PERCEPTION AND HEALTH SEEKING BEHAVIOUR FOR OBSTETRIC COMPLICATIONS AMONG WOMEN OF REPRODUCTIVE AGE IN ZARIA METROPOLIS, KADUNA STATE

BY

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DECLARATION

I declare that the work in this Dissertationentitled "**Perception and Health Seeking Behaviour for Obstetric Complications among Women of Reproductive Age in Zaria Metropolis, Kaduna State"** has been performed by me in the Department of Nursing Science. The information derived from the 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.

_____	_____	_____
Name of Student	Signature	Date

CERTIFICATION

This Dissertation entitled PERCEPTION AND HEALTH SEEKING BEHAVIOUR FOR OBSTETRIC COMPLICATIONS AMONG WOMEN OF REPRODUCTIVE AGE IN ZARIA METROPOLIS, KADUNA STATE by EBUNOLUWA ADEBAYO meets the regulations governing the award of the degree of Master of Science in Nursing Sciences (Maternal and Child Health Nursing) of the Ahmadu Bello Universityand is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research is dedicated to God Almighty for His immeasurable grace and mercy upon my life.

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The researcher appreciates God Almighty for the grace and privilege given to her to carry out this study, to Him alone be all praise for ever.

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ABSTRACT

Worldwide, maternal mortality has been receiving tremendous attention but sadly, the success recorded cannot be applauded.This study was aimed at assessing perception and health seeking behaviour for obstetric complications among women of reproductive age group in Zaria metropolis, Kaduna State.The study was a descriptive cross-sectional study involving 400 respondents. Interviewer administered structured questionnaire consisting of four sections was the instrument used to collect data which was analyzed using SPSS version 22 and presented using descriptive and inferential statistics. Chi square tests were used to determine relationship between variables and level of significance. Findings revealed that most respondents had a good perception regarding occurrence of obstetric complications during pregnancy, labour and delivery, with an aggregate mean Likert scale score of 4.54, which was greater than the constant mean score of 2.5, indicating good perception. The main symptoms experienced during pregnancy, labour and post-partum were dizziness, swollen hands and face and severe bleeding respectively. Most women had a positive health seeking behaviour as evidenced by attendance of ANC clinic visitation (70.5%), usage of routine medications (59.0%, 65.0% and 68.3% for iron, folic acid and malaria prophylaxis respectively), and choice of hospital delivery during last pregnancy (56.8%).Financial constrain was the most stated reason for non-utilization of medications and husbands were the main decision makers pertaining hospital visits. There was a significant relationship between perception of obstetric complicationsand onset of antenatal care in last pregnancy, frequency of ANC clinic visits, usage of routine haematinics, usage of malarial prophylaxis and preferred place of next delivery. There was however no significant relationship between perception of obstetric complications and attendance of antenatal care during last pregnancy, and also place of last delivery.Based on these findings, the study recommends amongst others that ongoing health awareness campaigns by both government and non-governmental organizations regarding obstetric complications should be intensified for maximum coverage, and the Federal Government should be willing to commit adequate resources to meet the needs of the health system in order to reduce the prevalence of obstetric complications and by extension maternal mortality.

CHAPTER ONE

1.0 INTRODUCTION

Background to the Study

Maternal health and safe motherhood has received significant attention worldwide in the last three decades. Globally, much effort has been put into achieving a reduction in maternal mortality. In 2013 alone, the World Health Organization (WHO) recorded that 289,000 women died due to complications of pregnancy and childbirth worldwide, a significant reduction from 523,000 in 1990, with a decline of about 44% recorded between 1990 and 2015 (WHO, 2016). Sadly however, Sub Saharan Africa remains one of the regions in the world that has made the least progress in this regardwith Maternal Mortality Ratio of 239 per 100 000 live births as compared with 12 per 100,000 live births in developed countries (WHO, 2016).Sub Saharan Africa also remains the region with the highest risk in the world for death due to obstetric complicationswhere a woman faces about a 1 in 40 risk of dying during pregnancy and childbirth in her lifetime(WHO, 2014). In Nigeria, the most recent reported maternal mortality ratio is 576 maternal deaths per 100,000 live births, with maternal deaths accounting for 32% of all deaths among women of reproductive age (Nigeria Demographic and Health Survey, 2013).

Maternal morbidities can be referred to as all illnesses and complications associated with pregnancy and childbirth, short of death(Worku, Yalew, & Afework, 2013). Obstetric or maternal complications are acute conditions occurring during pregnancy, childbirth or post partum period(Worku, Yalew, & Afework, 2013).

Worldwide, about 80% of maternal deaths and 98% of stillbirths are ascribed to direct obstetric complications (Singh, Goli, & Parsuraman, 2014). A previous study in Nigeria revealed that mortality associated with obstetric complications was highest among the poor women(Olusola, 2011). In one of the widest disparities in International public health, maternal mortality rate in Nigeria is almost 100 times worse than in industrialized nations (National Population Commission & ICF Macro, 2009). Annually, 3 million pregnancies occur in Nigeria on the average, and approximately 170,000 result in death, mainly due to obstetric complications (Ndubuisi, 2009). Obstetric complications as they account for maternal mortality in Nigeria are presented thus: haemorrhage (25%), sepsis (15%), complications of unsafe abortion (13%), hypertensive disorders of pregnancy (12%) and obstructed labour (8%) (Ndubuisi, 2009).

The word perception has been defined to mean a belief or opinion often held by many people and based on how things seem; the quality of being aware of things through the physical senses, and an individual's ability to notice and understand things that are not obvious to other people. In Nigeria, negative perception about possible pregnancy related complications abounds(U. M. Lawan, Takai, & Ishaq, 2015). This has in no little way contributed to the worsening maternal mortality figures in the country. The Prevention of Maternal Mortality Network (PMMN), a research initiative under the Safe Motherhood Initiative (SMI) observed that pregnancy and delivery is regarded by most communities as a natural phenomenon (Ndubuisi, 2009). They also discovered that signs and symptoms of obstetric complications are usually not recognized as reasons for concern in many parts of the country (Ndubuisi, 2009). For instance, in some parts of Nigeria, feet swelling in pregnancy which is a symptom that precedes eclampsia, is seen as an indication that the unborn child is a boy (Ndubuisi 2009). Similarly, in a study conducted in South West Nigeria, exposure to cold and spiritual forces was among the perceived causes of

eclampsia(Akeju et al., 2016). Similar negative perceptions also apply to antepartum haemorrhage, amongst others.

Poor perception of the etiology and treatment of these obstetric complications has also affected the obstetric behaviour which involves the utilization of basic maternity and emergency obstetric care services(Pembe et al., 2009). Previous studies have attributed poor health seeking behavior to wrong perception of pregnancy and delivery complications, amongst others. The "three delays" framework first described by Thaddeus and Maine (1994) asserts that maternal mortality in developing countries occur as a result of three delays to accessing appropriate health care; the 1st of this delay is the delay in perceiving that a problem is occurring while the woman is at her home, and in making a timely decision to leave the house in search of medical assistance, due to lack of proper understanding of obstetric complication(Pacagnella, Cecatti, Osis, & Souza, 2012).

Statement of the Problem

Children are highly valued in Africa, with several African cultures allowing a woman to give birth to as many children as possible. However, the risks and possible complications that could result from pregnancy and delivery are understood by only a few, women inclusive. Several of these complications are erroneously ascribed to normal pregnancy and delivery processes that the woman must go through while pregnant; as such, these wrong perceptions and poor health seeking behaviours towards obstetric complications contribute in no little amount to maternal morbidity and mortality as seen above.

About 500,000 women die yearly from complications associated with pregnancy and of this figure, 99% of deaths occur in developing countries(Oyelese & Ananth, 2010). TheUnited Nations(2008)reported that one out of every 22 women in Africa dies from pregnancy related complications. This implies that more than 150,000 African women die and millions suffer serious illnesses due to obstetric complications. It has been reported that about a third of total disease burden among women of reproductive age in Africa has been linked to health problems arising from pregnancy and childbirth complications, abortion and reproductive infections(Olusola, 2011).Studies have also revealed that women in Africa die more frequently from obstetric complications, than is seen in Europe and North America(National Population Commission & ICF Macro, 2009).

Nigeria makes up about 2% of the world's population, but sadly, 10% of the world's maternal deaths occur in the country (World Health Organization, 2008). Currently, Nigeria has the second highest number of maternal deaths in the world with about 59,000 maternal deaths occurring annually(Olaku, 2014). According to the National Demographic and Health Survey (NDHS 2013), Nigeria records a Maternal Mortality Ratio of 576 deaths per 100, 000 live births annually. Maternal mortality ratio is worst in Northern Nigeria, with an average figure of 2,420 per 100,000 live births recorded in Kano State(Olaku, 2014). The North East zone has the highest maternal mortality rate (1,549 per 100,000 live births) which is about ten times that in the South West. The rate in the North West (1025 per 100,000 live births) is about six times higher than what obtains in the South West (UNICEF, 2015)

In Kaduna state, the Nigerian Urban Reproductive Health Initiative (Nigerian Urban Reproductive Health Initiative, 2013) reported that about 1,999 women die annually from

pregnancy related complications. MMR in Zaria was found to be 800 per 100,000 live births(National Population Commission & ICF Macro, 2009), That is to say one out of ten pregnant women is likely going to die from obstetric conditions. Attendance at ante natal care was 30% and delivery by skilled birth attendants was 10% in Zaria local government (NURHI, 2013).

In Zaria local government, which is an easy reflection of Northern Nigeria, several studies have been done on maternal mortality but there has been no broad study done to document the perceptionand health seeking behavior of women of child bearing age regarding obstetric complications in preventing maternal morbidity and mortality. It is in view of this that the researcher took a close look at perception and health seeking behavior for obstetric complications among women within Zaria metropolis.

Significance of the Study

Findings from this study will help women to benefit from recommendations made which will improve the quality of health services they will receive from the prenatal period till the post-partum period.

Health institutions will benefit from this study in that recent written and theoretical information on obstetric complications will be added to the body of knowledge in the reduction of complications that lead to maternal morbidity and mortality. It will also be useful for future researchers who may have interest in studying maternal perceptions on obstetric complications and other related issues.

Policy makers which includes government at all levels will also benefit from this study. Results and recommendations from this study will help in policy formulations and serve as a basis for developing new and refined maternal welfare programs, services and strategies including those aimed at reducing maternal mortality.

Research Questions

This study is predicated upon the following research questions:

1. What are the perceptions of women regarding obstetric complication?
2. What are the obstetric complications experienced by women in the study location?
3. What is the health seeking behaviour of womentowards obstetric complicationsin the study location?
4. What are the factors influencing health seeking behaviour of women in the study location?
5. What is the relationship between perception of obstetric complications and the health seeking behaviour of women in the study location?

Aim of the study

This study is aimed at assessingperception and health seeking behaviour for obstetric complications among respondents who are women of reproductive age group in Zaria.

The specific objectives of the study are as follows:

1. To determine the perception of women regarding obstetric complication
2. To identify obstetric complications experienced by women in the study location.

3. To identify the health seeking behaviour ofwomen towards obstetric complications in the study location.
4. To identify factors influencing health seeking behaviour of women in the study location
5. To determine the relationshipbetween perception of obstetric complications and the health seeking behaviour of women in the study location.

Scope of the Study

The scope of this study is limited to perception and health seeking behaviour for obstetric complications in Zaria metropolis Kaduna State, Nigeria.

Delimitation of the Study

The study is delimited to women of child bearing age of 15 to 49 years resident within Zaria metropolis who have been pregnant at least once, regardless of the outcome on obstetric complications.

Operational Definition of Terms

Perception: Views, opinions, feelings of women in the study location about obstetric complications

Obstetric Complication: Any deviations from normal pregnancy, labour, and after delivery, that occurs in women within the study population during pregnancy, childbirth and after delivery

Health Seeking Behaviour: Actions or inactions engaged in by pregnant women in the study location during ante natal, labour or post-natal period to maintain and promote health, or treat complications when they occur

Women of Reproductive Age Group: women who fall between 15 to 49 years, who are married and have delivered at least one child within the last six months within the study population

Zaria Metropolis: Towns within the urban Zaria and Sabongari local governments

CHAPTER TWO

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter deals with the review of literature related to this study. It will be discussed under the following sub-headings:

- Overview of pregnancy
- Maternal mortality
- Overview of obstetric complications
- Perception of obstetric complications
- Health seeking behaviour

2.2 Overview of Pregnancy

The state of pregnancy is known as gravid, and a pregnant female is sometimes referred to as a gravida(Dorland, 2012). Similarly, the term "parity" (abbreviated as "para") is used for the

number of previous successful live births. Incomplete pregnancies or abortions, miscarriages or stillbirths account for parity values being less than the gravida number, whereas a multiple birth will increase the parity value. Women who have never carried a pregnancy achieving more than 20 weeks of gestation age are referred to as "nulliparous" or gravida 0 and a woman who is pregnant for the first time or has been pregnant one time is referred to as primigravida. A multigravida or more specifically a gravida 2, gravida 3, and so on, is a woman who has been pregnant more than one time.

The term pregnancy is derived from a latin word “graviditas” meaning carrying of one or more offspring, known as foetus/embryo inside the uterus of a female(Kumari & Joshi, 2013). While the embryo describes the developing offspring during the first eight weeks following conception, foetus is used from about two month’s gestations until birth. According to the American Pregnancy Association (2008), a number of medical signs are associated with pregnancy. These signs typically appear, if at all, within the first few weeks after conception. Although not all are universally present, nor are all of them diagnostic by themselves, taken together they make a presumptive diagnosis of pregnancy. These signs include the presence of Human Chorionic Gonadotropin (HCG) in the blood and urine, missed menstrual period, implantation bleeding that occurs at implantation of the embryo in the uterus during the third or fourth week after last menstrual period, increased basal body temperature sustained for over two weeks after ovulation, Chadwick's sign (darkening of the cervix, vagina, and vulva), Goodell's sign (softening of the vaginal portion of the cervix), Hegar's sign (softening of the uterus isthmus), and pigmentation of linea alba – Linea nigra, (darkening of the skin in a midline of the abdomen, caused by hyperpigmentation resulting from hormonal changes; it usually appears around mid-pregnancy(American Pregnancy Association, 2008).

