	X	X	X	X
19	,, S	X	2	7	,,	✓	✓	✓	✓	
20	,, T	X	X	2	,,	X	✓	X	X	X
21	,, U	X	2	8	,,	✓	✓	✓	✓	
22	,, V	X	X	5	,,	X	✓	X	X	X
23	,, W	X	X	4	,,	✓	✓	X	X	X
24	,, X	X	X	2	,,	X	X	X	X	X
	Total	Nil	6 (25%)	24 (100%)	Nil	11 (45.8%)	17 (70.8%)	5 (20.8%)	4 (16.6%)	5 (20.8

Findings in Table 4.3 showed that only 6 (25%) PHC facilities had trained midwives providing maternal health services. None of the PHC centres had a medical doctor either on part-time or full-time basis. The other categories of personnel providing the services were mainly the Senior and Junior Community Health Extension Workers (SCHEW and JCHEW) whose training were below the required standard for effective provision of maternal health services.

It is pertinent to note that among the six PHC facilities that had midwives, only 3 had them on full-time basis. In the other 3 PHC facilities, the midwives were provided through the SURE-P and Midwives Service Scheme (MSS) programmes of the Federal Government. It was also observed that the Midwives serving in the SURE-P and MSS programmes were not equitably distributed as required by one of the principles of PHC. For instance, in one of the health facilities visited, six (6) midwives were posted there through the MSS programme while none of the other PHC facilities including the one located in the Local Government headquarter had any midwife either through the MSS or the SURE-P programmes. It was however observed that since they assumed duties at the PHC clinics, the midwives were denied access to patients by the JCHEWs and CHEWs in some of the clinics for fear of losing their patients to the midwives. This inter-professional conflict is affecting the effective utilization of the midwives in the community with its attendant consequences on maternal health.

Similarly in another health facility, it was found that the only trained health personnel was a male JCHEW with two years post qualification experience who personally admitted that he lacks the required knowledge and skill to attend to some maternal health problems effectively. He stated that some husbands objected to his attending to their wives and either took them home to be attended to by the TBAs or took them to clinics in nearby villages or towns. The other

categories of personnel in that health facility included a female attendant also involved in the provision of health services to the people and a male night guard.

The findings of the quantitative study revealed the inadequacy of the personnel in the PHC facilities as presented in Table 4.1 where 66.5% of the respondents indicated that the PHC facilities in their communities lack adequate personnel to handle the maternal health clients attending the clinics which suggests poor service delivery.

It must be mentioned here that in 9 (37.5%) of the PHC facilities, the JCHEW and SCHEW had between 20-30 years of working experience implying that they could provide fairly good maternal health services based on their experience. For instance, a 54 year old SCHEW with 33 years working experience explained that she had six months training on maternal health services in London in 2006. This is in addition to several other training programmes organized in Nigeria in the past. This therefore implies that this category of personnel could offer some levels of skilled maternal health services.

However, most of the health workers interviewed complained that they were not exposed to regular training by Government. Most of them explained that the only training they received was on immunization and prevention of mother to child transmission of HIV (PMTCT) often organized by NGOs which had no direct bearing on provision of routine maternal health services.

In one of the FGDs, a 33 year old HND II Polytechnic male student said:

> The problem with the health facilities within and around us is that they don't have qualified midwives. Almost all the staff are from this environment and they did not go beyond the 2-3 years training programmes of the School of Health Technology Minna. Most of them could not pass a single paper when they finished their secondary schools. We even learnt that some of them trained as as "dubagari" (i.e. environmental health officers).

The participants at various FGD sessions complained about the quality of health personnel in clinics within their communities and requested that nurses and midwives should be made available in the bigger health facilities in their communities.

4.4 Management of Health Facilities and Continuity of Care

Management of PHC facility and clients' guarantee for continuity of care are important indicators for quality health care in health facilities. These indicators were assessed to determine the state of the health facilities and health services offered by them. Findings of the IDI revealed that the PHC facilities had heads appointed by the Directors of PHC in the LGAs who were mainly CHEWs and in the case of PHC facilities located in the District headquarters, some of the heads had Community Health Officers (CHO) certificates because such centres usually serve as referral units for the village health facilities.

The heads of most of the facilities visited claimed that they took orders or directives from the Directorate of Primary Health Care in the LGAs on how to manage activities in the facilities although they usually take decision on minor issues affecting the facilities from time to time mostly through erratic staff meetings. Only 11 PHC facilities produced minutes of meetings held. This implies that the other personnel are not involved in the decision making processes of the facilities which could affect the provision of quality and continuity of care.

It was also reported by most of the staff interviewed that there was irregular or complete absence of supervision from the PHC departments in the LGAs. The only supervisions they received were from the NGOs that had programmes with them and usually supervise the particular programme in place. Similarly, there were no operational guidelines for the provision of maternal health services in 19 (79.2%) of the PHC facilities assessed because only 5 (20.8%) had operational guidelines for focused antenatal care designed by the WHO. However, all the facilities visited had copies of the standing orders.

Another important finding of the study is that 17 (70.8%) of the 24 PHC facilities had good records kept for family planning, antenatal care, childbirth, maternal and childhood immunization and other health problems managed in the facilities. However, there were inadequate records for referral services, follow up visits and deaths while most of the facilities did not have the standard record books or forms required for specific purposes. In most of the facilities, the staff purchased and used exercise books to keep all the required records and in some facilities there were no lockable cupboards for safe keeping of the records. Asked about the use of these books and forms, a maternal health care worker in one of the IDIs responded thus:

> Ah, my brother, who will give us those books and forms? We buy these exercise books with our money because when anyone eventually visit us from the headquarters, he/she will ask us for the records and we have to produce it otherwise they will withhold our salaries.

This implies that sometimes, records may be concocted by the personnel to avoid having their salaries withheld and other punishments that may be meted on them by officials at the LG headquarters. This was particularly observed in three PHC clinics visited where different records were provided by different personnel that were supposed to be working together.

It was also established from the IDIs that the two-way referral system which requires that patients could be referred from the Primary through the Secondary to the Tertiary levels of health

care and vice versa was not adequately practiced in about 80% of the facilities assessed. The respondents reported that in most cases they only verbally suggested to the clients requiring referral to go to a particular facility for further management. They added that it was only in emergency cases that they sometimes write letters or fill relevant referral forms for the clients who usually transport themselves to the referral centre for further management. Neither the communities nor the PHC facilities visited had a vehicle or any arrangement for conveying patients referred to other facilities. It was reported that most often, the facilities that referred patients did not receive feedback from most of the facilities they referred their patients to in the past. This violates the principle of 2-way referral system as enshrined in the primary health care guidelines.

None of the facilities had any form of financial subvention or received any money for its day to day running. The health personnel explained that sometimes they charged patients certain fees in order to buy some basic equipment like brooms, cutlasses for clearing the surrounding grasses, mops and consumables like antiseptics/disinfectants, detergent, soap, cotton wool and hand gloves. They sometimes requested the patients to provide some of the consumables when it was required. For instance, in one of the clinics visited the toilet was observed to be very dirty and on enquiries, the personnel on duty explained that they did not have detergent and disinfectants because only clients reporting for childbirth usually supply detergent and disinfectants and there was none in the last five days.

4.4.1 Provision of Essential Drugs

Drug Revolving Fund (DRF) is an important means of guaranteeing adequate and regular supply of drugs for maternal health services in the PHC facilities. Responses from the health personnel during the IDIs revealed that only 7 (29.2%) of the PHC facilities had functional drug

revolving fund in place. In the remaining 17 (70.8%) PHC facilities visited there was no drug revolving fund in place. The health personnel claimed that they usually contribute money to purchase the drugs required by clients and the clients were charged according to the drugs prescribed for them. When asked why the DRF is not in place, a 47 year old Chief CHEW answered:

> The previous money released for DRF in the past has been mismanaged and was not accounted for by our officers in the LG headquarters and in some facilities. Therefore, they cannot ask for another money from the LG and presently, LGAs don't receive enough funds from the state any longer so everything is being managed.

They explained that they had to resort to buying drugs with their money to avoid being redundant at work and in cases of emergencies brought to the facilities especially at night. It was observed that essential drugs were fairly more adequate in PHC facilities that had no functional DRF than in those where DRF existed although, standard of the drugs purchased by the personnel could not be ascertained

Similarly, 20.9% of the respondents indicated that the PHC facilities lacked adequate drugs needed for maternal health services (Table 4.2). The implication of this finding is that clients may not receive the right drugs for their health conditions from the facility even during emergencies which may likely affect attendance to the facilities by the people.

CHAPTER FIVE

COMMON MATERNAL HEALTH PROBLEMS AND PATTERNS UTILIZATION OF MATERNAL HEALTH SERVICES

5.1 Introduction

This chapter presents the findings of the study on the sociodemographic characterisitics of the surveyed women and that of their husbands and the common maternal health problems affecting women in the study communities. The patterns of utilization of the existing maternal health services in PHC facilities located in the communities are also presented.

5.2 Socio-demographic Characteristics of Female Respondents

The overall questionnaire return rate was 98.2% of the 903 distributed and of this total, 38.8% and 36.3% were within the age groups 18-25 and 26-33 years old respectively. Majority (73.5%) were Muslims who cut across the four major ethnic groups of Gwari, Hausa, Kambari and Nupe with others coming from other ethnic groups like Fulani, Kadara, Igbo and Yoruba as presented in Table 5.1. The findings in Table 5.1 revealed that 84.4% were married, 5.3% are single mothers. In terms of formal education, 33.7% of the women of childbearing age had no formal education.

Table 5.1: Sociodemographic Characteristics of Female Respondents

Characteristics	Frequency	Percentage (%)
A. Age (years)		
Less than 18	9	1.0
18 – 25	322	36.3
26 – 33	344	38.8
34 – 41	171	19.3
42- 49	37	4.2
More than 49	4	0.4
Total	**887**	**100**
B. **Religion**		
Islam	653	73.6
Christianity	221	24.9
Traditional Religion	13	1.5
Total	**887**	**100**
C. Ethnic Group		
Gwari (Gbagyi)	212	23.9
Hausa	147	16.6
Kambari	138	15.6
Nupe	215	24.2
Others (Fulani, Igbo, Yoruba, Kadara etc)	175	19.7
Total	**887**	**100**
D. Marital Status		
Single	47	5.3
Married	749	84.4
Divorced	67	7.6
Widowed	24	2.7
Total	**887**	**100**
E. Level of Education		
No formal education	299	33.7
Primary education	140	15.8
Secondary education	216	24.4
Tertiary education	232	26.2
Total	**887**	**100**
F. Occupation		
Housewife	439	49.5
Farming	128	14.3
Civil service	281	31.7
Business/Trading	39	4.4
Total	**887**	**100**
G. Number of Children		
Less than 5	753	84.9
5-8	82	9.2
9-12	38	4.3
More Than 12	14	1.6
Total	**887**	**100**

Husband's characteristics and family type are perceived as strong contributors to utilization of maternal health services by women. The husbands' sociodemographic are presented in Table 5.2 below:

Table 5.2: Respondents' Husbands' Socio-demographic Characteristics

Characteristics	Frequency	Percentage (%)
A. **Husband's Level of education**		
No formal education	263	29.7
Primary education	91	10.3
Secondary education	232	26.2
Tertiary education	301	33.9
Total	**887**	**100**
B. **Husband's occupation**		
Did not know	45	5.1
Farming	271	30.6
Daily labourer	67	7.6
Civil servant	323	36.4
Business/Trading	181	20.4
Total	**887**	**100**
C. **Type of family**		
Nuclear	443	49.9
Extended	444	50.1
Total	**887**	**100**
D. **Husband's number of wives**		
Not married	22	2.5
One wife	373	42.1
Two wives	298	33.6
Three wives	125	14.1
Four wives	66	7.4
More than four	3	0.3
Total	**887**	**100**
E. **Wife's position to the husband**		
First wife	504	56.8
Second wife	264	29.8
Third wife	62	7.0
Forth wife	26	2.9
Missing cases	31	3.5
Total	**887**	**100**

The findings in Table 5.2 show that a cumulative 60.1% of the respondents' husbands had between secondary and tertiary levels of education, 29.7% had no formal education and 36.4% of the husbands were civil servants. Almost equal number of respondents lived in nuclear and extended types of family while majority of the respondents' husbands (55.4%) were polygynous although, 56.8% of the women indicated that they were the first wives of their husbands.

5.3 Common Maternal Health Problems Affecting the Women

One of the objectives of this study is to identify the common maternal health problems in Niger State. The respondents were requested to state the maternal health problems they suffered during the most recent pregnancy, from conception to puerperium. The health personnel were also asked to mention the most frequently reported maternal health problems in their facilities. This was investigated with the aid of the questionnaires for the women and discussion with the health workers and FGDs with the male participants during the IDIs and FGDs. Findings from the survey are presented in Table 5.3

Table 5.3: Maternal Health Problems as Reported by the Women During last Pregnancy

Maternal Health Problem	Frequency	Percentage (%)
1. Prolonged labour	171	19.3
2. High blood pressure	168	18.9
3. Bleeding during pregnancy (antepartum haemorrhage)	112	12.6
4. Anaemia in pregnancy	102	11.5
5. Postpartum haemorrhage	78	8.8
6. Retained placenta	60	6.8
7. Intra-uterine foetal death/Stillbirth	23	2.6
8. Breech/Malpresentation of the baby during delivery	10	2.4

Note: Multiple responses were recorded

The findings showed that prolonged labour (19.3%), hypertension (18.9%), antepartum haemorrhage (12.6%) and anaemia in pregnancy (11.5%) were the most frequently occuring maternal problems by some of the respondents. These conditions are life threatening to both the mother and unborn child and the major causes of maternal mortality in the developing countries (Ejembi et al, 2002). They require skilful handling in well equipped health facilities by adequately trained midwives, nurses or medical doctors.

Similarly, all the health workers interviewed mentioned maternal health problems like hypertension in pregnancy, haemorrhages, prolonged/obstructed labour, retained placenta, abortion, malaria in pregnancy, anaemia in pregnancy, sepsis and eclampsia as the main maternal health problems often brought to the health facilities for treatment. Most of them (87.5%) revealed some maternal deaths were recorded mostly at homes. The health personnel identified ignorance, poverty, cultural beliefs and failure to deliver babies in the clinics as the main factors responsible for the health problems and their consequences in the community.

Participants in some of the FGDs conducted identified haemorrhage, prolong labour, retained placenta, still birth, fever and severe abdominal pain as the major health problems suffered by women during pregnancy and childbirth. Most of the participants attributed the problems to hard work undertaken during pregnancy, poor nutrition, women's failure to attend antenatal clinic, sorcery, witchcraft and evil spirits intrusion. For instance in one of the FGD sessions, a 60 year old non-literate father of 11 children stated that:

> Evil spirits, sorcery and witchcraft still affect the outcome of pregnancies. Sometimes men that lost the hands of women in marriage use charm to prevent them from having children either by preventing them from getting pregnant or by making them to lose the babies after getting pregnant.

This view was also held by a group of young non-literate participants aged 25-30 years in another FGD session that women who deceive some men by initially promising to marry them and latter refusing to do so usually fall victims of some perceived "wicked men" during pregnancy and childbirth. The implication of this finding is that there are cultural explanations to health problems which may eventually have determined where treatment for the health problems is sought by the people.

The study investigated where the identified maternal health problems were managed when they occurred. The women indicated different places where treatment was received (Table 5.4).

Table 5.4: Where the Identified Maternal Health Problems were Treated

Place of Treatment	**Frequency**	**Percentage (%)**
At home	69	14.1
At the TBA's place	53	10.8
At a prayer house	8	1.6
At the traditional healers' place	46	9.4
At the clinic	313	64.0
Total	**489**	**100**

As shown in Table 5.4, the respondents indicated that the maternal health problems they developed during their most recent pregnancies, childbirth or puerperium were treated at various traditional and modern treatment centres including home treatment and prayer houses. Majority of the respondents that had one maternal health problem or the other (64%) indicated that they

treated the problems at the PHC facilities. The implication of this is that the respondents treated the health problems according to perceived causes of the problems.

During the IDIs, most of the health personnel revealed that although most of the women usually report to the health facilities to treat their maternal health problems, some of them also go to traditional healers after coming to the clinic. Some of the health workers revealed that some of the mothers presented the problems in the health facilities after they have tried traditional means without success while others combined the modern and traditional methods of treatments. In one of the IDI sessions, a maternal health care worker explained that there were times that the clients reported at the modern health facilities with concoctions rubbed all over the body and different kinds of talisman tied round the neck, chest and other parts of the body meant for the protection of either the pregnancy, the delivered baby or the mother herself.

