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## Utilization of Primary Health Care for Maternal and Child Health Care Services in Suleja Local Government Area of Niger State, Nigeria

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### Abstract

A primary health care system aimed at reducing maternal morbidity and mortality as well as child health care. Maternal and child related morbidity and mortality is generally acknowledged to be a failure of the overall health system. The basic essence of PHC service was designed to provide universal access to skilled pregnancy care in order to prevent maternal mortality and morbidity, very little is known of the factors that predict the use of PHC for skilled maternity care in rural parts of Nigeria. This study examined Utilization of Primary Health Care for Maternal and Child Health Care services in Suleja Local Government Area of Niger State, Nigeria. The data were sourced from primary and secondary sources; primary data were sourced and collected through the use of questionnaires. The SPSS version 22.0 package was used to construct a database, the data were analysed using simple descriptive statistics. Multistage sampling techniques were used to select 180 respondents in Suleja Local Government Area of Niger State, Nigeria. From the findings, it was established that majority of respondents were within the age range of 29-25 years 32.7%; educational status revealed dominance of secondary education 41.1% and those that are into business/trading 31.1%. The income range showed that most respondents 45.6% earned below the Nigerian minimum wage of N18,000. Majority of 87.2% visited PHC and other health care facilities for antenatal services, most began attending ANC visits within 1-3months 53.5%, the number of ANC visits showed that above 4times accounted for 41.4% and major reason for ANC attendance was to check the health status of foetus and mother 60.5%. Majority of respondents despite attending ANC at a health facility delivered at home 43.3%. Maternal health related diseases were mostly bleeding after delivery 49.4% and Sepsis/infection 43.3% while place of treatment was majorly primary health care 39.4% and remained at home 29.4%. The major child related disease which was respiratory disease/cough and catarrh 52.2% while malaria 46.1%; the place of treatment was basically at a primary health care 48.9%; specific type of treatment administered was paracetamol 38.9%, anti- malaria 38.2% while cough syrup/medicine 28.9%. About 42.8% practiced family planning method. Services offered to respondents during ANC visits of last pregnancy, blood test 96.2%, blood pressure test 94.9%, feeling abdomen 92.4%, weighed 89.1%, counseling on delivery with a skilled birth attendant 87.9%, the major factors affecting the utilization of primary health care for maternal and child health care service; bad/poor roads 51.7%, long waiting time 2-5hours 41.1%, long queues 40.0%, inadequate skilled personnel 36.1%. from the findings of this study it was revealed that PHC facilities are utilized. The majority (87.2%) of the study population was found to rely on PHC services for maternal and child health care and majority started ANC visits within the first trimester of pregnancy (53.5%) but after attending antenatal, majority delivered at home which accounted for 43.3%. The study recommends that Government should ensure adequate funding of PHC centres for provision of necessary facilities, a forum should be created for women of child bearing age who are in dearth need of the services of the tertiary health institutions following complications at subsidized rate especially when they cannot afford it, this will help to reduce maternal mortality.

**Keywords:** Utilization, Maternal Child Health Care, Morbidity, Mortality, Niger State.

## Introduction

A primary health care service, aimed at reducing morbidity and mortality of maternal and infant children. Skilled antenatal care and birth attendance has been advocated globally as the most crucial intervention to reduce maternal mortality (WHO, 2014). Maternal health is the health of women during pregnancy, childbirth and the postpartum period (WHO, 2018). These essential health care services are received by the woman during pregnancy and after delivery which is very important for the wellbeing and survival of mother and child. A primary health care service that encompasses a health care dimensions of family planning, preconception, prenatal and postnatal care to minimize maternal morbidity and mortality (Franny, 2013).

The high rate of maternal mortality is a major public health concern in Nigeria. Several studies have shown that pregnant women in rural areas of the country are at greater risk of dying during pregnancy or childbirth as compared to those that live in urban areas (WHO, 2010). This is largely due to limited access to maternal health care by rural women as health facilities are often located far from where they live, with the result that they rely more on the use of traditional sources of care or no care at all (Srivastava, 1976). The Nigerian health care system is founded on a tripod of primary health care, secondary health care and tertiary health care. In compliance with global recommendations for optimal maternal health care, primary health care provides Basic Emergency Obstetrics Care (BEOC) comprising skilled delivery care, administration of antibiotics, manual removal of the placenta, removal of retained products of conception, assisted vaginal delivery possibly with a vacuum extractor, and basic neonatal care including neonatal resuscitation. By contrast, secondary and tertiary health facilities (consisting of the general and teaching hospitals) provide Comprehensive Emergency Obstetrics Care (CEOC) that consists of all BEOC services as well as caesarean section, safe blood transfusion and treatment of the sick child (Aigbiremolen et al 2014; Eboreime et al 2017).

The Federal Ministry of Health in Nigeria specifically recommends primary health care as the entry point to the health care system in order to generate universal health coverage for all citizens. Primary Health Care (PHC) was designed as a universal access to skilled pregnancy care for the prevention of maternal morbidity and mortality (Okonofua, 2018).

Maternal health services are major health concern globally, especially the international organizations such as World Health Organization (WHO) united nations (UN) United Nations children's fund (UNICEF) and also a target for Millennium Development Goals (MDG) which is to reduce child mortality and improve maternal health. Effective delivery of healthcare services requires availability of adequate infrastructure, diagnostic medical equipment, drugs and trained medical personnel (Oyekale 2017).

Primary Health Care (PHC) was adopted in Nigeria and it was meant to address the main health problems in rural communities by providing, promotive, preventive, curative and rehabilitative services to pregnant women, children and others (Alenoghena, 2014). Maternal and child mortality is generally acknowledged to be a failure of the overall health system. Most of the developing countries like Nigeria, the vast majority of maternal deaths occurs during delivery and the immediate 24 hours following delivery and most are attributable to just a few causes such as obstructed labor, viral hepatitis, malaria, hemorrhage, hypertension, sepsis and unsafe abortion. Virtually all of these conditions can be prevented or managed by basic health care services including quality antenatal care, safe and clean delivery practices and access to emergency referral facilities when needed (WHO, 2010). This also includes computer equipment and consumables while human resource comprises the health professionals including doctors, Pharmacists, Nurses, Midwives, Laboratory technologists, Hospitals and Hospital Beds. All these put together form the structure upon which the healthcare delivery is anchored in any society and the determinants of its infrastructure. Health infrastructure is a part of a larger concept of the health system which contains the health policy, budgetary allocation, implementation and monitoring (Adebayo; Oladeji, 2006).

#### **Statement of Research Problem**

According to (WHO 2008), the health of the population of any community is a very important determinant of the level of success of that community. Productivity is a function of the level of health. Thus, a community in which the population is diseases ridden cannot operate its economy at a level of maximum efficiency. Hence, health is considered as a crucial component of physical well-being and economic development of any community. Health systems performance makes a profound direct relationship to the quality as well as the length of lives of billions of people they serve. The extent to which adequate health care services are available and accessible and the level of utilization of health care services among others factors determines the performance of health systems. If health systems are poorly planned, managed and constituted, 7-point agenda of the Federal Government cannot be achieved.