Norwitz, Saade, Miller, & Davidson (2016)stated that though pregnancy begins at conception, it is more convenient to date from the first day of a woman's last menstrual period (LMP), or from the date of conception (if known).Counting from the LMP, pregnancy usually lasts between 37 and 42 weeks, with the expected date of delivery (EDD) at 40 weeks, thus pregnancy is considered 'at term' when gestation attains 37 complete weeks but is less than 42 weeks.Events before completion of 37 weeks are considered pre-term; from week 42 events are considered post-term. When pregnancy exceeds 42 weeks (294 days), the risk of complications for mother and fetus increases significantly(Royal College of Obstetricians and Gynaecologists, 2011)

Human pregnancy consists of three phases, called trimesters; the first trimester lasts for 12 weeks, second from 13 to 27 weeks and third from 28 to 40 weeks. In the first trimester, most pregnant women do not have any specific signs or symptoms of implantation, although it is not uncommon to experience light bleeding at implantation. Morning sickness can occur in about seventy percent of all pregnant women and typically improves after the first trimester. Most miscarriages occur during this period(CDC, 2016). In the second trimester, movement of the fetus often referred to as "quickening", can be felt. This typically happens by the fourth month of gestation. In the third trimester, the final weight gain takes place, and the fetus begins to move regularly. This period of pregnancy can be uncomfortable, causing symptoms like weak bladder control and back-ache. Movement of the foetus becomes stronger and more frequent.

2.3 Maternal Mortality

The World Health Organization (2016) defines maternal health as the health of women during pregnancy, childbirth and postpartum. While motherhood is often a positive and fulfilling experience, for many it is associated with ill health or even death (WHO, 2016). Pregnancy is a

good thing and the desire for large number of children is generally high in Africa. Although pregnancy is a physiological phenomenon, pregnant women commonly experience both physiological and psychological changes. There may also be accompanying complications, some with fatal outcome constituting maternal mortality. Pregnant women are thus risk prone and the care of a pregnant woman deserves highest priority.

Maternal mortality is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2016). Maternal mortality is a measure of the risk to the mother connected with childbirth. Since the 1980s, the health community worldwide has introduced a sequence of initiatives focused on reducing maternal deaths, beginning with the Safe Motherhood movement in 1987 to the creation of the partnership for maternal, newborn and child-health in 2005.

The twentieth century has seen a significant decline in the maternal mortality ratios (MMR) in developed countries. Sadly however, same cannot be said of the developing countries who still suffer from a large number of maternal deaths. Although maternal; mortality is unacceptably high in almost all developing countries, the most affected region is Sub-Saharan Africa. Assessments of progress made as the Millennium Development Goals (MDGs) project was coming to a close, revealed that least progress was made in goal 5 which aimed at reducing maternal deaths by 3/4th by 2015, particularly in Sub-Saharan Africa (Bryce et al., 2008); hence Sustainable Development Goal (SDG) 3 which aims to ensure healthy lives and promote well-being for all at all ages.

According to the World Health Organization (2016)global maternal mortality database, Sub-Saharan African region alone contributed 50% of global maternal deaths, followed by South Asia with 35%, the two regions together accounting for 85% of global maternal deaths. In Sub-Saharan Africa, 15-year old girls have a 1 in 31 risk of dying from childbirth related diseases while the risk in developed regions is 1 in 4,300 (WHO, 2008).

Worldwide, the maternal mortality ratio is 260 per 100,000 live births and 640 per 100,000 in Sub-Saharan Africa (WHO, 2008). According to the World Bank(2011), maternal mortality is regarded as the most extreme consequence of poor maternal health, with obstetric complications being the leading cause of disability and death amongst women between the ages of 15 – 49 years. For every maternal death, an estimated 25 others suffer a debilitating injury, some with lifelong consequences (World Bank, 2011). Risk to the newborn can also not be over-emphasized as maternal death almost invariably leads to death of the newborn. An estimated 4 million newborn die in the first week of life yearly, mostly due to complications encountered during pregnancy and childbirth(World Bank, 2011).

In 2010, the maternal mortality ratio of South Africa was put at 300 deaths per 100,000 live births, a decline from 2008 figures of 410(UNFPA, 2011). A study conducted in Eritrea revealed maternal mortality of 240 per 100,000 live births with 16% of these deaths occurring during pregnancy, 48% during childbirth and 36% postpartum(Mohammed, Elnour, Mohammed, Ahmed, & Abdelfattah, 2011). In Sub-Saharan Africa, some of the highest maternal mortality ratios have been recorded in conflict prone countries or those with large refugee populations, such as Sierra Leone and Central African Republic with values of 890 per 100,000 live births(Central Intelligence Agency, 2008) . The NDHS (2013) puts the maternal mortality ratio in Nigeria at 576 maternal deaths per 100,000 live births. Though this represents a reduction

from 2010 adjusted maternal mortality ratio of 630 maternal deaths per 100,000 live births, it still makes Nigeria the second largest contributor to maternal mortality in the world (UNFPA, 2011).

It is estimated that every single day, 145 women of childbearing age die as a result of complications of pregnancy and childbirth in Nigeria. The chance of a woman dying from pregnancy and childbirth in Nigeria is put at 1 in 13, and Nigeria remains one of the 10 most dangerous countries in the world to give birth. According to UNICEF (2015), a Nigerian woman has an average total of 6 births in her life, each pregnancy exposing her to the risk of maternal complications. Compared to the Sub-Saharan average of 1 in 39, a Nigerian woman's risk of dying from pregnancy/ childbirth is 1 in 29. In developed nations, the risk is 1 in 3,800 (World Health Organization, 2012).

Within Nigeria, significant disparities exist among regions, with northern Nigeria having fairly higher maternal mortality ratios than the South. While the South-West region of the country has a figure of 165 per 100, 000 live births, the North-East has the highest value with 1,549 deaths per 100,000 live births (National Population Commission & ICF Macro, 2009).This exceeds five times the global average and ten times the figure from the South-West. North Western Nigeria follows with 1,025 maternal deaths per 100,000 live births (National Population Commission & ICF Macro, 2009). This disparity has been attributed to a number of factors including poverty, lack of investment in health systems, low infrastructural levels and culture, amongst others.

A study byWorld Health Organization(2011)determined haemorrhage as the main cause of maternal mortality worldwide (35%); other causes include infections (8%), eclampsia (18%), embolism (1%), unsafe abortion (9%) and other direct or indirect causes (29%). Even in the same region, some women are more liable to maternal mortality than others in Nigeria. Studies

have revealed that women who are rural dwellers are less privileged, thus more liable to maternal mortality. Their liability may be due to medical factors (direct causes of maternal mortality), socio-cultural factors due to women's low status (educational and financial), harmful traditional practices and other barriers to utilization of available health services.

2.4 Overview of Obstetric Complications

The nine months of pregnancy preceding the delivery of a new baby into a family is normally a time of joy for expectant parents. Unfortunately, unforeseen complications may arise which would lead to consequent changes in mother's birth plan and lifestyle. Such problem that can interrupt the growth of the foetus or can alter the health of the mother is known as obstetric complications or complications of pregnancy.

Obstetric (maternal) complications are morbidities suffered during pregnancy, through the post-partum period of 42 days. Obstetric complications still constitute a large and under-realized burden. Of all pregnancies worldwide, 40% experience one form of complication or the other, with severe forms occurring in up to 15% of cases. Worldwide, an estimated 30 million pregnant women would develop complications (Hardee, Gay, & Blanc, 2012). More often than not, pregnancy constitutes a risky event in the life of a woman in the developing than developed countries. Many mothers living in developing countries continue to die from pregnancy related complications each year(Prata, Passano, Sreenivas, & Gerdts, 2010).

Complications of pregnancy can take several forms, acute or chronic, minor or severe. It may or may not be recognized or acknowledged as an illness by the sufferer. There is also a variation in the seriousness of a specific complication; some are instantaneously lethal while others may be potentially lethal having a disabling or discomforting effect on the sufferer.

Minor complications are those problems which pose no significant danger to either the woman or the foetus; they include back pain, constipation, contractions, dehydration, oedema, lower abdominal pain, increased urinary frequency(Koblinsky, Chowdhury, Moran, & Ronsmans, 2012). Acute obstetric complications are those suffered during pregnancy through the postpartum period of 42 days which may directly lead to maternal death. They include antepartum or postpartum haemorrhage, prolonged or obstructed labour, postpartum sepsis, complications of abortion, pre-ecclampsia/ecclampsia, ectopic pregnancy and ruptured uterus(Koblinsky *et al.*,2012). These may have potentially devastating consequences on women and their families, with slow recoveries which may come with lasting sequel.

2.4.1 Common Obstetric Complications

During any pregnancy, complications may arise some of which could be minor while others life threatening and may require medical intervention. This includes conditions that arise as a result of pregnancy. Others could be conditions that existed before but are aggravated by pregnancy. The commonest obstetric complications include the following:

2.4.1.1 Haemorrhage

Bleeding or haemorrhage in pregnancy is a serious complication. According to CDC(2016), bleeding in pregnancy may be early (less than 26 weeks) or late (after 26 weeks).Typical causes of early bleeding include implantation bleeding (when the fertilized egg attaches itself to the lining of the womb and is of no consequence), an infection in the vagina and threatened miscarriage. Bleeding can also occur in late pregnancy andsuch bleeding is referred to as antepartum haemorrhage (CDC, 2016). Typical causes of antepartum haemorrhage include

placenta praevia and abruptio placentae(Royal College of Obstetricians and Gynaecologists, 2011)

2.4.1.2 Placenta Praevia

Placenta praevia is a condition in which the placenta is attached close to or covering the cervix (opening into the uterus), rather than its normal location (upper part of the uterus). According to CDC (2016), this type of placental implantation occurs in one in every 200 deliveries and occurs more often in women who have scarring of the uterine wall from previous pregnancies, fibroids or other abnormalities of the uterus, or previous uterine surgeries. Signs and symptoms may include vaginal bleeding that is bright red and not associated with abdominal tenderness or pain most likely to occur in the third trimester, hypotension, tachycardia, a soft and non-tender uterus, high presenting part with normal fetal heart tones. Diagnosis is confirmed by performing a physical examination (without a vaginal examination) and an ultrasound. The baby usually has to be delivered by cesarean section (if it is type III or IV) to prevent the placenta from detaching early and depriving the baby of oxygen during delivery (CDC, 2016).

2.4.1.3 Placenta Abruption

Placental abruption (also known as abruptio placentae) occurs when the placenta separates from the uterus before the fetus is delivered. In a healthy pregnancy, the placenta remains attached to the uterine wall until after the foetus is delivered. This form of condition affects about one in every 150 births and in very severe forms, placental abruption can cause death to the foetus which occurs in approximately one in every 500-750 deliveries(Kohnle, 2008). Death of the mother from placental abruption is veryrare and infants who survive a birth with the condition have a 40-50 percent chance of experiencing complications. The cause of abruption placentae is

often difficult to diagnose. A number of risk factors have been identified; these include pregnancy during old age, history of placental abruption during a previous pregnancy, high blood pressure, diabetes, previous multiple deliveries (twins, triplets), cigarette smoking, heavy alcohol use, cocaine use, and malformations of the uterus and placenta(Ghaheh et al., 2013). The signs and symptoms are as related to the grade(Ananth et al., 2016); they include:

Grade I (Mild): This accounts for 40% of all cases. They include ante partum haemorrhage (APH) of unknown cause, intra uterine irritability, presence of a small retro placental clot without fetal distress or maternal coagulopathy.

Grade II (Intermediate): This accounts for 45% of all cases. The symptoms include uterine hyper tonicity with viable uterus, fetal distress, tachycardia, greater amount of vaginal bleeding, hypo fibrinogenaemia.

Grade III (Severe): This accounts for 15% of all cases. Here, the fetus is not alive and the uterus is tetanic, there is presence of heavy vaginal bleeding which leads to maternal hypotension. Thrombocytopaenia and hypo fibrinogenaemia are present.

Sometimes, there is no visible vaginal bleeding. Instead, the bleeding is said to be "concealed." In this case, the bleeding is trapped behind the placenta, or there may be bleeding into the muscle of the uterus(Deering& Smith, 2016).

2.4.1.4 Obstructed Labour

Another complication to consider is obstructed labour which is a condition in which the presenting part of the foetus cannot progress into the birth canal despite strong uterine contractions. The most frequent cause of this condition is cephalo-pelvic disproportion

(mismatch between the fetal head and the mother's pelvic brim). Other causes include malpresentation or malposition of the foetus. In rare cases, locked twins or pelvic tumours can lead to it. A Study in Sokoto, North-West Nigeria revealed an obstructedlabour incidence of 2.0% or 1 in 49 deliveries (Nwobodo & Ahmed, 2011). Obstructed labour, if neglected can cause serious maternal and newborn morbidity and mortality. Signs and symptoms includes a high presenting part, soft and non-tender uterus, fetal tachycardia, painless vaginal bleeding which is bright red in colour, maternal shock corresponding to the amount of blood lost leading to fetal hypoxia. Most often, the delivery mode employed here is operative which could be either instrumental delivery or caesarean section. Complications that could arise from obstructed labour include prolonged rupture of membrane with consequent intrauterine infections, trauma to bladder / rectum, ruptured uterus with attendant haemorrhage, shock or death. The most severe and long term condition following obstructed labour is formation of an obstetric fistula which is a communication between the vaginal wall and the bladder (Bimbola, 2013).

2.4.1.5 Abortion/Miscarriage

A miscarriage is the loss of a pregnancy during the first 20 weeks.According to Cohain, Buxbaum, & Mankuta (2017),out of every one hundred pregnancies, ten to twenty end in miscarriage. Miscarriage occurs when the pregnancy ends before the baby has any chance of survival. Most miscarriages occur in the first 12 weeks of pregnancy but can also be experienced up to the twentieth week of pregnancy. Any pregnancy loss occurring after the twentieth week is referred to as abortion. The signs and symptoms of miscarriage include bleeding from the vagina which progresses from light to heavy, pain in the lower abdomen and lower back, fever, weakness, and passage of tissue from the vagina. Both the bleeding and the pain can be quite similar to those accompanying a heavy menstrual period, especially for an early miscarriage. It

may therefore be difficultto tell when a miscarriage happens, especially if pregnancy was never suspected. According to Batty (2008), women who have suffered one miscarriage are three times more likely to have complications in future pregnancies.She noted that such women are 3.3 times more likely to develop pre-eclampsia in their next pregnancy, and 1.5 times more likely to give birth to a premature baby.

