

**FACTORS INFLUENCING ACCESS TO EMERGENCY OBSTETRIC CARE  
AMONGST WOMEN SEEN IN ONE OF THE TERTIARY HEALTH  
FACILITIES IN DELTA STATE, NIGERIA**

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**Factors Influencing Access to Emergency Obstetric Care Amongst Women Seen  
in one of the Tertiary Health Facilities in Delta State, Nigeria**

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## DECLARATION

I certify that this work has not been accepted in substance for any degree, and is not concurrently being submitted for any other degree other than that of Doctor of Philosophy (PhD) being studied at the University of Wolverhampton. I also declare that this work is the result of my investigations, except where otherwise identified by references and that I have not plagiarised the works of others.

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(Student)

.....

Date

## **DEDICATION**

This thesis is dedicated to God almighty whose infinite mercies and favour saw me through this PhD journey.

## **ACKNOWLEDGEMENT**

I would like to extend my sincere gratitude and appreciation to many people who made this thesis a reality; to my parents (Professor and Mrs Stephen Ekpenyong), my brothers and sisters (Alfred, Idorenyin, Uwem, Kufre, Eno, Emy and Eddie) for their inspiration and moral support throughout my research. Without their loving support and understanding I would never have completed my thesis. Particularly, I owe a debt to my parents for their prayers for my work over a time they needed to take care of themselves more.

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## ABSTRACT

**Background/Aim:** Historical evidences indicate that maternal health care by a skilled birth attendant is one of the key strategies for maternal survival. However, the rate of maternity care utilisation and reduction of maternal death is very low in Nigeria. This study was designed to investigate factors influencing access to emergency obstetric care with a view to guiding programmatic efforts targeted at overcoming these barriers and also contribute to health reforms in Nigeria. Hence, the need to understand factors influencing access to emergency obstetric care in Nigeria using the Socio-ecological Model (SEM) and Gender and Development (GAD) to identify associated factors operating at different levels.

**Methods:** A mixed method was employed for this study. Data collection used questionnaires and in-depth interviews. Questionnaires were distributed to 330 respondents of which 318 of them were retrieved and qualitative in-depth interviews were conducted for 6 participants. Data collection were done using a sequential approach. The study was conducted in one of the tertiary health facilities in Nigeria from January-April, 2015, amongst mothers aged 15-45 years meeting the study inclusion criteria. Statistical Package for Social Sciences (SPSS) was used in analysing the quantitative data. Bivariate and logistic regressions were conducted for the quantitative data whilst a qualitative content analysis was done for the qualitative data.

**Results:** The study established that education, income level, costs associated with seeking care, distance and time taken to travel were significantly associated with maternity healthcare services utilisation. Quality of service, staff attitude and women's autonomy showed consistent significant association with maternal health care utilisation.

**Conclusions:** The study concludes that; costs of treatment, distance and time, income level, staff attitude and women's autonomy were critical in determining women utilisation of maternity care services.

**Recommendation:** As an outcome of this research, best practice framework has been developed. The framework presents a coherent and systematic approach for achieving sustainable MH by providing a roadmap for instituting measures at the policy, health

facility, community and at the individual levels, taking into account factors that are likely to promote or impede the achievement of sustainable MH.

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## OPERATIONAL DEFINITION OF TERMS

**Accessibility of Health Care** is defined as the ease with which patients can access a referral facility. Indicators include location of the facility, distance from referral sources, time taken to reach the facility from the referral source, and the availability of facility-based or public transport to reach the facility (Sharan *et al.*, 2010).

**Antenatal care (ANC)** is defined as the routine or higher-level of medical care given to a woman and her unborn child during pregnancy and provided by a skilled attendant (WHO, 1994).

**Availability of Care** is defined by several variables, including operating hours of the facility, availability of clinical obstetric services at the facility, availability of medical staff, and medical staff workload, which may determine their ability to provide those services (Sharan *et al.*, 2010).

**Direct Obstetric Deaths** are those resulting from obstetric complications of the pregnant state (pregnancy, labour and puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above (Donnelly *et al.*, 2015).

**Emergency Obstetric Care** is defined as care provided in health facilities to treat direct obstetric emergencies that cause the vast majority of maternal deaths during pregnancy, at delivery and during the postpartum period (Paxton *et al.*, 2006).

**Indirect Obstetric Deaths** are those resulting from previous existing disease or disease that developed during pregnancy and not due to direct obstetric causes, but which was aggravated by physiological effects of pregnancy (Oxaal and Baden, 1996).

**Maternal Morbidity** is the chronic and persistent ill-health occurring because of complications of pregnancy and childbirth (Kilpatrick *et al.*, 2016).

**Maternal Mortality** is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the 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, 2010).



**Skilled Care during Childbirth** refers to the process by which a pregnant woman and her infant are provided with adequate care during pregnancy, labour, birth and the immediate postpartum periods, whether the place of delivery is the home, health centre, or hospital (MacDonald and Starrs, 2002).

## **GLOSSARY OF TERMS**

The following abbreviations were used in this thesis:

ANC: Antenatal Care

EmOC: Emergency Obstetric Care

EOC: Essential obstetric care

FMC: Federal Medical Centre

GAD: Gender and Development Theory

ICSU: International Council for Science

ISSC: International Social Science Council

LSS: Life-saving Skills

MCH: Maternal and Child Health Care

MDG: Millennium Development Goal

MMR: Maternal Mortality Ratio

NDHS: Nigeria Demographic and Health Survey

NPCN: National Population Commission Nigeria

OWG: Open Working Group

PMM: Maternal Mortality Programme

PNC: Post-Natal Care

SDG: Sustainable Development Goal

SEM: Socio-Ecological Model

SF: Silences Framework

SMI: Safe Motherhood Initiative

TBA: Traditional Birth Attendant

UN: United Nations

UNFPA: United Nations Population Fund

UNICEF: United Nations Children Fund

WHO: World Health Organisation

WSS: World Summit for Child

# CHAPTER ONE – INTRODUCTION

## 1.0 INTRODUCTION

This chapter provides the introductory and background information for this thesis. A brief theoretical background on the socio-ecological model, the gender and development theory that guided this study. It presents problem statement, justifications for conducting the study and the research contribution to knowledge. The chapter also identifies the research design and a brief outline of the structure of the thesis.

## 1.1 BACKGROUND OF THE STUDY

Research has consistently shown that high maternal and prenatal mortality is associated with lack or inadequate skilled maternal healthcare during pregnancy and childbirth particularly in sub-Saharan Africa, where half (50.4%) of all maternal deaths occur (Esen and Sappor, 2013). The development of poor health behaviours can have long-negative effects on maternal health. Improving women's health during pregnancy and childbirth has continued to be a global priority. One of the United Nation's Millennium Development Goals (MDGs) was to reduce maternal mortality by three-quarters between 1990 and 2015, with much reduction expected across low income countries (United Nations, 2000). With the expiration of 2015, the year for achieving reduction in maternal mortality by three-quarters and have universal access to reproductive health, progress is low, especially in sub-Saharan Africa and in South Asia. In sub-Saharan Africa and in South Asia, it is reported that 1 in 16 and 1 in 43 women dies from pregnancy or childbirth (Filippi *et al.*, 2006). The maternal mortality ratio (MMR) was estimated at 450 in developing countries per every 100,000 live births compared to 9 in developed countries (Mojekwu and Ibekwe, 2012; Antor, 2014).

In addition, the life time risk of maternal death for a woman in sub-Saharan Africa is 332 times higher compared to a woman in the developed countries (Shah and Say, 2007). Given the above-mentioned figures on maternal death, it can be argued that maternal mortality is not evenly spread through the world's regions and is not in the same amount to the population of women of reproductive age in those regions. African countries are reported to have the highest burden of maternal mortality and sub-Saharan Africa is accountable for the depressing maternal death figure for the area, contributing approximately 40% of all maternal deaths due to pregnancy-related complications which is higher in developing countries than in developed countries (Esen and Sappor, 2013). Thirteen of the 15 countries with high

maternal deaths are in sub-Saharan Africa and this includes Angola, Burundi, Cameroon, Chad, the Democratic Republic of the Congo, Guinea-Bissau, Liberia, Malawi, Niger, Nigeria, Rwanda, Sierra Leone and Somalia (Antor, 2014).

Maternal health care is the care given to women during pregnancy, childbirth and postpartum periods to ensure good health outcomes for the woman and baby (Hounton *et al.*, 2008). This comprises of antenatal care (ANC), labour and delivery (maternity) care and postnatal care. The international guidelines for utilisation of maternal health care stipulate that; utilisation of antenatal care should be a minimum of 4 visits and the first visit should be done during first three months of pregnancy. Maternity care should be provided by a skilled birth attendant and postnatal care should be done to both the woman and baby immediately after delivery and within two weeks after birth and, throughout 42 days after delivery (WHO, 1994). The main objectives of ANC are to deliver effective and appropriate screening, preventive and treatment interventions. Effective use of ANC contributes to better maternal outcomes and safer birth. ANC also provide opportunity for assisting women to make birth and emergency preparedness plan (WHO, 1994). However, contribution of ANC to maternal mortality reduction has been challenged. High risk screening during antenatal care as a means of identifying women for facility based delivery is not effective since most of the antenatal care provided is of poor quality in many low-income countries (Penn-Kekana, McPake and Parkhurst, 2007). It therefor becomes important to note that each pregnancy may end up with obstetric complications.

There are many external influences that affect a woman's health behaviours and outcomes. Women, especially in their reproductive ages, are influenced most by the components of their immediate surroundings, usually their friends, neighbours and communities. These environments and exposures can shape maternal health. Most maternal deaths in developing countries are avoidable if adequate nutrition, proper healthcare, including access to family planning, the presence of a skilled birth attendant at delivery and emergency obstetric care are available. The provision of good and skilled care to women during pregnancy and childbirth is vital not only for saving the lives of the mothers alone but as well as that of their babies (United Nations, 2013). In sub-Saharan Africa, particularly in Nigeria significant change relating to health at the grassroots has failed. The use of top-down tactic in policy development and execution has failed to bring about the much-needed transformation. For this change to occur, real and active community involvement is crucial (Antor, 2014).