Several efforts have been made by Non-Government Organizations (NGOs), government of Nigeria and international organizations like UNICEF, World Bank among others to increase maternal and child health service utilization which will in turn mitigate maternal and child mortality in Nigeria with Suleja in Niger state inclusive. For instance, the Expanded Programme on Immunization (EPI) was introduced in Nigeria in 1978 and the purpose was to reduce mortality and disability

associated with six vaccine preventable diseases namely: tuberculosis, tetanus, diphtheria, measles, perturssis and poliomyelitis (Nwogu, Larson & Kim, 2008). UNICEF has also provided high impact health and nutrition interventions in partnership with governments, the WHO and others (UNICEF, 2010).

Nigeria government has introduced a variety of national health and development policies that aim at reducing maternal mortality by 75% by 2015 (Okonofua, Inarhugube, Hussam & Wulf, 2009). Among these are the maternal reproductive health strategic framework developed in 2002 aimed to reduce maternal mortality; the health sector reform policy developed in 2003 with the objective of improving maternal health as a way to reduce maternal mortality, national strategic plan for reproductive health commodity security developed in 2003 to secure the supply of reproductive health commodity and to reduce maternal mortality, an Integrated Maternal Newborn and Childbirth (IMNCH) strategy formulated in 2007 to ensure continuum of care from pregnancy through the postpartum, newborn and childhood periods so as to reduce maternal, newborn and child mortality (National Population Commission & National Demographic and Health Survey, 2003). Although these policies suggest that the government recognizes the need to reduce maternal mortality in Nigeria, the political will to transform these policies into action is largely absent (Westoff; Bankole, 2005). It was further stated that lack of improvement in maternal health despite these policies is due to inadequate implementation. Note that government policies are meaningless if there are no laws to enforce them or money to implement them. Lack of financial and political commitment from government has created a number of significant barriers for pregnant women seeking maternity care.

#### **Research Questions**

- i. What are the socio economic as well as the demographic characteristics of respondents in the study area?
- ii. What is the level of knowledge on maternal and child health services amongst respondents in the study area?
- iii. Is there adequate and available facilities for maternal and child health in a primary health care facility?
- iv. What is the extent of utilizing the primary health care for maternal and child health care?
- v. What are the factors that influence the utilization of Primary Health Care for Maternal Child Health care among respondents in the study area?

#### Aim and Objectives of the Study

The aim of this research study is to determine the utilization of Primary Health Care (PHC) services for Maternal and Child Health (MCH) in Suleja Local Government

Area of Niger State. This aim will be achieved through the following objectives which are to:

- i. Examine the relationship between the socio-economic and demographic characteristics of respondents and the utilization of maternal and child health care services.
- ii. Assess the level of knowledge of maternal and child health service utilization among respondents in the study area.
- iii. Ascertain the availability of maternal and child health services in primary health care facilities in Suleja
- iv. Assess the extent of utilization of Primary health care for Maternal and Child Health (MCH) care services in the study area
- v. Examine the factors that influences the choice of health care services

#### **Conceptual Framework**

The chapter is set out to review different studies that set the parameters to the utilization of primary health care service for maternal and child health from different parts of the world. The fundamental principle of the review is aimed at identifying the gaps and dearth targeted at the study area.

Primary Health Care (PHC) refers to essential healthcare that is based on scientifically sound and socially acceptable methods and technology which makes universal healthcare accessible to all individuals and families in a community. The three goals of PHC are majorly categorized as: empowering people and communities, multisectoral policy and action, primary care and essential public health functions as the core of integrated health services (WHO, 1976).

For the purpose of this study, we are streamlining PHC in relation to maternal and child health. Maternal health care service is defined as the services that women obtain in order to acquire quality of maternal health at prenatal/antenatal, childbirth in public or primary health facilities and postnatal/postpartum care facilities (Aregay et al., 2014; Dairo et al., 2010).

#### **Maternal Health Care Utilization**

Maternal health care utilization over the years has been a public health challenge more prominent in rural communities (Sepehri et al., 2008).

Maternal health care services are organized services provided to cater for the health needs of women during pregnancy, antenatal conceptional period (Good burn and Campbell 2001). In an ideal situation, every pregnant woman is supposed to have access to maternal health care.

Maternal mortality is a global issue and WHO recommends the use of maternal health service to help improve the health of women and babies during pregnancy and childbirth. Use of maternal health service is an effective means for reducing the risk of maternal morbidity and mortality especially in places where the maternal and child health service utilization is poor. According to WHO, UNICEF & UNFPA (2001), explained that the state of maternal health reflects the level of social justice and respect to women's right in a society i.e. right to receive good quality health service is guaranteed when their fundamental human right to life, education, nutrition, safe environment, economic resources and participation in decision making is met. Maternal health service 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). Improving the wellbeing of mothers, infants and children is an important public health goal; this determines the health of the next generation and can help predict future public health challenges for families, communities and the health care system. The risk of maternal and child health mortality and pregnancy related complications can be reduced by increasing access to quality pre conception, prenatal and inter-conception care (UN, 2006). Moreover, healthy birth outcomes and maternal health through early identification and treatment of developmental delays and disabilities and other health conditions among mothers and infants can prevent or minimize morbidity and mortality (MMWR 2004, Callaghan WM et al, 2007).

It is important to ensure that all pregnant women have access to preventive interventions, early diagnosis and treatment for problems, complications and emergency care when needed especially at the primary level of healthcare. These services should include provisions for basic emergency obstetric care, post abortion care and care of the new born. Key components of primary health care for maternal health include antenatal care, basic emergency obstetric care and postnatal care (Kilpatrick SK 2016).

#### **Antenatal Care**

Antenatal Care is the care concerned with the health of the mother and foetus during pregnancy. Antenatal care refers to the care that is given to the pregnant woman from the time that conception is confirmed until the beginning of labor (Frazer & Cooper, 2003). Antenatal care is provided by skilled health personnel (doctors, nurses or midwives) during pregnancy to aid in the monitoring and progress of both mother and child (UNICEF 2016).

WHO (2003) outlined essential approach to antenatal care as:

Identification and surveillance of the pregnant woman and her expected child recognizing and managing of pregnancy related complications particularly pre-

eclampsia screening for conditions and diseases like anemia, HIV infections, STIs, mental health and symptoms of stress. Preventive measures including tetanus toxoid immunization, de-worming, iron and folic acid, intermittent preventive treatment of malaria in pregnancy (IPTp), insecticide treated bed nets (ITN).

Advice and support to the woman and her family for developing healthy home behaviors and a birth emergency preparedness help the woman and her partner prepare emotion2ally, physically for birth and care of their baby, breastfeeding and essential newborn care. Promote healthy behaviors in the home such as healthy lifestyles, diet, safety and injury prevention, increase awareness of maternal and newborn health needs and selfcare during pregnancy and the postnatal period including the need for social support during and after pregnancy.