2.4.1.6 Ectopic Pregnancy

Ectopic pregnancy is another complication. The word ectopic is derived from the Greek word ektopos, meaning out of place, and refers to the implantation of a blastocyst in a location outside of the uterine cavity, including the fallopian tubes, cervix, ovary, cornual region of the uterus, and the abdominal cavity, thus it is also known as tubal, cervical or abdominal pregnancy.The American College of Obstetricians and Gynaecologists (2008) stated that of all first trimester pregnancies, 2% are ectopic and account for 6% of all pregnancy related deaths.Bilateral ectopic pregnancy, though rare, has an estimated incidence of 1 in every 725 to 1 in 1580 ectopic pregnancies(Amine & Haythem, 2015). Risk factors for an ectopic pregnancy include prior tubal damage from a previous ectopic pregnancy, or from tubal surgery.Burd (2016) noted that this complication can be prevented by avoiding conditions that might scar the fallopian tubes. Infertilityhas also been found to increase the risk of an ectopic pregnancy (Clayton et al., 2006).The symptoms include lower abdominal or pelvic pain, mild cramping on one side of the pelvis, amenorrhea (missed period), abnormal vaginal bleeding (usually spotting), breast tenderness, nausea, low back pain (Steinauer, 2015).There may be severe, sharp, and sudden pain in the lower abdominal area, light headedness or fainting, referred pain to the shoulder area and the most common complication is rupture with internal bleeding that leads to shock(Steinauer, 2015). A trans-vaginal scan, now the gold standard for diagnosing an ectopic pregnancy has

replaced the traditional laparoscopy. The trans-vaginal scan enables the visualization of an intra uterine pregnancy at a much lower serum hCGtitre(Kaur & Kaur, 2011)

2.4.1.7 Pre-Eclampsia/Eclampsia

Pre-eclampsia, also known as toxaemia in pregnancy is another pregnancy complication. It is characterized by hypertension (high blood pressure) and proteinuria (excessive protein in the urine), often including oedema (accumulation of water) and occasionally involving thrombocytopenia (low platelets) or liver function abnormalities(American College of Obstetricians and Gynaecologists, 2013). Pre-eclampsia occurs in as many as 10 percent of pregnancies, usually in the second or third trimester, and after the 32nd week. Preeclampsia-eclampsia can occur any time after 20 weeks of gestation and up to six to eight weeks postpartum (after delivery). It is commoner in women who are pregnant for the first time and its frequency drops significantly in second pregnancies (Kumar, Abbas, & Aster, 2015). If not properly handled, the patient may develop eclampsia, a potentially fatal condition involving seizures and loss of consciousness. Five percent of all patients with preeclampsia progress to eclampsia. The cause of preeclampsia is not known, but immune factors have been implicated, as it may result from fetal antigens – elements of the fetus that trigger an immune response in the mother.

Preeclampsia can range from mild to severe, and it can progress slowly or rapidly. The only symptoms felt in mild cases may include swelling ofthe feet, ankles, hands and face. Signs of pre-eclampsia include elevated blood pressure, proteinuria, oliguria, thrombocytopaenia. The symptoms of severe preeclampsia, which can develop during the last weeks of pregnancy, are persistent occipital headaches, persistent visual disturbances such as blurred vision and photo

phobia, nausea and vomiting,epigastric or right upper quadrant pain, and salt and water retention. It may progress to eclampsia, the symptoms of which are convulsions (seizures) and sometimes unconsciousness. Management of preeclampsia includes foetal assessment and earliest safe delivery while monitoring maternal blood pressure, urinary protein excretion and weight change(Townsend, O'Brien, & Khalil, 2016).

2.4.1.8 Anaemia in Pregnancy

The World Health Organization estimates that more than half of pregnant women in the World have a haemoglobin level indicative of anaemia (< 11.0gldl), the prevalence may however be as high as 60 percent in developing countries(Tsegaye & Tesfaye, 2014).Anaemia during pregnancyresults due to increased demand for iron and other vitamins in pregnancy. Thus, more than 50 percent of women suffering anaemia in pregnancy actually have iron deficiency anaemia.Folate deficiencies and other causes usually account for a large proportion of the other anaemias(Okeke, 2011). Other predisposing factors to anaemia in pregnancy include parasitic infestations like malaria, hookworm, or schistosome in the blood or body (leading to iron deficiency), and repeated pregnancies without adequate time in-between to recover physically, thereby depleting micro-nutrient stores of the body(Noronha, Bhaduri, Vinod, & Kamath, 2010). Studies by Esike*et al.,* (2016)in Ebonyi State amongst pregnant women proved that 56% of women studied were anaemic, while hookworm infestation, malaria and HIV were found to contribute immensely to severe anaemia cases seen amongst pregnant women in Lagos (Okeke, 2011). Maternal anemia contributes significantly to maternal mortality and causes an estimated 10,000 deaths peryear (Center for Disease Control and Prevention, 2015). Signs and symptoms of anaemia in pregnancy include weakness/fatigue, dizziness, shortness of breath, tachycardia, pale skin, lips and nails.

2.4.1.9 Malaria in Pregnancy

WHO (2015) recognized malaria in pregnancy as a significant public health problem, with great risks to the pregnant mother and her unborn child. Malaria is a common disease in many parts of African that is transmitted through mosquito bites. Malaria associated maternal illness is mostly the result of Plasmodium falciparum infection which occurs predominantly in Africa. The result of malaria infection during pregnancy includes maternal anemia, fetal loss, premature delivery, intrauterine growth retardation, and delivery of low birth-weight infants that is <2.5kg (Center for Disease Control and Prevention, CDC, 2015). It is a particular problem for women in their first and second pregnancies and those who are HIV positive.

There is variation in the complications and symptoms of malaria in pregnancy according to malaria transmission intensity in a given geographical area. In high transmission settings where individuals have high acquired immunity levels, P. falciparum infection is usually asymptomatic in pregnancy, though there may be predisposition to maternal anemia. In low transmission settings however, relative acquired immunity to malaria is low, thus there is an increased risk of severeanaemia with its attendant effects (CDC, 2015). For all these reasons, the WHO recommends use of Intermittent Preventive Treatment (IPT) and long-lasting insecticide treated nets amongst pregnant mothers (WHO, 2015). Symptoms include high fever, chills, sweating, headache, weakness, anaemia, and in severe cases, multi system failure, loss of consciousness.

2.5 Health Seeking Behaviour

Since the launch of safe motherhood initiative in 1987, efforts have intensified on improving maternal health and decreasing maternal mortality. Increased maternal deaths may be attributed to the “three delays” identified by Thaddeus and Maine(Knight, Self, & Kennedy, 2013).This delays could be a result of lack of knowledge on the obstetric complications of

pregnancy/labour/ child birth in developing countries (Okour, Alkhateeb, & Amarin, 2012). The World Health Organization (2003) defined obstetric complications under the concept of near miss as ‘a woman who nearly died but survived a complication during pregnancy, childbirth or within 42 days of termination of pregnancy). Complications include: haemorrhage (ante partum, intra-partum and post-partum), prolonged / obstructed labour, puerperal sepsis, complications of unsafe abortion, hypertensive disorders (pre-eclampsia / eclampsia), ectopic pregnancy and ruptured uterus(United States Agency for International Development, 2008).

Complications can occur at any point in pregnancy most of which can be effectively managed if detected early and whether prompt action was taken. Commonest danger signs during pregnancy include severe bleeding per vagina, swollen face and extremities, blurred vision. While those during labour and child birth include severe vagina bleeding, prolonged labour, retained placenta, sepsis (WHO, 2011). A good recognition of these symptoms as dangerous will improve the probability of women, their husbands, members of their community to stay healthy and take necessary steps to ensure safe deliveries. A study by Say, Souza, & Pattinson(2009) revealed that women with severe obstetric complications were often referred to hospitals and clinics in the late stages of emergency due to lack of recognition of maternal complications.

The Safe Motherhood Initiative (SMI) developed some research initiatives to tackle the issue of safe motherhood of which Prevention of Maternal Mortality Network (PMMN) is one of them. This network which involves experts in the medical and social science fields identified factors associated with maternal mortality. One of such factors is that communities see pregnancy and child birth as a natural process as such signs and symptoms of complications are not seen as a cause for concern. In Thailand, women perceived that the complications experienced during

pregnancy are normal and as such do not require seeking for appropriate care (Sharma & Vong, 2012). Sikder *et al*(2011) in their study found out that half of the women interviewed had only one antenatal care (ANC) check-up. Reasons for lack of regular ANC included the perception that the visits were unnecessary since previous pregnancies and deliveries were uncomplicated.

A National survey conducted in Bangladesh revealed a low level of awareness of life threatening complications during pregnancy, delivery and in the post-partum period(Amin, Shah, & Becker, 2010). During the study, findings revealed that only 62% of women with complications sought medical care. This however depended on the maternal view of whether it was life threatening or not. Among other reasons, cost related considerations (44%) were the most cited reason for not seeking treatment for complications. Other reasons include transportation, family opposition and concerns related to quality of maternal health services.

A study in Ghana suggested that basic knowledge of obstetric complications was present, however, there were misconceptions about the cause of such danger signs such as possession by evil spirits which influenced care seeking (Aborigo, 2014). A similar finding by Sidker et al(2011) revealed that some women refused medical care even in the face of complication because of the belief that the problem was caused by an evil spirit. In Nigeria, the PMMN reported that swelling of the feet in pregnancy, a sign of eclampsia indicates that a woman is carrying a boy. Similarly, small amounts of bleeding are also not seen as a cause for concern. Therefore, the decision to seek medical care when such complains occur is dependent on what is perceived to be a complication as it were.

Ante natal care services has always addressed the issue of recognition of obstetric complications when they occur but the quality of these service in low income areas have been described to be

inconsistent(Fagbamigbe & Idemudia, 2015). In Nigeria, the ability of women to seek care is significantly dependent on the cost (Sambo, Abdulrazaq, Shamang, & Ibrahim, 2013). According to NDHS (2008), attendance in Ante natal clinics in Zaria was put at 30%, showing that a larger proportion of women are ignorant to the need for gaining knowledge on the normal and abnormal sings they may encounter in the course of pregnancy and delivery.Oladipo (2014) revealed that utilization of health services is related to availability, quality and cost of the servicesas well as social structure, health beliefs and personal characteristics of those using the services.An estimate of the average interval between the onset of obstetric complications which progress to death in the absence of medical intervention is 2 hours for post-partumhaemorrhage, 12 hours for ante-partum haemorrhage, 24 hours for ruptured uterus, 2 days for eclampsia, 3 days for prolonged labour, and 6 days for puerperal sepsis (WHO,2009).

Several logistics and cultural factors determine whether a family is likely to seek skilled care. Cultural premonitions in some areas do not give women the permission to seek care when they think they need it. Rather, the person ofpower in the home such as the husband or mother in law makes the decision. Muoghalu (2010)during a study on socio economic determinants of maternal mortality reported women's lack of power in making decisions at home.Akeju*et al*., (2015) found out that the patriarchal family structure was responsible for women'sinability for when and where to seek care during complications. Women's lack of financial empowerment further complicatestheir health seeking behaviour. Pembe et al(2009) reported that women of child bearing age had poor knowledge of obstetric complications and appropriate care. This was attributed to low level of awareness about danger signs of pregnancy and labour as well as the prevalence of cultural traditions in the community, where seeking for permission from a male

member (or being accompanied by a male member) of the family must be done before care can be sought.

Some cultures confer social status on women through child bearing. Self-delivery and fearlessness in child birth is praised as opposed to death or medical interventions at birth which is seen as failure, laziness and weakness. These responses therefore lead to delay or prevent a woman and her family members from seeking medical interventions even at the face of obvious health problems requiring medical interventions. Similarly, such cultural beliefs are implicated in unsafe practices where majority of women prefer utilizing the services of Traditional Birth Attendants (TBAs) for pregnancy and child birth while neglecting the services of trained birth attendants.

Poor care or treatment in the hospital, whether actual or perceived greatly alters the cost benefit of delivering in the hospital versus delivering in the home. This is obvious by the fact that 94% of Ugandan women in a study by Ellis, Schummers and Rostoker (2011) only attend one ANC visit, during which they obtain an ante natal card, a necessity for birthing in the hospital but do not keep to all other appointments during the ANC period as a result of perceived hostility of care givers. A perceived expectation of poor care also lead women to labour unattended at home until a catastrophe occurs in a bid to avoid institutional care. Delay in referral to higher levels of care has also been attributed to non-availability of transport to convey patients to tertiary health care centres(Ellis, Schummers and Rostoker, 2011).

2.6 Theoretical Framework

2.6.1 The Health Belief Model (HBM)

The HBM is a psychological model that attempts to explain and predict health behaviours by focusing on attitudes and beliefs of individuals. It was created in the 1950s by social psychologists Hochhbaum, Rosenstock and Kegel working in the United States Public Health Services. The HBM suggests that people's belief about health problems, perceived benefits of action and barriers to action and self-efficacy explains engagement (or lack of engagement) in health promoting behaviour. The model postulates that health seeking behaviour is influenced by a person's perception of a threat posed by a health problem as well as the value associated with actions aimed at reducing the threat.

This model was developed to predict the likelihood of a person taking recommended preventive health action and to understand a person's motivation and decision making about seeking health services.

2.6.1.1 Core Assumptions

The HBM is based on the understanding that a person will take health related action if that person:

1. Feels that a negative health condition can be avoided,
2. Has a positive expectation that by taking a recommended action, he or she will avoid a negative health condition,
3. Believes that he or she can successfully take a recommended health action.

2.6.1.2 Theoretical Constructs

This model was spelled out in terms of four constructs represent ting the perceived threat and net benefits to vary between individuals and predict engagement in health related behaviour.