Evidence in the literature revealed that the health status of Nigerian populace is poor, with a maternal mortality ratio of 545 deaths per 100,000 live births, thereby making Nigeria only second to India in the world maternal mortality estimates (Society of Gynaecology and Obstetrics of Nigeria (SOGON) (2012). Nigeria accounts for 2% of the world's population but contributes 10% of the global maternal mortality (Ogunlela, 2012). Each year approximately 60,000 Nigerian women die in childbirth and for every woman that dies 20-30 more experience serious complications to their reproductive organs resulting in disabilities such as pelvic inflammatory disease, a ruptured uterus, obstetric fistula (WHO, 2005). In 2010, it was reported that 47% of the estimated 8.3 million pregnant women received no antenatal care. Among those who received ANC, 45% made less than the recommended number (four visits) of ANC (WHO, 2013).

It is also reported that in Nigeria, only 37% of all deliveries are attended to by skilled birth attendants (WHO, 2013). Poor quality of skilled maternal healthcare services to women of reproductive age is reported as one of the factors that contribute to maternal death in Nigeria (Ogunlela, 2012). McClure *et al.* (2009) stated that access to maternal healthcare services especially during emergency situations was found to be highly associated with maternal death and stillbirth. More so, since the start of the 1990s, essential obstetric care (EOC) and emergency obstetric care (EmOC) have been suggested as schemes to tackle the high maternal morbidity and mortality problem. Lack of access to skilled maternal health care services in sub-Saharan Africa is one of the many reasons utilisation of maternal health care services is low in this region (Adamu, 2011).

Despite the availability of these strategies for improving maternal and child health, complications of pregnancy and childbirth continue to be a leading cause of maternal morbidities and mortality for women of reproductive age (15-49 years) in developing countries (Abouzahr, 2000). Studies have consistently shown that most women who suffered complications do not have any known risk factors, and there is no way of knowing whether any will develop. It therefore becomes necessary for quality emergency obstetric care services to be made available and accessible to every pregnant woman over and above health worker responsiveness to life-threatening complications (Olenja *et al.*, 2009).

Therefore, it will be reasonable to conclude that the reduction of maternal mortality requires a multifaceted approach that includes tackling both individual/socio-cultural and health facility factors associated with barriers to accessing emergency obstetric care. As complications of

pregnancy do not suddenly happen, they occur because of failure to put in place safety measures that ought to have been before, during and after pregnancy.

### **1.1.1 Theoretical Background**

The most successful public health programmes and initiatives are based on an understanding of health behaviours and the context in which they occur. Hence, interventions to improve health behaviour can be best designed with an understanding of relevant theories of behaviour change and the ability to use them competently (Glanz and Bishop, 2010). The development of poor health behaviours can have long-term negative effects on maternal health. There are many external influences that affect a woman's health behaviours and outcomes. Humans are usually influenced most by the components of their immediate environments and exposures can shape their health behaviours. The development of poor maternal health care seeking behaviour stems from multiple influences and exposures in a woman's life. Today, many health planners and providers are recognising the need to expand the focus of their efforts not only at the individual level, but also at the broader family, organisation and social context in which women live (Brindis, Sattley and Mamo, 2005).

Interventions aimed at the family/community level, reflective of women's social and environmental context, are conceptualised as providing cultural models and norms that support and sustain healthy health behaviours, thereby promoting individual behaviours that reduces the risks of maternal death. The importance of working to ameliorate maternal mortality at the structural level has been recognised. Ameliorating poverty, gender inequalities, employment opportunities, and assuring greater access to educational and health resources will promote the social equality necessary to reduce the incidence of maternal death. The purpose of this research was to gain a better understanding of the factors that are associated with maternal health care utilisation.

Understanding factors associated with maternal health care seeking behaviour using the socio-ecological model and gender and development theory can help to create more comprehensive and effective programming to tackle and prevent this public health issue. Bronfenbrenner (1979) stated that models contribute to policies promoting health service use through increased education, knowledge and awareness of individuals and communities including effecting changes in people's attitudes, skills and behaviour. McLeroy *et al.* (1988) describe the psychological, social, environmental and economic factors influencing health seeking behaviour. The conceptual framework provided by the socio-ecological model of

health service utilisation Bronfenbrenner (1994) is most relevant to this study since it addresses both individual behaviour and socio-ecological determinants aimed at improving health seeking behaviour at multiple levels (Bronfenbrenner, 1994).

The socio-ecological model of utilisation of health care services has four components namely: (1) individual factors; (2) social environment factors; (3) physical environment factors and (4) policy. In the socio-ecological model physical environment (Figure 2.2), social environment factors and public health policy are all important factors influencing change in people's behaviour. This model further assumes that appropriate changes in the social environment may affect changes in individuals' behaviours. For instance, women's attitudes to service utilisation, such as not needing to use skilled delivery care if their condition is 'normal' and the patriarchy system in Nigeria, influence health care seeking behaviour.

The socio-ecological model is widely used in health behaviour research (Elder *et al.*, 2007) because it covers individual and social environment factors affecting health service utilisation. The socio-ecological model emphasises the importance of addressing public health problems at multiple levels and it stresses the interaction and integration of factors within and across levels (Gregory, 2002). The socio-ecological model for health service utilisation focuses attention on both individual and social environmental factors as targets for addressing health problems.

In applying the theory of gender and development by Connelly *et al.* (2000), gender inequalities exist in any society and contribute to the subordination of women relative to men in most contexts. Gendered structures place barriers to women's access to paid labour, education and health services which could provide them with life-saving care. These gender norms and structures are therefore relevant to any analysis of maternal health. Women's role, patriarchy, education and other core issues concerning women's position in society and how that affects their health, particularly maternal health. There are certainly more aspects of gender divisions and female subordination which affects the lives of women, however these categories (women's role, patriarchy, education) as they include issues that are crucial for an understanding of how gender is linked to maternal mortality. It is crucial to recognise these connections to understand how gender creates the root causes of sustained high rates of maternal mortality. Hence, provide a base for the argument that gender inequalities prevent women from accessing available health services. To gain a full and accurate understanding of



maternal mortality and its causes, it is crucial to include gender in the discussion. Gender issues lie at the core of women's limited access to health services and hence the slow reduction of maternal mortality rates.

There are many influences that impact on women utilisation of maternal health care services; however, women's choices on decision to seek care are constrained by numerous factors related to women experiences in reaching the health care facility and at the facility. How do all these factors work to influence maternal health care utilisation? In the next chapter, a broad theoretical model that incorporates influences ranging from individual, to the societal is discussed. These two (socio-ecological model and gender and development theory) and the Silences Framework were used to guide and interpret this research and findings in the following chapters and analysis.

## **1.2 PROBLEM STATEMENT**

Evidence in the literature reveals that maternal mortality ratio in the developing world has failed to reduce significantly in the last decade despite various policies and strategies such as Safe Motherhood Initiative, Life-saving Skills (LSS) and many others initiated to change the situation (Hill *et al.*, 2007). Sub-Saharan Africa is reported to have the highest morbidity and mortality rates in the world, with the goals of safe motherhood eluding many governments and organisations. To tackle women health issues, the World Summit for Children (WSC) in 1990, the programme of Action of the International Conference on Population and Development which took place in Cairo in 1994 were immediately supported by the Fourth World Conference on women in 1995 (Adenike, 2013). Furthermore, the United Nations Millennium Development Goals was formed to curb these problems and portrayed extraordinary devotion to reproductive health rights as well as gender equity and equality. Also, in Africa declarations such as the 1982 African Charter, the 2008 Maputo protocol and the African Union Governments pledge to allocate at least 15% of their annual budgets toward improving the health sector was endorsed by all participants at the 2001 Abuja declaration (Mojekwu and Ibekwe, 2012).

Despite all these interventional strategies created to fight the war against maternal mortality, women in sub-Saharan Africa particularly in Nigeria still face many difficulties due to pregnancy-related complications (Mojekwu and Ibekwe, 2012). Studies conducted in Nigeria on maternal mortality have consistently reported that there are variations across the regions with MMR (Yar'zever and Said, 2013). The report revealed that average maternal mortality

rate in the north-east was 1,747 compared to 165 in the south-west and urban and rural variations also exist. The northern part of the country has usually been reported to record the worse indicators. Although maternal mortality is an international issue, the critical concern associated with it is higher in developing countries. Hence, of the estimated figure for maternal deaths globally, a total of 99 percent occurs in developing countries and more than half of these maternal deaths take place in sub-Saharan-Africa and one third of these deaths occurring in South Asia (WHO, 2008).

Nigeria has one of the poorest records of maternal deaths and the situation is getting worse with time. For instance, in 2000, it was reported that the maternal mortality rate per 100,000 live births was 800 when compared to 540 for Ghana and 240 for South Africa. By 2003, the maternal mortality ratio for Nigeria had increased to 948/100,000, in 2005, it became 1100/100,000 and 840/100,000 live births in 2008, while the National Demographic and Health Survey (NDHS) placed it at 545/100,000 live births (National Population Commission, 2008; Berlin Institute for Population and Development, 2011). The likelihood of a Nigerian woman dying from reproductive disorders and complications in 2002 was reported to be 1 in 10, 1 in 18 in 2005, and 1 in 23 in 2008 (Pitterson, 2010), thereby putting the Nigerian women at more risk than their equals in high income countries, where the risk was estimated to be 1 in 17,800 and 1 in 10,000 (Population Reference Bureau, 2002). The effects of these assessments are the decline of the country's workforce and the general stifling of rapid growth.