These antenatal can only be provided during scheduled visits except there are cases of complication which may necessitate otherwise. The usual approach to antenatal care based on European models developed in the early 1990s, assumes that frequent visits to the clinics is desirable for pregnant women. Frequent visits to the antenatal clinic were the norms 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 health centers and the inability of poor women to afford the transport fare. The scheduled visits recommended by Ciceklioglu, Soyer & Ocek (2005) are; the first booking appointment which should take place before 12weeks of pregnancy, should give opportunity for patient assessment, health education and baseline investigation; the second visit at 16week of pregnancy to access the progress of pregnancy and initiate iron and calcium supplements to the pregnant woman; the third visit at 20week of pregnancy during which ultra sound scan is recommended to check for any structural abnormalities affecting the baby while the fourth visit is at 24weeks of pregnancy for routine medical examination of the mother and the expected baby; the fifth visit at 28week 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 according to Ciceklioglu et al. (2005) is usually carried out at the 36week of pregnancy for medical routine checks of the mother and baby while the seventh visit often carried out at the 40<sup>th</sup> week of pregnancy for routine assessment of the mother and the baby; the eighth visit is also for routine checks.

According to Karanja (2009), explained that these schedules 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 guidelines for antenatal visits in all countries should

include at least: the measurement of blood pressure, testing of urine for diseases/germs, glucose and protein and blood test to detect syphilis, HIV and severe anaemia and to provide to mothers the 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 12weeks of pregnancy, at 26weeks, 32weeks and 36weeks of pregnancy.

#### **Intranatal Care**

Intranatal care refers to the health care service provided to the woman during labor (Frazer et al., 2006). This type of maternal care emphasizes the need for the woman to give birth to her baby under the care of skilled health personnel in a clean, safe and hygienic environment for delivery practices and also maintaining the highest standards of sterilizing of tools and instruments (Wagle, Sabroe and Nielsen, 2004).

#### **Emergency Obstetric Care (EmOC)**

Emergency Obstetric Care refers to a series of crucial lifesaving functions ideally performed in a medical facility which can prevent the death of a woman experiencing the start of complications during pregnancy, delivery or postpartum period (UNFPA, 1997). These signal functions must be performed at a facility for it to be recognized as an emergency obstetric care (EmOC). A facility can either be classified as a basic emergency care or comprehensive emergency care facility.

Basic Emergency Obstetric Care (BEmOC) according to UNFPA (2004), is very crucial in reducing maternal and neonatal death. This care can be provided with skilled health personnel in primary health centres to include the following:

- i. Manual removal of placenta
- ii. Administering antibiotics, uterotonic drugs (oxytocin) and anticonvulsants
- iii. Removal of retained products following miscarriage or abortion
- iv. Assisted vaginal delivery, preferably with vacuum extractor
- v. Basic neonatal resuscitation care

Comprehensive Emergency Obstetric care includes the performing of caesarean sections, safe blood transfusion and provision of care to sick and low birth weight newborns including resuscitation which can only be carried out at a hospital.

#### **Post Natal Care**

Postnatal Care (PNC) is the care received by the mother and her newborn child immediately after birth and for the first six weeks.

The postnatal period is the time after delivery in which the mother's 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 breastfeeding
- iv. Provide family planning services
- v. Provide basic health education to the mother and the family

Postpartum care for both mother and child can be defined as the prevention, early detection and treatment of complications and diseases, provision of advice and services on breastfeeding, birth spacing, immunization and maternal nutrition. The main components of postpartum care vary in accordance with the postpartum stage, corresponding to a timetable of visits that has been summarized in the formula of "6hours, 6days, 6weeks and 6months" (WHO, 1998).

**Maternal Mortality:** This is referred to as the death that occurs to women during or 6weeks after pregnancy termination, notwithstanding the duration of the pregnancy and not by accidental or incidental cause (WHO, 2013

#### The 3 Delays Model

Primary health care and maternity globally uses an integrated approach to address each of the issues that women face when trying to access safe childbirth. This is based on the 3 delays model which identifies three groups of factors which may stop women from accessing the maternal health care they need.

The delay model firstly identifies the point at which delay to EOC can occur as delay in deciding to seek medical care caused by woman's status in the immediate and extended family, perceived severity of the complications, societal expectation, culture and tradition and the necessity of travelling long distance (Oyesola, Shehu, Ikeh and Maru 2006).

The model secondly highlights the delay in reaching a health facility with EOC capacities caused by accessibility factors, poverty and lack of means of transportation, lack of the means of communication (PPMN 2005, Fawcus, Mbizvo and Landmark 2006). Low utilization of the services is hindered by factors such as poverty, ignorance, beliefs, awareness, culture, low status of women and poor attitude of health workers. (PMMN, 2005) stated that when women cannot afford good antenatal care services, some patronize quacks, traditional birth attendance without the professional skills or decide to deliver at home and this is dangerous to life of both mother and child.

The third delay in receiving care after arriving at the health facility caused by inadequate health personnel, poorly trained health personnel, lack of equipment/drugs, lack of blood for transfusion, lack of supporting services and lack of ambulance services (Mtimavalye, Justesen and Ngawalle 2004).

The community leaders in partnership with health workers should inform, educate and sensitize the community members on maternal health especially during pregnancy. This can be achieved through: town-crier, community newspapers, mass media (Abdulkarim, Mohammed and Abubakar, 2008). This study utilization of primary health care services among women of child bearing age will be anchored on the theory of the 3 delays model.

## Materials and Method Study Area Location

Suleja local government area is located in Niger State which is the north central region of Nigeria. The Local Government Area is part of the Suleja emirate and has a close proximity to the Federal Capital Territory. It lies between latitude 9°11'N and longitude 7°17'E and situated at elevation 412.9 meters above sea level. Suleja is the third largest town in Niger state with an estimated population of 215,075 (population census, 2006). Towns and villages that makes up Suleja Local Government Area includes Gupena, Apia, Buru, Gusun, Guraka, Bwoi, Chimbi and Chizako.

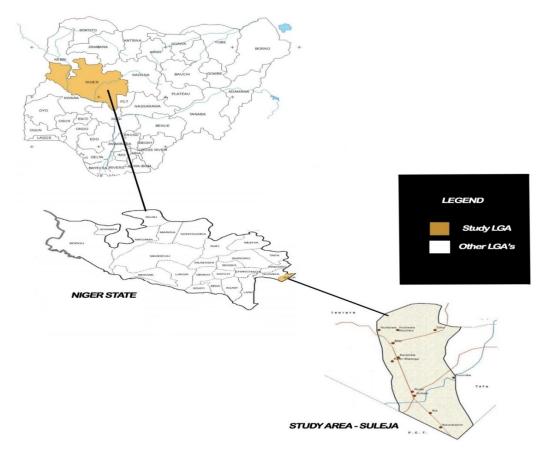


Figure 1: Map of Niger State showing Suleja LGA

#### Research Methodology Study design

The study employed a cross sectional survey design using both quantitative and qualitative tools to source data.