Similarly, participants in various FGD sessions across age, ethnic, religious and educational backgrounds expressed different views regarding where the identified maternal health problems were treated. For instance, while the non-literate participants across the aforementioned backgrounds emphasized that both the modern and traditional methods of treatment such as the traditional birth attendants and traditional healers were contacted for the management of the identified maternal health conditions, most of the literate respondents explained that the modern health facilities were mainly used to treat members of their families.

In one of the FGD sessions, a 54 year old non-literate male participant stated that:

> We use the hospitals a lot for treatment of those problems but we also use our traditional birth attendants and the traditional healers because pregnancy and childbirth problems are sometimes mystically caused.

This implies that traditional medicine related to maternal health is being patronized by the people either in combination with modern medicine or as an alternative to modern medicine. This finding implies the persistence of traditional practices in the management of pregnancy and childbirth related health problems despite the presence of modern health facilities.

5.4 Access to Maternal Health Services

One proven effective strategy to improve maternal health services utilization is to provide easy access to the services. It was observed that PHC clinics were available in most communities. The distance from the PHC centres to the place of residents varied from community to community. An investigation of the time it takes in minutes to walk from the respondents' houses to the nearest PHC health facility showed that most of the respondents (76.3%, n=677) took 34 minutes or less to reach the PHC facility as presented in Table 5.5.

Table 5.5: Respondents' Estimated Distance/Duration of Trekking to the Nearest PHC Facility in Minutes

Duration in Minutes	**Frequency**	**Percentage (%)**
A. Time in minutes		
Less than 15 Minutes	323	36.4
15 – 34 Minutes	354	39.9
35 – 60 Minutes	146	16.5
65 – 90 Minutes	14	1.6
100 – 120 Minutes	21	2.4
140 – 180 Minutes	22	2.5
200 – 300 Minutes	7	0.8
Total	**887**	**100**

Findings in Table 5.5 indicates that some of the women like those resident in Zangon-Magaman Daji village required about 3-5 hours of trekking to reach the nearest PHC centre for maternal health services. This distance on foot is considered too long for the women to keep appointments especially for antenatal care and in emergency when the women need to reach the health facility to avert complications. In addition where means of transportation is difficult either as a result of poor road network or lack of money, the woman may either be denied access to modern health services or have delayed access which may eventually lead to utilization of the services of traditional healers and the TBAs with the attendant consequences on the health of the mother and the baby. It was also identified that 47.8% of the respondents indicated that they were sometimes not attended to by the health workers when they visit the facilities. This implies that there was limited access to the services in the facilities.

Most of the IDI informants believed that women have access to maternal health services offered by the PHC facilities because they felt that health facilities were as close to the people as possible in most communities, the personnel were always available and the services were supposedly considered affordable. However, some of the health personnel reported that lack of adequate equipment, drugs and consumables as well as poor road network and poverty were some of the constraints for access to maternal health services by the women in the rural areas.

It is important to note that while the JCHEW and SCHEW personnel interviewed felt that women in the rural communities have access to maternal health services, the nurses and midwives interviewed felt that the women lacked access to quality services because of lack of qualified staff and facilities for the services. Some of the midwives reported that in some facilities, only women that paid for the services as requested by the JCHEW and SCHEWs were attended to even in emergency situations. When asked about women's access to maternal health

services in the community, a 58 year old midwife on MSS programme with 37 years work experience stated that:

> All I can say is that the women have access to health facilities but not quality services. The CHEWs lack the necessary knowledge and skills to offer maternal services. Some of them do more harm than good because they go beyond their limits and they don't like referring clients. The women have been complaining about the way they treat them in the clinics especially when they cannot pay what they requested them to pay.

Some of the midwives reported that most of the JCHEWs and CHEWs could not even carry out accurately physical examination of pregnancy to either estimate the duration of pregnancy or understand foetal positioning in the womb. They explained that because of their poor knowledge of the development of foetus, pregnancy progression and danger signals of pregnancy and childbirth several maternal morbidity and mortality have been recorded in the rural areas unreported. According to some of the personnel interviewed, poor handling of maternal problems, arrogance and poor attitude to work of some of the health workers had led many husbands to withhold permission for their wives to attend some of the PHC facilities in the rural areas.

Similarly, participants at different FGD sessions expressed different views about the women's access to PHC facilities for maternal health services. In one of the FGDs, a 31 year old Secondary School leaver explained that once a husband lacks the money to foot the bill for his wife's treatment, he should not bother to take his wife to the health facility because she will not be attended to irrespective of the gravity of her ill health. He stated that:

> Once you have the money, your wife can always be attended to. The Government has been saying that medical treatment for women and children is free but the truth is that nothing is free in the hospital

In the same vein, another male participant in one of FGD session complained about the health workers attitude to work especially as it relates to their refusal to attend to clients. The 30 year old NCE I student stated that:

> The health workers don't attend to patients especially at night. Many sick people have died in front of the health workers houses at night. There was a time I took my wife to his house at night and the health worker refused to come out. I even threw several stones on the roof of his house but he refused to come out of the house. We returned home untreated.

He explained that the health workers have become so powerful in the village that they do whatever they like including refusing to treat patients taken to the clinic for non-payment of fees charged by them or on account of disagreement with any member of the patient's family. He added that until the government officials act decisively about the attitude of the health workers, the people will not enjoy the benefit of the health facilities provided for the people.

5.5 Patterns of Utilization of Maternal Health Services

The patterns of utilization of maternal health services was measured by investigating the women's utilization of antenatal care, institutional delivery, postnatal care, family planning, maternal and childhood immunization as well as emergency obstetric services were investigated. The survey findings in Table 5.6 revealed that different types of maternal health services were utilized in multiples by the women. It could be seen in the patterns of utilization that more women use some particular services than the others.

Table 5.6: Maternal Health Services Utilized by the Women

Maternal Health Services	Frequency	Percentage (%)
Antenatal care	737	83.1
Maternal and Childhood immunization	603	68.0
Childbirth/delivery services	537	60.5
Family planning	390	44.0
Postnatal care	312	35.2

Note: Multiple response recorded

The finding on the utilization shows that 83.1% of the respondents utilized the antenatal care services, 68% utilized the maternal and childhood immunization services while 60.5% delivered their babies in the health facilities. The gap between utilization of ANC services and childbirth in the clinics could be as a result of the fact that many women only go ANC when they fell sick thus combining treatment for the illness suffered with ANC services. Similarly, many maternal health care providers and participants in the FGDs reported that many people especially in the rural areas expected that unless there are problems associated with childbirth, the woman should deliver her baby at home.

Similarly, most of the interviewees indicated that antenatal care, delivery service and immunization were the maternal health services most utilized by the women. Findings from all the FGDs revealed that the most utilized component is the antenatal care services.

5.5.1 Antenatal Care (ANC)

As shown in Table 5.6, the proportion of women that attended antenatal clinic was 83.1%. This shows that ANC was the most utilized maternal health service by the women across ethnic, religious and educational background (Table 5.7).

Table 5.7: Utilization of Antenatal Care Services Across Ethnic Groups

Ethnic Group	**Ever Utilized Antenatal Care Services**		**Total**
	Yes	No	
Gwari (Gbagyi)	181 (85.4%)	31 (14.6%)	212 (100%)
Hausa	123 (83.7%)	24 (16.3%)	147 (100%)
Kambari	118 (85.5%)	20 (14.5%)	138 (100%)
Nupe	167 (77.7%)	48 (22.3%)	215 (100%)
Others (Igbo, Yoruba, Fulani, Koro, Kadara etc)	148 (84.6%)	27 (15.4%)	175 (100%)
Total	**737 (83.1%)**	**150 (16.9%)**	**887 (100%)**

The findings in Table 5.7 shows that women from all the ethnic groups utilized the antenatal services although, a higher proportion of Nupe women (22.3%) than any other ethnic group did not utilized the services. Gwari women (85.4%) and Kambari women (85.5%) constituted the higher proportion of users.

Most of the women revealed that they obtained permission from their husbands before going for the ANC services. They also indicated the period they commenced the ANC and the reasons for utilizing the ANC as presented in Table 5.8. Multiple responses were recorded for item D.

Table 5.8: Reasons for Utilization of ANC Services

Categories	Frequency	Percentage (%)
A. Obtaining permission for ANC from Husband		
Obtained permission from husband	726	81.9
Did not obtain permission from husband	11	1.2
No response	150	16.9
Total	**887**	**100**
B. Age of pregnancy at commencement of ANC		
1-3 months	326	36.8
4–6 months	322	36.3
7-9 months	89	10.0
No response	150	16.9
Total	**887**	**100**
C. How many times ANC was attended		
1-3 times	174	19.6
4 times	121	13.6
5-7 times	323	36.4
8-10 times	96	10.8
11-or more times	23	2.5
No response	150	16.9
Total	**887**	**100**
D. Reasons for utilization of ANC services		
I was sick	219	24.7
Health facility is near	264	29.8
Husband encouraged me	445	50.2
To know my health status	508	57.3
To know the health status of the foetus	491	55.4
The facility offer good services	318	35.9
Encouraged by neighbour	113	12.7
The service is free	123	13.9

As shown in Table 5.8, about 82% of the respondents indicated that they had their husband's permission before attending the antenatal clinic, 36.8% began the ANC during the first trimester or as soon as pregnancy was confirmed and only 13.6% attended the ANC as required by the focused antenatal care guideline of the WHO while some of the women claimed they attended the ANC more than 10 times with a particular respondent that revealed that she attended the ANC about 18 times before childbirth.

The finding shows that the women had various reasons for attending the ANC as indicated by the multiple entries of some of the respondents. From the table, the respondents gave reasons like they attended the ANC to know their health status and that of the unborn baby, they were encouraged to attend by their husbands and that they were sick before attending the ANC. This implies that most of the women attended the ANC to achieve a particular objective or the other.

Similarly, most of the health workers interviewed explained that the husbands offered various forms of support for the women in the utilization of the ANC services including accompanying them to the clinic, transporting them to the clinic on motor cycles and paying the bills for the drugs, investigations and the consumables used. The health workers reported that the ANC was the most utilized component of maternal health services by the women. From available records in the clinics it was seen that while the health facilities in the smaller villages recorded 35-70 clients for the ANC per month, the PHC facilities in some LG headquarters like Paiko, Gawu-Babangida, Kutigi, Lemu and Nasko as well as those in some districts like Diko, Ibeto and Mariga recorded 100-200 ANC clients per month. The health workers explained that they adopted the strategy of conducting the ANC clinics on market days to encourage the women

from nearby villages to combine their visits to the market with the ANC which they claimed helped in increasing the attendance rate.

Majority of the participants in the FGD also reported that they permitted and encouraged their wives to attend the ANC and sometimes gave them money for transportation and clinic services if they had the money. Some of them said that they did not give the women money because they felt it was not necessary especially when the visits were more frequent than usual. For instance, a 47 year old non-literate FGD participant explained that on two occasions, he transported one of his wives to the health facility on his motor cycle for the ANC but discovered that all that the health worker did was to ask the wife if she had any health problem and the wife indicated that there was none. He added that the health worker only gave her paracetamol and a yellow tablet and eventually charged some fees before asking her to go without even touching her. He therefore felt that the ANC was just a waste of time and stopped either transporting the wife to the clinic or giving her money for the ANC. Most of the health workers reported that most of the women attended only the first ANC and only appeared in the health facilities for childbirth sometimes with complications like high blood pressure and anaemia.

However, most of the literate male participants in the FGDs reported that they usually accompanied their wives to the clinics and paid all the fees for ANC. Some of them reported that they insisted on palpation, blood test and blood pressure measurement to be conducted on their wives when they felt that the health workers were not going to do them.

Although, it was observed that the ANC was the most utilized component of maternal health service by the women of childbearing age, it was discovered that ANC services were not offered as required in the guidelines. For instance, the number of visits deviated from the newly introduced focused antenatal care guideline which stipulates that the visits in normal pregnancy

should not be more than four (4) times. In most of the facilities, the women were given 2-4 weekly appointments for the ANC until childbirth thus, 13.4% of women paid between 8 and 18 ANC visits before delivery. Most of the clinics (19) did not have simple facilities for haemoglobin estimation, urine analysis, blood pressure monitoring and other physical examinations of the clients. Most of the personnel could not even palpate the women accurately because they were JCHEW and CHEW whose level of training did not provide for such skills.

5.5.2 Delivery (Childbirth) Services

The study found that patronage of delivery service by women that have ever delivered was generally low (60.5%) across all ethnic groups when compared with ANC utilization rate of 83.1% (Table 5.6). Utilization of childbirth services across the ethnic groups revealed that more Nupe women (65.1%) delivered in the health care facilities than women from any other ethnic groups as presented in Table 5.9.

Table 5.9: Ethnic Group and Delivery at PHC Facility

Ethnic Group	**Ever Delivered Baby at PHC Centre**		**Total**
	Delivered at Clinic	Did not deliver at Clinic	
Gwari (Gbagyi)	127 (59.9%)	85 (40.1%)	212 (100%)
Hausa	86 (58.5%)	61 (41.5%)	147 (100%)
Kambari	75 (54.3%)	63 (45.7%)	138 (100%)
Nupe	140 (65.1%)	75 (34.9%)	215 (100%)
Others (Igbo, Yoruba, Fulani, Koro, Kadara etc)	109 (62.3%)	66 (37.7%)	175 (100%)
Total	**537 (60.5%)**	**350 (39.5%)**	**887 (100%)**

The women indicated other places that they delivered their most recent babies which included at home, assisted by the TBA, and in religious homes. The findings also revealed that husbands played key role in deciding where the women delivered their babies. The majority of the women indicated that labour is not prolonged or complicated (easier labour) as reason for their choice as presented in Table 5.10.

Table 5.10: Place of Recent Childbirth, Reasons for the Choice of Place and Persons that Decided where Child was Delivered

	Frequency	Percentage
A. Place of recent childbirth		
At home	350	39.5
In the clinic/hospital	537	60.5
Total	**887**	**100**
B. Who decided where child was delivered		
My self	115	13.0
My husband	298	36.8
Both of us	251	31.8
Family members	53	9.6
Health workers during ANC visit	79	8.9
No response	91	10.3
Total	**887**	**100**
C. Reasons for choice of Place		
Labour is easier	260	29.3
Health facility is far	244	27.5
Husband refused my going to the clinic	132	14.9
We cannot afford the fee	114	12.9
Poor services at the clinic	49	7.8
Attended to by the TBA	58	7.7
No response	30	3.4
Total	**887**	**100**

Findings in Table 5.10 reveal that the respondents delivered their most recent babies in other places such as their homes (39.5%) assisted by family members, TBAs and in various prayer homes. One third (33.6%) said that their husbands decided where they delivered their recent babies, others indicated that they took the decision jointly with their husbands while others claimed that they were advised by the health workers to deliver their babies in the hospital. The respondents gave reasons for their choice of place of child delivery that includes labour was easier, distance/transportation problem to the health facility, husband's refusal for childbirth in the health facility and lack of money to settle the hospital bill among other reasons. The implications of the women giving reasons as labour is easier is that women may be kept at home for a long during labour until complications occur before being taken to the hospital.

Similarly, during the IDIs, the health workers explained that although many women attended the ANC, only few delivered their babies in the health facilities. They reported that most of them usually deliver their babies at home assisted either by members of the family or the TBAs. The health workers reported that husbands exert considerable influence on where the women delivered their babies while mothers in-law and other family members also had significant influence on the women's choice of place of childbirth. They explained that women that had formally educated family members were likely to use the health facilities for childbirth than those with none. It was also reported that some of the women were brought to the health facilities after prolonged labour that sometimes would have lasted for 1-2 days and in most cases with complications like foetal distress and intra-uterine foetal death while some were brought to the health facilities as a result of retained placenta, haemorrhage and injuries to the genitalia that required sutures. They further stated that outcomes of previous childbirths were influential in deciding where the next child was delivered.