2.6.1.2.1 Perceived Severity

If a person does not see a healthbehaviour as risky or threatening, there is no stimulus to act. Perceived severity encompasses beliefs about the disease itself and how serious the consequences might be as regards impacts of the disease on functioning in work and social roles. For example, a 59-year-old woman who sun baths daily, who does not believe she is at risk of skin cancer will continue to do so, however an individual who perceives that common cold will have serious consequences as a result of being absent from work will perceive the condition as a serious problem.

2.6.1.2.2 Perceived Susceptibility

This refers to the subjective assessment of risk of developing a health problem. The HBM predicts that individuals who perceive that they are susceptible to a particular health problem will engage in behaviours to reduce their risks of developing the health problem. This model asserts that when a person believes that he or she is susceptible to a health problem with severe consequences, the person will more likely conclude that the benefits outweighs the barriers associated with changing one's behaviour to prevent the problem.

2.6.1.2.3 Perceived Benefits

Health related behaviours are also influenced by perceived benefits of taking action. A perceived benefit refers to an individual's assessment of the value or efficacy of engaging in a health promoting behaviour to decrease the risk of the disease. If an individual believes that an action

will reduce susceptibility to a health problem or decrease its seriousness, then he or she is likely to engage in that behaviour regardless of objective facts regarding effectiveness of action.

2.6.1.2.4 Perceived Barriers

Perceived barriers deal with an individual's opinion of the tangible and psychological costs of the advised action. This includes an individual's assessment of the obstacles to behaviour change. In such instances, the perceived benefits must outweigh the perceived barriers in order for behaviour change to occur. Perceived barriers to taking action includes the perceived inconvenience, expense, side effects or dangers, discomfort involved in engaging in the behavior.

2.6.1.2.5 Modifying variables

The HBM suggests that modifying variables affect health related behaviours indirectly by affecting perceived seriousness, susceptibility, benefits and barriers. Individual characteristics including demographic (e g age, sex, race, ethnicity, education), psychosocial(e g personality, social class, peer group pressure) and structural variables (e g knowledge about a given disease condition, prior contact with a disease)can affect perception.

2.6.1.2.6 Cues to action

As proposed by the HBM, a cue or trigger is necessary for prompting engagement in health promoting behaviour.They are strategies to activate the readiness to take a necessary health promotingaction. These cues could either be internal or external. The intensity of cues needed to

prompt action varies between individuals by perceived seriousness, susceptibility, benefits and barriers.

2.6.1.2.7 Self efficacy

The concept "self-efficacy" was added to the four components of the HBM in 1988.Self efficacy refers to an individual's perception of his or her confidence to successfully perform a behaviour. This was added in an attempt to better explain individual differences in health behaviour. Developers of the model recognized that confidence in one's ability to effect change in outcomes (self-efficacy)was a key component of health behaviour change.

2.6.2 Application of Theory to the Study

The Health Belief Model measures attitudes and beliefs surrounding health related matters. This theory is therefore useful in determining perception on a phenomenon as it strengthens the ability to differentiate between concept of belief and meaning to help produce questions which can lead to more concentrated interventions.

Perception of high benefit and low barrier regarding a health action influences a behavioural intention. Since participation in healthy behaviours is influenced by beliefs about the likelihood of an action resulting in a perceived benefit, women will tend to involve in more positive behaviours to improve their health.The perceived benefits of healthbehaviour must however exceed the perceived barrier to carrying out the health action in order to ensure compliance thereby altering the cost benefit analysis of engaging in a health promotivebehaviour.

Furthermore, interventions based on the health belief model may provide clues to action to remind and encourage women to engage in health promoting behaviours. Self-efficacy can also be improved by providing by training in specific health promoting behaviours to ensure lifestyle

changes. Interventions can be aimed at the individual level (one on one intervention) or at the societal level through legislations, etc)

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

The research methodology employed in this study includes a research design, location of study, population of study, sample size and sampling technique, instrumentation, validity of instrument, procedure for data collection, procedure for data analysis and ethical consideration.

3.1 Research Design

This study is a descriptive cross-sectional study, which collected primary data on women's perception regarding obstetric complications, obstetric complications experienced by women,and factors influencing health seeking behaviourof women with obstetric complications in Zaria metropolis. A structured questionnaire was used to gather data.

3.2 Location of Study

Zaria metropolis located between latitude 11”15/N and 11” 3/N of the equator and longitude 7”30/E and 7”45/E of the Greenwich meridian. It is a local government in Kaduna state, Nigeria. It is an ancient city situated North of the capital city, Kaduna state. The 2006 Census population was 408,198. It is located on a plateau at a height of about 660m above sea level in the guinea savannah.

It is a cosmopolitan town of great historical importance in Northern Nigeria. It is made up of the core town (Zaria city), surrounded by ancient and recently a moderately renovated wall. It is mostly inhabited by Hausa Muslims, who are mostly farmers or traders.

Zaria metropolis consists ofurban towns within Zaria Local Government and SabonGari Local Governments with Zaria local government having thirteen (13) political wards andSabonGari local government havingeight (8) political wards.

Zaria has a tropical continental climate with three seasons: hot (February- April), wet (May-October) and dry (November - February). The mean annual rainfall is 100mm and the maximum daily temperature begins to rise in January to reach a peak (36.9’) in April before it falls, while the minimum daily temperature is lowest in December.

Zaria has been known for long as a scholastic town. This is probably the central factor for its growth. There are lots of primary, secondary and tertiary institutions in the metropolis. Among these are the Zaria Polytechnic, Federal College of Education, Nigerian College of Aviation Technology, Chemical and Leather Institute, a School of Nursing and Midwifery as well as Ahmadu Bello University.

There are various trading ventures scattered all over the town. Health institutions include a teaching hospital (Ahmadu Bello University Teaching Hospital), general hospitals (State

Hospitals), and several private hospitals and clinics to meet the health needs of the inhabitants. This study is restricted to the urban Zaria andSabonGari local government. Zaria local government has thirteen political wards while SabonGari local government has eight political wards.

3.3 Population of Study

Women of reproductive age group (15-49 years) who have been living within Zaria metropolis of Kaduna State for at least six months, and who have been pregnant in the last one year, regardless of the outcome comprised the population of study.The population of the two local government areas (Zaria Local Government and SabonGari Local Government) under studyis approximately 695,069(Federal Republic of Nigeria Official Gazette, 2007). The units of analysis were regular households with a group of persons consisting of conjugal families. The National Population Commission (NPC, 2008) states that a regular household includes presence of recognized head of household, sharing of catering arrangement and feeling of belonging as a social unit.

3.4 Inclusion Criteria

Women within the reproductive age group who are willing to participate, who have been resident within Zaria metropolis at least six months prior to the study, and have been pregnant or have given birth in the last one year during the period of study were included.

3.5 Exclusion Criteria

Women who are resident within Zaria metropolis for less than six months during the period of data collection**,** who are mentally unstable and who are unwilling to participate were excluded from the study.

3.6 Sample Size and Sampling Technique

The Yamane's formula(Araoye, 2004) was used to determine the sample size as follows:

$$n = \frac{\mathrm{N}}{1+\mathrm{N}(\mathrm{e})^2}$$

Where:

n= sample size

N = total population

e= level of significance (0.05)

$$n = \frac{695{,}069}{1 + 695{,}069(0.05)^2}$$

= 399.6 ≈ 400. A total sample size of 400 women was used for the study.

A multi-stage sampling technique was adopted for this study. According to Flower (2004), a strategy is needed for linking population numbers to some kind of groupings that can be sampled in the absence of direct sampling source. The multistage sampling technique commonly utilized in large scale surveys, involves selection in stages until the final sampling units are arrived at (Araoye, 2004). Given the widely dispersed population of the metropolis, this sampling technique allowed for representation of various groups.

The multi-stage sampling technique was utilized as follows:

Stage I – Zaria metropolis was divided into two Local Governments within it namely Zaria local Government and SabonGari Local Government

Stage II – All the wards within the two local governments were listed and four (4) wards each from the above regions was selected by simple random technique using balloting method, making eight (8) wards out of the twenty-one (21) wards in the metropolis.

Stage III – Cluster sampling technique was utilized in each ward, with each tenth numbered households serving as clusters.

Stage IV- Within each household, respondents were selected through simple random sampling. A household with no eligible respondent was automatically skipped and the next house selected

3.7 Instrumentation

Quantitative instrument, which is a structured questionnaire containing both open and closed ended questions was used to collect data in this study. The questionnaire contained four sections. The first section (Section A) contained socio demographic data of respondents, the second section (Section B) contained questions regarding perception of obstetric complications. The third section (Section C) contained questions on obstetric complications experienced by respondents while the fourth and final section (Section D) contained questions on health seeking behaviour.

3.7.1 Quantitative Data Collection Instrument

Quantitative design is basically survey, which emphasizes the collection of mass data from a large body of individuals (Gyong, 2011). The questionnaire, adapted from the JHPIEGO monitoring birth preparedness and complication readiness tools and indicators for maternal and newborn health(JHPIEGO, 2004), served as the survey instrumentwhich included both open ended and close ended questions with options.This was used to answer the first and second research questions. The third, fourth and fifth sections were self-developed by the researcher.Questions were developed based on the five objectives of the study.The objective of the questionnaire is to obtain adequate, reliable and valid information on the subject of research. The languages that are basically used in communication in Zaria, apart from native languages are

English and Hausa language. These are the two basic languages the researcher usedin communicating with the respondents and collecting data.

3.8 Validity of Instruments

Content validity was carried out by the supervisors and vetting was done by five professionaljurors for clarity, relevance, applicability and comprehensiveness. Appropriate corrections were effected.

3.9Procedure for Data Collection

Advocacy visits and meetings were held with the heads of the selected wards for introduction and to explain the objectives of the research. Eight (8) research assistants consisting of trained Community Health Extension Workers (CHEWs) were involved in data collection. The objectives of the study were fully explained to them after which training on how to administer the questionnaires was done. The questionnairewasalso interpreted into Hausa language by the Department of African Languages and Cultures,Ahmadu Bello University, Zaria for participants who cannot read or speak English language.

3.10 Procedure for Data Analysis

Data from questionnaire was analyzed by first sorting them according to the numbers. A code book was prepared and the data was fed into it based on the questions asked. Data was then transferred to a code sheet. For open ended questions, the researcher defined categories for them. Finally, data wasanalyzed using Statistical Package for Social Sciences (SPSS), version 22. Both descriptive and inferential statistics were used to present data. Frequency distribution tables and percentages was used to describe data. Mean and standard deviations were used to measure

perception while Chi square analysis was used to determine relationship between variables. P values of ≤ 0.05 was considered as significant.

3.11 Ethical Consideration

Approval to conduct the research was sought and obtained from the Health Research Ethics Committee (HREC) ofAhmadu Bello University, Zaria. Verbal consent was also obtained from the gate keepers of each ward used and the respondents. Participation was voluntary.

CHAPTER FOUR

4.0 PRESENTATION AND DATA ANALYSES

4.1 Introduction

This Chapter presents data analysis of the Study. 400 questionnaires were administered and all were retrieved. Responses were analyzed using the Statistical Package for Social Sciences (SPSS) Version 22. A constant mean of 2.5 was used to ascertain the agreement or non-agreement of respondents to questionnaire items.

4.2 Results

The results were presented in frequency distribution tables, percentages, mean and standard deviation.

Socio-demographic characteristics of respondents are presented in Table 4.1.

Table 4.1: Socio-demographic characteristics of Respondents

Variables	Frequency n=400	Percent (%)
Age group(years)		
15-19	10	2.5
20-24	66	16.5
25-29	114	28.5
30-34	87	21.8
35-39	67	16.8
40-44	43	10.8
45-49	13	3.3

Ethnicity		
Hausa	216	54.0
Yoruba	68	17.0
Igbo	34	8.5
Others	82	20.5
Religion		
Islam	254	63.5
Christianity	146	36.5
Level of Education		
Non-formal	76	19.0
Primary	32	8.0
Secondary	172	43.0
Tertiary	120	30.0
Occupation		
Teacher	98	24.5
Civil Servant	40	10.0
Trader	36	9.0
House Wife	226	56.5

From Table 4.1 above, age of respondents ranges from 15-49 years, with majority 114 (28.5%) between 25- 29 years of age, with a mean age of 30.4 ± 6.9 years. Majority of respondents 216 (54.0%) are Hausa, 254 (63.5%) practice Islam, 172 (43.0%) have attained tertiary level of education, and 226 (56.5%) are housewives.

Perception of women regarding obstetric complications in pregnancy are presented in Table 4.2a below:

Table 4.2a: Responses to perception of women of reproductive agein Zaria metropolis regarding obstetric complications in pregnancy in 2017

Obstetric Complications During Pregnancy	Mean	SD
Bleeding is a serious health problem that can occur during pregnancy	4.6	0.519
Severe headache can lead to serious health problems during pregnancy	4.4	0.719
Dizziness during pregnancy can endanger the life of a pregnant woman	4.5	0.719
Convulsion is a complication that can lead to death of a woman during pregnancy	4.67	0.512
Swollen body/face could be a sign of a serious health problem during pregnancy	4.48	0.671
High fever can lead to death of a woman during pregnancy	4.59	0.619
Loss of consciousness is a serious health problem during pregnancy	4.47	0.739

Difficulty in breathing could endanger the life of a pregnant woman	4.64	0.641
Severe weakness is a serious health problem that could occur during pregnancy	4.68	0.58
Severe abdominal pain could endanger the life of a pregnant woman	4.59	0.622
Increased foetal movement is a serious health problem that could occur during pregnancy	4.1	0.959
Reduced foetal movement could lead to serious health problems during pregnancy	4.44	0.727
Water leaking before labour could put a pregnant woman at serious health risk	4.48	0.645

From Table 4.2a above, majority of respondents were in strong agreement with the statements regarding occurrence of obstetric complications in pregnancy.