#### **Reconnaissance Survey**

A Reconnaissance survey was conducted in Suleja L.G.A through which the researcher was able to identify women of child bearing age (WCA) which served as the respondents that were interviewed and the areas of the study that the researcher was able to cover and the instrument of data collection were pre-test.

#### **Target Population**

The study population consist of women of child bearing age 15-49 years who had at least one child from 0-12 months in the study area.

#### Sources and Types of Data Required

#### **Sources of Data**

Data were obtained from both primary and secondary sources.

Primary data were sourced through field observations, administering of questionnaire and in-depth interviews.

Secondary data were sourced from published materials such as government gazettes, textbooks, journals, monographs; unpublished materials like dissertations, workshops. Seminars, consultation and symposia. Others are technical reports/papers and internet search.

#### **Types of Data Required**

The information required includes:

- Socio-Economic and Demographic characteristics of respondents
- Knowledge of maternal and child health services among respondents
- Availability of maternal and child health services in a Primary health care facility in the study area
- Prevalence/extent of utilization of primary health care for maternal and child health services and pregnancy outcome in the study area
- Factors that influences the utilization of maternal and child health services among respondents in the study area

#### **Method of Data Collection**

Two methods of data collections was employed; quantitative and qualitative method were used to generate data for the study. The study used the following tools of data collection

- 1. A questionnaire on the utilization of primary health care for maternal and child health care services were administered to women of child bearing age who had their last child between the ages of 0-23months at the time of this survey. A total of 180 questionnaires were administered; the communities includes; Madalla area (Town A) Suleja (Town B) and Guraka (Town C)
- 2. In-depth interviews were carried out to strengthen and validate the quantitative data collected through the household survey. Mothers were interviewed indepth. They were chosen randomly. In-depth interviews were conducted with health workers to verify the information gathered from the household survey and to understand the views of the mothers towards the available MCH services in the primary health care level provided by the public sector.
- 3. Observation of health facilities to ascertain its availability as well as its utilization by respondents.

#### Sample Size

The study population consist of women of reproductive age 15-49years as well as a few health workers within the study area. The sample size for the study comprised of 180 women which is representing 10 percent of the study population. This sample size that was used is based on Nwana's (1991) rule of thumb which states that when the population is a few thousands, (10%) of it can be used. Hence 10 percent of the entire population will be selected for the study.

#### **Sampling Techniques**

The sampling procedure was designed into three stages. The stratified sampling was used in the first stage whereby the study area was stratified into three strata comprising the three zones. The second stage is the use of simple random sampling techniques of balloting without replacement by selecting three different towns within the study area, thereafter household listing was undertaken and systematic sampling was used to select households. In the third stage, purposive sampling method was used to select a woman of child bearing age that had at least one child from 0-23months using a sample interval of four, starting from the first household, every fourth household were chosen and also questionnaires were administered to women who were willing to participate. About 60 women from each town (3 towns) within the study area were selected. At the end of the sampling procedure, 180 respondents were selected for this study, indepth interviews of health workers and mothers.

#### **Method for Data Analysis**

Descriptive statistics, that is frequencies and simple percentages were used in describing the demographic data of the respondents, mean and standard deviation were

also used for the analysis to provide answers to the research questions while Statistical Package for Social Sciences (SPSS version 22.0) was used in testing the hypotheses.

#### **Results and Discussion**

#### **Data Presentation and Analysis**

This chapter focused on presentation and analysis of data. Data are presented according to socio-economic and demographic characteristics of respondents as well as research questions that were stated to guide the study.

From the distribution of the socio-economics and demographic characteristics of respondents in table 4.1, about 59.4% are from urban area while 40.6% are from rural areas. The sampled ward revealed that Iku-South1 has 32.2% while Iku-South 2 has 48.3%, and Kurmin Sarki has 19.4%. Majority of sampled respondents were from Niger State 49.4%, Nasarawa State has 8.9%, Kaduna State has 7.2%, Kwara State has 6.7%, while others which cut across the nation, which includes states like Benue, kogi, Edo, Abia, Ondo, Plateau, Kano, Anambra, etc constituted 27.8%. The ages of respondents were from 15-21 years having 13.9%, 22-28 years having 22.8%, 29-35 years constituted 32.7% while 36-42 years have a percentage of 21.1%. This implies that majority of the respondents are from young age cohort and will desire to have more children which will influence the utilization of primary health care for maternal and child health services in the study area. Age range of 43-49 years constituted 9.4%. The research concurs with the results by (Wanjira et.al., 2011) that young mothers use maternal services more than the older ones. The meridian duration of breastfeeding declined with increasing age (Gebreselassie et al., 2008). See table 4.2

Religion affiliation of respondents showed dominance of Islam with 60.6% while Christianity accounted for 39.4%. About 87.2% are married, followed by widowed 6.1%, divorced 2.8%, separated 2.2% while single constituted 1.7%.

Educational status of respondents revealed dominance of secondary 41.1%, followed by primary 25.6%, no formal education 20.6% and tertiary constituted 12.8%. Respondents are engaged in various forms of occupation, those that are into business/trading 31.1%, farmers 26.1%, civil servants/government employee 17.2%, private workers 16.1% and others accounted for 9.4%. Income range of respondents revealed that most 45.6% earned below the Nigeria minimum wage of N18,000, N18,000-N38,000 and above N59,000 accounted for the same 19.4% while N39,000-N59,000 accounted for 15.6%. The level of education of respondents has influence on the knowledge/awareness of maternal and child health related issues. Since most respondents are literate, it is expected that there will be high level of patronage on maternal and child health service in the study area.

Most spouses of respondents have obtained one of education, secondary 49.4%, tertiary 31.1%, Primary 12.2% while no formal education form the list with 7.2%. Most spouse of respondents are farmers 45.0%, followed by civil servants/government employee 29.4% while business/traders and private workers constituted 12.2% and 10.0% respectively, while others accounted for 3.3%. Income range of spouses revealed dominance of above N59,000 which accounted for 53.9%, followed by N39, 000-N59, 000 with 30.0%, N18,000-N38, 000 accounted for 12.8% while below N18, 000 accounted for 3.3%.

From this result, it is not wrong to say that there will be high utilization of Primary Health Care for maternal and Child Health Care Services since most couples are literate, employed and most earned more than the Nigeria minimum wages.

The results of Manishimwe (2011) which investigates the determinants for maternal health care in Rwanda using 2005 Rwanda demographic and health survey data. The study analyzes the determinants of antenatal care visits, the timing of first antenatal care check-up and delivery care using multinational Logit Model and Probit Model to analyze postnatal care utilization.

The result showed that education of a wife and husband, income, medical insurance, age and living in urban areas influences positively the utilization of maternal health care services. But this finding disagreed with the study of (Fitzpatrick et al., 2011), which demonstrates a direct relationship between socio-economic status and health outcomes, with lower socio-economic status being linked with lack of access to care and low utilization of care leading to poorer health outcomes. See table 2 and 3.