Findings from the FGDs with the male participants showed that some of the women delivered their babies in the clinics/hospitals while others delivered at home assisted by family members or the TBAs. Some of the men across ethnic, religious and educational backgrounds explained that their wives usually delivered their babies at home except if a problem ensued in the course of labour or if the woman had some health problems before childbirth. However, a 35 year old NCE holder stated that:

> In the past, most people in the community insisted on their wives delivering their babies at home assisted by older female family members or the TBAs, but now, more people have recognized the importance of the hospitals. I think it is because of the influence of western education and some religious leaders that emphasized the importance of hospital deliveries.

This implies that modernization is gradually influencing the people's health seeking behaviour.

They explained that some of the women saw hospital deliveries as signs of weakness on the part of the women and that it lacked privacy because according to some women, "everybody will know that you are going to deliver a baby even before childbirth". Some of the health workers explained that childbirth was conducted in the client's home either because there was no space for childbirth in the clinics or because the client preferred to be delivered at home.

It was observed that only 8 (33.3%) of the 24 health facilities had a labour room kept mainly for conducting delivery and only 3 were fairly equipped for the provision of delivery services. In some of the health facilities, delivery services were provided in the same place where ANC and other physical examinations of clients' were carried out and in some PHC clinics there were no screen for the provision of privacy during delivery. From the available clinic records, most of the clinics had 5-10 deliveries per month, 7 clinics recorded 15-30 per month and 3 recorded 25-40 deliveries per month. In some of the clinics, there was no bed for the woman to

lie on after childbirth; clients' family provided mat for the woman to lie on after childbirth before returning home.

When the women were asked to mention where they will prefer to deliver their next babies, they answered as shown in Table 5.11. Majority (76.9%) of the women most of who were formally educated at secondary and tertiary levels indicated that they preferred to deliver their next babies in the clinic/hospital while 15.6% (mainly non-formally educated) preferred to deliver their next babies at home. This implies that majority of the women were aware of the importance of delivering their babies in the hospital. However, the finding also suggests that there is need for public enlightenment on the importance of delivery in the clinic in order to reduce the rate of home deliveries as indicated by about 16% of the respondents as presented in Table 5.11.

Table 5.11: Preferred Place for Next Childbirth

	Frequency	**Percentage (%)**
A. Where respondent will prefer to deliver next baby?		
At home	138	15.6
At religious/prayer house	7	0.8
At the clinic/hospital	682	76.9
Assisted by TBA	14	1.6
No response	46	5.2
Total	**887**	**100**
B. Where husband will prefer the next baby to be delivered		
At home	154	17.4
At religious/prayer house	10	1.1
At the clinic/hospital	660	74.4
Assisted by TBA	11	1.2
No response	52	5.9
Total	**887**	**100**

The findings in Table 5.11 revealed that 74.4% of the respondents indicated that their husbands preferred that they deliver their next babies in the clinic while 17.4% indicated that their husbands preferred that they delivered their next babies at home.

The health workers indicated during the IDIs that there was low utilization of delivery services by the women when compared with rate of utilization of ANC services. According to some of the health workers, many women especially in the remote villages preferred delivering their babies at home and deliver at clinics only when there were some perceived or identified health problems. They explained that many of the women only appeared for ANC when the pregnancy is 7-9 months after which they only returned to the clinic for childhood immunization. Some of the health workers reported that apart from the formally educated women and women whose husbands were formally educated that preferred delivering their babies in the clinic; only the very young non-literate women preferred delivering their babies in the clinics. Most of the last category of women usually insisted on delivering their first babies in the clinics after which they will deliver their next babies at home if no difficulty or problem was developed during the first childbirth.

Similarly, during the FGDs, there was a divide in the choice of preferred place where the next baby will be delivered. While the older non-literate participants indicated that there was no need for childbirth in the health facilities if there was no identified health problem affecting the woman or the unborn baby, the literate FGD participants across all ages and the young non-literate participants indicated that they preferred that their wives delivered their next babies in the health facilities.

5.5.3 Postnatal Care

Postnatal care was one of the most poorly utilized maternal health services among the women of childbearing age in the rural areas. As earlier shown in Table 4.8, only 35.2% of the respondents indicated that they utilized the postnatal care services during their most recent childbirth as against 83.1% and 60.5% that utilized the ANC and delivery services respectively.

Table 5.12: Ethnic Group and Utilization of Postnatal Services

Ethnic Group	**Ever Utilized Postnatal Services**		**Total**
	Ever Utilized	Never utilize	
Gwari (Gbagyi)	76 (35.8%)	136 (64.2%)	212 (100%)
Hausa	55 (37.4%)	92 (62.6%)	147 (100%)
Kambari	48 (34.8%)	90 (65.2%)	138 (100%)
Nupe	64 (29.8%)	151 (70.2%)	215 (100%)
Others (Igbo, Yoruba, Fulani, Koro, Kadara etc)	69 (39.4%)	106 (60.6%)	175 (100%)
Total	**312 (35.2%)**	**575 (64.8%)**	**887 (100%)**

Findings in Table 5.12 revealed that the Gbagyi (35.8%) and a combination of other ethnic groups like the Koro, Kadara, Yoruba and Fulani women (39.4%) utilized the postnatal services more than the Hausa and Nupe women. This could be as a result of their economic power which enables them to pay for the services because of their engagement in petty trade and farming.

Most of the health workers interviewed reported that only few of the women utilized the postnatal care services after childbirth. They explained that most of the women that attended the postnatal clinics included the formally educated, the young and those that had some health problems before or immediately after childbirth as well as those whose babies developed some

health problems after birth. The health workers added that most of the women; especially the non-literate only returned to the health facilities when their babies were due for immunization while few of them attended the postnatal clinics as advised by the health workers. On the average, the clinic records showed that 15-30 women utilized the services per month.

Participants at the FGDs were divided on the issue of postnatal care. For instance the formally educated and the non-literate young participants expressed the views that postnatal care was good and that they encouraged and granted permissions for their wives to attend the postnatal clinics. On the other hand, the older non-literate participants explained that the postnatal services were not necessary as long as the mother and baby did not develop any health problems. Most of them reported that they neither encouraged nor granted permission for their wives to attend.

5.5.4 Maternal and Childhood Immunization

This service was the second most utilized maternal health service by the respondents with a utilization rate of 68% as shown in Table 5.6. The maternal and childhood immunization services provided within the pregnancy and puerperium include oral polio, hepatitis B vaccine, BCG as well as Diphtheria, Pertusis and Tetanus (DPT) vaccines. Findings in Table 5.13 shows how the different ethnic groups utilized the maternal and childhood immunization services.

Table 5.13: Ethnic Group and Utilization of Maternal and Childhood Immunization Services

Ethnic Group	**Ever Utilized Maternal and Childhood Immunization Services**		**Total**
	Utilized	Not utilized	
Gwari (Gbagyi)	140 (66.0%)	72 (34.0%)	212 (100%)
Hausa	99 (67.3%)	48 (32.7%)	147 (100%)
Kambari	83 (60.1%)	55 (23,3%)	138 (100%)
Nupe	165 (76.7%)	50 (23.3%)	215 (100%)
Others (Igbo, Yoruba, Fulani, Koro, Kadara etc)	116 (66.3%)	59 (33.7%)	175 (100%)
Total	**603 (68.0%)**	**284 (32.0%)**	**887 (100%)**

Findings in Table 5.13 showed that there is significant difference in the patterns of utilization of utilization of maternal and childhood immunization component of maternal health services among the various ethnic groups. The Nupe women (76.7%) utilized the services more than women from other ethnic groups (60.1-67.3%) in the state.

All the health workers interviewed reported that most of the women immunized their children within six weeks after childbirth. They explained that they used the women's visits to the clinic for the first doses of childhood immunization to provide other postnatal services. Maternal tetanus immunization was received by the women during the ANC visits. It was reported that most of the children received the childhood immunization as scheduled while few parents refused permission for their children to receive immunization especially the polio vaccine because of the controversies surrounding polio immunization in some parts of northern Nigeria.

Most of the male participants in the FGDs reported that they granted permissions for their wives and newly born babies to receive the routine immunization for pregnant women and the new born. According to a non-literate 57 year old village head, his community members currently cherish having their children immunized. He stated:

> In the past, my people had problem accepting the polio vaccine and other immunization because of the controversies surrounding the polio vaccine but with public enlightenment by health workers and some of our children working or attending Schools in different parts of the country as well as the sermons in the Churches and Mosques, most of my people are now accepting immunization.

He added that government and the health workers needed to do more in the areas of public enlightenment about childhood immunization, the provision of adequate vaccines and other facilities for immunization in the clinics.

Available records in the health facilities visited showed that an average of 20-40 women utilized the immunization services during puerperium every month. However it was observed that most of the health facilities lack equipments for cold chain system like stable electricity, refrigerators, cold boxes and steady supply of required vaccines. The implication of this is that the efficacy of the vaccines will not be guaranteed because they may have been destroyed by heat.

5.5.5 Family Planning Services

Findings of the study showed that 78.2% of female respondents indicated that they were aware about family planning and 44.0% indicated that they were practicing family planning while 48.2% of the women indicated that they have been practicing family planning for 1-4 years (Table 5.14). This indicates good knowledge of family planning but poor utilization of the services by the women in the study communities.

Table 5.14: Respondents' Practice of Family Planning

	Frequency	Percentage (%)
A. Awareness about modern Family Planning?		
Aware	694	78.2
Not aware	193	21.8
Total	**887**	**100**
B. Currently practicing planning?		
Currently practicing it	390	44.0
Not practicing it	497	56.0
Total	**887**	**100**
C. For how long Family Planning has been practiced		
Less than one year	62	15.9
1-2 years	91	23.3
3-4 years	97	24.9
5-6 years	53	13.6
7-8 years	34	8.7
9-10 years	36	9.2
11-12 years	17	4.4
Total	**390**	**100**
D. Method of Family Planning Used		
Oral Contraceptives	104	26.7
Injectable Contraceptives	233	59.7
Intra-uterine Contraceptive Device (IUCD)	39	10.0
Norplant	14	3.6
Total	**390**	**100**
E. Reasons for practicing Family Planning		
Advised by health workers	164	42.1
Husband recommended it	91	23.3
I decided to practice it on my own	51	13.1
Joint decision with my husband	84	21.5
Total	**390**	**100**
F. Reasons for not practicing Family Planning		
I personally dislike it	89	22.8
My husband did not approve of it	208	53.3
My culture forbids it	48	12.3
My religion forbids it	67	17.2
Services not available in my community	37	9.5
I am not aware of it	23	5.9
I cannot afford the fee charged	25	6.4
Total	**497**	**100**

As presented in Table 5.14, majority of the respondents (59.7%) revealed that they used the Injectable contraceptives like Noristerat and Depo Provera while 26.7% used the Oral contraceptives (Pills) for family planning and 42.1% indicated that they were advised by the health workers to practice family planning. It is pertinent to note that husbands had influence on the wive's practice of family planning (23.3%) while in some cases, the woman and the husband

jointly decided on the wife's practice. This implies a change in the traditional practice where husbands' decisions on issues were to be complied with by the wife.

Among the respondents that indicated that they were not practicing family planning, majority (53.3%) claimed that their husbands did not approve of it while others gave reasons like personal dislike for family planning (22.8%), religion (17.2%), culture (12.3%) and non-availability of family planning services in the community (9.5%) as being responsible for not practicing family planning. Most of those who said that their husbands did not approve of it were observed to be the elderly non-literate while those with younger husbands said that their husbands encouraged and recommended the utilization of family planning services in the health facilities. There were slight variations in the utilization of family planning among the mothers across the ethnic groups in the state.

Table 5.15: Ethnic Group and Utilization of Family Planning Services

Ethnic Group	**Ever Utilized Family Planning Services**		**Total**
	Ever utilized services	Did not utilize services	
Gwari (Gbagyi)	108 (50.9%)	104 (49.1%)	212 (100%)
Hausa	63 (42.9%)	84 (57.1%)	147 (100%)
Kambari	72 (52.2%)	66 (47.8%)	138 (100%)
Nupe	69 (47.3%)	146 (67.9%)	215 (100%)
Others (Igbo, Yoruba, Fulani, Koro, Kadara etc)	78 (44.6%)	97 (55.4%)	175 (100%)
Total	**390 (44.0%)**	**497 (56.0%)**	**887 (100%)**

Findings in Table 5.15 shows that the Kambari women (52.2%) utilized the family planning services more than women from other ethnic groups (42.9-50.9%). This shows that family planning utilization was slightly higher among the Gwari and Kambari women than among the Hausa and Nupe women.

During the IDIs, some of the health workers revealed that most of those that were practising family planning were the literate women and the younger non-literate ones. The health workers explained that some of the non-literate women who requested for family planning services were asked to bring their husband for evidence of consent as required by international guidelines never returned. The international guidelines for the provision of family planning services to married women require that the husband and wife must physically appear in the clinic and together consent to the provision of the services to the woman before it is offered. However, some CHEWs and JCHEWs among the health workers reported that they administer injectable contraceptives to women whose husbands had refused to grant permission for contraception on demand. It is instructive to note here that a 42 year old University graduate, who is a secondary school teacher and a mother of five stated that many women in the rural areas usually practice modern family planning without the knowledge of their husbands. She stated that:

> Although, many of the women will tell you that they are not practicing family planning, but the truth is that most of them practice it without the knowledge of their husbands because many of the husbands will not agree. The women usually go for either the injectibles or the oral pills which they usually remove from the satchets and put in a drug envelop and refer to them as "maganin mura" i.e. drugs for the treatment of catarrh.

When asked about where the women usually get the family planning drugs from, she explained that some of them usually plead with the health workers especially when they have some health problems shortly after childbirth while others usually obtain the drugs from the patent medicine stores (chemists) within their community. This is an ethical and legal issue in health care practices as both the ethical and legal provisions require the consent of both the husband and wife.

Male participants in the FGDs expressed different opinions regarding the practice of family planning by their wives. Some of the non-literate older males indicated that they did not subscribe to their wives' practice of family planning on cultural and religious grounds while some from among the same group indicated that they permitted their wives to utilize the family planning services when the wives were breastfeeding their babies as requested by the wives. However, some of the younger participants indicated they granted their wives permission to utilize the family planning services when they were breastfeeding, attending school or as advised by the health workers immediately after childbirth or during postnatal visits to the health facilities.

Asked if they use condom for family planning and for prevention of sexually transmitted diseases, the participants said they did not like having sex with condom because it reduces their sexual pleasure and their wives did not also like it. A 28 year old secondary school leaver and father of two children stated that:

> In the past, we don't allow our wives to practice family planning but now we do grant them permission especially when they have small babies because in our community if someone goes out with a girl and she gets pregnant, the person is charged between N100,000 and N200,000 in addition to marrying the girl. Also, there is HIV/AIDS everywhere now. It is better for your wife to do family planning so that someone can have regular sex without fear of pregnancy.

He added that some of them often agree with the wives before going to the clinic for the family planning services. Asked if there are women who utilize the services without the knowledge of the husband, a 30 year old secondary school leaver explained that there are some women that practice family planning without the knowledge of their husbands. He however complained that some of those that use the oral pills or injectable contraceptives ended up with complications like severe bleeding and subsequent failure to be pregnant. When asked whether their elders were

aware of the practice, he answered with an emphatic “NO” and added that ‘you did not have to tell them’. “Is the woman not your wife?” “The cultural practices of parents controlling you, your wife and children has to change”, another participant stated.

From the family planning records in most of clinics, it was noted that some of the health facilities recorded an average of 5-10 family planning clients per month while for the much bigger PHC facilities especially in the LG headquarters, 15-30 clients were recorded on the average per month.

5.5.6 Emergency Obstetrics Care (EmOC)

The need for the provision of EmOC is very necessary especially in the rural areas where access to quality maternal health services is grossly inadequate. Most of the morbidity and mortality related to pregnancy and childbirth could be averted with the provision of EmOC services in the rural areas. This involves important basic and comprehensive functions needed to save the lives of mother and baby including use of injectible antibiotics, oxytocic and anticonvulsant drugs, manual removal of the placenta, manual vacuum aspiration of retained products of conception (MVA), assisted vaginal delivery, caesarean section and blood transfusion. The findings in Table 5.16 indicated that 29.4% received injectable Oxytocin for the facilitation of labour in their most recent childbirth, 8.2% utilized blood transfusion services and 1.8% each utilized caesarean section and MVA services in the facilities as presented below:

Table 5.16: Utilization of EmoC and Special Services in the PHC Facilities

EmOC Services	Frequency	Percentage (%)
Provision of injectable Oxytocin to aid labour	261	29.4
Blood transfusion	73	8.2
Manual removal of placenta	57	6.4
Assisted vaginal delivery	53	6.0
Caesarian section	16	1.8
Manual Vacuum Aspiration of Retained Products	16	1.8
Infertility clinic services	11	1.2

Note: Multiple responses recorded

It could be seen from Table 5.16 that only 1.2% of the mothers indicated that they benefitted from infertility clinic services which is a special and important maternal health services offered in 3 of the facilities assessed.