The MDG number 5 was aimed at reducing maternal mortality rate by 75% between 1990 and 2015 and to achieve universal access to reproductive health. The fact that the NDHS 2008-2009 reports that only 44% of births are attended to by health professionals and only 43% of deliveries take place in health facilities is a clear indication that there is underutilisation of maternal health care professionals and facilities in the country, especially in the rural areas. What determines maternal health utilisation therefore needs to be understood to improve this situation with a view of achieving the SDG goal 3. In fact, it is clear throughout the literature reviewed that there is a dearth of recent data on the factors influencing maternal health care utilisation. Notwithstanding the fact that maternal healthcare services utilisation is essential for the enhancement of maternal and child health. This study therefore examined the factors that determined the utilisation of maternal healthcare services utilisation in one of the tertiary health facilities in Nigeria.

### **1.3 JUSTIFICATION FOR THE STUDY**

Maternal mortality in Nigeria is one of the highest in the world (WHO, 2005). The rate is higher in the rural areas than in the urban and the pattern shows regional variations, with higher maternal mortality rate in the north than in the south. The aim of the Millennium Development Goals (MDGs) was to improve maternal health and reduced maternal deaths by three-quarter (75%) in the year 2015. With the expiration of the year 2015 and the inability of many countries to meet this goal, and the introduction of the Sustainable Development Goals (SDG), maternal mortality remains an issue of concern to the world at large. Today more than two decades into the fight against maternal mortality and morbidity, Nigerian women are still experiencing health related problems including maternal and child deaths, even though several strategies are said to have been put in place by the Nigerian government. The causes of these deaths in Nigeria include postpartum haemorrhage, sepsis, obstructed labour, eclampsia and complications of unsafe abortion (Federal Office of Statistics and UNICEF, 1999).

Most of the maternal deaths occur outside the medical system either at the TBA's home or on the way to the hospital. Underutilisation of maternal health services is said to be worsened among pregnant women by levels of poverty. About 31% of deliveries are assisted by skilled birth attendants and over 70% of maternal deaths in Nigeria are preventable (Federal Ministry of Health, 2001). The national health policy of Nigeria laid no special emphasis on the prevention of maternal mortality despite the global actions to reduce the burden of maternal death. However, the Reproductive Health Policy of Nigeria states that the risk of maternal death should be reduced by 50% through access to emergency obstetric care (Federal Ministry of Health, 2001). Given the complexity of factors influencing maternal health care utilisation, it appears that the health facility is an important resource that is frequently overlooked. The contribution of which could be explored through women with direct obstetric complication attending the health facility for care during pregnancy, delivery and postpartum period, to bring about improvement in maternal health care utilisation. It was also evidenced in the literature that most study done in the country are mostly done using either a qualitative or quantitative method.

This thesis, therefore, aims to address this gap by attempting to explore the factors that are assumed to be barriers to maternity care services utilisation using a mixed method approach. This may act as a foundation for further research in this area and thus bridge knowledge gaps and update scientific knowledge on this important subject area. Elaboration of the issues may

be helpful in planning efficient health service policies for the future. Developing relevant maternity policies can help increase the use of skilled maternal health care services during pregnancy, labour, delivery and postpartum period leading to improvement in maternal morbidity and mortality rates.

## **1.4 AIM**

The aim of this research was to identify factors that contribute to delays among women seeking emergency obstetric care, including barriers to accessing maternal health services from the perspective of the women using a pragmatic approach. Knowledge and understanding of the factors affecting maternal health care service utilisation during pregnancy, labour and delivery could be helpful in the efforts to increase skilled maternal health care service use and encourage women to utilise the services

### **1.4.1 Research Questions**

To achieve this, specific research questions were developed. These questions are:

1. What are the factors influencing decisions to seek emergency obstetric care among women attending the health facility?
2. What are the women's experiences in reaching the health facility?
3. What are the care experiences encountered by the women in receiving care at the health facility?

## **1.5 CONTRIBUTION OF THIS RESEARCH**

This study will provide important contributions to understanding women's access to health services utilisation. The contribution of this research relates to the theories and methods. The theoretical framework employed in this research will allow access to and utilisation of health care services to be understood as a function of one's environment, while also recognising how gender, underscored by structural factors influence ability to access and utilise maternal health care services. These approaches further strengthen the central tenet of health behaviour which regards health and our environment as inextricably linked (Glanz and Bishop, 2010), while more broadly adding to theorisation on women's health (Anderson, 1995).

This thesis will also demonstrate the importance of using multiple methods to gain a wider context of factors that influence perceptions, access, and utilisation of maternal services to identify factors influencing access to maternal health care services among women of

reproductive age in Nigeria. It is hoped that by developing an in-depth understanding of the participants' lived experiences, the researcher will propose a best practice framework in the form of partnership working that addresses these issues and seek to initiate fundamental changes in health and health care. Consequently, this research study will reveal how access to maternity care is not entirely the decision of individual women, but must be taken within the milieu of structural mechanisms, the effect of socio-economic factors, and environmental characteristics which shape, evident, and determine women's utilisation of maternity care. This study hopes to provide policy makers with information that can help in the development of interventions aimed at reducing maternal morbidity and mortality.

## **1.6 RESEARCH DESIGN**

To answer the fundamental questions posed by this research, a pragmatic research paradigm was adopted. According to Ralph (2012), a pragmatic approach is the approach to solving practical problems in the "real world" rather than an assumption about the nature and knowledge. Pragmatism can be considered a bridge between paradigm and methodology or as a stance at the interface between philosophy and methodology (Cameron, 2011). Howe (1988); Tashakkori and Teddlie (2003) stated that pragmatism is the best paradigm for justifying the use of a mixed method. The populations for this study were patients with direct obstetric complications that have given birth in the last one year and/or were pregnant, age between 15-49 years and must be attending the health facility for care at the time of this study who gave informed consent. As a consequence of the study inclusion criteria for participating in the study, the views/experiences of women who attended other facilities, TBAs and those who stayed at home were completely missing out. The researcher acknowledges that their experiences may have been different from the ones included in this study which is a limitation of the study. This could also not be overcome due to the ethical boundaries guiding this research study.

To identify factors influencing access to emergency obstetric care among women seeking care in Nigeria, a descriptive cross-sectional study (both quantitative and qualitative research approaches involving questionnaire and in-depth interviews) was utilised to explore the issue at hand. The use of a mixed method approach gave a holistic view of the subject and allowed for the use of multiple sources of data. The use of multiple sources of data helped to achieve triangulation of results, which ensures the quality of the evidence, generates strong evidence in support of key findings (Simons, 2009), and makes the findings more reliable (Yin, 2013).

Data collection was by means of self-administered questionnaires to 318 participants and in-depth interviews with a total of 6 participants were conveniently selected from participants in the quantitative phase.

The quantitative data collected were analysed using the Statistical Package for Social Sciences (SPSS), where both descriptive and inferential statistics were applied. Data analysis for the qualitative data was done manually and this involved organising and coding the data, using content analysis. From the findings of the study, it is demonstrated that the health care seeking-behaviour has multiple levels of influences (such as individual, interpersonal, organisation, community and public policies). The findings of the research led to the development of a best practice framework that addresses the concerns and possible hindrances of maternal healthcare utilisation.

## **1.7 THEORETICAL FRAMEWORK OF THE STUDY**

A theoretical framework can be defined as a plan for the entire research investigation that links the theoretical with the mechanical components of the research (Grant and Osanloo, 2014). Thus, a theoretical framework comprises of the chosen theory (s) that undergirds an individual thinking with regards to how you understand and plan to research on your chosen topic, as well as the concepts and definitions from the theory that are relevant to the research topic. The importance of a theoretical framework cannot be overemphasised as it is the structure around which research is conceived, designed and implemented (Eshareturi *et al.*, 2015). Thus, it is the ‘birthing point’ for the methodology and methods that will be used in a research study (Crotty, 2003). Although no definite rule exists as to how a theoretical framework should be selected; Crotty (2003) posits that a key criterion in conceptualising a theoretical framework is that it must clearly address that ‘what’ question: what exactly is the study trying to achieve? As this study is aimed at investigating factors influencing access to emergency obstetric care for women of reproductive age. This study adopted the ‘Silences Framework’ as the theoretical underpinning of this research study. The Silences Framework which comprised of four stages will be used as a guide for organising this thesis. TSF was used to guide the research activity from conceptualisation of the research question to the production of the research findings.

### **1.7.1 Silence Framework and Its Theoretical Assumptions**

This section considers the theoretical underpinnings of the concept of ‘screaming silences’ that influenced the research design (Serrant-Green, 2004). The section also details The Silences Framework arising from the concept (Serrant-Green, 2010), used to conduct the study. The aim of this is to help the reader to understand the overall theoretical framework informing the study as I refer to the framework and its associated stages in every chapter of this research work. The broader theoretical approaches underpinning the concept of screaming silences include aspects of feminism and ethnicity-based approaches (Serrant-Green, 2010). The approaches align with my own beliefs in that they value individual or group interpretations of events and human experiences as a part of what people believe to be the ‘truth’.

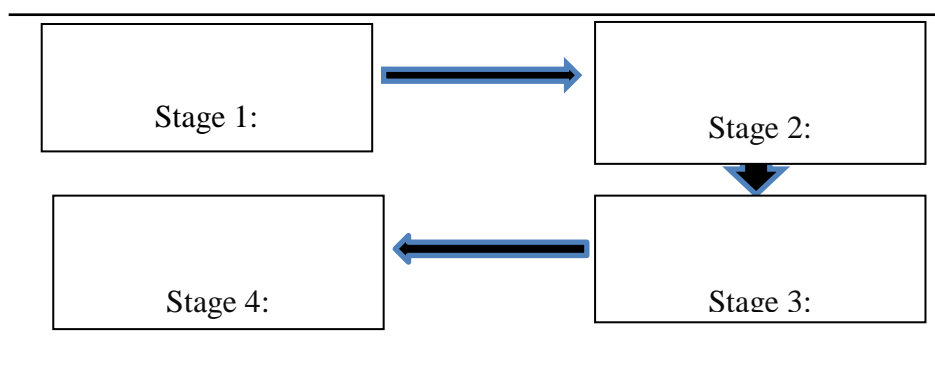
As this study aimed at investigating and documenting factors which serve as barriers to accessing emergency obstetric care in Nigeria, with a view to providing information on policy strategies targeted at overcoming these barriers and contributes to health reforms in Nigeria, this study adopted TSF as conceptualised by Serrant-Green (2010) as the framework of choice. This framework is ideally suited for researching issues which are little researched, silent from policy discourse and marginalised from practice (Serrant-Green, 2010). In this study for example, it relates to the subject of access to emergency obstetrics care among women of reproductive age. This study adopts the pragmatic research paradigm which places more importance on the problem being studied as well as the questions being asked instead of the methods and as such focuses on the outcome of the research and its applications.