**TABLE 1: Socio-Economic and Demographic Characteristics of Respondents** 

Variable	Characteristics	Frequency	Percentage
Location	Rural	73	40.6
	Urban	107	59.4
Ward	Iku-South 1	58	32.2
	Iku-South 2	87	48.3
	Kurmin Sarki	35	19.4
State of origin	Niger	89	49.4
	Nasarawa	16	8.9
	Kaduna	13	7.2
	Kwara	12	6.7
	Others	50	27.8
Age Range	15 - 21	25	13.9
	22 - 28	41	22.8
	29 - 35	59	32.7
	36 - 42	38	21.1
	43 - 49	17	9.4

Religion	Islam	109	60.6
	Christianity	71	39.4
<b>Marital Status</b>	Single	3	1.7
	Married	157	87.2
	Divorced	5	2.8
	Widowed	11	6.1
	Separated	4	2.2
<b>Educational Status</b>	No formal Education	37	20.6
	Primary	46	25.6
	Secondary	474	41.1
	Tertiary	723	12.8
Occupation	Farmers	47	26.1
-	Private Worker	29	16.1
	Civil Servant/		
	Government Worker	31	17.2
	Business/Traders	56	31.1
	Others	17	9.4
Income Range	Below N18, 000	82	45.6
_	N18,000 - N38,000	35	19.4
	N39,000 - N59,000	28	15.6
	Above N59, 000	35	19.4

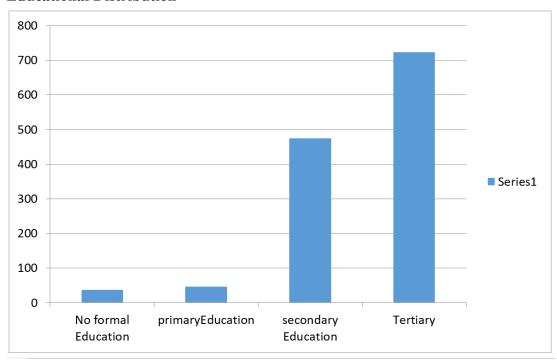
Source: Field Survey, 2019.

## Utilization of primary health care by state of origin

			ANC	services	Total
			and its utilization (	patronage	ī
			Yes	No	
State of origin	Niger	Count	80	6	86
$(X^2=22.707,$	State	percent	93%	7%	100%
p.>0.0005)	kaduna	Count	12	4	16
		percent	75%	25%	100.0%
	Kwara	Count	8	4	12
		percent	67%	33%	100.0%
	Nassarawa	Count	13	3	16
		percent	81.4%	18.6%	100.0%
	others	Count	44	6	50
		percent	88 %	12%	100.0%
Total		Count	157	23	180
		% percent	87.2 %	12.8%	100.0%

Three respondents from Niger State decline response on ANC utilization services. From the table Niger state has 93% of patronage while Kwara state is the least patronage with 67%. The total number of patronage from all the state is 87% while 12.8% do not patronize ANC services.

#### **Educational Distribution**



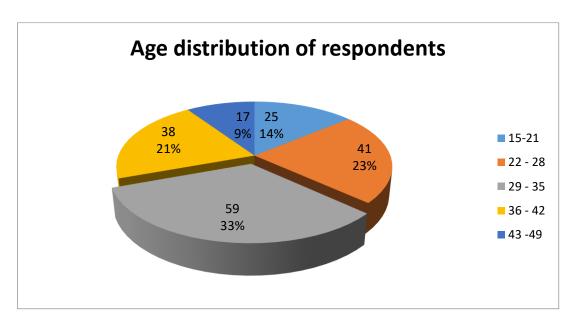


TABLE 2: Socio-Economic and Demographic Characteristics of Respondent's Spouse

Variable	Characteristics	Frequency	Percentage
<b>Educational Status of</b>	No Formal Education	13	7.2
Spouse	Primary	22	12.2
	Secondary	89	49.4
	Tertiary	56	31.1
Occupation of	Farmer	81	45.0
Spouse	Private Worker	18	10.0
	Civil servants/Govt.	53	29.4
	employee	22	12.2
	Business/Traders	6	3.3
	Others		
<b>Income Range of spouse</b>	Below N18, 000	6	3.3
	N18,000 - 38,000	23	12.8
	N39, 000 – N59, 000	54	30.0
	Above N59, 000	97	53.9

Source: Field Survey, 2019.

# Extent of Maternal and Child Health Service Utilization among Respondents During Last Delivery/ Birth in a Primary Health Care

On the extent of antenatal care services patronage among respondents, 87.2% utilized various primary health care facilities within the study area during their pregnancy. The result of this findings disagreed with a study carried out in rural Zimbabwe on socioeconomic status and health care utilization, all forms of health care tended to be utilized by those of high or medium high socio-economic status rated (65%) of the study subjects (Kevancy et al., 2012). See table 4.3. Gestational age/age of pregnancy before ANC visit, majority began ANC between 1 – 3 months 53.5% followed by 43.9% 4 – 6months and the last 7 – 9 months with 2.5%. The majority attended health facilities for ANC, which is the right age of pregnancy as recommended by World Health Organization that ANC visit should start form the first trimester, which is the first three months of pregnancy. From the above results, mothers are well informed about safe delivery and other related maternal and child health problems (MCH) which can be managed.

Reasons of refusal to attend ANC revealed that majority 39.1% have no health issues during pregnancy, followed by husband's refusal 21.7%, poverty and others 17.4% respectively (others include issues like smell form drugs, forbidden religion e.t.c,

while scared of high medical bill is 4.3%. The results of this study is similar with the findings of Eric Arthur (2012), that poverty is a barrier to access maternal services and accelerate maternal deaths amongst the poor segment of the population.

On the number of times that respondents visited or attended antenatal care in various health care facilities, above 4 times accounted for the most with 41.4% followed by 4 times 37.6%, while 3 times accounted for 10.8% and 2times and once accounted for 8.9% and 1.3% respectively. This study agreed with the findings of Eric Arthur (2012), which stated that wealth influences the use of health services positively; wealthier mothers have more chances of attending a first and additional visit than poorer mothers in Columbia. The study found out that wealth index had an effect on the utilization of ANC Services and maternal deaths. Salaried mothers and those who benefitted from vouchers of health had higher utilization compared to the other groups.

The reason for ANC attendance ranges from checking the health status of foetus and mother 60.5%, followed by safe delivery 52.2%. Diagnosis and treatment of complications in pregnancy accounted for 42.0%, sickness 37.7%, to be immunized against tetanus 26.1%, get medicine to prevent malaria 23.6%, prevent complications in pregnancy 19.1% and the least is to receive folic acid and ferrous sulphate 12.1%. About 43.3% of women who served as the sampled respondents delivered at home, followed by primary health care which accounted 32.2%, Government hospital 11.7%, private clinics 7.8%, private hospital 3.3, while others which consist of traditional birth attendant (TBA) churches or in a car accounted for the least 1.7%. This study is in line with the study of (FMO and NPHCDA, 2009) that in Nigeria, only 39% birth takes pace with assistance of medically trained personnel.