The IDIs with the health personnel revealed that most of the facilities provided injectable antibiotics like Gentamycin, intravenous Flagyl and Ampiclox, Oxytocin and anticonvulsants like Largactil, Diazepam and Paraldehyde injections as well as assisted vaginal delivery. Most of the PHC facilities did not have trained staff and equipment for manual removal of retained placenta, manual vacuum aspiration (MVA) of retained products of conception especially in the case of incomplete abortion, caesarean section and blood transfusion. Most of the personnel providing maternal health services indicated that they lacked the necessary skills and equipment to provide EmOC services as required.

Similarly, findings from the FGDs confirmed that most of the facilities did not offer EmOC services to the women when the need arose. Most of the participants explained that cases of retained placenta, blood transfusion and caesarean section were often referred to nearby

General Hospitals and Medical centres for further management. However, participants from Paiko, Mariga, Kutigi and Ibeto indicated that cases that required manual removal of retained placenta, blood transfusion and manual vacuum aspiration (MVA) of products of conception were attended to in the PHC facilities in their communities. Only participants from Paiko community indicated that selective caesarean section operations were conducted by NYSC doctors posted to the facility in the past. There was no NYSC doctor at the time of the study.

From the institutional assessment conducted, it was observed that only PHC facilities located in Diko, Paiko, Kutigi, Mariga and Ibeto had midwives trained on MVA that provided MVA services and manual removal of retained placenta and two experienced CHEWs in the PHC facilities in Izom and Baidna communities who used their experience to remove retained placenta thus, denying the women from other communities of quality services. Others claimed they referred clients with such problems to the nearest General Hospitals for further management. It was observed that only the PHC facilities in Ibeto and Paiko offered blood transfusion services although, none of the two facilities had an equipped laboratory for proper screening of blood and other pre-transfusion blood tests. One of the health workers (a CHEW) claimed that they used the facilities of nearby health institutions for blood tests before transfusion. The implication of this finding is that the blood may not be properly screened before transfusion leading to the transmission of blood born diseases like HIV, hepatitis, typhoid fever and malaria. It also implies that in the case of emergencies like haemorrhages, obstructed labour, sepsis and retained placenta, the PHC facilities may not be adequately ready to offer the required EmOC services.

CHAPTER SIX

FACTORS AFFECTING UTILIZATION OF MATERNAL HEALTH SERVICES

6.1 Introduction

The study established that several factors influenced the utilization of maternal health services in the PHC facilities. The findings revealed that accessibility, quality of service, availability of drugs and equipment, formal education, age, family type, number of children, husband's occupation, economic factors and male involvement influenced the women's utilization of maternal health services in the PHC facilities. These factors operates at individual, household and community levels and vary according to the indicator of maternal health services, resulting in different patterns of utilization of the services. These factors were assessed with the aid of questionnaire, IDI, FGD and observation tool.

6.2 Availability and Access to Health Care Facilities

The study found availability and access to services as some of the determinants of utilization of maternal health services in the PHC facilities. Findings shows that more women utilized the ANC services in areas with PHC as presented in Table 6.1.

Table 6.1: Proximity to Health Facility and Utilization of ANC Services

Health Care Facility in the Community	Utilized ANC Services During the Last Pregnancy		Total
	Attended ANC	Did not attend ANC	
Available	726 (85.1%)	127 (14.9%)	853 (100%)
Not available	11 (32.4%)	23 (67.6%)	34 (100%)
Total	**737 (83.1%)**	**150 (16.9%)**	**887 (100%)**

The findings in Table 6.1 revealed that 85.1% of the 853 mothers across all socio-demographic characteristics that indicated that there were PHC facilities in their communities utilized the ANC services as against 32.4% of the 34 that did not have PHC facilities in their communities. Most of the female respondents from Zangon Magaman Daji reported not utilizing various components of maternal health services because of lack of health facility in their community. They require 3-5 hours on foot to reach the health facility nearest to them (Table 5.5).

Findings earlier presented in Table 5.10 revealed that some respondents in rural areas like Kunkele, Libele, Wawagi, Lanle, Gubata, Kwakuti and Durgu delivered their recent babies at home (29.9%) assisted by family members, TBAs or at prayer house. The respondents attributed their choice of place of childbirth to among other things transport problem, long distance from the nearest health facilities, inability to afford the fees for the services and poor quality of the services in the facilities. This implies non-availability and poor access to the services.

Similarly, most of the maternal health service providers interviewed indicated that women who live where health facilities are available or very close to their residence utilized the ANC services more than those from far distance. They explained that women that did not attend the ANC clinics often complained of absence of clinic in their communities and the long distance they had to cover to reach the nearest facility to them. For instance, while mothers from Kunkele, Gubata and Wawagi communities reported that they required between 2 and 3 hours of trekking to get to Kutigi and Lemu where fairly good maternal health service could be obtained, mothers from Magaman Daji community required 3-4 hours of trekking to get to Ibeto for maternal health services because their facilities were only providing maternal and childhood immunization and some forms of ANC services. Mothers from Magaman Daji and Kunkele in particular

complained of lack of regular vehicles to neighbouring villages especially during the raining season because of poor road network.

Asked to explain the reasons for non-utilization of childbirth and postnatal services, some of the men in Libele, Magaman Daji, Kunkele, Gubata and Wawagi communities across age, ethnic groups and level of educational attainment complained of lack of maternal health services in health facilities in their communities, poor transportation to other facilities and highcost of services in the clinics as some of the reasons for poor or lack of utilization of the services by their wives. Some male participants in the FGDs from Ibeto, Mariga, Baidna and Kwakuti communities indicated poor services, poor attitude of the health personnel and lack of qualified personnel as reasons for non-utilization of the services. Complaining about the charges in the facilities and peoples' inability to utilize the services, a 36 year old non-literate male discussants in an FGD session stated that:

> People find it difficult to go to the clinics for ANC, childbirth and other health care services because they cannot afford the fees for transportation, drugs and other services. Although government used to say that health care service for women and children is free, the truth is that nothing is free in the hospital

This statement clearly shows that one of the factors that influenced utilization of the services in addition to availability and accessibility of the services is high cost.

6.3 Age of the Women

The study revealed that age was significantly associated with utilization of maternal health services by the women. Findings in Table 6.2 shows how age of the woman influenced utilization of family planning services.

Table 6.2: Age and Practice of Family Planning

Age (Years)	Ever Utilized Family Planning Services		Total
	Utilized Family Planning Services	Did not Utilize Family Planning Services	
Below 18	3 (33.3%)	6 (66.7%)	9 (100%)
18-25	131 (40.7%)	191 (59.3%)	322 (100%)
26-35	197 (46.4%)	228 (53.6%)	425 (100%)
36-45	56 (45.5%)	67 (54.5%)	123 (100%)
Above 45	3 (37.5%)	5 (62.5%)	8 (100%)
Total	**390 (44.0%)**	**497 (56.0%)**	**887 (100%)**

The findings in Table 6.2 revealed that generally, there is low utilization of family planning services as only 44% of the mothers indicated ever utilizing the family planning services. However, the findings revealed that a higher proportion of women aged 26-45 years utilized the services more than those aged 18-25 years and those above 45 years old..

Findings of the IDIs showed that younger women across ethnic and formal educational attainment groups utilized the ANC, postnatal and immunization services than older women while younger women utilized the childbirth services in the PHC facilities.

6.4 Marital Status of Women

The findings demonstrated significant relationship between the marital status of women and utilization of maternal health services in the PHC facilities. The findings presented in Table 6.3 show respondents' marital status and place of most recent childbirth.

Table 6.3: Marital Status and Place of Most Recent Childbirth

Marital status	Place of Recent Childbirth				Total
	At home	Assisted by TBA	Clinic/Hospital	Prayer House	
Single	11 (16.4%)	8 (11.9%)	47 (70.1%)	1 (1.5%)	67 (100%)
Married	151 (21.9%)	59 (8.6%)	475 (69.0%)	3 (0.4%)	688 (100%)
Divorced	11 (37.9%)	8 (27.6%)	9 (31.0%)	1 (3.4%)	29 (100%)
Widowed	7 (38.9%)	5 (27.8%)	6 (33.3%)	-	18 (100%)
Total	180 (22.4%)	80 (10.0%)	537 (67.0%)	5 (0.6%)	802 (100%)

Findings in Table 6.3 shows that single (70.1%) and married (69.0%) women delivered in the clinic more than the divorced and widowed women.

Similarly, findings from the IDIs indicated that the proportion of the married women that utilized the delivery services was higher than that of divorced, widowed and the singles because in addition to providing the necessary financial supports, husbands usually decided where their wives delivered their babies. They reported that in addition to taking full financial responsibilities, either the husbands or their relations usually accompany the expectant mothers to the clinic for childbirth. It was also reported that because pregnancy out of wedlock is seen as a shameful act among most of the ethnic groups, pregnant girls are not usually allowed to go out of their houses. They are therefore not taken to the hospital for childbirth unless complications during childbirth.

6.5 Level of Education of Women

Level of educational attainment of the women has been found to have influenced the utilization of some maternal health services by the women. For instance, the findings of this study indicated that the woman's level of educational positively influence the utilization of ANC services as shown in Table 6.4.

Table 6.4: Level of Education and Utilization of ANC Services

Educational Qualification	**Ever Utilized ANC Services**		**Total**
	Attended ANC	Did not attend ANC	
No formal education	245 (81.9%)	54 (18.1%)	299 (100%)
Primary education	104 (74.3%)	36 (25.7%)	140 (100%)
Secondary education	182 (84.3%)	34 (15.7%)	216 (100%)
Tertiary education	206 (88.2%)	26 (11.2%)	232 (100%)
Total	**737 (83.1%)**	**150 (16.9%)**	**887 (100%)**

The findings in Table 6.4 indicate that the higher the woman's level of formal educational attainment, the more likely the utilization of ANC services. However, the study revealed that there is no difference in the utilization of delivery services between the formally educated women and those that are not formally educated in the study communities as presented in Table 6.5.

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Table 6.5: Level of Education and Utilization of Delivery Services

Educational Qualification	**Ever Utilized Delivery Services**		**Total**
	Delivered in clinic	Did not deliver in clinic	
No formal education	169 (56.5%)	130 (43.5%)	299 (100%)
Primary education	93 (66.4%)	47 (33.6%)	140 (100%)
Secondary education	124 (57.4%)	92 (42.6%)	216 (100%)
Tertiary education	151 (65.1%)	81 (34.9%)	232 (100%)
Total	**537 (60.5%)**	**350 (39.5%)**	**887 (100%)**

The findings in Table 6.5 show that many of the respondents across levels of education did not utilize the delivery services provided by the PHC facilities in their respective communities.

Similarly, most of the maternal health care providers interviewed revealed that maternal health services were mostly utilized by the young and formally educated women in the communities studied. In particular, they explained that there was low utilization of postnatal services and that most of those that utilized the services had either secondary or tertiary education certificates.

Most male participants in the FGDs across ethnic and educational backgrounds explained that young women were expected to deliver their babies in the privacy of their home assisted by more experienced women in the family. They explained that TBAs and hospitals are usually only involved when the labour is prolonged or when there are obvious signs of danger like severe bleeding and breech presentation of the expected baby. For instance a 41 year old Nupe male participant in one of the FGDs explained that taking the woman to the hospital for childbirth is a

sign that there is problem with the process of childbirth and could provide opportunity for people with evil intentions to apply their sorcery or witchcraft to harm the woman. The participant added that the "woman should naturally deliver her baby without interference from either the hospital or the TBA".

The findings in Table 6.6 shows that women with higher level of formal education utilized the postnatal services more than those without or with lower levels of formal education.

Table 6.6: Level of Education and Utilization of Postnatal Services

Educational Qualifications	**Ever Utilized Postnatal Services**		**Total**
	Attended postnatal clinic	Did not attend postnatal clinic	
Tertiary	114 (49.1%)	118 (50.9%)	232 (100%)
Secondary education	62 (28.7%)	54 (71.3%)	216 (100%)
Primary education	42 (30.0%)	98 (70.0%)	140 (100%)
No formal education	94 (31.4%)	205 (68.6%)	299 (100%)
Total	**312 (35.2%)**	**575 (64.8%)**	**887 (100%)**

Findings in Table 6.6 indicated that there was poor utilization of postnatal services among the women across all levels of formal educational attainment. Although, majority of those that utilized the postnatal services had attained tertiary level of education (49.1%), more women without formal education (31.4%) utilized the postnatal services than those that attained secondary level of education.

6.6 Husband's Level of Education

Husbands' formal education was also found to have influenced the utilization of some of the maternal health services by the women. For instance, the husband's level of education was found to have influenced the women's utilization of postnatal services as shown in Table 6.7.

Table 6.7: Husband's Level of Education and Utilization of Postnatal Services

Husbands' Educational Qualifications	**Ever Utilized Postnatal Services**		**Total**
	Attended postnatal clinics	Did not attend postnatal clinic	
Tertiary education	137 (45.5%)	164 (54.5%)	301 (100%)
Secondary education	62 (26.7%)	170 (73.3%)	232 (100%)
Primary education	38 (41.8%)	53 (58.2%)	91 (100%)
No formal education	75 (28.5%)	188 (71.5%)	263 (100%)
Total	**312 (35.2%)**	**575 (64.8%)**	**887 (100%)**

The results in Table 6.7 revealed that generally few women whose husbands had formal education utilized postnatal services and majority did not utilize the postnatal services. Findings revealed that women whose husband's had tertiary levels of education utilized the postnatal services more than other women in the communities.

Most of the male participants in the FGDs that indicated that their wives utilized one or more maternal health services had attained the secondary or tertiary levels of education. While the utilization of ANC services cut across all formally educated and non-formally educated groups, most of those whose wives utilized the postnatal services are formally educated.

6.7 Number of Children

The study identified number of children as an important factor in the women's utilization of maternal health services. Women that had less than five children utilized some maternal health services than those with more than five children. It was particularly identified that the more the

woman's number of children the less likely that she delivered her most recent baby in the clinic as presented in Table 6.8.

Table 6.8: Respondents' Number of Children and Place of Recent Childbirth

Number of Children	**Place of Recent Childbirth**				**Total**
	At home	TBA's Place	Clinic/Hospital	Religious/Prayer House	
Less than 5	152 (20.6%)	73 (9.9%)	508 (68.9%)	4 (0.5%)	737 (100%)
5-8	13 (37.1%)	4 (11.4%)	17 (48.6%)	1 (2.9%)	35 (100%)
9-12	6 (37.5%)	1 (6.3%)	9 (56.3%)	-	16 (100%)
13 and above	9 (64.3)	2 (14.3%)	3 (21.4%)	-	14 (100%)
Total	**180 (22.4%)**	**80 (10.0%)**	**537 (67.0%)**	**5 (0.6%)**	**802 (100%)**

The implication of this finding is that women with few children are likely to spend less in the maintenance of the family and therefore likely to afford the fees charged for delivery services. Similarly, findings of the IDIs revealed that women with few children utilized the delivery services more than others because according to the health workers, husbands of women that had severally delivered safely at home found it un-necessary to take their wives to the health facilities for childbirth especially when the woman is considered to be healthy or had no history of childbirth problems. This finding has great implication on the outcome of childbirth because multigravidae and older women have high risk of developing health complications related to childbirth like postpartum haemorrhage and retained placenta.

6.8 Husband's Occupation

It was established in the study that husband's occupation influenced the wife's utilization of family planning, ANC, postnatal as well as maternal and childhood immunization. Findings of the study presented in Table 6.9 shows that husband's occupation influenced wife's utilization of family planning services.

Table 6.9: Husband Occupation and Utilization of Family Planning Services

Husband Occupation	**Ever Utilized Family Planning Services**		**Total**
	Practiced Family Planning	Did not practice Family Planning	
Did not know husbands' occupation	20 (44.4%)	25 (55.5%)	45 (100%)
Farming	90 (33.2%)	181 (66.8%)	271 (100%)
Daily Labourer	28 (41.8%)	39 (58.2%)	67 (100%)
Civil servant	177 (54.8%)	146 (45.2%)	323 (100%)
Business/Trading	75 (41.4%)	106 (58.6%)	181 (100%)
Total	**390 (44.0%)**	**497 (56.0%)**	**887 (100%)**

The findings showed that 54.8% of the wives of civil servants indicated that they practiced family planning with the least being wives of farmers.