Nonetheless, in adopting the pragmatic paradigm, TSF as adopted herein focuses on exploring the marginalised nature of women experiences in seeking health services to uncover hidden perspectives with regards to partnership delivery of health interventions. Accordingly, TSF as used in this study seeks to uncover ‘screaming silences’ which are situated in the subjective experiences of women of reproductive age seeking maternal health services known as the listener’ and the social and personal context in which these experiences occur. The concept of ‘screaming silences’ reflects how an issue, as experienced by the listener, ‘screams’ out to them in relation to their health needs, because of its relationship or impact in their reality. Conversely, the same issue may relatively ‘silent’ in the consciousness or experience of the greater majority in society, or absent from the available evidence base where it fails to have wider impact on shared aspects of health (Serrant-Green, 2010). Therefore, screaming silence as a concept seeks to give voice to the experiences, subject and

issues which are often hidden, devalued or silenced. In addressing these silences, TSF is associated with the concept of marginalised discourses. Marginalised discourses are labelled as such as they are less prioritised by policy and frequently positioned as being far removed from what society considers to be normal (Eshareturi *et al.*, 2015). Discourse has been defined as a group of ideas or patterned way of thinking which can be identified in textual and verbal communications, and can also be in wider social structures (Lupton, 1992). Discourse provides insight into the functioning of bodies of knowledge in their specific situated contexts by generating interpretive claims with regard power effects of a discourse on groups of people, without claims of generalisability to other contexts (Cheek, 1997).

Screaming silences can also be viewed as a way in which power can be used to determine an arbitrary norm in society (Serrant-Green, 2010). The domination of what is morally or socially acceptable in society has affected not only the interpretation of research, but also what issues can be researched and funded in line with societal ethos and values at a particular point in time (Tarozzi, 2013). As a result, gaps exist in research in terms of the approaches, experiences and perspective presented about sensitive issues (Mason, 2002). It is in these gaps “screaming silences” are located. It is these critical aspects of the concept in particular that makes it an appropriate approach to use in this study and why I chose to employ the associated theoretical framework to guide the research.

The Silences framework is comprised of four stages which guided the research activity from conceptualisation of the research question to the production of the research findings. The four stages are depicted in the Fig. 1.1 below;



**Figure 1. 1: Schematic representation of The Silence Framework. Adapted from Serrant - Green (2010)**



### **1.7.2 Stage 1: ‘Working in Silences’**

Towards comprehending the Silences around health care utilisation among women of reproductive age, it is necessary to consider the wider social and political context in which their lives are lived. This stage of the SF was used in building the literature review for this research from different viewpoints in the literature. This stage of the framework starts by identifying these individuals and a contextualisation of their lived experiences. This stage sets the context for the research through a critical literature review. The emphasis laid on the framework is necessitated by the fact that even independently of individual experience, the context or social situation surrounding individual experience must be understood to hold the importance of the experience relayed (Eshareturi *et al.*, 2015). This was done by carrying out a critical review of the literature to identify factors influencing access to emergency obstetric care. Critical literature reviews tell a story and help to advance our understanding of what is already known. Critical literature review is more than descriptive. It is original, perceptive and analytical. It is also based on a fair selection of sources, which critically compare the ideas and evidence, thereby identifying the gap of what still needs to be known and researched (Khan, Popay and Kleijnen, 2001).

On this basis, the literature review conducted herein was aimed at identifying the range and scope of existing knowledge relating to maternal health care utilisation and the policy context to which this research was conducted. Significantly, this review also highlights foundational studies done in the past on this issue and important historical events that suggest to why the research problem exists in its present context. As an outcome of this phase, the possible gains of carrying out this study will be offered in light of why this study is important and necessary.

### **1.7.3 Stage 2: ‘Hearing Silences’**

This stage of the framework explored areas in the research topic where little is known/understood, less importance is given or silenced. This stage set out to identify the ‘Silences’ associated with this research towards ensuring that this study identifies the silence being heard by the ‘listeners’ (women seeking maternal health care services). The SF stresses that individuals and groups are exposed to different silences because of their lived experiences which can limit the way they interact with health services within their environment (Serrant-Green, 2010). The key issue here is that it is women who live with the concealed silences, and therefore their construction of these silences is fundamental to exposing their lived experiences. This stage acknowledges the interdependent relationship

that exists between me as the researcher, research participants and the subject being researched. It is at this stage that I exposed and reflected on the silences arising out of the relationship. At this stage I therefore identified and explored three aspects of the silences which underpinned and formed the basis of the overall study design, data collection and analysis. The three aspects are set out below:

- a) **Researcher identity:** In any research utilising The Silences Framework, active engagement must be preceded by an identification of self by the researcher (Eshareturi *et al.*, 2015). At this point, it is expected that the position of the researcher in the study is identified. What were the motivations researching on this topic? What are the researchers' personal and professional drivers for investigating on the subject matter? In so doing the researcher is located within the study, giving arenas that allow possible readers opportunity to evaluate the study through the researcher's lens. The biases and beliefs of the researcher about the research phenomenon are made clear at this phase.
- b) **Research Subject:** At this stage, the researcher clearly showed how the research subject in question is sensitive in the given society. The sensitivity of the research subject has a direct effect on the engagement of the research participants and the subsequent outputs (Edwards *et al.*, 2007). The issues explored include reproductive health behaviours and the involvement of the researcher in researching her own community.
- c) **Research Participants:** Women are known to be vulnerable or marginalised group. Being a woman especially in a patriarchal society like Nigeria placed women as second-class citizen and, as such, issues around reproductive health is downplayed because only women suffered the direct effect of maternal mortality. This phase entails identifying missing evidence linking to the marginalised perspectives of the study participants. Through an exploration of existing evidence, this phase identifies the silences arising from the marginalised perspectives of the research participants to their access to emergency obstetric care. At this stage I critically reflected on why these silences existed.

#### **1.7.4 Stage 3: Voicing 'Silences'**

This stage entails the active data collection and analysis phase of the study towards exploring the Silences identified in both stages 1 and 2 from the perspectives of the key players in the

research. The operational issues inherent carrying out this study using TSF were all addressed and the choice of method, identification and recruitment of research participants and data collection and analysis approaches were addressed at this stage. Central to the research and the theoretical approach taken, the marginalised voices of the research participants need to be captured in order to fill the identified gaps in the evidence (Serrant-Green, 2010). The choice of the research design was driven by their suitability to address the aims of the research. Accordingly, a mixed method approach was employed in addressing the research aims and objectives. The rationales for the methods adopted for this study in the context of the Silences were explored in depth.

- a) **Participants:** The key aim of TSF is motivated to hear silent voices located in an issue were captured. In this situation, it is in the direct exploration of participants' experiences that The Silences Framework makes its contribution to knowledge (Serrant-Green, 2010). This section presents the research participants whose Silences were explored and the criteria which qualified them for the inclusion in the research.
- b) **Analysis:** The method of analysis is driven by the quest to address the research objectives of the study. At this stage, the researcher identifies the biases that existed at the data collection stage which continued to shape the outcomes from the analysis (Serrant-Green, 2010). The process of the analysis will be discussed in detail in the methodology chapter.

#### **1.7.5 STAGE 4: 'WORKING WITH SILENCES'**

This stage of the framework was used to incorporate the discussion of the findings to address the silences that exist in accessing health care among the study participants, the weakness that exist in addressing some of these silences within the communities and in the health care facilities were explored. This was achieved via the contributions got during stage 3 by contextualising the findings generated from the stage 3 to the initial aims and objectives of the research.

#### **1.8 RESEARCHER IDENTITY**

In the Silences Framework, the researcher plays an important role in conducting the research ranging from data collection to interpretation of the research (Seibold, 2007; May, 2001). There are some biases that can come into the research that need to be highlighted within the

approaches and any possible impact on the study should be explored and evaluated (Ludwig, 2006).

It is important to realise the power dynamics inherent in certain interactions including the research process and the different viewpoints projected by individuals and groups. In the case of the current study it is taking place in the context of the researcher being a female Nigerian who is a health professional working with one of the private universities in Nigeria. This means that my personal and professional identity impacts directly on the research through my position as a researcher and a member of the health care profession, including my relationship with the participants in the study area. There were additional tensions that came out because of my identity. For example, as a female Nigerian working with female research participants from one of the Nigerian communities, I may touch on some of the passionately contested views within the Nigerian communities based on women subordination. These tensions needed to be acknowledged and exposed ahead of the research (Burman, 2006). This allowed all the concealed issues to be explored relating to my researcher position and relationship to the people.

According to Serrant-Green (2010), TSF values the way in which people make sense of their world and their experiences within it. All these aspects of my identity had the potential to impact on the outcome of the research. In this research, there were aspects of my identity that I felt were going to have an impact on the research, these included my gender (female Nigerian) conducting a research in a Nigerian community and my professional status as a researcher. It was important that these issues were managed professionally to get the most out of the research. The key ethical issues that arose included the following:

- The effect of my positioning as a female Nigerian and as a researcher, on the discussions arising out of the survey and on the one-to-one semi-structured interviews.
- Due to my familiarity with the study setting, some informants were concerned that I was asking them to explain noticeable things.