The findings are also similar to the study of Okeke (2010), which stated that poverty is one factor responsible for the poor utilization of quality antenatal and delivery care services.

Majority of the respondents 90.6% go for routine immunization. This study concurs with the findings of Regassa (2011). On the specific immunization ever received, it revealed that about 71.7% received OPV0, HEP, BO, BCG at birth; 57.8% received OPV1, Penta1, PCV1 at 6weeks; 56.1% received OPV2, Penta2, PCV2 at 10 weeks; OPV3, Penta3, PCV3, IPV at 14 weeks; Vitamin A 1<sup>st</sup> dose, measles 1 accounted for 52.8 at 6months, while Yellow fever, meningitis Conjugate A CSM at 9months and vitamin A 2<sup>nd</sup> dose at 12 0r 15months accounted for 54.4% and 28.9% respectively. From the study, it was observed that child immunization is one of the programmes that the government of Nigeria is implementing throughout the country to prevent children from contacting the six main childhood diseases. Government facilities particularly the PHC facilities are the main sources of immunization. It was found that majority of

respondents had knowledge about immunization and its importance, and had their children immunized before the age of five. Most of them were informed about immunization by the health care workers, community health environmental workers (CHEW). Mothers were able to show their vaccination card during the household survey while a few others could not, though they confirmed about vaccination of their children.

TABLE 3: Extent of Primary Health Care Utilization for Maternal and Child Health Service among Respondents

Variable	Characteristics	Frequenc	%
		y	
ANC Services	Yes	157	87.2
and its	No	23	12.8
utilization/patro			
nage			
Reason for	No health problem	9	39.1
refusal to attend	Husband's refusal	5	21.7
ANC	Poverty	4	17.4
	Scared of high medical bill/charges	1	4.3
	Others	4	17.4
Age of	1-3	84	53.5
Pregnancy	4-6	69	43.9
before	7-9	4	2.5
ANC visit			
No of ANC visits	Once	2	1.3
	2 times	14	8.9
	3 times	17	10.8
	4 times	59	37.6
	Above 4 times	65	41.4
Reason(s) for	Sickness		
attending ANC	Check the health of foetus and mother		
	Prevent complications in pregnancy		
	To be immunized against tetanus		
	Get medicine to prevent malaria		
	To receive folic acid and ferrous sulphate		
	Diagnosis and treatment of complications		
	in pregnancy		
	Safe delivery		
Place of	Primary Health care	58	32.2
delivery	Government/General hospital	21	11.7
•	Private Hospital	6	3.3

	Private clinic	14	7.8
	At home	78	43.3
	Other	3	1.7
Attendance of routine immunization	Yes	163	90.6
Specific type of	OPV0, HEP, BO, BCG (At Birth)	129	71.7
immunization	OPVI, Penta1, PCV1 (6 WEEKS)	104	57.8
received/given	OPV2, Penta2, PCV2 (10 Weeks)	101	56.1
	OPV3, Penta3, PCV3, IPV (14 Weeks)	101	56.1
	Vitamin A, 1 <sup>st</sup> dose, measles 1 (6	95	52.8
	months)	98	54.4
	Yellow fever, Meningitis conjugate A		
	CSM (9 months)	52	28.9
	Vitamin A 2 <sup>nd</sup> dose, measles 2 (12 0r 15 months)		

#### Maternal and Child Health Related Problems Diseases among Respondents

From the sampled women as respondents within the study area, the study revealed that women suffered from one form of maternal problems such as; bleeding after delivery form the most with 49.4%, followed by sepsis/infection 43.3%, malaria 37.2%, hypertension 16.7%, Anemia in pregnancy 5.6%, retained placenta 4.4%, while bleeding during pregnancy 3.3%, others consist of prolonged labor and fainting, and it accounted for 8.3%. The places where respondent treat their problems ranges from PHC 39.4%, remained at home 29.4%, hospital 17.8%, traditional 7.8%, chemist 4.4% and others 1.1%. This finding concurs with the study of researchers in Nigeria which reported that puerperal sepsis amounts for 12% of maternal deaths in Nigeria and that till date, little is known about the background of hospital factors that predispose pregnant women to puerperal infection that leads to mortality (Okonofua et at., 2012). The above findings also concur with the result of Omoruyi (2010) stated that five major maternal problems that causes maternal deaths are hemorrhage, infection, abortion, hypertensive disease of pregnancy and obstructed labor. Also, poor access to and no utilization of quality reproductive health services tend to contribute to the high maternal mortality level in Nigeria.

On the child related diseases, the result from the table revealed dominance of respiratory disease/cough and catarrh with 52.2%, followed by malaria 46.1%, diarrhea 38.3%, worms 14.4%, typhoid 11.1%, dysentery 2.2%, and others 11.7%. Most of the diseases that children suffered from are those that contribute mainly to child mortality in the study area and the nation at large. Place of child treatment ranges

from PHC 48.9%, chemist 17.2%, Hospital 12.2%, remained at home 9.4%, traditional/herbal medicine 7.2%. The specific type of treatment given to a child include paracetamol 38.9%, anti-malaria 38.3%, O.R.S 34.4%, Cough syrup/medicine 7.2%, herbal/traditional medicine 7.2%, De-worming tablets/syrup 5.6% and others 11.7%. In terms of child/children treatment, most use improve/modern way of treatment.

About 42.8% of respondents utilized family planning. The specific method of family planning usage involve injection 26.0%, prolonged breast feeding 20.8%, intrauterine device 18.2%, pills 13.0%, condoms 9.1%, tubal ligation 3.9% while others which consist of traditional method, etc. accounted for 9.1%. The result of this study is not in line with the study in the urban settings in Nigeria by (Corroon Gibbs et al., 2014) which showed that women who are empowered are more likely to utilize family planning such as modern contraceptives, to deliver at facilities and to have skilled birth attendants present during labour. See table 3.