Perception of women regarding obstetric complications during labour are presented in Table 4.2b below:

Table 4.2b: Responses to perception of women of reproductive age in Zaria metropolis regarding obstetric complications during labour in 2017

Obstetric Complications During labour	**Mean**	**SD**
Severe bleeding during labour could endanger the life of a pregnant woman	4.58	0.665
Severe headache can put the life of a woman in labour at serious health risk	4.5	0.649
Convulsions is a serious health problem that could occur during labour	4.54	0.556
High fever during labour could lead to death of a pregnant woman	4.69	0.499
Loss of consciousness is a serious health problem that could endanger the life of a pregnant woman	4.58	0.626
Labour lasting more than 12 hours is a serious health problem that could		

occur during labour	4.37	0.881

From Table 4.2b above, majority of respondents were in strong agreement with the statements regarding occurrence of obstetric complications during labour.

Perception of women regarding obstetric complications after delivery are presented in Table 4.2c below:

Table 4.2c: Responses to perception of women of reproductive agein Zaria metropolis regarding obstetric complications after delivery in 2017

Obstetric complications after delivery	Mean	SD
A placenta not delivered 30 minutes after baby could endanger the life of a pregnant woman	4.78	0.446
Severe bleeding within the first seven days after birth is a serious health problem that could endanger the life of a woman	4.69	0.479
Severe headache occurring within the first seven days after birth could lead to death of a woman	4.57	0.55
Blurred vision is a serious health problem that could occur within the first seven days after birth	4.56	0.571
A woman could die from convulsions occurring within the first seven days after	4.55	0.55

delivery		
Swollen hands/face within the first seven days after birth could put a woman's life at risk	4.45	0.839
High fever is a serious health problem that could occur within the first seven days after delivery	4.57	0.694
A woman with foul smelling vaginal discharge within the first seven days after delivery is at serious health risk	4.55	0.635
Loss of consciousness occurring within the first seven days after delivery is a serious health problem that could endanger the life of a woman	4.62	0.588
Difficulty in breathing during the first seven days after delivery is a serious health problem that could endanger the life of a woman	4.51	0.611
Within the first seven days after delivery, a woman could die from severe body weakness	4.31	0.802

From Table 4.2c above, majority of respondents were in strong agreement with the statements regarding occurrence of obstetric complications after delivery.

From the Tables 4.2a, b and c above, majority of respondents were in strong agreement with the statements regarding occurrence of obstetric complications in pregnancy, labour and delivery (aggregate mean 4.54> constant mean 2.5).

Obstetric complications experienced by women during their last pregnancy are presented in Table 4.3 below:

Table 4.3: Responses to obstetric complications experienced by women of reproductive agein Zaria metropolis during last pregnancy in 2017
n= 400

	YES	NO
Symptoms	**Frequency(%)**	**Frequency(%)**
Bleeding	114 (28.5)	286 (71.5)
Severe headache	114 (28.5)	286 (71.5)
Dizziness	195 (48.8)	205 (51.3)
Convulsions	64 (16.0)	336 (84.0)
Swollen body/ face	173 (43.3)	227 (56.8)
High fever	123 (30.8)	277 (69.3)
Loss of consciousness	32 (8.0)	368 (92.0)
Difficulty in breathing	46 (11.5)	354 (88.5)
Severe weakness	123 (30.8)	277 (69.3)

Severe abdominal pain	131 (32.8)	269 (67.3)
Increased fetal movement	80 (20.0)	320 (80.0)
Reduced fetal movements	38 (9.5)	362 (90.5)
Water leaks without labour	108 (27.0)	292 (73.0)

From Table 4.3 above, the symptom experienced by majority of participants' during pregnancy was dizziness (48.8%). Other symptoms experienced include swollen body/ face (43.3%), severe abdominal pain (32.8%), severe weakness and high fever (30.8%), bleeding and severe headache (28.5%), water leaks without labour(27.0%),increased fetal movement (20.0%), convulsion (16.0%), and difficulty in breathing (11.5%), reduced fetal movements (9.5%) and loss of consciousness (8.0%).

Obstetric complications experienced by respondents during labour are presented in Table 4.4 below:

Table 4.4: Responses to obstetric complications experienced by women of reproductive age in Zaria metropolis during labour in 2017
n= 400

	YES	**NO**
Symptoms	**Frequency(%)**	**Frequency(%)**
Severe bleeding	110 (27.5)	290 (72.5)
Severe headache	121 (30.3)	279 (69.8)
Convulsions	44 (11.0)	356 (89.0)
High fever	101 (25.3)	299 (74.8)
Swollen hands/ face	148 (37.0)	252 (63.0)
Loss of consciousness	72 (18.0)	328 (82.0)
Labour lasting more than 12 hours	139 (34.8)	261 (65.3)

Placenta not delivered 30 minutes after delivery of baby	57 (14.3)	343 (85.8)

From Table 4.4 above, majority of respondents (37.0%) experienced swollen hands/face in labour. Other complications experienced include labour lasting more than 12 hours (34.8%), severe headache (30.3%), severe bleeding (27.5%), high fever (25.3%), loss of consciousness (18.0%), retained placenta (14.3%) and convulsion (11.0%).

Obstetric complications experienced by women after birth are presented in Table 4.5 below:

Table 4.5: Responses to obstetric complications experienced by women of reproductive age in Zaria metropolis after birth in 2017
n= 400

	YES	**NO**
Symptoms	**Frequency(%)**	**Frequency(%)**
Severe bleeding	138 (34.5)	262 (65.5)
Severe headache	115 (28.8)	285 (71.3)
Blurred vision	86 (21.5)	314 (78.5)
Convulsions	35 (8.8)	365 (91.3)
Swollen hands/ face	112 (28.0)	288 (72.0)
High fever	110 (27.5)	290 (72.5)
Foul smelling vaginal discharge	72 (18.0)	328 (82.0)

Loss of consciousness	67 (16.8)	333 (83.3)
Difficulty in breathing	58 (14.5)	342 (85.5)
Severe weakness	138 (34.5)	262 (65.5)

From Table 4.5 above, majority of respondents (34.5%) experienced severe bleeding and severe weakness postpartum. Other respondents reported severe headache (28.8%), swollen hands and face (28.0%), high fever (27.5%), foul smelling vaginal discharge (18.0%), loss of consciousness (16.8%), difficulty in breathing (14.5%) and convulsions (8.8%).

Responses to attendance of antenatal care clinic during last pregnancy are presented in Table 4.6 below:

Table 4.6: Attendance of antenatal care clinic by women of reproductive age groupin Zaria metropolis during last pregnancy in 2017

Attendance	Frequency	Percent (%)
No	118	29.5
Yes	282	70.5
Total	400	100

From Table 4.6 above, majority of respondents (70.5%) attended antenatal care clinic during their last pregnancy, while 29.5% did not.

Responses to where antenatal care was sought during last pregnancy are presented in Table 4.7 below:

Table 4.7: Responses to where women of reproductive agein Zaria metropolisaccessed ante natal care during last pregnancy in 2017

Place of antenatal care	Frequency	Percent (%)
Primary Healthcare Centre	71	17.8
General Hospital	58	14.5
Teaching Hospital	94	23.5
Private Hospital	59	14.7
Not Applicable	118	29.5

Total	400	100.0

From Table 4.7 above, majority of respondents (23.5%) accessed antenatal care in the teaching hospital, while 17.8% attended Primary Health Care Centre, 14.7% attended Private hospital and 14.5% attended General hospital.

Responses to alternative care sought for those who did not attend antenatal clinics arepresented inTable 4.8 below:

Table 4.8: Alternative care sought by women of reproductive age in Zaria metropolis during last pregnancy in 2017

Source of alternative care	Frequency	Percent (%)
Care from relatives	44	11.0
Spiritual care from Prayer House	19	4.8
Traditional Birth Attendant	46	11.5
No form of care	9	2.3
Not Applicable	282	70.5
Total	400	100.0

Findings in Table 4.8 above shows that for women who did not attend antenatal care clinic, majority (11.5%) sought care from traditional birth attendants, while 11.0% sought care from relatives, 4.8% from prayer houses, and 2.3% sought no form of care during last pregnancy.

Responses to gestational age at onset of antenatal care during last pregnancy are presented in Table 4.9 below:

Table 4.9: Gestational age of women of reproductive agein Zaria metropolis at onset of care during last pregnancy in 2017

Gestational age (trimester)	Frequency	Percent (%)
1st Trimester	113	28.3
2nd Trimester	225	56.2
3rd Trimester	62	15.5
Total	400	100.0

From Table 4.9 above, majority (56.2%) of respondents sought care for the first time in the 2nd trimester of pregnancy. 28.3% sought care in the first trimester, while 15.5% sought care in the 3rd trimester.

Responses to frequency of antenatal care clinic attendance during last pregnancy are presented in Figure 4.10 below:

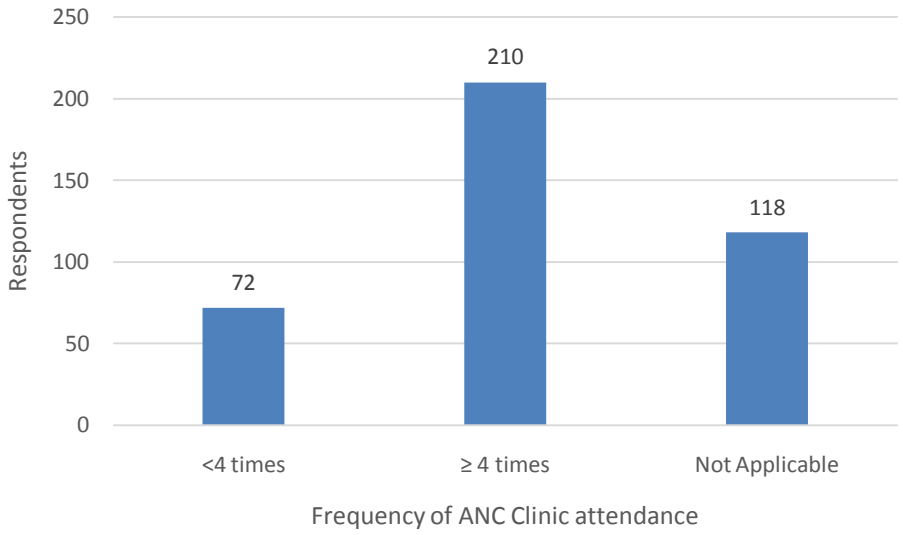


Figure 4.1: Antenatal care clinic attendance of women of reproductive age within Zaria metropolis during their last pregnancy in 2017

Figure 4.1 above reveals that majority 210(52.5%) of respondents attended antenatal care clinic at least 4 times, while 72 (18.0%) attended less than 4 times.

Responses to utilization of Iron supplements during last pregnancy are presented in Figure 4.11 below:

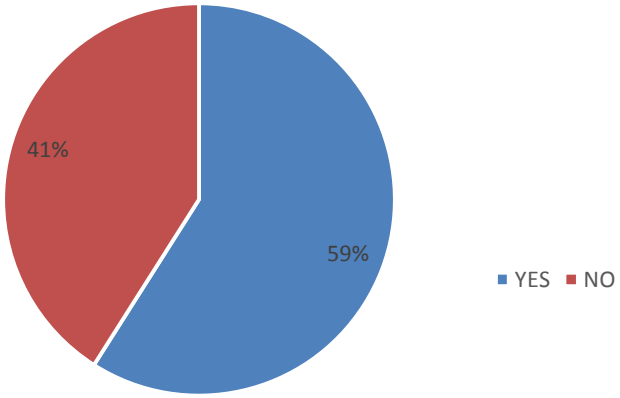


Figure 4.2: Use of Iron supplements by women of reproductive age within Zaria metropolis during last pregnancy in 2017

Figure 4.2 above reveals that majority of respondents (59.0%) utilized iron supplements during their last pregnancy, while 41.0% did not.

Responses to reasons for lack of utilization of iron supplements during last pregnancy are presented in Table 4.10 below:

Table 4.10: Reasons for lack of utilization of iron supplements during last pregnancy by women of reproductive age in Zaria metropolis in 2017

Reason for lack of iron supplement usage	Frequency	Percent (%)
Financial constraints	81	20.2
Drug unavailability	3	.8
Side effect of the drug	32	8.0
Unaware of need	48	12.0
Not Applicable	236	59.0
Total	400	100.0

From Table 4.10 above, reasons for non-utilization of Iron supplementsinclude financial constraints (20.2%), unaware of need (12.0%), side effect of the drug (8.0%) and unavailability of the drug (0.8%).

Responses to utilization of folic acid during last pregnancy are presented in Figure 4.3 below:

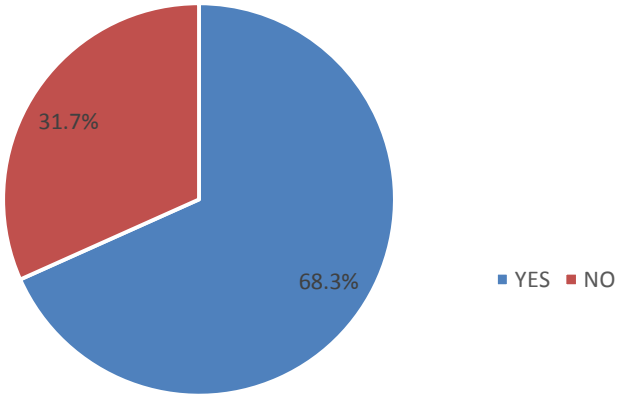


Figure 4.3: Utilization of folic acid during last pregnancy by women of reproductive age within Zaria metropolis in 2017

Findings in Figure 4.3 above revealed majority of respondents (65.0%) used folic acid during their last pregnancy, while 35.0% did not.

Responses to reasons for lack of utilization of folic acid during last pregnancy are presented in Table 4.11 below:

Table 4.11: Reasons for lack of utilization of folic acid by women of reproductive age within Zaria metropolis during last pregnancy in 2017

Reasons for non-use of folic acid in pregnancy	Frequency	Percent (%)
Financial constraints	70	17.5
Drug unavailability	11	2.8
Side effect of drug	13	3.3
Unaware of need	33	8.3
Didn't feel like taking drug	13	3.3
Not Applicable	260	65.0
Total	400	100.0

From Table 4.11 above, reasons for non-utilization of folic acid include financial constraints (17.5%), unaware of need (8.3%), side effect of the drug (3.3%), didn't feel like taking it (3.3%) and unavailability of the drug (2.8%).