There has been a wide debate and contrasting perspectives concerning the researcher relationship to research participants and its effect on the research outcome. Issues around shared identities have been extensively explored by researchers from a wide range of traditions and perspectives including ethnicity and feminism-based research, sometimes referred to as the insider/outsider perspective (Clingerman, 2007). Hammersley and Atkinson

(2007) observed that it is difficult to avoid the existential fact that we are part of the world that we study. This has led to the subsequent development of what has come to be known as researcher reflectivity (Clingerman, 2007) which recommends working towards better understanding of the role of the researcher and the impact of the research process on the research findings. It should be noted that, my identity appeared to reach and sit on both insider and outsider to the research participants. I was an insider as a female Nigerian who lives and worked in Nigeria. I was familiar with and aware of the issues that affect Nigerian women settling in Nigeria and in other African countries. I was also aware of the social expectations of the communities on me as a female Nigerian.

However, at the end of the other spectrum, I was an outsider to some of the research participants. Again, I was one of the few Nigerian women who have managed to get to this height of education and also secure a modestly professional job within the public services in Nigeria. This again could cause me to be viewed by the participants as representing and advancing the cause of the authorities within the Nigerian communities, thereby putting me in an outsider position in the context of the research. However, for this research I was an outsider. The discussion of any issues involving reproductive health among African/Nigerian communities is a taboo (Clingerman, 2007). Therefore, the nature of the study being undertaken was affected by the identity of the researcher. It was highly likely that the topic would pose a challenge in discussing certain details with someone seen to be in a better socio-economic position as opposed many of the research participants. Access to the research participants and collecting data to inform the research study meant that I was going to interact with women from the Nigerian communities.

Gaining access to a setting for research purposes can be time-consuming and challenging especially when dealing with the vulnerable groups in the community. It can also be affected by the researcher's relationship to the gatekeepers as well as ethical issues (Griffiths *et al.*, 2007). Fetterman (2000) reports that an introduction to the group by a member is the researcher's best ticket into the community and the trust that the group has towards that member will approximate to the trust it extends to the researcher at the beginning of the study. My insider and outsider identity meant that I might not need any introduction by a community member to some of the gatekeepers. However, it also determined whether the research participants and the gatekeepers would view me as an insider or outsider which could affect the quality of the outcome of the study.

It is worth mentioning that in the current research the gatekeepers included the midwives, the doctors and the Head of the department Obstetrics and Gynecology of the hospital where the participants can be access. In the light of this situation, I needed to take into consideration the way I portrayed myself in the research study and my everyday life as a female Nigerian. I was also aware that my positioning and the trust of participants might also affect the nature of the information that participants chose to share in the face-to-face interviews (Hayman, Wilkes and Jackson, 2012). For example, in the research if I am perceived as an insider, participants might have felt more at ease discussing their views with someone they perceived to be one of them who may share their views. Conversely, they might have felt uneasy about discussing sensitive issues with someone they know as a member of the community.

Given the close association and established links, an insider researcher may have easier access to the research participants particularly in the case of marginalised (Griffiths *et al.*, 2007). Being an insider under study, the insider researcher is usually viewed as being on an equal footing, minimising any power imbalance between the researcher and research participants. This may lead to the development of a good rapport enabling reciprocity between the researcher and the research participants (O'Connor, 2004). Conversely, insiders coming to research on sensitive issues among marginalised groups may be viewed with misgiving as trying to advance the agenda of the dominant group (Kusow, 2003).

Notwithstanding this challenge, I was determined not to fall into the set trap by careful selection of locations and critically question all the things going on. According to Dwyer and Buckle (2009), researchers doing research on their community will not see the taken for granted that only an outsider can look with an unbiased lens. I decided that a topic guide would be used as a basis for the design of the semi-structured interview guide for the interviews.

## **1.9 OVERVIEW OF CHAPTERS**

This thesis will be structured under the headings of The Silences Framework (TSF) (Serrant-Green, 2010). This thesis is divided into seven chapters. A summary of key elements of each chapter is given as follows.

### **Chapter 1: Introduction to the Research**

This chapter presents an introduction to the research as well as the background information of the study and identifies the research problem and theoretical background. The chapter

describes the aim and research questions, justification, contribution and a snippet of the research design, theoretical underpinning, The Silences Framework and researcher identity.

## **Chapter 2: Literature Review**

Chapter two presents the search strategy, research perspective, and conceptual framework. The chapter also describes Nigeria action on maternal mortality and all over the globe. The chapter also discussed the themes which include factors influencing maternal mortality.

## **Chapter 3: Research Design and Methodology**

Chapter three discusses the choice of method for collecting and analysing the data, the methodology of this study as well as the ethical requirements for the research. The chapter also presents the reflexivity and positionality and the research philosophy. The pragmatic research paradigm and its justification as the most appropriate approach to achieve the purpose of this study are discussed in this chapter.

## **Chapter 4: Results of the Quantitative of Data**

Chapter four presents the results of the quantitative analysis of the questionnaire study.

## **Chapter 5 Results of the Qualitative of Data**

Chapter Five presents the results of the individual interviews with the mothers.

## **Chapter 6 Discussion of Findings**

Chapter six discusses the results as they relate to present contemporary literature reviewed.

## **Chapter 7 Conclusion and Recommendations**

This is the last chapter of this thesis; it provides the overview of the study, the steps taken to achieve the research objectives of the study. The chapter also presents best practice framework developed as an outcome of the research findings. The chapter also highlights the contributions of this study to methodology and practical contributions. The chapter concludes with the limitations of the study and makes recommendations for further studies, medical practice and policy.

The next chapter presents the literature review for this study.

## **CHAPTER TWO – WORKING IN SILENCES (STAGE 1 OF THE SILENCES FRAMEWORK)**

### **2.0 INTRODUCTION**

This chapter provides literature search strategy, a review of literature related to present study done in Nigeria and elsewhere. It presents an overview of theories and discusses how it informs the proposed research study. Also, different factors influencing access to, and use of healthcare services by women will be critically explored and discussed in terms of themes, and sub-themes based on existing knowledge to highlight where the gaps are in knowledge.

### **2.1 SEARCH STRATEGY**

My interest in this research developed because of the debate around access to health services utilisation for women of reproductive age. This formed my basis for exploring the literature. A detailed search was conducted to locate the most up to date documented information on maternal health care services provision in Nigeria using computers to search available databases. The information on issues discussed herein was sought from journals, policy textbooks and in some cases ‘grey sources’. The search process entailed a methodical approach applying explicit procedures and reflective processes as suggested by Rumsey (2004) in identifying and reviewing articles. First, a preliminary search was performed to establish boundaries for this research. This assisted in defining both the breadth and depth of this study to retain the research within the defined topic. This preliminary phase relied chiefly on reviews of published works, to help narrow down the research problem. Secondly, a focused review was done using standard electronic databases such as **MEDLINE, CINAHL, WEB OF SCIENCE, EMBASE, PUBMED, GOOGLE SCHOLAR, PSYCINFO, SCOPUS, and SCIENCE DIRECT**. The databases outlined above were used in identifying studies that were eligible for inclusion in carrying out this study. Finally, using all available sources, studies that had a direct bearing on this work was identified. This is covered in the ‘grey search’ section which is discussed in Appendix IX.

Subsequently, and to establish rigour, already established and recognised standards were utilised to weigh all relevant materials collected as recommended by Lincoln and Guba (1985). Thus, a comprehensive critique, which involved validity, reliability and confirmability checks, was done using guidelines from the critical appraisal skills programme (Public Health Resource Unit, 2006). This process was performed to assess the literature



towards establishing that this study was done rigorously and the findings reached were credible. These studies considered relevant were searched thoroughly by combining different search terms (see Table 2.1). If the result of two combinations of terms were large, a third term was used to achieve a manageable number of studies. For example, numbers one and two combined from the next table; if the numbers of studies were large then number three was added.

**Table 2. 1: Search Terms Used in the Literature Strategy**

	Terms	Combined with
1	‘Access* or use* and healthcare or provision’ OR ‘Access* or use* and health services or health provision’	} AND
2.	‘Maternity* care OR ‘Child* healthcare services’	
3	‘Sub-Saharan Africa* OR ‘Developing Countries*’	
4.	‘Socioeconomic factors* OR ‘Factors affecting access to treatment*’	
5.	‘Health Policies*’	
6.	‘Obstetric Emergency*’	

Reference lists of articles were also searched to identify additional relevant articles/reports. As prominent authors in the field became apparent, author searches were undertaken. Manual searches of the electronic library catalogue of the University of Wolverhampton have been made. Strategies were developed, for example, using citation alerts to keep up to date with the new and emerging literature that would be relevant to the topic area.

### **2.1.1 Inclusion and Exclusion Criteria for the Studies**

The inclusion criteria for studies that were included in this study were those which focused on the aim of this research which can be found in chapter one of this thesis and met the following criteria:

- Access to healthcare,
- Maternal healthcare services
- Publications used for this study were studies and titles that were applicable to this study

- Studies which used quantitative, qualitative or mixed methods, because they are considered as high-quality studies
- Studies in English, published between 1990- 2017. However, other relevant materials, which did not fall within these years, were also included when they happened to be retrieved.

Articles excluded from this study were those with the following reasons:

- Studies that did not meet the above inclusion criteria,
- Not in English, due to my inability to read text written in any other languages.

If the article met the inclusion criteria, but was not empirical article such as report, audit, opinion article or narrative review article, then it was excluded from the critical appraisal process, however the researcher considered them if they were appropriate in the final discussion of findings and literature review. First, the titles and abstracts were reviewed and then an assessment of how the articles met the selection criteria was carried out. The abstracts that were not eligible were excluded. See (Appendix IX) for search strategy and summaries of the number of excluded and eligible (included) articles.