TABLE 4: Maternal and Child Health Related Problems/Diseases among Respondents

VARIABLES	CHARACTERISTICS	FREQUENCY	%
Maternal Health Related	Bleeding during pregnancy	6	3.3
diseases	Bleeding after delivery	89	49.4
	Anaemia in pregnancy	10	5.6
	Retained placenta	8	4.4
	Sepsis/infection	78	43.3
	Hypertensive	30	16.7
	Malaria	67	37.2
	Others	15	8.3
Place of treatment for	Primary Health Care	71	39.4
mothers	Hospital	32	17.8
	Remained at home	53	29.4
	Traditional/herbal	14	7.8
	Medicine	8	4.4
	Chemist	2	1.1
	Others		
Child related disease(s)	Diarrhea	69	38.3
	Dysentery	4	2.2
	Malaria	83	46.1

	Respiratory disease/cough	94	52.2
	& catarrh	20	11.1
	Typhoid	26	14.4
	Worms	7	3.97
	None	21	11.
	Others		
Places of child's	Primary health care	88	48.9
treatment	Hospital	22	12.2
	Remained at home	17	9.4
	Chemist	31	17.2
	Traditional/herbal	13	7.2
	Medicine	21	11.7
	Others		
Specific type of treatment	O.R.S	62	34.4
administered to the child	Anti-malaria	69	38.3
	Cough Syrup/medicine	52	28.9
	Paracetamol	70	38.9
	De-worming tablets/syrup	10	5.6
	Traditional/herbal	13	7.2
	medicine	21	11.7
	Others		
Family Planning method	Yes	77	42.8
practiced	No	103	57.2
	Pills	10	13.0
Specific method of family	I.U.D (intrauterine device)	14	18.2
planning being used	Injection	20	26.0
	Tubal Ligation	3	3.9
	Condoms	7	9.1
	Prolonged breastfeeding	16	20.8
	Others	7	9.1

## **Services Received During Antenatal Care of Last Pregnancy**

Table 5 contained information on services received according to (WHO) categorized into compulsory and non-compulsory. For the compulsory services; blood pressure test accounted the most with 94.9%, followed by weighed 89.1%, blood test 88.5% and urine test 68.8%. The non-compulsory services, counselled on preparing for birth

96.2%, feeling of abdomen 92.4%, counselled on delivery with a skilled birth attendant 87.9%, received tetanus injection 84.7%, provision of folic acid and ferrous sulphate 80.2%

TABLE 5: Services Received During Antenatal Care of Last Pregnancy

Variable	Characteristics	Frequency	%
Services offered	Urine test	108	68.8
during ANC	Stool test	41	26.1
	Feeling of abdomen	145	92.4
	Blood pressure measurement (B.P test)	149	94.9
	Blood Test	151	96.2
	Received tetanus injection	133	84.7
	Weighed	140	89.1
	Counseling on breast feeding	94	59.9
	Counseling on preparing for birth	139	88.5
	Counseling on delivery with a skilled	138	87.9
	birth attendant (SBA)		
	Counseling about prevention of mother to	87	55.4
	child transmission (PMTCH) of HIV		
	Counseling about danger signs of	80	51.0
	pregnancy		66.2
	Counseling about family planning/birth	104	
	spacing		
	Counseling on new born care	48	30.6
	Advice to sleep under a bed net	91	58.0
	Provision of Folic acid and ferrous	126	80.2
	sulphate		

## Factors Influencing the Utilization of Primary Health Care for Maternal and Child Health Services

The factors influencing the utilization of Primary Health Care for maternal and child Health services within the study area amongst respondents includes: Bad/Poor road with the most factor 51.7%, followed by long waiting time of 2 -5 hours 41.1%, long queues 40.0%, inadequate skilled personnel 36.1%, poor attitude of health workers 33.9%, side effects of drugs/vaccines 30.6%, absence of health personnel 27.8%, inadequate drugs in health facilities 26.1%, high cost of drugs 15.6%, high cost of transportation 10.0%, while long distance to the health care facility accounted for 8.3% and medical examination by opposite sex which is the least factor 4.4%.

This result is similarly reported by Amosu et al., (2011) who observed that poor roads, irregular visits with long waiting time, little feedback to mothers, side effects of some vaccines, inadequate skilled personnel, poor attitude of health workers etc are some of the factors that discourages mothers and hinders the utilization of Primary Health Care, causing them to abandon or postpone vaccination.

The cost of last delivery indicated that those that did not pay accounted for the majority with 43.2%, this can be attributed to the fact that a lot of women in the study area among the respondents delivered at home and got one form of assistance or the other from families, relatives, neighbors, etc. Below N5000 accounted for 21.7%, followed by N6000 – N7000 with 12.2%, above N10,000 accounted for 10.0%, while N10,000 and N8,000 – N9,000 accounted for 8.9% and 3.9% respectively by. The study also noted that individuals that always pay for MCH services accounted for the husband with the most payment of 57.9% followed by the husband and wife 22.9%, wife with 14.6% while the least is relatives/in-laws with 4.6%. This therefore implies that husbands are the sole player.

Studies also showed that the average time taken to reach a PHC or any health facilities within 10minutes accounted for 52.2%, 11-20 minutes with 29.3%, above 30 minutes and 21 – 30 minutes accounted for 11.55% and 7.0% respectively. A finding by (NDHS, 2013) reported that common impediments to accessing health care in Nigeria include inadequate information, financial barriers, lack of good and accessible roads, cost of transportation etc, other possible problems may include cultural and religious challenges, need to obtain permission before going to the heath care facility and attitude of health workers as well as inadequate skilled personnel.

TABLE 6: Factors Influencing the Utilization of Primary Health Care for Maternal and Child Health Services

Variable	Characteristics	Frequency	%
Factors	High cost of drugs.	28	15.6
influencing the	Poor attitude of health workers.	61	33.9
utilization of	Inadequate drugs in health facilities.	47	26.1
maternal and	Inadequate skilled personnel.	65	36.1
child services	Medical examination by opposite sex.	8	4.4
	Absence of health personnel.	50	27.8
	Side effect of drugs/vaccines.	55	30.6
	Long waiting time of $2 - 5$ hours.	74	41.1
	Long queues.	72	40.0
	Bad/poor roads.	93	51.7
	Long distance to the health care	15	8.3
	facilities.		

	High cost of transportation.	18	10.0
Cost of last	Below N5, 000	39	21.7
delivery	N6,000 - N7,000	22	12.2
	N8,000 - N9,000	7	3.9
	N10, 000	16	8.9
	Above N10, 000	18	10.0
	Did not pay	78	43.2
Time taken to	Within 10 minutes	82	52.2
reach the health	11 – 20 minutes	46	29.3
facility	21 – 30 minutes	11	7.0
	Above 30 minutes	18	11.5
Individuals that	Wife	23	14.6
always pay for	Husband	91	91.58
MCH service	Husband and wife	36	22.9
	Relatives/in-laws	7	4.6

# Who Made the Decision to Utilize PHC for Maternal and Child Health During Last Pregnancy

This study revealed that the decision to utilize PHC for antenatal among respondents includes: Husband with 48.4%, Wife 28.7%, Husband and Wife 18.5%, health workers 2.5%, relatives/in-laws with 1.3%, while others accounted for 0.6%.

The decision made on the place of delivery revealed that husband accounted for 48.6%, this implies that majority of husbands decide where their spouses will give birth; husband and wife constituted 28.3%, wife 13.3%, relatives/In-laws and health workers 2.3% and 1.7% respectively, with others accounted for 5.8%.

The decision on family planning according to respondents; husband and wife with the most accounted for 62.3%, husband 19.5%, wife 14.3% while the least which is the health worker accounted for 3.9%. This study concurs with the findings of (Medhanjie et al., 2012; USAID, 2013), that male involvement in maternal health services has been reported to have significantly influenced service utilization by women especially in developing countries like Malawi, Ethiopia and Nigeria.