Similarly, the study identified that husband's occupation influenced the wife's utilization of postnatal services. The findings showed that larger proportion of women whose husbands were civil servants and business men utilized the postnatal services than women whose husbands were farmers or daily labourers as presented in Table 6.10.

Table 6.10: Husband's Occupation and Utilization of Postnatal Services

Husband's Occupation	Ever Utilized Postnatal Care Services during most recent childbirth		Total
	Attended Postnatal Clinic	Did not attend Postnatal Clinic	
Did not know husbands' occupation	16 (35.6%)	29 (64.4%)	45 (100%)
Farming	73 (26.9%)	198 (73.1%)	271 (100%)
Daily labourer	21 (31.3%)	46 (68.7%)	67 (100%)
Civil servant	131 (40.6%)	192 (59.4%)	323 (100%)
Business	71 (39.2%)	110 (60.8%)	181 (100%)
Total	**312 (35.2%)**	**575 (64.8%)**	**887 (100%)**

The findings in Table 6.10 revealed that civil servants wives (40.6%) utilized the postnatal services more than the other women while farmers' wives were the least utilizers of postnatal services in the PHC facilities.

According to the IDIs discussants, most of the wives of civil servants and business men utilized the services at intervals as advised at the facilitieswhile the wives of the farmers utilized the services mostly during the harvesting period when their husbands supposedly had money to pay the service bills as required. Also, women who were either working as civil servants or engaged in some gainfulful activities attended the clinics and paid for services obtained when the need arose than those that solely depended on their husbands and other relations.

6.9 Quality of Maternal Health Services

Quality of services offered to mothers as assessed by mothers was identified as a contributory factor to the under or non-utilization of some of the services by the mothers. The findings showed that 60.1% of the female respondents complained that some of the personnel were not adequately qualified to handle pregnancy and childbirth issues (60.1%). They also complained about the poor attitude of the health workers (40%), lack of adequate equipment for the provision of maternal health services (39.5%) and inadequate drugs in the facilities (20.9%)

as seen in Table 4.1. Similarly, about 40% of the respondents indicated that they delivered their most recent babies in places other than the clinic/hospital. This group of women gave reasons like poor services at the clinic and poor skills of the health workers as influencing their decisions to deliver their babies in places other than the health facilities.

Male participants in all the FGDs pointed out shortage of qualified staff, lack of equipment, lack of drugs, long distance from their homes, difficulty of transporting women in labour, cost of services, poor attitude of staff and cultural practices as the main barriers to the utilization of maternal health services. In addition, they mentioned that the health workers were not always available when needed and that most of the personnel lacked basic skills and experience on delivery services. Most of the participants especially those in Magaman Daji, reported that older women and TBAs were more experienced and acceptable to the women than the CHEWs because of the perceived CHEWs' gross inexperience and disregard for privacy for women in labour. A 33 year old non-literate Kambari male participant in one of the FGDs stated that:

> We don't like taking our wives to the clinics for childbirth because most of the health workers are not adequately trained to deliver women of their babies. You may end up wasting your time only to be referred to the city hospitals after your wife has suffered.

Almost all the health workers during the IDIs reported that their facilities lacked the needed equipments and drugs for maternal health care. They complained of lack of training on maternal health care and the poor state of their facilities for effective maternal health services delivery. The facilities assessments confirmed the poor state of the PHC facilities including lack of labour room and equipments, lack of midwives, lack of drugs and lack of training for the staff.

6.10 Economic Factors

About 36% of the female respondents were gainfully employed as civil servants or engaged in petty businesses on their own while the other 64% were unemployed and mainly dependent on their husbands and family members (Table 5.1). This placed the women at economic disadvantage thus, making them dependent on their husbands and family members for financial support for their health care needs. Consequently, only 8.1% of the women indicated that they paid for their maternal health services by themselves while about 70% said that their husbands paid for the services and another 10.3% claimed they jointly paid for the services with their husbands as shown in Table 6.11.

Table 6.11: Persons that Paid for Maternal Health Services Received

Who paid?	Frequency	Percentage (%)
Woman herself	72	8.1
Husbands	616	69.5
Fathers in-law	9	1.0
Mothers in-law	22	2.5
Woman's parents	10	1.1
Husband and Wife jointly	91	10.3
No response	67	7.6
Total	**887**	**100**

The finding in Table 6.11 shows that husbands were mostly responsible for the maternal health services of their wives. This may deny the woman access to the services when she needed it considering that most of the husbands were either subsistence farmers, daily labourers or petty business men whose income may not be sufficient for them to pay for the services and provide other needs for the family (Table 5.2). In addition, more than 50% of the husbands had more than one wife thus, increasing the financial needs of the family. The implication is that if the woman

is not sick, the husband may not find it necessary to provide money for services like ANC and postnatal care services.

Similarly, during the IDIs, most of the health workers explained that some of the women were unable to utilize the services because they could not afford the fees charged for services or transportation to the facility. The health workers reported that some husbands provided money for medical services only when the wives developed health problems on the grounds that there were other competing needs for the little money they had. They stated that most often, only the youngest wives in a polygynous family had the attention of the husbands while the older wives were sometimes financially supported by mothers in-law or other members of the husbands' families or by the wives' parents.

The FGDs revealed that most of the men agreed that it was their responsibilities to foot the bills for maternal health services of their wives and that they did so based on resources available to them. They complained that sometimes the fees charged were outrageously high hence their inability to pay. The participants reported that based on resources available to them and competing family needs, they did not make funds available to their wives for some of the services especially when they felt that their wives had money to pay for such services. Complaining about some women's poor attitude towards assisting their husbands in settling some of their medical bills even when it was obvious that the man did not have the money, a 53 year old non-literate Hausa male trader complained that:

> Some of the women don't like assisting their husbands even when the husbands don't have the money. They will swear that they don't have any money, only to see them buying expensive wears and materials for the decoration of their rooms in preparation for or immediately after the child's naming ceremony.

The implication of this is that there is lack of support for the men from their wives. In addition, some women have poor attitude towards the utilization of maternal health services as

indicated by giving preference for fashion in place of their health care. This could lead to lack of access to maternal health services by the women especially when their husbands' are unable to provide money for such services.

6.11 Male Dominance

The study identified that most of the women across the ethnic groups in the state depended on their husbands for the financing of maternal health services. The men were reported to have played different key roles in the women's utilization of maternal health services including granting permission for service utilization by women such as in ANC utilization (81.9%) as earlier presented in Table 5.8.

Most of the maternal health care providers interviewed explained that some of the women were denied access to maternal health services by their husbands who insisted that their wives utilized alternative sources such as the TBAs and traditional healers. In addition, they explained that some of the women utilized some services especially the ANC without the knowledge and permission of their husbands, especially the women that personally paid for the services. The IDI participants reported that the husbands usually pay for health services obtained by the wives and children although, some of the women usually pay for the health services and that of their children especially when the men could not afford or when they refuse to give them money for such services. This category of women were said to be personally empowered and that they were expected to obtain the permission of their husbands before going to the clinics. According to a 43 year old female chief CHEW interviewed:

> Some of the women had to pay the fees charged by themselves including transportation because their husbands did not consent to their visiting the facility, had no money or they had travelled out during the visit. In such situations, the women either got the money from their parents and relations or sold their personal belongings including farm produce to obtain the services

They reported that in the case of the husband's absence from home or financial constraints, the husband's relations offered some assistance especially in emergency situations such as during childbirth, ill-health or miscarriage. However, in the absence of family members that could assist, the woman's parents and other family members usually pay for the services. It was said to be much easier for the working class women and women engaged in business. The Gwari, Kambari, Fulani, Koro and Kadara women were economically stronger than their Hausa and Nupe counterparts because of their engagement in farming and petty business hence, their utilization of maternal health services more than the women from other ethnic groups. Their economic power was seen as influential in the use of family planning and postnatal services than the other women who had to wait for their husbands to provide the fees for transportation and services in the facilities.

It was also reported by the health workers that some of the women were accompanied or transported to the health facilities by their husbands or representatives of the husbands. According to them "some of the men were supportive especially during childbirth when some of the women were accompanied to the health facilities by more than one family member in the absence of the husbands.

Asked what they thought about men who were concerned about the health of their wives, all the participants agreed that men were expected to be concerned and be fully responsible for the health of their wives and other members of the family. A 65 year old non-literate grandfather stated that:

> It is good to be concerned about the health of one's wife and even find time to accompany her to the health facility. Men that neglect the health care of their wives are neglecting their responsibilities, they are irresponsible.

The grandfather reported that their community usually sanctions men that neglect the health care of their wives. Sanctions include fine, settling the health bills paid by other members of the family, preventing such men from participating in marriage affairs concerning members of their family and barring them from marrying from that community.

All the male participants in the FGDs reaffirmed their cultural norm that men were the heads of their families and therefore decide what to do on all health matters for their wives, children and other members of their families. They explained that based on their respective cultural and religious practices, their wives must obtain permission from them or members of their immediate families. These are usually the husbands' parents, brothers, sisters or cousins in the absence of husbands before seeking for health care services. According to them, such members of the family contacted in the absence of the husbands were to pay for the services utilized. This implies that the decision making power and selection of where to seek health care services rested on the husbands, putting the women at disadvantage especially when emergencies occur in the absence of the husbands which may lead to complications.

CHAPTER SEVEN

SUMMARY, DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter presents summary of major findings, discussion of findings, conclusion and recommendations. The recommendations are drawn based on the findings of the study.

7.2 Summary of the Findings

This study is titled Patterns of Utilization of Maternal Health Services in Primary Health care Facilities in Niger State, Nigeria. The specific objectives of the study are to evaluate the current state of maternal health services in PHC facilities in Niger State, to determine whether women of childbearing age have access to maternal health services in Niger State, to identify the common maternal health problems in Niger State, to determine level of utilization of maternal health services as well as the factors influencing utilization of the services by women.

The study adopted two theories; the Marxist political economy and the Health Belief Model. The basic assumption of the Marxist political economy is unequal distribution of resources, wealth and power between the rich and the poor. The basic assumption was utilized to explain the introduction and provision of PHC services especially in the rural areaswhile the Health Belief Model was adopted to explain the utilization of maternal health services by the women in Niger State. Data for the study was collected using both quantitative (using questionnaire) and qualitative (through IDIs, FGDs and Observation) techniques.

Findings of the study showed that 75.1% of women of childbearing age (n=666) were 18-33 years old. The majority (73.6%) were Muslims mostly from the Gbagyi (23.9%), Hausa (16.6%), Kambari (15.6%) and Nupe (24.2%) ethnic groups. Data showed that 84.4% were

married with 33.7% not formally educated and about 50% not gainfully employed or engaged in any form of income generating activitiesand solely dependent on their husbands and other members of the family. The data also revealed that 84.5% had four or fewer children while others had between 5 and 12 children lending credence to the need for maternal health services. The study found that 60.1% of the respondents' husbands had between secondary (26.2%) or tertiary (33.9%) levels of education and that 36.4% of the husbands were civil servants. Majority of the husbands (55.4%) were polygynous and 56.8% of the women indicated that they were the first wives of their husbands.

The study revealed that there were PHC facilities providing some forms of maternal health services in more than 90% of the communities as revealed by the women of childbearing age and as observed by the researcher. However, the health care providers in the health facilities indicated that only 19 (79.2%) of the 24 PHC facilities assessed provided some maternal health services like antenatal care, delivery, family planning and immunization services to the women. In some PHC centres, the services were observed to be part of the routine services offered by the PHC facilities and not targeted for maternal health service. It was observed that women were offered some maternal health services as they visit the clinic for other health conditions.

The study identified poor quality of maternal health services offered in the facilities. Most of the PHC centres had unconducive environment for the provision of maternal health services. Some of the facilities had leaking roof and damaged ceiling sheets while others lacked water supply, toilet facilities, examination room and couch, waiting areas for clients and separate consulting area for ANC services. Findings of the study indicated that most of the clinics had inadequate personnel most of whom were CHEWs and therefore unable to provide skilled maternal health services. Most of the clinics lacked essential drugs, equipment and consumables

like cotton wool, antiseptic lotions, hand gloves etc for the provision of essential maternal health services. It was identified that there was no Drugs Revolving Fund (DRF) in most of the clinics. The personnel provided the drugs for the patients who in-turn paid for them. In addition, some of the community members (men and women) complained about high cost of the services in the PHC centres. Lack of DRF may also have implication on the quality of drugs provided to or purchased by the women with its attendant consequences. These negatively affected the quality of maternal health services and utilization of the services by the women.

The findings of the study also indicated that although each of the PHC clinics had heads appointed by the LGAs Directors of PHC, none of them had any form of financial support from any source. There were no operational guidelines for the provision of maternal health services in about 80% of the PHC centres as only about 20% had operational guidelines for focused antenatal care designed by the WHO and most of the facilities lacked adequate supervision from the LGAs PHC Department. However in most of the health facilities, there were adequate records of client attendance and clinic activities related to family planning, ANC, delivery services, postnatal and immunization services. There was poor record of client referrals to other health facilities in most of the clinics.

The findings of the study revealed that prolonged labour, hypertension in pregnancy, antepartum and postpartum haemorrhages, anaemia and retained placenta were the most frequently occurring maternal health problems affecting women in the rural communities. It was found that 64% of the maternal health problems reported were treated in the clinics while others had their problems treated at home, by the TBAs, the traditional healers or at religious homes.

There were PHC facilities in most of the communities (96.2%) and most of the facilities provided maternal health services while 76.3% of the respondents indicated that they spent 30

minutes or less on foot to reach the clinics and 52.2% reported that they were attended to by the personnel when they visited the clinics. However, women from some communities spent 3-5 hours by trekking to reach the clinics for maternal health services. While the JCHEW and CHEW in the clinics felt that the women had access to maternal health services, the nurses and midwives reported that the women lacked access to quality services. Most of the women and the male respondents felt that they lacked access to quality services.

Investigations into the patterns of utilization of maternal health services revealed that more women utilized the ANC (83.1%) and immunization services (68%) than the delivery services (60.5%), family planning (44%) and postnatal services (35.2%). The findings revealed that more Kambari and Gbagyi women utilized the ANC services, the Hausa and Nupe women utilized the delivery services more than the other women though, majority of the women (60.5%) delivered their babies in the clinics. Most of the women (81.9%) obtained permission from their husbands before utilizing the ANC services. The women began ANC visits at 1-3 months of pregnancy and visited the ANC 5-7 times before childbirth as a result of their desire to check their health status and that of the foetus. Some were either encouraged or compelled to attend by their husbands. There was poor access to EmOC services like blood transfusion, manual removal of placenta and retained products of conception and assisted vaginal delivery.

Husbands were reported to have offered various forms of support for their wives including deciding and granting permission for the use of the services, accompanying them to the clinics, making provision for transport and paying the bills for drugs and other services utilized by the women. Findings showed that 76.9% of the women preferred to deliver their next babies in the clinics and that 74.4% of the husbands preferred their wives to deliver their next babies in the clinics.

Findings of this study revealed that several factors influenced the utilization of maternal health services in rural communities of Niger State. These factors include availability and access to maternal health services, woman's age, marital status and level of education of both the woman and their husbands. Thus, women who had access to maternal health services, younger women and women who either had formal education or whose husbands had formal education utilized the services more than the non-literate women although, there was no significance difference in the utilization of ANC services between literate and non-literate women.

The findings also showed that number of children, husband's occupation, quality of services, economic factors and male dominance played significant roles in the women's utilization of maternal services in the communities. It was found that although it was the responsibility of the husband to take care of the wife's health needs, some of the women paid their medical bills especially for services like ANC, normal delivery and postnatal care considered to be "un-necessary services" by some husbands. Thus, women who had personal incomes like the Gbagyi, Kambari, Koro and Kadara women utilized some services than those solely dependent on their husbands like the Hausa and Nupe women.