Responses to utilization of malarial prophylaxis during last pregnancy are presented in Table 4.4 below:

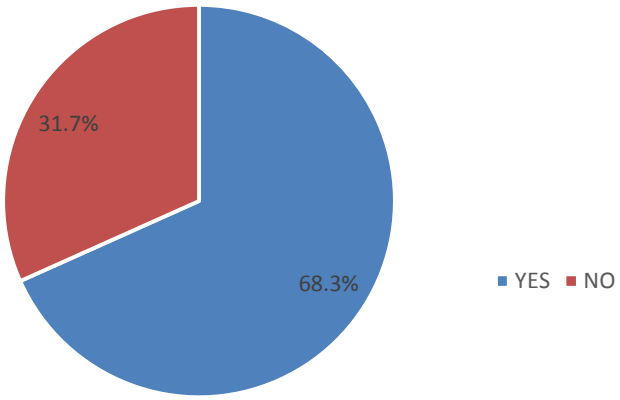


Figure 4.4: Utilization of malaria prophylaxis by women of reproductive age within Zaria metropolis during their last pregnancy in 2017

From Figure 4.4 above, majority of respondents (68.3%) used malaria prophylaxis during their last pregnancy, while 31.7% did not.

Responses to reasons for lack of utilization of malarial prophylaxis during last pregnancy are presented in Table 4.12 below:

Table 4.12: Reasons for lack of utilization of malaria prophylaxis by women of reproductive age in Zaria metropolis during last pregnancy in 2017

Reasons for non-utilization of malarial prophylaxis	Frequency	Percent (%)
Financial constraints	73	18.3
Drug unavailability	7	1.8
Side effect of drug	27	6.8
Unaware of need	25	6.3
Not Applicable	268	67.0
Total	400	100.0

From Table 4.12 above, reasons for non-utilization of malaria prophylaxis include financial constraints (17.5%), unaware of need (8.3%), side effect of the drug (3.3%), didn't feel like taking it (3.3%) and unavailability of the drug (2.8%).

Responses to who decides when to visit the hospital are presented in Table 4.13 below:

Table 4.13: Responses to decision makers regarding hospital visits by women of reproductive age in Zaria metropolis in 2017

Who decides when to visit the hospital	Frequency	Percent (%)
Myself	131	32.8
Husband	206	51.5
Mother-in-law	33	8.3
Senior family member	30	7.5
Total	400	100.0

As shown in Table 4.13, majority of respondents (51.5%) depend on their husbands to take decisions on when to go to the hospital, 32.8% decide for themselves, 8.3% depend on their mother-in-law, and 7.5% rely on a senior family member to go to the hospital.

Responses to place of last delivery are presented in Table 4.14 below:

Table 4.14: Place of last delivery of women of reproductive age in Zaria metropolis in 2017

Place of last delivery	Frequency	Percent (%)
Home	109	27.3
Traditional Birth Attendant	53	13.3
Hospital	227	56.8
Prayer House	11	2.8
Total	400	100.0

Table 4.14 above shows that majority of respondents (56.8%) of respondents delivered in the hospital during their last pregnancy, 27.3% delivered at home, 13.3% delivered with the help of a birth attendant and 2.6% delivered in a prayer house.

Responses to opinion of respondents regarding obstacles to hospital delivery are presented in Table 4.15 below:

Table 4.15: Opinion of women of reproductive age in Zaria metropolis regarding obstacles to hospital delivery in 2017

Obstacles to hospital delivery	Frequency	Percent (%)
High cost	167	41.8
Rude attitude of hospital staff	85	21.3
Family disapproval	27	6.8
Lack of privacy	59	14.8
Distance	57	14.3
Others	5	1.3
Total	400	100.0

From Table 4.15above, majority of respondents (41.8%) regard high cost as an obstacle to hospital delivery. Other reasons include rude attitude of hospital staff (21.3%), lack of privacy (14.8%), distance (14.3%), family disapproval (6.8%) and other reasons which include dirty environment (1.3%).

Responses to preferred place for next delivery are presented in Table 4.16 below:

Table 4.16: Preferred place for next delivery of women of reproductive age in Zaria metropolis in 2017

Preferred place for next delivery	Frequency	Percent (%)
Home	60	15.0
Traditional Birth Attendant	17	4.3
Hospital	322	80.5
Prayer House	1	0.2
Total	400	100.0

From the table 4.16 above, majority of respondents (80.5%) prefer the hospital for their next delivery, 15.0% prefer to deliver at home, 4.3% prefer a traditional birth attendant and 0.2% prefer to deliver in a prayer house.

Table 4.17: Relationship between attendance of Antenatal Care during last pregnancy and perception of Obstetric complications

ANC Attendance	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Yes	43	169	53	17	282
No	9	84	17	8	118
Total	52	253	70	25	400

$\chi^2 = 6.374$ p = 0.095 df = 3

From the chi-square test above, there is no significant relationship between perception of obstetric complications and the health seeking behaviour on attending antenatal care during last pregnancy ($p > 0.05$). Perception of obstetric complications did not significantly influence antenatal care clinic attendance among respondents.

Table 4.18: Relationship between onset of care in last pregnancy and Perception of Obstetric complications

Onset of care	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
1st Trimester	3	99	6	5	113
2nd Trimester	42	116	54	13	225
3rd Trimester	7	32	10	7	62
Total	52	253	70	25	400
$\chi^2 = 118.746$	p = 0.000		df = 24		

From the table above, there is a significant relationship between perception of obstetric complications and onset of care in last pregnancy ($p < 0.05$). Perception of obstetric complications significantly influenced onset of antenatal care among respondents.

Table 4.19: Relationship between antenatal care clinic visits in last pregnancy and perception of obstetric complications

Frequency of ANC attendance	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
< 4 times	18	130	22	20	190
≥ 4 times	34	123	48	5	210
Total	52	253	70	25	400

χ^2= 230.020 p = 0.000 df = 27

The table above shows that there is a significant relationship between perception of obstetric complications and frequency of ANC clinic visits during the last pregnancy ($p<0.05$). Perception of obstetric complications significantly influenced frequency of ANC clinic visits among respondents.

Table 4.20: Relationship between use of Iron supplements during last pregnancy and Perception of Obstetric complications

Use of iron supplements	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Yes	34	157	31	14	236
No	18	96	39	11	164
Total	52	253	70	25	400

$\chi^2 = 8.211$ p = 0.042 df = 3

From the above table, there is a significant relationship between perception of obstetric complication and usage of iron supplement during the last pregnancy ($p < 0.05$). Perception of obstetric complications significantly influenced the usage of iron supplements during pregnancy among respondents.

Table 4.21: Relationship between use of folic acid during last pregnancy and Perception of Obstetric complications

Use of folic acid supplements	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Yes	43	155	48	14	260
No	9	98	22	11	140
Total	52	253	70	25	400

$\chi^2 = 9.989$ $p = 0.019$ $df = 3$

From the above chi-square test, there is a significant relationship between perception of obstetric complication and usage of folic acid during the last pregnancy ($p < 0.05$). Perception of obstetric complications significantly influenced the usage of folic acid during pregnancy among respondents.

Table 4.22: Relationship between use of malaria prophylaxis during the last pregnancy and Perception of Obstetric complications

Use of malaria prophylaxis	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Yes	48	173	38	14	273
No	4	80	32	11	127
Total	52	253	70	25	400

$\chi^2 = 29.921$ p = 0.000 df = 3

From the table above, there is a significant relationship between perception of obstetric complication and usage of malaria prophylaxis during the last pregnancy ($p < 0.05$). Perception of obstetric complications significantly influenced the usage of malaria prophylaxis during pregnancy among respondents.

Table 4.23: Relationship betweenplace of last delivery and Perception of Obstetric complications

Place of last delivery	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Hospital	36	137	41	13	227
Others	16	116	29	12	173
Total	52	253	70	25	400

$\chi^2 = 4.813$ p = 0.186 df = 3

From the above chi-square test above, there is no significant relationship between perception of obstetric complication and the place of last delivery ($p>0.05$). Perception of obstetric complications did not significantly influence the place of last delivery among respondents.

Table 4.24: Relationship between preferred place of next delivery and Perception of Obstetric complications

Preferred place of next delivery	Perception of Obstetric complications				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Hospital	43	184	70	25	322
Others	9	68	1	0	78
Total	52	253	71	25	400
$\chi^2 = 32.242$	p = 0.000		df = 3		

From the above chi-square test in Table 4.24, there is a significant relationship between perception of obstetric complication and preferred place of next delivery ($p < 0.05$). Perception of obstetric complications significantly influenced the preferred place of next delivery among respondents.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents discussion of findings obtained during the course of the study.

5.2 Discussion

This study aimed at investigating perception and health seeking behavior for obstetric complications among respondents who are women of reproductive age group in Zaria. The socio-demographic profile of the respondents revealed that majority of women are within the age group of 25-29 years, with a mean age of 30.4±6.9 years. This is similar to the findings ofIgberase, (2012) and Okeshola & Sadiq (2013) in studies among women of reproductive age group in Niger Delta and Kaduna South respectively. The predominance of Islam and Hausa as the dominant religion and ethnic group of respondents respectively is reflective of the study environment. Most respondents had attained secondary level of education. This is similar to findings by Olaku (2014) in a study among women of reproductive age group in Plateau State. In this study, majority of respondents were housewives not engaged in any occupation. This contrasts with studies by Okeshola & Sadiq (2013) and Olaku (2014) in Southern Kaduna and Plateau State respectively wherein most respondents were civil servants. The notion in this environment that women should remain at home to take care of the children may be responsible for the finding in this study.

In this study, majority of respondents had a good perception of obstetric complications as most of them agreed/ strongly agreed with the symptoms and possible consequences of complications that could occur in pregnancy, labour and delivery. This result is similar to the findings ofIgberase, (2012) wherein most of the respondentshad good perception of obstetric complications, especially relating to excessive bleeding, hypertension and obstructed labour. It is also similar to the findings ofLawan, Takai, & Ishaq (2015) in a study done in Kano, North Western Nigeria where respondents had a good perception of obstetric complications, and were able to mention at least three danger signs of pregnancy. This can be attributed to awareness campaigns using different sources which aim at enlightening women about the possible negative occurrences during pregnancy and how they can be recognized.

The most common symptoms of obstetric complications reported from this study were dizziness, swollen hands/ face and excessive bleeding in pregnancy, labour and puerperium respectively. The symptoms reported in pregnancy and labour differ from previous studies wherein excessive bleeding is the most commonly reported complication (Worku et al., 2013) and (Cristina & Mullin, 2012). However, dizziness and body swelling are symptoms related to blood loss with consequent anaemia, with the tendency for some individuals to report them as separate occurrences. Bleeding, as the most reported postpartum complication from this study is however in agreement with the previous studies by Worku et al., (2013) and Cristina & Mullin (2012).

Antenatal care aims at ensuring optimal health outcomes for both mother and child. Provision of antenatal care from a skilled health worker is important as it helps in pregnancy monitoring and consequent reduction of morbidity risks for both mother and child during pregnancy and delivery. From the study, majority of respondents received antenatal care during last pregnancy,

most of them in a Teaching hospital setting. This is slightly higher than the national average, but is much higher than the average for the North-West region (National Population Commission and ICF, 2014). It however falls short of the recommended ANC coverage required to reduce most deaths among mothers and their newborn(Dahiru & Oche, 2015). High patronage of teaching hospitals may be due to patient's expectations to be seen and managed by a combination of professionals and specialists in the health team in case complications arise. The federal government can reduce this burden by adequately equipping the primary and secondary levels of healthcare to allow for wider access to quality health care services. Numerous campaigns by the State Government including provision of free ANC services may be responsible for the increase in ANC attendance recorded in this study. However, the percentage of respondents that did not attend ANC clinic during their last pregnancy is comparable to the national average of non-ANC attendance(National Population Commission & lCF, 2014).The percentage of respondents who sought alternative care in pregnancy from this study is higher than the national average (National Population Commission & ICF 2014) and (Doctor, Findley, & Dahiru, 2010).

The antenatal care policy in Nigeria follows the focused antenatal care approach of WHO which recommends at least four ANC visits for women without complications. The recommended schedule of visits states that the first visit should occur by the end of 16 weeks gestation, second visit should be between 24 and 28 weeks of pregnancy, the third visit at 32 weeks and the fourth visit should occur at 36 weeks. From the study, majority of respondents booked in the second trimester, with the mean gestational age at first ANC visit being 4.5 months. This is similar to the findings ofNational Population Commission & lCF (2014) which revealed majority of women attend booking visits in the second trimester, with the median age at booking being five months.

The distribution of booking by trimester among respondents in this study is similar to the findings of Doctor, Findley, & Dahiru (2010) in Kano. Regarding frequency of ANC clinic attendance, majority of respondents visited at least four times, which is the WHO recommendation for clinic attendance. This is also similar to findings of the National Population Commission & lCF, (2014) and Doctor, Findley, & Dahiru (2010).

From this study, majority of respondents took iron and folic acid respectively during their last pregnancy. This is similar to the findings of National Population Commission & lCF (2014) where majority of women who had a live birth in the 5 years preceeding the survey took iron supplements. It is however lower than values reported from a study in Ibadan, Oyo State, South Western Nigeria among pregnant women(Omiunu, 2015). Among the reasons put forward by those who did not take haematinics during pregnancy, financial constraints was identified as the major reason. Thus, the high compliance with haematinic usage in South-Western Nigeria may be due to unequal wealth index distribution in the nation (National Population Commission & lCF, 2014).

The “three delays” model proposes that pregnancy related mortality is mainly due to delays in 1. Deciding to seek appropriate medical help; 2. Reaching an appropriate facility and 3. Receiving adequate care upon reaching the facility. The low status of women (especially in the African setting) with consequent over-dependence on the husband, has been identified as one of the reasons for the first delay (Matenity Worldwide, 2017). This study revealed that among majority of respondents, the decision to visit the hospital solely lies in the hands of the husband. This is similar to the findings of Olaku (2014).

Increasing the percentage of births delivered in health facilities has been identified as an important factor in reducing deaths arising from complications of pregnancy (National Population Commission & lCF, 2014). It is expected that a skilled health worker can manage complications in a health facility if they arise. From this study, the place of last delivery among majority of respondents was in the hospital. This is higher than the national average reported by National Population Commission & lCF (2014), and the figure reported for Kaduna State in the same survey. The inclusion of free/ highly subsidized maternal and child health services by successive State Governments, as well as increased awareness may be responsible for this rise in patronage of healthcare facilities for delivery.