TABLE 7: Who Made the Decision to Utilized PHC for Maternal and Child Health During Last Pregnancy

Variable	Characteristics	Frequency	%
Who made the decision	Husband	78	48.4
to utilize PHC for MCH	Wife	45	28.7
for ANC	Husband and Wife	29	18.5
	Health workers	4	2.5
	Relatives/in-laws	2	1.3

	Others	1	0.6
Who made the decision	Husband	84	48.6
on the place of delivery	Wife	23	13.3
	Husband and wife	49	28.3
	Health workers	3	1.7
	Relatives/In-laws	4	2.3
	others	10	5.8
Who made decision on	Husband	15	19.5
family planning	Wife	11	14.3
	Husband and wife	48	62.3
	Health workers	3	3.9

Source: Field Survey, 2019

# **Knowledge of Primary Health Care for MCH and the Reasons for Utilizing the Services among Respondents**

The reason(s) as a result of the awareness of ANC visit is to check the health status of foetus and mother 52.8%, save life of mother and child 45.6%, check if the baby is growing well 40.6%, diagnosis and treatment of complication in pregnancy 36.7%, check for danger signs/child abnormality with 34.4%, sickness accounted for 29.4%, to be immunized against tetanus 22.8%, get medicine to prevent malaria 20.6%, prevent complications in pregnancy 16.7%, provision of nutritional supplements like folic acid and ferrous sulphate 10.6%, learn how to care for new born 7.2%.

TABLE 8: Knowledge of Primary Health Care for MCH and the Reasons for Utilizing the Services among Respondent

Variable	Characteristics	Frequency	%
Is there any Primary	Yes	163	90.6
Health Care in this	No	6	
community?	I don't know	11	
Reason(s) of ANC visit	Sickness	53	29.4
	Check the health of foetus and mother.	95	52.8
	Check for danger signs/child abnormality.	62	34.4

	Diagnosis and treatment of	66	36.7
	complications in pregnancy.		
	Check if the baby is growing	73	40.6
	well.		
	To be immunized against	41	22.8
	tetanus.		
	Provision of nutritional	19	10.6
	supplements like ferrous		
	sulphate and folic acid.		
	Save life of mother and	82	45.6
	child/safe delivery.		
	Get medicine to prevent	37	20.6
	malaria.		
	Learn how to care for new	13	7.2
	born.		
	Prevent complications in	30	16.7
	pregnancy.		
	I don't know.	6	3.3
Age of pregnancy before	1-3 months	84	49.1
ANC visit	4-6 months	69	40.4
	7-9 months	4	2.3
	I don't know	14	8.2
No of ANC visit before	2 times	14	7.8
delivery	3 times	17	9.4
·	4 times	59	32.8
	Above 4 times	75	41.7
	I don't know	15	8.3
Is it advisable to deliver	Yes		
in a primary Health	No		
Care Center	I don't know		

## **Prevalence of Child Mortality among Respondents**

It was revealed from the study carried out through the respondents that the number of pregnancies with 1-2 pregnancies accounted for 37.8%, 3-4 pregnancies with 35.6%, 5-6 pregnancies with 18.3%, while above 6 accounted for 8.3%. The ones that experienced abortion/miscarriages, from the study, it showed that none (no

abortion/miscarriage) had the most with 73.3%, once accounted for 18.9%, twice with 6.1% and above 2times constituted the least with 1.7%. No history of still-birth accounted for 86.7%, once with 8.3%, twice with 3.9% while above 2times accounted for 1.1%.

The respondents also reported of their child/children under 5years who died within the last five years which accounted for 26.7% lost their child/children. The number of deceased child/children; 1-2child/children had the highest with 91.7%, 3-4children accounted for 6.6% while 4-5children was 2.1%. as regards under five illness before death, respondents reported malaria most with 50.0%, diarrhea 25.0%, acute respiratory infection was 12.5%, fever with 8.2% and typhoid with 4.2

**TABLE 9: Prevalence of Child Mortality among Respondents** 

Variable	Characteristics	Frequency	%
No of Pregnancy	1-2	68	37.8
	3-4	64	35.6
	5-6	33	18.3
	Above 6	15	8.3
Experienced	None	132	73.3
abortion/miscarriages	Once	34	18.9
	Twice	11	6.1
	Above 2 times	3	1.7
<b>Experienced/history of still</b>	None	156	86.7
birth	Once	15	8.3
	Twice	7	3.9
	Above 2 times	2	1.1
Loss of child/children	Yes	48	26.7
under 5years of age			
No of deceased under	1-2	44	91.7
5years of age	3-4	3	6.6
	4-5	1	2.1
Under five illness before	Fever	4	8.3
death occurred	Acute respiratory infection	6	12.5
	Diarrhea	12	25.0
	Malaria	24	50.0
	Typhoid	2	4.2

#### **Conclusion and Recommendations**

Conclusion This study investigated the utilization of PHC facilities in Suleja and it's environs. The overall aim of the study was to identify factors, which affect utilization of PHC for MCH services within the study area, and to provide policy recommendations for improving the utilization level of PHC facilities. This chapter

provides summary of the study which emerged from quantitative and qualitative analyses of collected data and information. Several recommendations are also given in the hope that implementation of those would lead to improved utilization of public sector health care services at the primary health care level in the study area, the entire state and even the country at large. It was found that PHC facilities are utilized. The majority (87.2%) of the study population was found to rely on PHC services for maternal and child health care and majority started ANC visits within the first trimester of pregnancy (53.5%) but after attending antenatal, majority delivered at home which accounted for 43.3%. PHC was found to be widely used for Maternal and Child Health services; TT vaccination of mother during pregnancy, and child immunization, which seems to be a big achievement of the government. This service needs to be continued. Mothers mostly 49.4% suffered from bleeding after delivery and sepsis/infection 43.3%, these findings suggest that government needs to intensify efforts to addressing the limiting factors such as quality of care by using creative and innovative approaches which will further help increase the utilization of skilled pregnancy care in PHC(s) and reduce maternal mortality.

#### Recommendations

In view of the findings, the following recommendations were made:

- i. Health workers should be encouraged to show more empathy for women, to facilitate this, health workers need to be shown and offered appropriate support by health system.
- ii. Government should ensure adequate funding of PHC centres for provision of necessary facilities, a forum should be created for women of child bearing age who are in dearth need of the services of the tertiary health institutions following complications at subsidized rate especially when they cannot afford it, this will help to reduce maternal mortality.
- iii. The benefit of involving people in health care management was found to be positive at the ward level health services; immunization of children and TT vaccination of mother through PHC. Achievements in the coverage of TT vaccination and immunization are remarkable. The lesson learned from this approach could be used by other States in the North-Central Nigeria who want to provide similar services to rural women and children at a low cost and in an effective way. For Niger State, a policy decision could be taken by the government to involve people in the management and operation of PHC facilities at rural areas. Formation of a "Local Health Authority" comprising representatives 'from different government and non-profit organizations along

with people's representatives could be considered as a strategy for peoples' involvement.

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