7.3 Discussion of Findings

Most of the PHC facilities were in state of dilapidation, ill-equipped, lacking in qualified personnel and in two cases, located too far away from the reach of some women. In addition, the findings showed that the facilities were poorly managed and lacked guarantee for continuity of care that would have been ensured through effective 2-way referral system. From the IDIs and FGDs, it was also found that most of the rich and powerful few in the rural areas availed themselves of quality health care services provided by highly skilled and specialist health care personnel in health facilities mostly based in the urban areas. This conformed with the

political economic perspective which explains the imperialistic power relations and the exploitation of labourers with emphasis on the socioeconomic politics of medicine and the unequal distributions of health care services to the people (Abraham, 1968; Godswill, 2008). In line with the thinking of the political economists, the findings of the study revealed that most of the PHC centres in the rural areas suffered neglect characterized by poor environment, lack of qualified personnel, lack of drugs and basic equipment for the provision of maternal health services. This is partly because most of the people in position of leadership and the well-to-do in the communities as well as members of their families do not utilize the services of the PHC facilities thus, neglecting them.

The findings showed that only 6 (25%) of the PHC clinics had trained midwives and only three had the midwives on full-time basis while the other three PHC facilities had the midwives through the SURE-P and MSS programmes of the Federal Government which is now faced with the problems of funding and conflict of interests among the professional groups in the FMOH. This is consistent with the findings of Uzochukwu *et al* (2004) who reported lack of qualified health personnel, poor funding, lack of basic infrastructures and conflicts among the professional groups as some of the factors that led to poor implementation of PHC programmes. The implication of this is non-continuation of the programmes that provided skilled maternal health personnel to the rural women in most parts of northern Nigeria leading to poor quality of maternal health services in the rural areas.

The study identified prolonged labour, hypertension in pregnancy, bleeding in pregnancy (antepartum haemorrhage), postpartum haemorrhages, anaemia in pregnancy, retained placenta and breech presentation of the foetus as the most frequently occurring maternal health problems affecting the women in the rural areas. This finding is consistent with earlier studies conducted in

northern and southern parts of Nigeria which identified hypertension, anaemia, prolonged labour and haemorrhages as the major cause of maternal morbidity and mortality in most parts of Nigeria (Garba *et al*; 2008, Makinde *et al*, 2012).

Regarding where the reported maternal health problems were treated, the findings revealed that 64% of the respondents indicated that the problems were treated in the PHC clinics while the remaining 36% were treated at home, by the TBAs or by the traditional healers. Findings at the FGDs and IDIs showed that respondents treated the identified health problems according to perceived causes, socio-economic status and decision making power of the women. This is consistent with the findings of Garba *et al* (2011) which identified that the Kambari women utilized various methods to treat pregnancy and childbirth related health problems. The HBM has earlier identified modifying factors like socioeconomic and cultural factors as well as self-efficacy as individual characteristics that could affect the utilization of existing health services. The implication of this finding is that some of the health problems may become complicated before reporting to the PHC facilities. Since findings showed that most of the PHC clinics were not adequately prepared to manage the most frequently occurring maternal health problems, it may lead to increased maternal morbidity and mortality.

The study showed that while 83.1% of the women utilized the ANC services, the utilization of delivery, postnatal care, maternal immunization and family planning by women were significantly low. Postnatal care and family planning services utilization were particularly below 50%. This finding is consistent with the narratives of the male participants at the FGDs across ethnic and educational backgrounds in the study areas. They opined that postnatal care was not necessary after normal delivery. However, it was identified that family planning was considered not acceptable by most of the respondents' husbands, their cultures and religions

especially among the non-literate women. The reasons for non-utilization of these important components of maternal health services could be the result of resistance to change which the HBM has describes as perceived barrier to health action. Women were reported to have practiced family planning secretly without the knowledge and or permission of the husbands. The implication of these findings is that there is persistence of cultural beliefs and practices related to maternal health in the rural communities. The WHO (2008) reported that cultural practices have greatly influenced the utilization of maternal health services especially in the developing countries.

Findings of the study revealed that about 82% of the women obtained permission from their husbands before attending the ANC clinics and about 50% commenced the ANC from the 4^{th} month of their pregnancies. The findings also showed that about 50% of the respondents made 5-10 ANC visits while 2.6% made 11-18 ANC visits and only 13.6% had the 4 recommended focused ANC visits. The implication of these is that the women made several unnecessary ANC visits as a result of ignorance and misconception of ANC regimens. These made the exercise probably more burdensome to husbands and the women.

There was no adequate provision for emergency obstetrics care (EmOC) in almost all the PHC clinics. Similarly only 29.4% of the female respondents indicated that the clinics had Oxytocin injection, 8.2% had provision for blood transfusion and 6.4% had provision for manual removal of retained placenta. However, the health care providers reported that most of the PHC facilities provided injectable antibiotics like Gentamycin, intravenous Flagyl and Ampiclox. They also reported that they administered anticonvulsant drugs like Largactil, Diazepan and Paraldehyde injections to eclamptic women while only 5 PHC clinics provided MVA services. This implies that some levels of EmOC services were provided by the clinics in the rural areas

although mostly by unskilled personnel which may lead to increased maternal mortality and morbidity. Thus, lending credence to the Marxist political economy which explained that inequalities exist in the quality of health services offered between the rich and the poor, the rural and the urban residents leading to increased morbidity and mortality. Fournier *et al* (2009) reported that one proven effective strategy for reducing maternal mortality and morbidity is the provision of basic and comprehensive EmOC by qualified personnel especially in the rural areas.

When compared with ANC attendance, institutional deliveries was low (60.5%) among the women. The findings revealed that husbands played key roles in deciding where the women delivered their babies (33.6%) while mothers-in-law and other family members were said to be influencing the choice of place of childbirth. The finding was supported by oral narratives of the health workers that many women in the rural areas delivered their babies at home as preferred by their husbands. This indicates that the women lacked decision making power and that there is persistence of cultural practices where family members like mothers-in-law greatly influenced the women decision on health care services utilization. Abel *et al* 2012 reported majority of the rural women that delivered their babies at home in Lubumbashi area of the Democratic Republic of Congo explained that their husbands, family members and especially their mothers-in-law decided that they delivered their babies at home as demanded by their culture. This is consistent with the position of the proponents the HBM that perceived barriers to health action like cultural beliefs and practices usually influence the utilization of existing health services while perceived benefits of action often encourage utilization of the services.

Regarding childbirths outside the health facilities such as at home, assisted by TBAs and in religious homes, the women mentioned easier labour as the main reason for not going to the PHC clinics to deliver their babies. Other reasons given by the women were transportation

problem, financial constraints, distance from health facilities husbands' refusal and poor services in the health facilities. These findings corroborated with the findings of Koria *et al* (2012) who reported poor services, cultural belief, financial problems and distance as the key determinants of place of childbirth among rural Indian women. Similarly, only 76.9% and 74.4% of the women indicated their preference and that of their husbands for their next childbirth in the clinics respectively especially among the literate and younger non-literate men. This implies the persistence of cultural practices of delivering at home especially among the older and non-literate husbands.

The finding showed that only 35.5% of the women underwent postnatal care services. This is significantly low and at variance with the findings of Koria *et al* (2012) who reported 98% attendance at postnatal clinics among rural women in India. Health workers in the study communities reported that most of the women that utilized the postnatal services were those who either fell ill or whose newborn babies got sick and those that took their babies for childhood immunization. In a study in rural areas in Ethiopia, Medhanyie *et al* (2012) reported that only 1% of the women that delivered babies reported for postnatal care most of who were either sick or their babies had some health challenges within the period. They linked this to cultural practice of confining women to the house within the first 42 days of childbirth. Similarly, Abel *et al* (2012) reported that few postnatal visits were recorded and most of the visits took place on the 42nd day after delivery largely because of a belief among some Lubumbashi people that newborns will be exposed to demonic influences and witchcraft if they are taken outside the house in the first month. In addition, they mentioned poor services and poor attitude of the workers as contributory.

The findings showed that 68% of the women indicated that they utilized the maternal and childhood immunization services offered in the PHC facilities. The health workers reported that most of the women reported for childhood immunization during which they offered other postnatal services. However, the health workers reported that many Hausa parents refused accepting the polio vaccine. This could be the result of the controversies generated by polio immunization especially within the predominantly Hausa speaking communities in northern Nigeria which implies the need for public enlightenment by all stakeholders including the government, the health workers, traditional and religious leaders in the affected areas. In a study in the urban slums of Bhopal, India, Gupta and Nandeshwar (2012) reported that 87.1% of women tetanus toxoid immunization while 48.3% and 35.2% of children received partial and complete childhood immunization respectively. There is need for cues to action as described by the HBM where mass media campaign and health education programmes are required in order to change the behaviour of the people.

The study revealed that 78.2% were aware about family planning but only 44% were practicing it; 48.2% of which reported practicing family planning for the past 1-4 years. This indicates good knowledge but poor utilization of family planning services among the women. The poor utilization of family planning services are the result of ignorance, cultural or religious beliefs which have been describes by the HBM as modifying factors and could be effectively addressed as cues to action. The finding agrees with the findings of Medhanyie *et al* (2012) who identified that 72% of the women in rural Ethiopia received information about family planning while only 21% practiced it. The finding also revealed that majority of the women that practiced family (59.7%) used the injectable contraceptive and 42.1% indicated that they were advised to practice family planning by the health workers while 53.3% indicated that they were not

practicing family planning because their husbands did not approve of it. Most of this category of women being the elderly and the non-literate. This finding was supported by the narratives of the health workers at the IDIs who reported that majority of the women practicing family planning had formal education above secondary school.

The study identified several factors that influenced the utilization of maternal health services in the rural communities. Similarly, there was wide variation in the patterns of use of the ANC, clinic delivery, postnatal, family planning and maternal and childhood immunization services among the women. Factors identified include availability and access to the services, age, ethnicity, marital status, family education, number of children, husband's occupation, quality of services, economic factors and male dominance.

Availability and access, distance, cost, education and quality of service were identified as factors that influenced the utilization of ANC services by the women. It was identified that availability and access to health facilities have great influence on utilization of ANC services. Similarly, health workers explained that only few women from villages far away from the PHC clinics utilized the ANC services because some of them had to trek for about 3 hours before they reached the facility. This finding is similar to the findings of Chimankar and Sahoo (2011) who reported that availability of health facilities, affordability, schedule of ANC and quality of services influenced the utilization of ANC services among pregnant women in Uttarakhand, India. Similarly, Oluwabamide and Inyang (2006) explained that social distance between the health worker and mostly the rural consumers of health care who found it difficult to relate with health the health workers is a major factor in the utilization of health services.

Factors identified for clinic deliveries include education, history of prolong labour, cost, distance, transportation, marital status, number of children, male dominance, quality of service

and cultural practices. Women who either had formal education or had educated husbands tend to deliver their babies in the PHC facilities more than those without formal education. This could be the result of enlightenment about the importance of hospital delivery. Secondly, either the women or their husbands or both could be gainfully employed and could therefore, afford the fees for delivery services in the clinics which were considered unnecessary by the non-literate members of their communities especially in normal deliveries. Similarly, cultural practices of being delivered by elder female family members and TBAs as well as male dominance were found to have greatly influenced clinic deliveries among the women. This is consistent with findings of other studies that reported cultural factors and lack of decision making power of women as some of the main factors influencing hospital deliveries in most rural communities of the developing countries (Dey, 2009; Chimankar and Sahoo, 2011). Similarly, the HBM has described that perceived benefits of action including understanding the benefits of hospital deliveries as well as modifying factors like socio-economic factors as important factors determining utilization of health services.

Age, education, economic status and the health status of both the woman and the baby were important predictors for utilization of postnatal services among the women. Findings of this study showed that younger women across different ethnic groups utilized the postnatal services more than the older women. This is linked to social changes in the family structure where the elders have little control over the family lives of their married children in contrast to the traditional family control by the household heads. Similarly, women who are formally educated or having husbands with at least a secondary education utilized the postnatal services than other women. In addition, women who were gainfully employed and those whose husbands were considered economically stronger that others utilized the postnatal services more than the other

women. Marchie (2012) identified educational attainment, economic status and decision making power of the woman as important predictors in the utilization of postnatal services by women. This finding further supported the position of the HBM that identified modifying factors including education, economic status and age as important factor in access and utilization of health services in the society.

Availability, ethnicity, male dominance, age, education and husband's occupation were found to have influenced the utilization of family planning services among the women. Findings revealed that a higher proportion of Gbagyi and the Kambari women utilized the family planning services more than the Hausa and Nupe women because of their economic power to pay for the services themselves. Most of the Gbagyi and Kambari women were found to be more engaged in economic activities like farming and trading than the Hausa and Nupe thus, making them more financially independent and able to pay for the services. Similarly, the younger and formally educated women as well as women whose husbands were formally educated practiced family planning more than others thus, lending credence to the HBM that education is a modifying factor for health action. Women whose husbands were civil servants (53.8%) practiced family planning than those whose husbands were farmers (33.2%). This might be associated with education, competing demands and family income. The finding is consistent with other studies that identified individual factors like age, education, place of residence and household factors like economic status of women and family, decision making power and ethnic group as key factors in the utilization of family planning (Shaikh and Hatcher, 2004; Abdulraheem *et al*, 2012).

Another important finding of this study is that availability and access, ethnicity and male dominance determined the utilization of maternal and childhood immunization services among

the women in the rural areas. However, lack of facilities such as electricity and refrigerators for effective maintainance of the cold chain system affected the provision of immunization services in most of the PHC clinics thereby affecting its utilization by the women. This is part of the neglect suffered by the PHC described by the proponents of the political economic perspectives which greatly affect the quality of health services offered.

Availability and access, quality of health services, attitude of the health workers, economic factors and male dominance influenced the utilization of all the components of maternal health services in the rural communities. Findings revealed that women from communities located far away from health facilities had difficulties accessing the services. Similarly, dissatisfaction with quality of services in the clinics and poor attitude of the health personnel discouraged many women from visiting the clinics for service utilization. While male dominance is a function of the culture in most African societies, it also has direct bearing on the woman's economic and decision making power (Abdulraheem *et al*, 2012) thus, making her dependent on the man for utilization of health care services and other basic needs.

Men were responsible for payments relating to health services utilized by their wives as culturally defined. These have serious implications on maternal health as decisions to utilize the services could be delayed leading to complications especially in emergency situations. Financial difficulties affecting the husband might either lead to delay in seeking health services or non-utilization of maternal health services by the women. USAID (2013) reported that in most families in Africa, men are empowered financially and are the main decision-makers in all issues including reproductive health.

Some husbands were also found to be very supportive of their wives in the utilization of maternal health services. Findings revealed that in addition to offering permission for their wives

to utilize the services and paying for the services including transportation to the health centres, some of the men across ethnic, religious and educational backgrounds accompanied their wives to the health facilities especially for ANC and childbirth. This was observed to be mostly undertaken by the younger males in the communities. Accompanying the wife to the health centres and paying for the services indicates that the women received strong support from their husbands during pregnancy, childbirth and child rearing. This pattern further underscores the need for men to be involved in the design and implementation of maternal health services. This finding supports the findings of other studies (Assfaw, 2010; Chimankar *et al,* 2011; Olugbenga-Bello *et al,* 2013). Payment for health services received by the woman was said to be undertaken by the husband when consent for service utilization was obtained by the woman. This is regarded culturally as a sign of respect for the husband and a requirement for marital life in all the four major ethnic groups in the state. This implies that male dominance is culturally accepted and promoted thus, reducing the decision making power of the women.

It is instructive to note that it was discovered that some women personally paid for maternal health services utilized including childbirth services especially when their husbands could not pay and when they utilized the services without the consent of their husbands or members of the husbands' family. This finding further supported the assertion of the male respondents in the study that for the man to pay for maternal health services utilized by the woman, the decision for service utilization must be taken by the man or his representative.

The findings revealed that men that did not meet the health care needs of their wives were sanctioned by the community through fines, exclusion from participation in marriage affairs including marrying for themselves and giving out or taking a wife for others, refund of the fee paid by the wife or her relations and refusing them the hands of other women for marriage in the

community. This could serve as a form of social control thus, encouraging the men to support their wives during pregnancy, childbirth and puerperium.

7.4 Conclusion

Primary health care is built on the principles of equity in the distribution of quality health care, active community participation in health care programmes and emphasis on prevention of illnesses rather than cure. The main objectives of maternal health services in the primary health care programme are to ensure that every expectant mother maintains good health upto time of delivery and to bear healthy children. The woman is also expected to receive antenatal, intranatal postnatal and child spacing services from well equipped health facilities and adequately trained health personnel. The study evaluated the state of maternal health services in PHC facilities and women's utilization of maternal health services in PHC facilities. The study also identified factors influencing the utilization of maternal health services by women.