## **2.2 RESEARCH PERSPECTIVE**

The motivation to research this topic stems from the concern that although knowledge has been developing continuously for the past decades within the area of maternal health, and sound knowledge now exists on how to prevent most of the maternal deaths, there remains extremely high prevalence of maternal deaths in many countries, especially in sub-Saharan Africa. The fact that maternal mortality remains a risk factor despite several simple and inexpensive strategies put in place to improve maternal health shows that efforts have clearly not been to utilise the wealth of knowledge to improve maternal health in these countries (Nielsen, 2008). Evidence from many years of research on maternal health have created various results on the factors influencing maternal healthcare-seeking behaviour (Mojekwu and Ibekwe, 2012; Yar'zever and Said, 2013). To address maternal mortality and morbidity, most research emphasised more on the medical causes as opposed the sociocultural factors in society that play role in determining maternal health. To address this gap, this study adopted the theoretical frameworks therein, this study hopes to uncover how healthcare that is culturally-sensitive can be provided to women of reproductive age. Research consistently demonstrates that maternal health behaviour and health outcomes are mostly pitiable in the

developing countries, especially in sub-Saharan Africa and in Asia who are the main contributors of high maternal mortality rates. These regions are also known to have poor maternal healthcare-seeking behaviour (Fillipi *et al.*, 2006; Ogunlela, 2012; Oiyemhonlan, Udofia and Punguyire, 2013).

This poor healthcare-seeking behaviour by women of reproductive age led to the adoption of the ontological position that developing relevant maternity policies can help increase the use of skilled maternal health care services during pregnancy, labour, delivery and postpartum period leading to improvement in maternal morbidity and mortality rates. Knowledge and understanding of the factors affecting maternal health care service utilisation during pregnancy, labour, childbirth and the immediate postpartum period can be valuable in the efforts to increase skilled maternal health care use and encourage women to utilise the services. Therefore, epistemologically, the generation of knowledge about the reality and lived experience of women seeking care in health facilities would necessitate a pragmatic approach. This position informed the adoption of The Silences Framework and its theoretical underpinning (Serrant-Green, 2010).

The next section of this chapter discusses the model and theory in the field of public health that contribute to understanding variables and their interaction that affect health service utilisation. Theories and models can be applied to help to research questions about factors that are barriers to the utilisation of skilled delivery. Selected theory and model on decision making in health service utilisation are presented to describe women's feelings and experiences of maternal health service use to illustrate how different variables may influence health seeking behaviour.

### **2.3 THE SOCIO-ECOLOGICAL MODEL AND GENDER AND DEVELOPMENT THEORY**

For this research, the Socio-Ecological Model (SEM) and Gendered and Development (GAD) was utilised to identify factors that influence Nigerian women in their decision about utilising maternal healthcare services. The SEM of health service utilisation is the one mainly used to inform this study since this model addresses both individual and socio-ecological aspects influencing health service utilisation. Using a model may facilitate understanding of social issues (Davies and Macdowall, 2006). They may inform social issues in many ways, for example, by clarifying how society works, how organisations operate and why people interact in certain way (Reeves *et al.*, 2008). This section of the chapter discusses the importance of

these models in understanding social issues specifically as related to factors affecting utilisation of health services. Theories and models provide perspectives on complicated social issues from different angles in relation to health service utilisation. Bronfenbrenner (1979) stated that models also contribute to policies promoting health service use through increased education, knowledge and awareness of individuals and communities including effecting changes in people's attitudes, skills and behaviour. Using a model in relation to this study may not be able to address all the issues surrounding health service utilisation because multiple factors are interdependent in maternal health service utilisation. For example, the gender theory focuses on gender related issues affecting service utilisation. The SEM model covers the wide socio-economic environment including individual and community factors affecting health service utilisation. However, the SEM of health utilisation (Bronfenbrenner, 1994) and GAD (Connelly *et al.*, 2000) has been adopted for this research since this model describes the social, environmental, economic and gender issues influencing health seeking behaviour including maternal health care. These Theories are most relevant to this research study because health service utilisation is influenced by several individual, communities, socio-environmental factors and gender issues.

The gender and development theory is adopted for this study also because of the inequalities that exist between men and women. Reproductive health threats such as maternal mortality are unique to women, and as such they run the risk of not being properly dealt with due to the inferior position women have in many countries around the world in combination with an underrepresentation of women in higher policy circles. Nonetheless, its impact is felt by their families but it is the women who lost their lives in trying to bring another life. Hence, this explains the situation of women based on the position they occupy in the society. The socio-ecological model combined with the gender and development theory adopted for this study is on the realisation that maternal mortality is a complex issue that needs comprehensive strategies to tackle it, requires a collaborative effort as no one model can provide the "best" solution for designing, delivering, and/or evaluating effective maternal health prevention programmes. These models describe the unique social context in which women are embedded and how this context might impact healthcare utilisation. It also provides an overview of this model and discusses how it informs the proposed research study.

### **2.3.1 Socio-Ecological Model (SEM)**

The contribution of Bronfenbrenner span over 60 years, with some of the basic ideas of his ecological model traced back to a series of articles written in 1940s (Cairns and Cairns, 1995). However, by the 1970s, Bronfenbrenner began to overtly articulate his model for understanding human development as the ecology of human development or development in context (Bronfenbrenner, 1988). The idea that development was influenced by the environment was familiar and has a commonplace in science at the time according to Bronfenbrenner (1979). Bronfenbrenner (1979) conceptualised the settings and larger contexts in which the settings are embedded as a set of nested structures or systems, with the microsystem defined as a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular material characteristics at the innermost level. In subsequent writings, Bronfenbrenner points out that his earlier emphasis on the significance of the phenomenological nature of development neglected salient objective conditions and events occurring in the developing person's life. He highlights the significance of belief systems actualised in the behaviour of individuals as they interact, cope, confront, alter, and create the objective conditions and events in their lives. This shift in thinking is evident when Bronfenbrenner in 1979 adds to Thomas' dictum that 'if men define situations as real, they are real in their consequences' (Bronfenbrenner, 1979; p.23), a companion principle of real situations not perceived are also real in their consequences (Bronfenbrenner, 1988).

The SEM is useful for identifying multiple factors that influence an individual's behaviour. According to McLeroy *et al.* (1988: 355), authors of an Ecological Perspective on Health Promotion Programmes, "The importance of ecological models in the social sciences is that they view behaviour as being affected by, and affecting the social environment. Many of the models also divide the social environment into analytic levels that can be used to focus attention on different levels and types of social influences and to develop appropriate interventions. Thus, ecological models are systems models, but they differ from tradition systems of interest". McLeroy *et al.* (1988:10) states that 'individual behaviour both shapes and is shaped by the social environment'. McLeroy *et al.* (1988) delineated the ecological factors further by classifying them into the following levels: intrapersonal, interpersonal and community level. The intrapersonal level describes inherent factors in the individual like the knowledge, attitudes, beliefs and personality traits. Interpersonal factors include the influence of family, friends and peers in the attempt to provide social identity and role definition.

Lastly, the community influence is brought to bear through enforcing norms, rules and regulations as well as policies which can also be from the government.

Socio-ecological model can be conceptualised in different ways depending on the issues they are used to address. This model provides a framework for understanding a range of determinants of health-related behaviour and may be moulded and adapted to suite specific situations (Lounsbury and Mitchell, 2009). The SEM provides a set of conceptual and methodological principles, drawn largely from systems theory, for organising comprehensive, community-based and health promotion initiatives (Quinn, Thompson and Ott, 2005). Systems theory takes into consideration all possible sources of the problem and examines each individually and what role they play in the system. Systems theory describes human behaviour in terms of complex systems. It is premised on the idea that an effective system is based on individual needs, rewards, expectations, and attributes of the people living in the system. According to this theory, families, couples, and organisation members are directly involved in resolving a problem even if it is an individual issue (Mele, Pels and Polese, 2010).

Stokols (1996) in his study ‘translating socio-ecological model into guidelines for community health promotion’ outlined the core principles of the socio-ecological model of health promotion. Whilst adaptation may occur, the general principles remain the same. Social ecology acts as an overarching framework or set of theoretical principles, that assist researchers and practitioners to understand interrelations between a wide range of personal and environmental factors that impact human behaviour (Stokols, 1996). Socio-ecological approaches may also be used to promote utilisation of maternal health care services. In this respect, interventions or actions integrate person-focused efforts with the environment-focused efforts designed to modify and enhance both physical and social surroundings. This holistic approach allows entire community environments to be adapted to support the intended behaviour change. This present an opportunity for healthcare managers/policy makers, given that factors which facilitate or inhibit utilisation of health care services may be identified, allowing healthcare managers/policy makers to act strategically to enhance the supportiveness of the community environments and, thus encourage utilisation.

However, Bronfenbrenner’s work saw the influences on behaviour as a series of layers, where each layer had a resulting impact on the next level. He described these layers as being like a series of Russian dolls, where the innermost level represents the individual, which is

then surrounded by differing levels of environmental influences (Bronfenbrenner, 1994). Okoye (2016) reports that it is good to tailor the socio-ecological model to suit behaviours and population groups. For example, adolescents will perform different physical activities in different settings to older adults; therefore, intervention strategies would differ for each population. While the components of the SEM will remain the same and can be used in a range of populations, the specific examples within each component will vary depending on the population group (Elder *et al.*, 2007). Okoye however, suggested that other theories needed to be integrated into multilevel frameworks, but did not mention the theories that can be integrated into this multilevel framework. Ecological model specific to health promotion are multifaceted-targeting environmental, behavioural, and social policy changes that help individuals adopt healthy behaviours. Ecological models are unique in that they take into consideration the physical environment and its relationship to people at intrapersonal, organisational, community, and public policy levels. This perspective is based on the major philosophical construct of the model that behaviour does not occur in a vacuum but from the day-to-day interactions between people and their environments (Institute of Medicine, 2003; Quinn, Thompson and Ott, 2005). These interactions affect all individuals differently and guide the development of health beliefs and behaviours. For instance, women's attitudes to service utilisation, such as not needing to use skilled delivery care if their condition is 'normal' (Pradhan *et al.*, 2010).