Several factors have been identified as obstacles to hospital delivery. From this study, most respondents cited cost as the major obstacle to hospital delivery. This compares with findings from the South-South geo-political zone, Nigeria as reported in The National Demographic and Health Survey 2013 (National Population Commission & ICF, 2014). It however contrasts with findings from North Western Nigeria in the same study where only a few respondents cited cost as an obstacle, while most respondents claimed that delivery in a health facility was not necessary.It also contrasts with findings from a study by Doctor, Findley, &Dahiru (2010), where only a few respondents cited financial constraints as an obstacle to hospital delivery. Rising inflation rates over the years with attendant increase in costs may be responsible for this finding. However, despite the obstacles to hospital delivery stated by respondents, majority still prefer the hospital for their next delivery. This compares with findings of Okeshola & Sadiq (2013) in Kaduna South where majority of women preferred hospital delivery above other options.

Though the perception of majority of women regarding obstetric complications from this study was good, there was a negative relationship between this perception and attendance of antenatal care during pregnancy. A study by Ewa et al (2012) showed that the utilization and accessibility of child-bearing women to ANC depends on multiple factors, including socioeconomic factors, geographic barriers and quality of services, amongst others, and not only on perception of obstetric complications. In addition, the decision to visit the hospital for care has to be with the husbands' consent for most respondents. It has been identified that women encouraged by their husbands are more likely to use ANC centres, irrespective of the factors listed above (Ewa et al., 2012). However, there was a significant relationship between perception of obstetric complications and onset of ANC attendance, including frequency of clinic visits. This is supported by previous studies which have identified maternal knowledge about pregnancy related complications and having a history of obstetric complications as factors which affect timing of first ANC visit (Feleke, Yohannes, & Bitiya, 2015).

Findings from this study also revealed that there was a positive relationship between usage of haematinics in pregnancy and perception of obstetric complications. This shows that the more knowledgeable and enlightened a pregnant woman is about complications that could develop during pregnancy, the more she would want to comply with precautionary measures (including routine haematinic usage). Comparable results were also obtained in a study by Dinga (2013) in Nairobi, Kenya which revealed significant positive associations between knowledge on anaemia and adherence to iron/folate supplements.

Regarding usage of malarial prophylaxis in pregnancy, this study found a positive relationship between perception of obstetric complications and usage of malarial prophylaxis. This is similar

to the findings ofAndrew et al., (2015) where it was noted that understanding the risks of malaria in pregnancy or fearing their baby would fall ill, encouraged women to take malaria prophylaxis. It was also discovered that those who had witnessed others suffer the consequences of malaria or who had a negative experience with malaria in a previous pregnancy had a better perception of the illness and thus adhered to usage of malarial prophylaxis more (Andrew et al., 2015).

Though there was no significant relationship between perception of obstetric complications and place of last delivery, there was however a relationship between perception of obstetric complications and preferred place for next delivery. Several factors come into play when it comes to labour and delivery including socioeconomic status of the family at the time of onset of labour, level of birth preparedness, distance, amongst others. Thus the place of last delivery may not be a true reflection of one's perception of obstetric complications. However, preference of place for next delivery has been found to be associated with knowledge of the danger signs of obstetric complications as reported in a study by Lawan et al., (2015) in Kano, North West Nigeria.

CHAPTER SIX

6.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents summary of major findings obtained in the study, conclusion, recommendations and suggestions for further research.

6.2 Summary of Findings

The first objective of the study was to determine the perception of women regarding obstetric complications, and to that end, findings revealed that most participants had a good perception regarding occurrence of obstetric complications during pregnancy, labour and delivery.

The second objective which was to identify obstetric complications experienced by women in Zaria revealed that the main symptoms experienced by participants during pregnancy were dizziness, swollen body/ face and severe abdominal pain. During labour, the main symptoms experienced were swollen hands/ face, prolonged labour and severe headache. The main

symptoms experienced post-partum were severe bleeding, severe body weakness and severe headache.

The third objective was to identify the health seeking behavior of women towards obstetric complications in Zaria. Findings from the study revealed that majority of participants attended antenatal care clinic during last pregnancy, mainly in a Teaching Hospital, mostly during the second trimester of pregnancy. Frequency of attendance of ANC clinic was at least four times among the majority. Most participants used routine haematinics and malarial prophylaxis during pregnancy. Place of last delivery for most participants was in the hospital, and most still prefer a hospital facility for their next delivery.

The fourth objective was to identify factors influencing health seeking behaviour of women in the study location. Financial constraints was the major reason that influenced utilization of routine medications and hospital visits during pregnancy. In addition, the husband is the main decision maker pertaining hospital visits during pregnancy among participants.

The fifth objective was to determine the relationship between perception of obstetric complications and the health seeking behaviour of women in Zaria. The study revealed a relationship between perception of obstetric complications and onset of antenatal care in last pregnancy, frequency of ANC clinic visits, usage of routine haematinics, usage of malarial prophylaxis and preferred place of next delivery. There was however no relationship between perception of obstetric complications and attendance of antenatal care during last pregnancy, and also place of last delivery.

6.2 Conclusion

Findings from this study revealed a good perception of obstetric complications among women of reproductive age group in Zaria. Most women were able to identify occurrence of complications in pregnancy, labour and delivery. This can be attributed to awareness campaigns at different levels regarding possible adverse occurrences during pregnancy, labour and delivery, and how they can be recognized and prevented.

Most participants showed a positive and encouraging health seeking behaviouras evidenced by high level of antenatal care clinic attendance, usage of routine haematinicsand anti-malarial prophylaxis during pregnancy and high rate of hospital delivery among participants.

Knowledge of obstetric complications also significantly contributed to the health seeking behaviour adopted by participants in the study, as there was a significant relationship between perception of obstetric complications and ANC patronage, usage of routine haematinics and malaria prophylaxis, and preferred place of next delivery.

6.3 Recommendations

From the findings of this study, the following recommendations are made:

1. Ongoing health awareness campaigns by government parastatals at all levels and non-governmental organizations regarding obstetric complications should be intensified for maximum coverage.

2. Women should be encouraged by social workers, local secular and religious organizations to attend ANC clinic early in pregnancy, while the health workers should intensify efforts to

educate women during such clinic visits about danger signs in pregnancy and how to identify and also treat them.

3. During routine ANC visits, pregnant women should be encouraged by health personnel to report to the hospital immediately if they notice any symptom of an obstetric complication.

4. Husbands should be educated by medical personnel and social workers on possible obstetric complications that could occur during pregnancy, and the need to support their wives during pregnancy so as to seek medical help without delay in the event of an adverse occurrence during pregnancy, delivery or postpartum.

5. Various stakeholders (Governmental and Non- Governmental) should increase awareness campaigns on need of pregnant women to utilize and be compliant with routine medications (haematinics and anti-malarial prophylaxis) during pregnancy.

6. Provision of free ANC drugs by the federal ministry of healthas well as non-governmental organizations to pregnant women will eradicate the excuse of financial constrain to procurement of prescribed medications. This should be intensified

7. Health personnel should be courteous, receptive and friendly to clients as rude attitude of hospital staff has been identified as an obstacle to hospital delivery. They should also be very responsive in handling obstetric emergencies so as to avoid maternal mortality.

8. Federal government should be willing to commit adequate resources, particularly financial resources, to meet the needs of the health system. Government should also be willing to commit to provision of free antenatal care and delivery services in primary, secondary and tertiary health facilities, as well as equip these centres (especially at the primary and secondary level of

healthcare) to allow for a wider access to quality healthcare and reduce the burden on tertiary health facilities.

9. All disparate program efforts aimed at increasing safe motherhood should be integrated and monitored at a central level.

10. Federal government should put mechanisms in place to ensure continuity of policies and practices pertaining to safe motherhood irrespective of the individual or the political party in power.

6.4 Suggestion for Further Research

The following are suggestions for further studies:

1. Obstacles touse of maternal health services in Kaduna state.
2. Determinants of health seeking behaviour among women of reproductive age group.
3. Factors that determine choice of practitioner during labour

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APPENDIX 1: QUESTIONNAIRE

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QUESTIONNAIRE ON PERCEPTION AND HEALTH SEEKING BEHAVIOUR FOR OBSTETRIC COMPLICATIONS AMONG WOMEN OF REPRODUCTIVE AGE IN ZARIA METROPOLIS, KADUNA STATE.

INTRODUCTION

Dear respondent, I am a Masters student in the Department of Nursing Science, Faculty of Medicine, Ahmadu Bello University conducting a research on the above topic. Please, kindly tick or fill the appropriate answers as applicable to you. All information will be kept confidential. Thank you.

SECTION A: SOCIO-DEMOGRAPHIC PROFILE

A1. Age: _____ Years

A2. Ethnicity: (a) Hausa { } (b) Yoruba { } (c) Igbo { } (d) Others (specify)_____

A3. Religion: (a) Islam { } (b) Christianity { } (c) Others specify _____

A4. Highest level of education attained: (a) Primary { } (b) Secondary { }(c) Tertiary{ }
(d) Qur'an { } (e) Others specify_____

A5. Occupation: (a) Teacher { } (b) Civil Servant { }(c) Trader { }

(d) House wife { } (e) others specify_____

A6. Number of pregnancies: _____

KEY:

SA: Strongly Agree

A: Agree

D: Disagree

SD: Strongly Disagree

SECTION B: PERCEPTION OF WOMEN REGARDING OBSTETRIC COMPLICATIONS

Obstetric Complications During Pregnancy	**SA**	**A**	**D**	**SD**
B1 Bleeding is a serious health problem that can occur during pregnancy				
B2 Severe headache can lead to serious health problems during pregnancy				
B3 Dizziness during can endanger the life of a pregnant woman				
B4 Convulsion is a complication that can lead to the death of a woman during pregnancy				
B5 Swollen body/face could be a sign of a serious health problem during pregnancy				
B6 High fever can lead to the death of a woman during pregnancy				
B7 Loss of consciousness is a serious health problem during pregnancy				
B8 Difficulty in breathing could endanger the life of a pregnant woman				
B9 Severe weakness is a serious health problem that could occur during pregnancy				
B10 Severe abdominal pain could endanger the life of a pregnant woman				
B11 Increased foetal movement is a serious health problem that could occur during pregnancy				
B12 Reduced foetal movement could lead to serious health problems during pregnancy				
B13 Water leaking without labour could put a pregnant woman at serious health risk				
Obstetric Complications During Labour				
B14 Severe bleeding during labour could endanger the life of a pregnant woman				
B15 Severe headache can put the life of a woman in labour at serious health risk				
B16 Convulsions is a serious health problem that could occur during labour				
B17 High fever during labour could lead to the death of a pregnant woman				
B18 Loss of consciousness is a serious health problem that could				

endanger the life of a pregnant woman				
B19 Labour lasting more than 12 hours is a serious health problem that could occur during labour				
B20 A placenta not delivered 30 minutes after baby could endanger the life of a pregnant woman				
B21 Severe bleeding within the first seven days after birth is a serious health problem that could endanger the life of a woman				
B22 Severe headache occurring within the first seven days after birth could lead to the death of a woman				
B23 Blurred vision is a serious health problem that could occur within the first seven days after birth				
B24 A woman could die from convulsions occurring within the first seven days after delivering a baby				
B25 Swollen hands/face within the first seven days after birth could put a woman's life at risk				
B26 High fever is a serious health problem that could occur within the first seven days after delivery				
B27 A woman with foul smelling vaginal discharge within the first seven days after delivery is at serious health risk				
B28 Loss of consciousness occurring within the first seven days after delivery is a serious health problem that could endanger the life of a woman				
B29 Difficulty in breathing during the first seven days after delivery is a serious health problem that could endanger the life of a woman				
B30 Within the first seven days after delivery, a woman could die from severe body weakness				

SECTION C: OBSTETRIC COMPLICATIONS EXPERIENCED BY WOMEN

Did you experience any of the following		YES	NO

symptoms in your last pregnancy?	Bleeding		
	Severe headache		
	Dizziness		
	Convulsions		
	Swollen body / face		
	High fever		
	Loss of consciousness		
	Difficulty in breathing		
	Severe weakness		
	Severe abdominal pain		
	Increased fetal movement		
	Reduced fetal movement		
	Water leaks without labour		
C2 Did you experience any of the following during labour?	Severe bleeding		
	Severe headache		
	Convulsions		
	High fever		
	Swollen hands/ face		
	Loss of consciousness		
	Labour lasting more than 12 hours		
	Placenta not delivered 30 minutes after delivery of baby		
C3 Did you experience any of the following symptoms after birth?	Severe bleeding		
	Severe headache		
	Blurred vision		
	Convulsions		
	Swollen hands/ face		
	High fever		
	Foul smelling vaginal discharge		
	Loss of consciousness		
	Difficulty in breathing		
	Severe weakness		

SECTION D: HEALTH SEEKING BEHAVIOUR OF WOMEN

D1 Did you attend antenatal care during your last pregnancy?

Yes { } No { }

D2 If Yes, where did you attend antenatal care?

a. Primary health care centre { }
b. General hospital { }
c. Teaching hospital { }
d. Private hospital { }
e. Others (please specify)_____

D3 If No to D1, what form of care did you seek during your pregnancy?

a. Care from relatives
b. Spiritual care from a prayer house
c. With a traditional birth attendant
d. No form of care

D4 How old was your pregnancy when you started receiving care in your last pregnancy?