While the PHC centres are relatively uniformly distributed throughout Niger State, rural women tend to under-utilize maternal health services especially childbirth, post natal and family planning services. Although there is no single solution to this problem in Niger State, some starteggies that could result in enhanced utilization of maternal health services have been variously outlined. These include capacity building and empowerment of people vin the community through orientation, mobilization and women empowerment. Similarly, quality of maternal health care and service delivery especiallyin the rural areas must be assured by those in management positions. This is necessary because the study has shown that most of the PHC facilities especially in the rural communities of Niger State were in states of dilapidation, with poor/inadequate equipment, poorly trained staff, lack of drugs, poor facility management and poor referral system.

The cumulative effects of these have led to poor utilization of maternal health services by the women in most parts of the state. Some of the PHC clinics were located far away from some communities negating the PHC principle of equitable distribution of health services and improved access thus, ensuring delay in accessing maternal health services.

From the findings, maternal health problems like prolonged/obstructed labour, hypertension in pregnancy, bleeding in pregnancy, anaemia, postpartum haemorrhage, retained placenta, sepsis and breech presentation of the baby during childbirth were most frequently occurring in the study locations. Thus, there were several cases of maternal morbidity and mortality in the rural areas that were not reported because they mostly occurred at home.

The study showed that availability and access, age of the woman and or their husbands, education and number of children were important determinants of utilization of maternal health services in the study locations. These created disparities in access and utilization of maternal health services. Husband's occupation, quality of maternal health services, finance and male dominance were key factors in the women's access and utilization of maternal health services. Lack of women empowerment and poor decision making power of the women were significantly responsible for poor utilization of maternal health services. They were partly responsible for the adoption of different patterns of utilization of maternal health services by women. These modifying factors as described by the HBM were mostly responsible for the patterns of utilization of maternal health services in PHC facilities by the women.

As earlier identified by the study, it is pertinent to note that the increasing involvement of young males in women's utilization of maternal health services as indicated by their support greatly influenced utilization of the services. This support ranged from accompanying them to the PHC facilities to paying for maternal health services utilized by the women. This eventually

improved maternal health and reduced maternal mortality and morbidity especially among the younger and educated women. The men's active participation obliterated the culture of males' aloofness and eventually gave way to social change and modernization thus lending credence to concept of perceived benefit adopted by the HBM.

It is instructive to note that although people in the state exhibited patriarchal values of exerting control on their wives including their health care, women who are economically empowered showed departure from that value. This was shown by the Gbagyi and Kambari women paying for the services by themselves thus utilizing the services more than their Hausa and Nupe counterparts who were mostly dependent on their women.

7.5 Recommendations

Based on the findings of this study, it is recommended that the following measures be taken to improve quality, access and utilization of maternal health services especially in rural areas of Niger State:

i. Complete renovation of the PHC facilities should be undertaken by the Niger State Ministry of Health to make the environment more conducive for health care delivery through increased funding of the health sector and active involvement of the community.

ii. The PHC facilities should be adequately supplied with equipment, drugs and consumables by the State and Local Governments to improve the quality of maternal health services in the PHC centres.

iii. The Niger State government should put in place an active drug revolving fund (DRF) to ensure regular supply of essential and quality drugs to all PHC facilities in the

state. This can be achieved through the provision of seed money by government for the initial supply of drugs to the PHC facilities and ensuring that all the PHC facilities are remitting their proceeds regularly.

iv. The government should employ more midwives to ensure that there is at least one qualified midwife in each PHC facilities while the existing CHEWs should be regularly trained in the area of basic maternal health services to complement the activities of the midwives. To achieve this, government should direct all LGAs to offer automatic employment to all their indigenes graduating from the state School of Midwifery in addition to re-engaging all retired midwives in the state on contract.

v. Effective community enlightenment programme should be put in place in the rural areas by both the government and non-governmental organizations to improve the utilization of maternal health services by women.

vi. Stakeholders in maternal health programmes including government and community members should encourage male involvement in maternal health services utilization of their wives through effective public enlightenment and community mobilization.

vii. There is urgent need for the introduction of effective women empowerment programmes by the government, non-governmental organizations and community members to improve the economic and decision-making powers of women so that the women would be able to utilize and afford to pay for maternal health services obtained. This could be achieved through the provison of soft loans to women for small scale businesses and agricultural programmes.

viii. Government should put in place specific policies and programmes that will encourage men participation in maternal health care of their wives.Such policies should address the constraints to men's participation maternal health care of their women and ensure

reward for men that actively encourage their wives' utilization of maternal health services especially in the rural areas.

ix. Government should subsidize maternal health services or even make it free as already claimed for the people in the rural areas by making all or some of the basic services free.

x. There should be regular supervision of the PHC facilities in the rural areas by the LGA health department and the State Ministry of Health to improve and sustain the quality of the services offered.

xi. Government and other stakeholders in maternal health services should ensure active participation of the community in PHC programmes including the involving them in the management of PHC facilities in their communities.

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APPENDIX I

QUESTIONNAIRE ON PATTERN OF UTILIZATION OF MATERNAL HEALTH SERVICES IN PRIMARY HEALTH CARE FACILITIES IN RURAL COMMUNITIES OF NIGER STATE, NIGERIA.

Dear Respondents,

I am a Postgraduate student in the above named department conducting a research on the above named topic as part of the requirement for the award of PhD degree in Medical Sociology. This research is purely an academic activity and is not intended for any purpose other than for the award of the degree. Anonymity is also guaranteed as your name or any identification sign is not required. Therefore, your sincere response is required to make the research a success. Thank you for your cooperation.

Yours Sincerely,

Saleh N. Garba

(Researcher)

Instruction: Please fill in your answers or tick appropriately in the box provided as required by each of the questions.

A. SOCIO-DEMOGRAPHIC DATA

1. Age (years)…….
2. Ethnic group: a. Gwari (Gbagyi) [ ] b. Hausa [ ] c. Kambari [ ] d. Nupe [ ]
   e. Others (Specify) …….
3. Religion: a. Islam [ ] b. Christianity [ ] c. Traditional [ ]
4. Marital status:

   a. Single [ ] b. Married [ ] c. Divorced [ ] d. Widow [ ]
5. Local Government Area/District ……
6. How many wives does your husband have? .....…….
7. Are you 1st, 2nd, 3rd, 4th …. wife of your husband? ……
8. Type of family: a. Nuclear [ ] b. Compound [ ]

9. How many of the following category of people do you have in your family?

i. Wives ……. ii. Children ….. iii. Brothers ……. iii. Sisters …….

iv. Parents ……. v. Other relations (specify)……

10. Educational Qualification:

a. No formal education [ ] b. Primary education [ ]

c. Secondary education [ ] d. Tertiary education [ ]

11. Has your husband attended any formal school? a. Yes [ ] b. No [ ]

12. If yes, what is his level of formal education?

a. Primary education [ ] b. Secondary education [ ] c. Tertiary education [ ]

d. Don't know [ ]

13. What is the main occupation of your husband?

a. Farmer [ ] b. Daily labourer [ ] c. Government employee [ ] d. Business [ ]

14. Age of the youngest child…….

B. AVAILABILITY OF HEALTH FACILITIES

15. Is there any health care facility within the community?

a. Yes [ ] b. No [ ]

16. How far is the health facility from your house in kilometre and or by trekking (in hours/minutes) ……

17. If yes, does it provide services for pregnancy and childbirth problems?

a. Yes [ ] b. No [ ] c. Don't know [ ]

18. If yes, which of the following have you ever utilized in the facility? (Tick as many as applied) a. Family planning services [ ] b. Antenatal care [ ] c. Child birth [ ]

d. Postnatal care services [ ] e. Maternal and childhood immunization [ ]

f. Caesarean section [ ] g. Infertility clinic [ ] g. Blood transfusion services [ ]

h. Others (specify)…….

19. If there is a health care facility in your community, which of these are common features of the health care facilities and personnel? (Tick as many as applied)

a. The personnel are always available in the health care facility [ ]
b. The personnel are not adequate for the teaming population of the area [ ]
c. They are not adequately qualified to handle the cases in the facility[ ]
d. The facility lacks adequate equipments to function effectively [ ]
e. There are no adequate drugs in the clinic [ ]
f. The personnel's good attitude always encourage people to attend [ ]
i. The personnel's poor attitude often affects attendance to the clinic [ ]
j. Others (specify)……..

20. Did you get attended to when you visited the facility? A. Yes [ ] b. No [ ]

C. OBSTETRIC HISTORY

20. How many pregnancies have you had? ……

21. How many pregnancies have you carried to term? ……

22. How many live births have you had? …….

23. How many of your children are under five years of age? ……

24. Any history of abortion/miscarriage? a. Yes [ ] b. No [ ]

25. If yes, how many times? ……..

26. Any history of stillbirth? a. Yes [ ] b. No [ ]

27. If yes, how many times? .....

28. Did you attend antenatal clinic (ANC) during your recent pregnancy?
a. Yes [ ] b. No [ ]

If yes to question 28, answer questions 29 to 35

29. Did you obtain permission from your husband before attending the ANC?

a. Yes [ ] b. No [ ]

30. At what stage of your pregnancy did you start ANC? ….....

31. How many times did you attend ANC before delivery? ….....

32. If you attended the ANC, why? (Tick as many as applied)

a. I was sick [ ] b. Health facility is near [ ] c. Husband encouraged me [ ]

d. To know my health status [ ] e. To know the health status of the foetus [ ]

f. They offer good service [ ] g. Encouraged by neighbour [ ]

h. The service is free [ ] i. Others (specify)……

33. During your visit to the ANC did you receive any advice about where to deliver your baby?
a. Yes [ ] b. No [ ]

34. Did your husband ever accompany you for ANC? a. Yes [ ] b. No [ ]
35. Have you ever gone for the ANC without your husband's consent?
a. Yes [ ] b. No [ ]
36. If you did not attend the ANC during your last pregnancy, why? (Tick as many as applied) a. The health facility is far [ ] b. No health problem [ ] c. Husband refused [ ]
d. I was too busy to attend [ ] e. I don't know the importance [ ]
f. Afraid of the fee [ ] g. Feel ashamed to attend [ ] h. Poor attitude of health workers [ ]
i. Other reasons (please specify) ……..……
37. Which of the following health problems did you developed during the last pregnancy/childbirth?
a. Bleeding during pregnancy [ ] b. Anaemia in pregnancy [ ]
c. Obstructed labour [ ] d. Prolonged labour [ ] e. Retained placenta [ ]
f. Mal presentation [ ] g. Still birth [ ] i. Intra-uterine foetal death [ ]
j. Others (specify)……..

……

38. Where was the problem managed?

a. At home [ ] b. At the TBA's place [ ] c. At the religious/prayer house [ ]

d. At the traditional healer's place [ ] e. At the hospital/clinic [ ]

f. Others (specify)……

……..

D. HISTORY OF RECENT DELIVERY

39. Year of birth of most recent baby……

40. Place of birth of recent baby:

a. At home assisted by family member [ ] b. At home assisted by TBA [ ]

c. Clinic/Hospital [ ] d. Religious/Prayer house [ ] e. Others (specify)……

……

41. If you gave birth to the recent baby at home, why? (Tick as many as applied)

a. Labour is easier [ ] b. Health facility is far [ ] c. Transport problem [ ]

d. Husband refused my going to the clinic [ ] e. Can't afford fee [ ]

f. Poor service at clinic [ ] g. Poor skill of health workers [ ]

i. Feel ashame to deliver in the clinic [ ] j. Attended to by TBA [ ]

k. Other reasons (specify)…….

……

42. If you gave birth to the recent baby at the clinic/hospital, why? (Tick as many as applied) a. Prolonged labour [ ] b. I was sick before childbirth [ ]

c. No service fee is charged [ ] d. Aware of the importance [ ]

e. The clinic/hospital is near [ ] f. The family asked me to [ ]

g. Good service [ ] h. To save the mother/baby's life [ ]

J. Other reasons (specify)……..

43. Who decided where you gave birth to your most recent baby?

a. My self [ ] b. My husband [ ] c. Both of us [ ] d. Mother-in-law [ ] e. TBA [ ]

f. Family members at a meeting [ ] g. Health workers during ANC [ ]

h. Others (specify)…….

44. Do you think there is a difference giving birth at home and clinic/hospital?

a. Yes [ ] b. No [ ] c. Don't know [ ]

45. If you think clinic/hospital is better, why?

a. It is clean [ ] b. It shortens labour [ ] c. Saves mother's life [ ]

d. Saves the baby's life [ ] e. No bleeding [ ] f. No retained placenta [ ]

g. Other reasons (specify) …….

46. If you think home is better, why?

a. No need for transport [ ] b. No cost [ ] c. No bleeding [ ]

d. There is privacy [ ] e. Other reasons (specify) …….....

47. Where will you prefer to deliver your next baby?

a. At home [ ] b. At religious/prayer home [ ] c. At the clinic/hospital [ ]

d. Other places (specify) ……..…….

48. Where do you think your husband prefer for you to deliver your next baby?

a. At home [ ] b. At the religious/prayer home [ ] c. At the clinic/hospital [ ]

d. Others (specify)……..

49. Do you know about modern family planning? a. Yes [ ] b. No [ ]

50. If yes, are you currently practicing family planning? a. Yes [ ] b. No [ ]

51. If yes, for how long have you been practicing it? ..…….

52. If you practice family planning, which of these methods do you use?

a. Oral Contraceptive method [ ] b. Injectable contraceptives [ ]

c. Intra-uterine contraceptive device [ ] d. Norplant [ ]

e. Others (Specify) …….

53. Why do you practice family planning?

a. Advice from health workers [ ] b. My husband recommended it [ ]

c. I decided to practice it on my own [ ] d. Joint decision with my husband [ ]

54. If you do not practice family planning why?

a. I do not like it [ ] c. My husband did not approve of it [ ]

c. My culture forbids it [ ] d. My religion forbids it [ ]

e. The services are not available in my community [ ] f. I am not aware of it [ ]

g. I cannot afford the fee for the service [ ]

h. Others (specify)…….

55. In your opinion what are the benefits of family planning? …….....

.....

56. Who usually pay for the care you receive during pregnancy and childbirth?

a. My self [ ] b. My husband [ ] c. My father- in-law [ ] d. My mother-in-law [ ]

e. My parents [ ] f. My husband and I jointly [ ]

g. Others (specify) ……

……

57. In your opinion, how can the women in this community be encouraged to go to the hospital during pregnancy and childbirth? .....

APPENDIX II

IN-DEPTH INTERVIEW GUIDE FOR MATERNAL HEALTH CARE PROVIDERS IN PRIMARY HEALTH CARE FACILITIES

1. General characteristics of the informants

i. Age

ii. Sex

iii. Highest educational qualification

iv. Years of experience

2. **Primary Health Care (PHC) Facility Characteristics**

Probe for:

> Type of Maternal health care services rendered by PHC facility

> Provision of emergency caesarean section and blood transfusion

> Availability of functional equipments for maternal health care services

> Adequate and regular supply of consumables for maternal health services

3. **Characteristics of personnel providing maternal health services**

Probe for:

> Category of staff providing maternal health services

> Adequacy and quality of personnel for maternal health services

> Regularity of training received by personnel

> In what area of maternal health services training was received

4. **Common maternal health problems in the community**

Probe for:

- Type of maternal health problems
- Common maternal health problems seen in the health care facility
- Perceived socio-cultural reasons for maternal health problems
- People's response to maternal health problems

5. **Utilization of maternal health services by women**

Probe for:

> Women's utilization of maternal health services

- The most sort maternal health services by women
- Pattern of utilization of maternal health services by women
- Perceived quality of services offered compared to national guideline

6. **Factors affecting utilization of maternal health services by women**

Probe for:

> Availability and Accessibility of the services

- Reasons for utilization/ non-utilization of maternal health services
- Problems encountered in the course of service provision

7. **Facility management/funding**

Probe for:

- Decision making process in the facility
- Supervision of facility/services offered
- Record keeping and reporting – check record book for FP, childbirth, maternal health problems, use of national record books etc.
- Referral processes and feedback mechanisms
- Sources/regularity of facility funding such as budget, donations, drug revolving funds (DRF)
- Personnel training

8. **Need for improvement of services in the facility**

Probe for:

- Specific areas requiring improvement
- Respondents' opinion on ways of improving service delivery and utilization

APPENDIX III

ASSESSMENT TOOL FOR HEALTH CARE PROVIDERS ON "PATTERN OF UTILIZATION OF MATERNAL HEALTH SERVICES IN PRIMARY HEALTH CARE FACILITIES IN RURAL COMMUNITIES OF NIGER STATE, NIGERIA".