Using the SEM, health promotion, and specifically maternal mortality prevention, is viewed not only from the individual perspective, but rather more broadly, as the individual is embedded in and influenced by numerous systems or groups. Whether an individual feel supported or neglected by these systems also impacts behaviour. Thus, if social organisations do not invest in the future of women, women will continue to suffer from pregnancy complications which may lead to maternal mortality (Brindis, Sattley and Mamo, 2005). Binder *et al.* (2013) characterise the "socio-ecological systems" as the most comprehensive concept for structuring research framework, because it allows analysis of two-way dynamics between social and ecological systems. The term ecology is derived from biological science and refers to the interrelationships between organisms and their environments (Sallis, Owen and Fisher, 2008).

Conceptualisations of the socio-ecological model may range from three to five layers, depending on the requirements of the situation or problem at hand. Generally, Stokols (1995) observes that the social ecological paradigm is rooted in certain core principles concerning

the interrelations among environmental conditions and human behaviour and wellbeing. Figure 2.1 displays a model representing a basic four-layered version of a socio-ecological model, including the categories individual factors, social environmental factors, physical environmental factors, and policy/regulatory factors to better understand the connection between environmental and social factors, and access to and utilisation of maternal health services (Bronfenbrenner,1994).

Although generally well received, Urie Bronfenbrenner's models have encountered some criticism throughout the years. Most criticism centre on the difficulties to empirically test the model and the broadness of the model that makes it challenging to intervene at any given level (Quinn, Thompson and Ott, 2005). Despite these criticisms, the SEM of health behaviour was important in the application of this model as it addresses these criticisms by providing a theoretical framework to understand environmental inter-related influences affecting individual's health related behaviours (Sallis, Bauman and Pratt, 2008).

Consequently, SEM calls for multilevel interventions that better incorporate social, institutional, and policy approaches to health promotion. Although its application at multilevel could be cumbersome, a major strength of the socio-ecological approach to health behaviour in this study is their focus on multiple levels of influence that broadens options for intervention. The application of the SEM to maternal health is appropriate where the emphasis lies in encouraging people to take greater responsibility for health-related decisions. This encouragement is facilitated through bottom-up and top-down approaches to deliver health behaviour change. The former involves the individuals and their communities understanding their behaviours and being empowered through alliances to change their behaviours (Oetzel, Ting-Toomey and Rinderle, 2006). For example, the importance of parents and schools in providing social support (Coker *et al.*, 2002) and positive opinion leaders, such as peers and spouses, in promoting good health. Dempsey *et al.* (2011) argue encapsulates the essential aspects of health promotion: empowerment, equity, inclusion, respect and social justice. In contrast, the top-down approach relies upon changes in policy and institutions to deliver behaviour change. Incorporating both these aspects appears to deliver effective health promotion campaigns (Jackson *et al.*, 2006).



### **2.3.1.1 Individual Sphere of Influence**

The first level to analyse is the individual level. The individual level is at the centre of the socio-ecological model. Some individual level factors that may influence access to and utilisation of maternal healthcare services include personal factors that increase or decrease the likelihood of an individual being able to make good decision to seek help. These factors include; knowledge, attitudes, behaviours, beliefs, perceived barriers and motivation. Others include age, sex, level of education, socioeconomic status, employment status, skills and self-efficacy (Stokols, 1995).

Since individuals exist in a social ecological system, changing individual-level behaviours and creating new social norms collectively requires creating a supportive and an enabling environment, that is, an environment that is conducive to and facilitate change and removes blockages that impede change at the household, community, organisational, and policy levels. Significant others are important influences in the decision to utilise health facility for skilled care for non-emergency care, and the timing of healthcare provider visits. For example, if a programme goal is to increase the number of women that have access to skilled maternal care, then both women and their family must understand what skilled care is and where such services can be access, why it is important to have skilled maternal care, have trust in the providers and in the maternal health care services programme, and be motivated to seek and demand such care.

Health facilities and/or community health workers must be trained in good interpersonal and communication skills and health counselling, and equipped to provide maternity care. The communities must embrace and own the importance of maternal and child survival, and create a social norm around reproductive health care services. Programme managers and planners should use the SEM Level 1 to understand the complexity of, and possible avenues for addressing the health problems, and to prioritise resources and interventions that addresses the multiple facets of the problem, remove bottlenecks, and create an enabling environment for sustained social and behavioural change (UNICEF, 2013). A SWOT analysis tool can be use to achieve this. SWOT analysis usually focuses on four key programme management areas: partnerships, capacity development, research, monitoring and evaluation, and resource mobilisation. The SWOT analysis will help to highlight both the internal organisational strengths and weaknesses, external opportunities, and the external threats or barriers to achieving the programme's goal and objectives.

### **2.3.1.2 Social Environment Sphere of Influence**

Surrounding the individual in the SEM is the social environment. This level examines the close relationships and influences that may directly affect the health behaviours that women develop. The people and environment in this level of the SEM tend to hold great importance of a people's life. The social environment encompasses the relationships, the culture and the society with whom the individual interacts. The social environment has a significant influence on the health behaviour. For example, having someone such as a peer, family member or work colleague with good health behaviour can impact on health care seeking behaviour (Institute of Medicine, 2003). Strategies which bring change at the social environment level include community education, support and workplace incentives. These are used to promote positive community attitudes and awareness to participation in healthy, behavioural change and peer counselling- but the theory of change is one of changing individuals, and the targets of the intervention include characteristics of the individual, such as knowledge, attitudes, skills, or intentions to comply with behavioural norms. This distinction between levels of intervention and the targets of interventions is an important one in understanding ecological strategies.

### **2.3.1.3 Physical Environment Sphere of Influence**

As public health advocates seek ways to tackle the maternal mortality rate, they have given increased attention to the role that the built environment plays in promoting physical activity and healthy eating behaviours (Rundel *et al.*, 2013). The neighbourhood built environment is comprised of buildings, roads and open spaces and can provide opportunities or barriers to health (Tappe *et al.*, 2013). The physical environment also includes natural factors such as geographical accessibility, perceived qualities of health care services; proximity to health facilities, land use, public transport and safety includes all determinants of whether women are able and permitted by their family and community to participate in outdoors activities (Giles-Corti *et al.*, 2009). The built environment of communities and neighbourhoods has been changing. These changes have resulted in increased traffic thereby reducing space for recreational and safe sidewalks and have impacted on women's physical activity (Giles-Corti *et al.*, 2009).

Strategies focusing on the physical environment usually should be put in place before educational or community awareness initiatives are attempted. Sometimes, community initiatives encourage impossible or unrealistic behaviour. For example, media campaigns on the importance of utilising maternal health care services will be ineffective in the communities where there are no facilities allowing easy access and safety to health facility. In

this situation, education and awareness programmes are more likely to be effective when preceded by programmes for the development of community facilities and promoting community safety (Sallis, Bauman and Pratt, 1998).

#### **2.3.1.4 Policy/Regulatory Sphere of Influence**

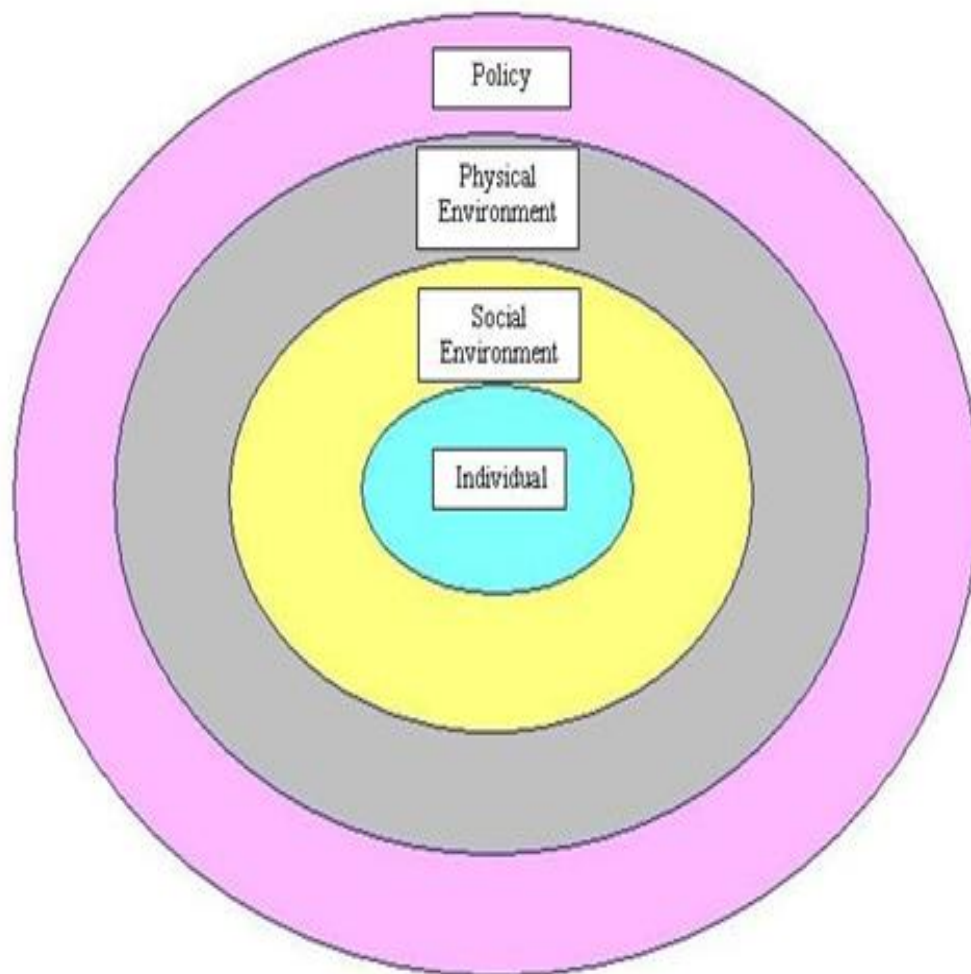
The broadest level of influence in the SEM is the policy/regulatory level. Policy refers to legislation, regulatory or policy making actions that have the potential to affect positive lifestyle (Victorian Curriculum and Assessment Authority (VCAA), 2010). This sphere includes interpreting and implementing existing policies at the local, state, and federal governments that regulate or support social/physical environment or individual behaviour, including protection of or attention to children and special populations. To reverse the maternal mortality rate (Brennan, Brownson, and Orleans, 2014) reported that numerous policy and environmental changes have been implemented to create healthier environments that promote healthy living for women. Many public and private institutions have devoted increased funds and resources to research to discover effective, sustainable, and cost-effective policy and environmental interventions that address this public health crisis. Policies that have the potential to benefit women and their children the most should focus on the availability of quality health care that promote or create obstacles to healthy behaviour or environmental/social change (Davison *et al.*, 2012). In addition, family support through promoting the benefits of women utilising maternal services is necessary in the fight against maternal mortality. Strategies to intervene include mass media campaigns, policy analysis, political change, and lobbying (Quinn, Thompson and Ott, 2005).