_____ Months

D5 How many times did you attend antenatal care during your last pregnancy? (If Yes to DI above)

a. Once
b. Twice
c. Thrice
d. Four times
e. Others (please specify) _____

D6 Did you take Iron supplements throughout your last pregnancy? Yes { } No { }

D7 If No to D6, Why?

a. Financial constraints
b. Unavailability of the drug
c. Side effect(s) of the drug
d. Unaware of need for Iron supplementation during pregnancy
e. Others (Please specify) _____

D8 Did you take folic acid throughout your last pregnancy? Yes { } No { }

D9 If No to D8, Why?

a. Financial constraints
b. Unavailability of the drug
c. Side effect(s) of the drug
d. Unaware of need for folic acid supplementation during pregnancy
e. Didn't feel like taking it

D10 Did you receive malarial prophylaxis during your last pregnancy? Yes { } No { }

D11 If No to D10, Why?

a. Financial constraints
b. Unavailability of the drug
c. Side effect(s) of the drug
d. Unaware of need for malaria prophylaxis during pregnancy
e. Others (Please specify) _____

D12 Who decides when you should visit the hospital?

a. Myself { }
b. Husband { }
c. Father-in-law { }
d. Mother-in-law { }
e. A senior family member { }
f. Others (Please specify) _____

D13 where did you deliver your last baby?

a. At home
b. At a traditional birth attendant's place
c. In the hospital
d. Prayer house
e. Others (Please specify) _____

D15 In your opinion, what are the obstacles to hospital delivery?

a. High cost { }
b. Rude attitude of hospital staff { }
c. Family disapproval { }
d. Lack of Privacy { }
e. Distance { }
f. Others (Please specify)_____

D16 Where will you like to give birth to your next baby?

a. At home
b. At a traditional birth attendant's place
c. In the hospital
d. Prayer house

APPENDIX II: HAUSA TRANSLATION OF QUESTIONNAIRE

RATAYE NA DAYA: TAMBAYOYIN BINCIKEN ILMI A KAN MATSALOLIN DA MATA KAN FUSKANTA A WAJEN HAIHUWA A BIRNIN ZARIYA

DEPARTMENT OF NURSING SCIENCE

FACULTY OF MEDICINE

AHMADU BELLO UNIVERSITY, ZARIA

GABATARWA

Zuwa ga mai amsa tambaya, ni daliba ce wacce take yin digirinta na biyu a sashen koyon aikin jinya da unguwar zoma da ke Tsangayar Ilmin Kula da lafiya da ke Jami'ar Ahmadu Bello Zariya. Ina gudanar da bincike ne a kan wannan fanni da aka rubuta a sama. Ana bukatar ka amsa wadannan tambayoyi kamar yadda suka shafe ki kai tsaye. Na gode

SASHEN A: ABUBUWAN DA SUKA SHAFI RAYUWARKI

A1. Shekarunki……..

A2. Kabila: (a) Hausa { } (b) Yarbanci { } (c) Inyamura { } (d) Sauran yarurruka(fadi sunan yare)……..

A3. Addini: (a) Musulunci { } (b) Kiristanci { } (c) Sauran addinai(fadi sunan addini)……..

A4. Ilmi mai zurfi da ake da shi: (a) Firamare { } (b) Sakandare { } (c) makarantar gaba { }

(d) Makarantar Alkur'ani { } (e) Sauran addinai(fadi suna)……

A5. Sana'a (a) Malamar makaranta { } (b) Ma'aikaciyar Gwamnati { } (c) 'Yar kasuwa { }

(d) Matar kulle (e) Sauransu(yi bayani……

A6. Sau nawa kika sami ciki?.....

Bayani a kan yadda za a amsa tambayoyi:

SA: Yana nufin, Na amince sosai

A: Yana nufin, Na amince

D: Yana nufin ban amince ba

SD: Yana nufin kwata kwata ban amince ba

SASHEN B: Fahintar mata dangane da lalurorin da akan fuskanta bayan haihuwa

Matsaloli a lokacin da ake ɗauke da juna biyu	SA	A	D	SD
B1. Fitar jini babbar matsala ce da kan iya aukuwa a lokacin da ake ɗauke da juna biyu.				
B2. Ciwon kai mai tsanani a lokacin da ake ɗauke da juna biyu na iya haifar da matsala babba ga lafiya				
B3. Jiri a lokacin da ake ɗauke da juna biyu kan iya saka ran mace cikin haɗari				
B4. Rikicewar jiki da motsawar jijiyoyi matsala ce da ka iya sa mace mai juna biyu ta mutu.				
B5. Kumburin fuska/jiki na iya kasancewa alamun babbar matsala ga mace mai juna biyu				
B6. Zazzaɓi mai zafi na iya raba mace mai juna biyu da ranta				
B7. Suma matsala ce babba ga mace mai ɗauke da juna biyu				
B8. Wahala wajen yin numfashi ka iya saka rayuwar mai juna biyu cikin haɗari				
B9. Kasala mai tsanani matsala ce babba da kan auku lokacin da mace ke da juna biyu				
B10. Matsananciin ciwon ciki na iya saka rayuwar mai ɗauke da juna biyu cikin haɗari				
B11. Yawan motsi a cikin ciki matsala ce babba da ke iya aukuwa ga mace mai juna biyu				
B12. Rashin jin motsi a cikin ciki matsala ce babba da ke iya aukuwa ga mace mai juna biyu				
B13. Tsiyayar ruwa ba tare da nakuda ba ka iya saka lafiyar mai juna biyu cikin haɗari.				
Matsaloli a lokacin nakuda				
B14. Zuban jini sosai a lokacin nakuda na iya saka rayuwar mai juna biyu cikin haɗari.				

B15. Ciwon kai mai tsanani kan iya saka lafiyar mai nakuda cikin hadari				
B16. Rikicewar jiki da motsawar jijiyoyi matsala ce da ke iya faruwa a lokacin nakuda.				
B17. Zazzaɓi mai zafi a lokacin nakuda na iya sa mai juna biyu ta mutu.				
B18. Suma matsalar lafiya ce babba da ka iya sa rayuwar mai juna biyu cikin mummunar hadari.				
B19. Nakuda ya zarce na tsawon awa 12 matsala ce babba da ke aukuwa a lokacin nakuda				
B20. Fitar uwa minti 30 bayan haihuwar jariri na iya saka rayuwar mai juna biyu cikin hadari.				

Matsaloli kwanaki bakwai bayan haihuwa				
B21. Fitar jini sosai kwanaki bakwai bayan haihuwa matsala ce babba da ka iya sanya rayuwar mace cikin hadari				
B22. Faruwar ciwon kai mai tsanani kwanaki bakwai bayan haihuwa na iya sa mace ta rasu.				
B23. Gani garara-garara matsala ce babba da ka iya aukuwa kwanaki bakwai bayan haihuwa.				
B24. Mace na iya mutuwa a dalilin tattakuran jijiyoyi idan ya auku kwanaki bakwai bayan haihuwa.				
B25. Kumburin hannu/fuska kwanaki bakwai bayan haihuwa na iya saka rayuwar mace cikin hadari.				
B26. Zazzaɓi mai tsanani matsala ce babba da ke iya faruwa kwanaki bakwai bayan haihuwa				

B27. Fitar wani abu mai wari daga farjin macce kwanaki bakwai bayan haihuwa alama ce da ke nuna akwai matsala zocai.				
B28. Suma da kan faru kwanaki bakwai bayan haihuwa matsala ce babba da ka iya sa rayuwar macce cikin hadari.				
B29. Wahalar yin numfashi kwanaki bakwai bayan haihuwa matsala ce babba da ke iya saka rayuwar macce cikin hadari				
B30. Macce na iya mutuwa idan ta riga jin kasala mai tsanani kwanaki bakwai bayan haihuwa.				

		E!	A'a
C1. Kin fuskanci wani daga cikin wadannan matsaloli a jima biyunki na baya?	Zubar jini		
	Ciwon kai mai tsanani		

	Jiri		
	Tattakuran jijiyoyi		
	Kumburin jiki/fuska		
	Zazzaɓi mai zafi		
	Suma		
	Wahala wajen yin numfashi		
	Kasala mai tsanani		
	Ciwon ciki mai tsanani		
	Yawan jin motsi a ciki		
	Rashin jin motsi a ciki		
	Tsiyayar ruwa ba tare da an fara nakuda ba.		
C2. Kin fuskanci wani daga cikin waɗannan matsaloli a lokacin da kike nakuda?	Fitan jini sosai		
	Matsananciin ciwon kai		
	Tattakuran jijiyoyi		
	Zazzaɓi mai zafi		
	Kumburin hannu/fuska		
	Suma		
	Nakudar da ta wuce tsawon awa 12		
	Rashin fitar uwa minti 30 bayan hailuwa		
C3. Kin fuskanci wani daga cikin waɗannan matsaloli bayan kin hailu?	Fitar jini sosai		

	Matsananciin ciwon kai		
	Gani garara-garara		
	Tattakaran jijiyoyi		
	Kumburin hanno/fuska		
	Zazzabi mai zafi		
	Fitar wani ruwa mai wari daga farji		
	Suma		
	Wahala wajen yin numfashi		
	Kasala mai tsanani		

SASHEN D: AL'ADAR MATA WAJEN NEMAN LAFIYA

D1. Kin rika zuwa ganin likita don duba maki juna biyunki a lokacin da kika sami ciki na baya?

E! ( ) A'a ( )

D2. Idan amsarki E! ee, a ina kika rika zuwa ganin likitan?

a) Karamin asibiti
b) Babban asibiti
c) Asibitin koyarwa
d) Asibitin kudi
e) Sauransu (fada).....

D3. Idan amsarki A'a ce ga tambaya mai lamba D1, wace irin kulawa kika nema

a lokacin da kike da juna biyu?

a) Kulawa daga 'yan uwa
b) Kulawa daga gidajen gudanar da addu'o'i
c) Daga wajen ungozwar zoma ta gargajiya

d) Ban nemi wata kulawa ba.

D4. Sai da cikinki da ya gabata ya yi wata nawa kafin ki fara samun kulawa? Wata……..

D5. Idan amsar da kika bayar ga tambaya mai lamba D1 E! ce, sau nawa kika tafi ganin likita don duba lafiyar juna biyunki?

a) Sau daya
b) Sau biyu
c) Sau uku
d) Sau hudu
e) Sauransu(yi bayani)……..

D6. Kin rika shan maganin karin jini a juna biyunki da ya gabata? E! ( ) A'a ( )

D7. Idan amsarki ga tambaya mai lamba D6 A'a ce, mene ne dalili?

a) Matsalar kudi
b) Rashin maganin a kasuwa
c) Maganin na da matsala
d) Ban san akwai bukatar shan irin wannan maganin ba a lokacin da ake dauke da juna biyu
e) Sauransu(Yi bayani)……

D8. Kin sha kwayoyin folic acid a lokacin da kike da juna biyu? E! ( ) A'a ( )

D9. Idan amsarki A'a ce ga tambaya mai lambar D8, mene ne dalili?

a) Rashin kudi
b) Rashin maganin a kasuwa
c) Maganin na da matsala
d) Rashin sanin akwai bukatar shan kwayan folic acid a lokacin da ake da juna biyu.
e) Ji na yi kawai ba ni son shan maganin

D10 . An yi maki rigakafin kamuwa da zazzabin cizon sauro a lokacin da kike da juna biyu?

E! ( ) A'a ( )

D11. Idan amsarki A'a ce ga tambaya mai lamba D10, mene ne dalili?

a) Rashin kudi
b) Rashin rigakafin a kasuwa
c) Matsalar maganin
d) Rashin sanin akwai bukatar yin wannan rigakafin?

e) Sauransu (yi bayani)……..

D12. Wane ne ke ba da umurnin ki tafi asibiti?

a) Ni kaina
b) Mijina
c) Surukina
d) Surukata
e) Wani babba a cikin iyalinmu
f) Sauransu (yi bayani)……

D13. A ina kika haifi ɗanki na baya?

a) A gida
b) A wurin unguwar zoma na gargajiya
c) A asibiti
d) A gidan gudanar da addu'a
e) Sauransu (yi bayani)……..

D14. A ra'ayinki mene ne matsalar hailuwa a asibiti?

a) Tsada
b) Rashin kunya da malaman asibiti ke yi
c) Iyalina ba su yarda ba
d) Babu sirri
e) Nisa
f) Sauransu (yi bayani)……

D15. A ina kike son ki haihu idan kin sami juna biyu?

a) A gida
b) A wurin unguwar zoma ta gargajiya
c) A asibiti
d) A gidan gudanar da addu'o'i

This is to certify that this translation is carried out at the Department of African Languages and Cultures, Ahmadu Bello University, Zaria.

Abubakar Sarki Muhammad



APPENDIX III: ETHICAL CLEARANCE CERTIFICATE

AHMADU BELLO UNIVERSITY, ZARIA
DIRECTORATE OF ACADEMIC PLANNING & MONITORING
Vice Chancellor Prof. Ibrahim Garba, B.Sc. (Hons) Geology, M.Sc. (Mineral Exploration) A.B.U., Ph.D Geology (London), D.I.C., F.NMGS
Director, Prof. M.I. Ishiyaku B.Sc. (Hons) Botany (ABU) M.Sc. Plant Breeding (Unilorin) Ph.D Agriculture (University of Reading) U.K. MASN, MRSN
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Appl No.: ABUCUHSR/2017/Nursing Sciences/010 9th April, 2018

Approval No: ABUCUHSR/2017/010

Dr. A.B. Umar
Department of Nursing Sciences,
College of Health Sciences,
Ahmadu Bello University,
Zaria.

Sir,

PROVISIONAL APPROVAL OF RESEARCH TITLED "PERCEPTION AND HEALTH SEEKING BEHAVIOUR FOR OBSTETRIC COMPLICATIONS AMONG WOMEN OF REPRODUCTIVE AGE GROUP IN ZARIA METROPOLIS"

This is to convey the provisional approval of the ABUCUHSR to you for the aforestated study domiciled in Department of Nursing Sciences of the Ahmadu Bello University. The approval is predicated on the assumption that you shall maintain and cater for the study subjects as indicated in your application.

Monitoring of the Research by spot checks, invitations, interactions with the subjects any other means the Committee deems fit shall be undertaken at the convenience of the Committee.

This approval can and shall be revoked should a significant breach in the terms and condition of the approval occur. It is hence your responsibility to ensure that the agreed terms are maintained to the end of the Study.

The said approval shall be posted on the ABUCUHSR Page on the University's website.

Note upon completion of the research, ethical clearance certificate will be issued.

Prof. I.H. Nock
ABUCUHSR Chairman

Cc. Director, DAPM
Director, IC &ICT
Provost, College of Health Sciences
HOD, Nursing Sciences
Prof. J.A. Randawa