Dear Respondents,

I am a Postgraduate student conducting a research on the above named topic as part of the requirement for the award of PhD degree in Medical Sociology. This research is purely an academic activity and is not intended for any purpose other than for the award of the degree. Anonymity is also guaranteed as your name or any identification sign is not required. Therefore, your sincere response is required to make the research a success. Thank you for your cooperation.

Yours Sincerely,

Saleh N. Garba

(Researcher)

Instruction: (Kindly tick as follows in the appropriate column 2= Yes, 1=Yes but needs improvement, 0= No, NA= Not applicable)

1. Type of health care facility ……

   ……

2. Local Government Area ……

A. **PHYSICAL ENVIRONMENT**(Key: Tick as follows 2= Yes, 1=Yes but needs improvement, 0= No, NA= Not applicable)

Environmental situation; Does your clinic have:	2	1	0	NA
1. A waiting area with seats for clients?				
2. An area with provision for privacy for counselling equipped with a table or desk and two chairs?				
3. A locked storage cupboard for medicines?				
4. An examination couch with plastic cover and sheet to cover client?				
5. Vaginal specula of different sizes?				
6. Three separate containers marked for decontamination, washing and rinsing equipment that come in contact with bodily fluids?				
7. Bleach/Jik for mixing a 0.5% chlorine solution?				
8. Liquid, powder or bar soap in appropriate position?				
9. Boiler e.g. a saucepan, dry oven or sterilizer?				
10. Two clocks (One in reception, one in labour room)?				
11. At least one bed with a plastic cover for adults?				
12. Separate weighing scales for babies and adults				
13. A tape measure?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
14. A foetoscope?				
15. A sphygmomanometer?				
16. Sterile syringes?				
17. Tetanus vaccination supply?				
18. Intrapartum (Delivery) medications and resuscitation equipment for mothers and babies in an easily accessible place including gloves, mucus extractor suction bulb, vitamin K, 50% and 5% dextrose, normal saline, IV set,oxytocics, scalp needle, needle and syringes, scissors, plaster, diazepam or magnesium sulphate, torch light, tongue depressor, injectable antibiotics and antihypertensives?				
19 Do you have enough gloves, needles, syringes, antiseptic and decontamination solutions available to be able to always follow infection prevention protocol?				
20 Bed nets for clients?				
21 Is there access to potable water (running water or a well near your clinic)?				
22 Is there electricity and/or a reliable alternative source of light e.g. torch, lantern or generator?				
23 Do you have a toilet (indoor or outside latrine) that you regularly clean for clients and staff?				
24. Does your facility have the capacity for washing hands with soap and water for staff and clients?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
25. Does your facility has a roof that does not leak?				
26. Does your facility have windows or shutters that open and close to ensure ventilation, warmth and protection from rain?				
27. Do you maintain a supply of educational materials on different topics including family planning, safe motherhood, neonatal care, prevention and treatment of malaria, sexually transmitted infections, HIV and immunization for your clients?				
28. Is a wall chart displayed indicating reproductive health services provided and available by referral?				
29. Are health educational materials on the wall in good (not dirty or torn) condition and displayed where your clients can see them?				
30. Do you wear clean and neat appropriate clothing and/or uniform or lab coat during working hours?				

31. In your opinion what area(s) in the above is your facility doing well?
……
……

32. In what area(s) in the above is your facility not doing well and needs improvement?
……
……
……

B. **TECHNICAL COMPETENCE** (Tick 2=Yes, 1=Yes, but needs improvement, 0-No, NA=Not applicable)

	2	1	0	NA
1. Do you have a copy of the most recent maternal health service delivery guidelines that guides your activities?				
2. Do you consult the national guidelines/standards in your daily routines when the need arises?				
3. Do you a summarized job aid that reminds you of the main steps of focused antenatal care, the use of partograph, active management of third stage of labour and management of postpartum haemorrhage?				
4. Do you inform your clients of their right to privacy and confidentiality?				
5. Do you provide your clients with the information to make health related-related decisions?				
6. Do you individualize information you provide based on your client's needs?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
7. Do you ensure that your clients understand the information provided by asking follow-up questions to clarify information given?				
8. Do you follow the three steps of infection prevention (decontamination, washing, high level disinfection) for equipment that has contact with bodily fluids?				
9. Do you maintain single-use injection practice?				
10. Do you dispose of needles using sharps container?				
11. Do you burn, bury or dispose of contaminated materials and other medical waste according to prescribed standards?				
12. Do you have a safe place to dispose of the placenta and other tissues and blood products?				
13. Do you wear protective garments for procedures including examination gloves, utility gloves, plastic apron, face shield etc?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
14. Do you discuss with the client the need for at least the national minimum standard of antenatal visits?				
15. Do you provide information about any health problems you discover and the appropriate treatment?				
16. Does the health information you provide to the client during ANC visits include personal hygiene, nutrition, warning signs of pregnancy, regular visits to clinic, birth plan, what to bring to the clinic when in labour, family planning and prevention and treatment of malaria in pregnancy				
17. Do you perform or refer the client for laboratory tests according to standards including urinalysis, haemoglobin estimation, grouping and crossmatching, HIV screening, tuberculosis screening etc?				
19. If the pregnant woman is HIV positive or her HIV status is not known, do you discuss the range of breastfeeding options using the approved criteria?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
19. Do you describe the signs and symptoms of labour, what to expect during labour and what to do when in labour?				
20. Do you discuss with the woman what to do if she encounters any problems during pregnancy or labour including fever, bleeding, convulsions/fits, swelling of the legs, labour pains for more than a day?				
21. Do you discuss local or traditional practices that might be harmful to the mother?				
22. If a woman wants to take her placenta home, do you discuss how to safely store or dispose of it?				
23. Do you inspect and palpate the breasts?				
24.Do you prescribe or dispense iron, folic acid tablets, other vitamins as indicated and any preventive medications that are appropriate such as for malaria, intestinal worms, or iodine deficiency according to national standard?				
25. Do you develop an individual plan of management for the woman if there are abnormalities like high blood pressure, anaemia, inadequate or lack of fundal growth?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
26. After 34 weeks do you check the baby's presentation and record; if the baby's head is not down by 36 weeks do you refer the woman to an appropriate provider or facility?				
27. During each antenatal visit, do you check for warning/danger signs like vaginal bleeding, severe headache, visual changes, swelling of the hands or face, leaking amniotic fluid, severe nausea and vomiting, fever, severe abdominal pain and lack foetal movement?				
28. If the above mentioned warning signs are identified, do you refer the pregnant woman to a place where she can receive emergency obstetric care?				
29. Do you use partograph during labour to chart the progress of labour?				
30. Do you encourage women to assume birth positions of their choice that are considered safe for both mother and baby?				
31. Do you give 10 units of oxytocin intramuscularly within the first minute after birth?				
32. Do you record details of birth including date, time, sex, birth weight, Apgar scores, perineal condition, estimated blood loss and any changes from normal?				

	Tick 2=yes, 1=yes but needs improvement, 0=No, NA= Not applicable	2	1	0	NA
	33. Do you use every opportunity to discuss the benefits of family planning according to the client's situation?				
	34. Do you introduce the client to the family planning methods that are available at your facility?				

C. CONTINUITY OF CARE

(Tick 2=Yes, 1=Yes, but need improvement, 0=No, NA=Not applicable)	2	1	0	NA
1. Have you established specific facilities or physicians for referral?				
2. Do you make available a list or provide information to your clients about where to obtain reproductive health services you don't provide bur are available by referral ?				
3. Do you send the client to the referral facility with a note describing the need for referral?				
4. Do you request information and feedback about the outcome of the visit from the referral facility?				
5. Do you contact the client to find out about the outcome of the referral visit?				
6. If you receive information from the referral facility, do you record the outcome of the visit in the client's record or register?				
7. Do you follow-up with each HIV-positive pregnant woman so that she is certain to deliver at a facility that has preventing mother-to-child transmission (PMTCT) services? This can include referral to where services are provided.				
8. Do you or other members of your staff contact clients about missed follow-up visits?				

D. FACILITY MANAGEMENT

Tick as follows: 2=Yes, 1=Yes, but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
1. Do you have a self-assessment quality improvement tool that you use quarterly?				
2. Do you prepare an updated action plan to improve quality regularly?				
3. Has any action been taken in the last six months to address items in the action plan?				
4. Do you have a written procedure or job aid for guiding infection prevention at your facility?				
5. Do you maintain client records/registers for recording client visits for every client?				
6. Are the records complete i.e. show reasons for visits, treatment given, outcome and note for follow up visit or referral if necessary?				
7. Are your client records kept where others cannot see them?				
8. Do you maintain strict confidentiality concerning all personal information collected during a client's visit to protect her privacy?				

Tick as follows: 2=Yes, 1= Yes, but needs improvement, 0= No, NA=Not applicable	2	1	0	NA
9. Do you keep an inventory list/stock cards of consumable supplies in your facility?				
10. Has your consumable inventory list been updated within the last three months?				
12. Does the list include expiration dates on drugs and supplies?				
13. Do you have a reliable and regular supply of drugs and other supplies?				
14. Do you order drugs and supplies based on a reliable estimate of your pharmaceutical needs?				
15. Do you keep records about cold-chain conditions for vaccines?				
16. Have you been able to avoid running out of drugs, contraceptives or other commodities in the last three months?				
17. Do you keep an inventory list of medical equipment and furniture that includes date of purchase, projected date of repair and replacement?				
18. Does your health facility operate drug revolving fund (DRF)?				

Tick 2=yes, 1=yes but needs improvement, 0=No, NA=Not applicable	2	1	0	NA
19. Are the facility's medical equipment and furniture in working condition?				
20. Do you have midwife/midwives who provide maternal health services at all times?				
21. Are there instructions about what to do in an emergency after the usual working hours?				
22. Do you have regular and adequate subvention for running the facility?				

23. What are the main managerial problems affecting your facility? ……

……

……

……

24. In what ways can the problems be solved? ……..

……

……

……

APPENDIX IV

FOCUS GROUP DISCUSSION (FGD) GUIDE FOR ADULT MALE RESPONDENTS ON PATTERN OF UTILIZATION OF MATERNAL HEALTH SERVICES IN PRIMARY HEALTH CARE FACILITIES IN NIGER STATE, NIGERIA.

1. Individual/family characteristics

Probe for:

- Socio-economic characteristics of individual participant i.e. age, level of education, occupation, religion, ethnic group
- Type of family, number of wives and children
- Family head and decision making process in the family

2. Male knowledge of maternal health problems

Probe for:

- The male understanding of maternal health problems
- Common maternal health problems affecting women in the area
- Perceived causes of maternal health problems

3. Maternal health behaviour

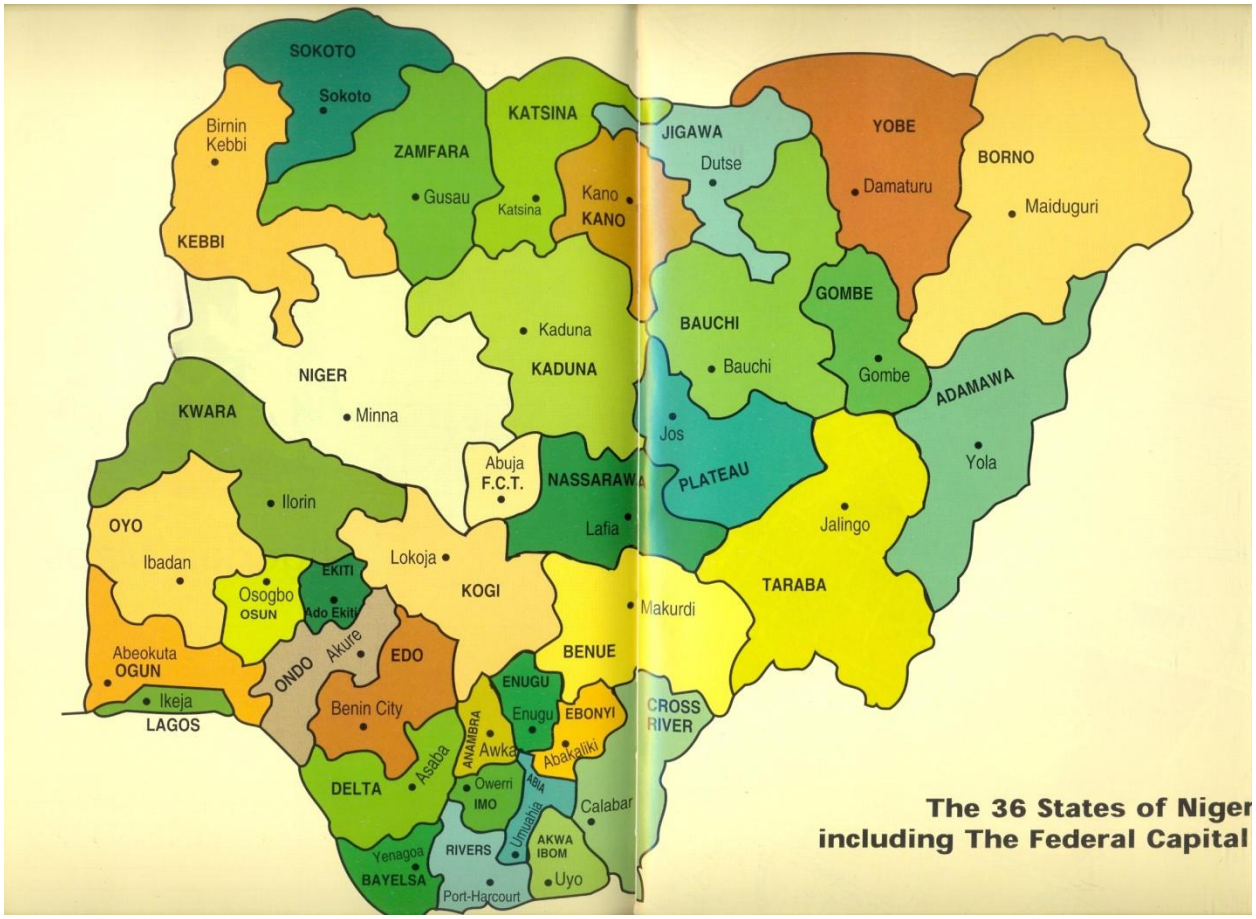
Probe for:

- Where maternal health problems are treated
- Women's ability to decide where to seek maternal health services
- Type of maternal health services women could seek for i.e. whether family planning, antenatal care, delivery services, postnatal care
- Does the men give consent for service utilization
- Who pay for the services women seek for
- Other forms of support rendered to women on use of maternal health services e.g. arrange for transportation to clinic, accompany wives to clinic

4. Sociocultural determinants of male involvement in utilization of maternal health services

Probe for:

- Decision making process for service utilization by women
- Reasons for use/non-use of maternal health services
- Men's view on access and utilization of maternal health services
- What they think about men who are concerned about the health of their wives, accompany their wives to clinics etc.


SOKOTO
Sokoto
Birnin Kebbi
KEBBI
ZAMFARA
Gusau
KATSINA
Katsina
Kano
KANO
JIGAWA
Dutse
YOBE
Damaturu
BORNO
Maiduguri
GOMBE
Gombe
BAUCHI
Bauchi
Kaduna
KADUNA
NIGER
Minna
KWARA
Ilorin
Abuja F.C.T.
NASSARAWA
Lafia
PLATEAU
Jos
ADAMAWA
Yola
Jalingo
TARABA
OYO
Ibadan
Lokoja
KOGI
EKITI
Ado Ekiti
Osogbo
OSUN
Makurdi
BENUE
Abeokuta
OGUN
ONDO
Akure
EDO
Benin City
Ikeja
LAGOS
ENUGU
Enugu
EBONYI
Abakaliki
ANAMBRA
Awka
ABIA
Umuahia
CROSS RIVER
Calabar
DELTA
Asaba
Owerri
IMO
AKWA IBOM
Uyo
RIVERS
Port-Harcourt
Yenagoa
BAYELSA
The 36 States of Niger
including The Federal Capital

Map Niger State Showing The 25 Local Government Councils