For instance, in recent years' improvement in communication and information about reproductive health and maternal health service utilisation in Nigeria through media and community awareness have led to an increase in positive perceptions of healthy life and health seeking behaviour (Babalola and Fatusi, 2009). Mass media campaigns as an indicator for progress for policy change include process measures such as the amount of content of educational outreach by concerned groups and documentation of consistent advocacy over time, as well as descriptions of the political climate of policy makers and their constituents. Changes can also result from interactions among individuals, organisations, and government.

As outlined in the SEM proposed by Bronfenbrenner (1994), healthfulness is a multifaceted phenomenon encompassing physical health, emotional well-being, and social cohesion. The model proposes that health is influenced by many factors beyond the individual level

emphasising that there are different external factors that affect health outcomes but that the dynamics of these factors jointly affect the health of community members. Therefore, it is most effective to influence health by coordinating across social ecological levels to achieve the desired behaviour change (Bronfenbrenner, 1994). The environment influences the health of its occupants and occupants' actions influence the community (Stokols, 1992). The model also uses system theory concepts, such as interdependence on one another, homeostasis, negative feedback, and deviation amplification, to understand the reciprocal interactions of people and their environment (Cannon, 1932; Stokols, 1992). System theory is the study of society as a complex arrangement of elements including individuals and their beliefs, as they relate to a whole (Gibson, Gregory and Robinson, 2005). If a community experiences interdependence, homeostasis maintains the interdependence, negative feedback regulates and limits variations in the environment and deviation amplification creates the mutual positive feedback in the environment to continue to magnify the interconnected and reciprocal relationships of the environment/ecology (Cannon, 1932).

In general, the primary aim of an ecological model is not to claim answers, but to provide a theoretical framework that, through its application, will lead to further progress in discovering the processes and conditions that shape human behaviour. Bronfenbrenner's model is suited to providing a framework for studying access to maternal health care services as it not only allows for individual attributes to be considered, but assumes that other environmental factors and influences will be considered as well as how they interact with the individual. Thus, it is important to look at factors in multiple levels and then decide on how best to implement effective interventions.



**Figure 2. 1: Social Ecological Model (Bronfenbrenner, 1994)**

### **2.3.2 Gender and Gevelopment (GAD)**

A look at the different theories on gender and development can also provide good basis for this study. The theory of gender and development is a social structural model that seeks to understand women's risk as a consequence of different social structures (Brindis, Sattley and Mamo, 2005). It argues that women's status in society is deeply affected by their material conditions of life and by their position in the national, regional, and global economies. Moreover, women's material conditions and patriarchal authority are both defined and maintained by the accepted norms and values that define women's and men's roles and duties in a society (Connelly *et al.*, 2000; Ansante-Sarpong, 2007). The GAD approach came about during the 1980s as an alternative feminist development approach to the 'women in development' (WID) and 'women and development' (WAD) approaches – as both

approaches failed to address the underlying factors that have structured and maintained gender inequalities, focusing instead on the biological differences between women and men as the basis of women's subordination. The consistent failure of development plans, which, in congruence to critiques about feminist theories, has led to intersection of international development with feminism to produce many approaches to addressing women's issues (Annan, 2005). These theories mostly try to explain the inequalities that exist between men and women when one considers their productive and reproductive activities. In different societies in Africa, the assumption is that women should be actively involved in reproductive activities than productive activities (Ansante-Sarpong, 2007). What this means is that in Black sub-Saharan Africa (BSSA) communities women are left to fulfil domestic chores and raising children as opposed to formal employment.

The WAD approach took a very different approach to enhancing women's needs in development, by creating women-only projects that focused on women's uniqueness, rather than attempting to integrate women's needs into a patriarchal world. The WAD also encountered the same criticism as the WID approach, as well as not being able to demonstrate that marginalising women-centered projects was beneficial for transforming gender inequalities (Annan, 2005). The GAD approach compensates for these limitations, as it is centered on the social construction of gender relations as the primary determining factor of women's position, as well as acknowledges the importance of the connection between gender, class, ethnicity, and other socially distinguishable characteristics that further shape the degree of oppression women face. The focus of GAD is on the social construction of gender role and gender relations. It is strongly believed that maternal health can, to some extent, be influenced by the role women themselves play in reproduction and production but also the social relations as determined by the society have a greater influence.

This approach emphasises the importance of examining gender division of labour in specific societies, particularly the invisible aspects of women's productive and reproductive work, and the relationship between these labour patterns and other aspects of gender inequality (Annan, 2005). Thus, while the WID approach focused on integrating women in development, GAD is for an equitable and sustainable development process that involves both men and women as decision-makers, by particularly empowering women and the disadvantaged and altering unequal relations in society. GAD acknowledges that development policies affect men and women differently, and perceives women not as recipients, but as agents of the development process (Connelly *et al.*, 2000). The GAD

concept, however, is not optimistic about this assumption. Women's weakness in socio-economic and political structures as well as their limited bargaining power puts them in a very disadvantageous position (Anann, 2005). One of the strategies suggested by the GAD approach is the self-organisation of women at the local, regional and national levels. The GAD concept suggests that the state can play an important role with respect to women's emancipation.

Young (1997) points out to the role of state can assume in its dual role as major employer and allocator of social capital. Putnam (1995) described social capital as the features of social life- networks, norms, and trust that enable participants to act together more effectively to pursue shared objectives. In its simplest term, social capital refers to social connections and the attendant norms of trust. This demand, however, seems to be contradictory due to women's poor representation and lack of decision-making power in the state apparatus. This is true for developing countries and for higher levels of policy making. Moreover, since the early 1980s the above-mentioned roles of the state in developing countries have been fading away because of structural adjustment programmes, privatisation, economic crisis, etc.

The criticism of the GAD concept concerns gender mainstreaming. One problem with the gender mainstreaming is that it is rather difficult to implement. The goal of integrating women in all spheres and at all levels of the society is not an easy task. Gender mainstreaming implies a major institutional change in all areas and levels of public sphere. However, women's inferior position in the hierarchy of all social structures (including the state), male dominance and resistance, and a generally hostile environment constitute serious obstacles for gender mainstreaming. Arnfred (2001) argues that fighting for gender mainstreaming involves the risk of diverting the attention of the feminist struggle from the overall impossibility of the task:

“It might be more useful to realise that feminist visions regarding mainstreaming as a tool for changing gender power relations, do not match the reality of governments and development institutions. Feminists have to realise that states are institutions where male privileges are deeply embedded” (Arnfred, 2001; p.82-83).

This study could have adopted a feminist approach however a broader theoretical approach of the silences framework was used. The concept of screaming silences includes aspects of feminism and ethnicity-based approaches. I do not agree with Arnfred that feminist only project is impossible. Feminist only project is achievable if broad processes of change are

made, particularly at policy and institutional level (Cerna, 2013). The structures and practices that perpetuate inequalities of all kinds must be resolved through relations between women and men, particularly with regard to the division of labour, access to and control over resources, and potential for decision-making. Gender mainstreaming in research seeks to ensure that gender issues are taken into consideration in planning the overall research agenda as well as in formulating specific projects. The research agenda is important because choices made at this stage shape the opportunities available at the implementation stage.

Strategies proposed by the GAD approach include identifying and addressing practical needs and strategic interests for both improving the condition of women and ultimately transforming structures of subordination that determine their position (Nielsen, 2008).

Aina (2012) stated that GAD approach uses a multi-dimensional approach to ‘women empowerment’, whereby women’s empowerment goes beyond changing women socio-economic conditions, to changing the system which continues to reproduce gender inequality in societies. The approach goes beyond women issues, to ways society assign roles, responsibilities and expectations to both women and men (Aina, 2012). However, it draws a distinction between “women’s interests”, which are purely biologically determined (assuming homogeneity) and “gender interests”, which are socially constructed and can be divided into practical and strategic gender interests (Connelly *et al.*, 2000). Practical needs are easily identified by women as essentials for daily life, such as food, housing and safety, and are specific to the situation in which women find themselves (Adenike, 2013).

Addressing them can improve their immediate condition, but do not have an impact on the roots of the cause for them being in that situation in the first place (Nielsen, 2008). Strategic gender interests concern the factors causing women’s subordinate position in society, and changing these requires changing the socially constructed structures that characterise women’s position (Connelly *et al.*, 2000). Strategic interests relate to vulnerable and disadvantaged positions in society that perhaps all women experience compared to men, but with varying degrees dependent on the number of other socially distinguishing characteristics, they are associated with (Adenike, 2013). Only gender interests therefore concern GAD, because they acknowledge the possibility of women’s interests being determined by other characteristics (Moser, 1993).

Gender and health are related through multiple pathways (Fikree and Pasha, 2004). Gender roles and norms and the gender based division of labour interrelate with education,



employment status, income, culture, household position, age and physical and social environments (Furuta and Salway, 2006; Pradhan *et al.*, 2010). Gender related issues, such as young women's lack of opportunity to discuss pregnancy related matters within the family, low educational status and shyness or shame, lack of pregnancy related knowledge and women's lack of autonomy over resources are important factors in health seeking behaviour (Furuta and Salway, 2006; Pradhan *et al.*, 2010; Kululanga *et al.*, 2012). It is widely accepted that increased gender equality is a prerequisite for achieving improvements in health service utilisation (Fikree and Pasha, 2004). Male societal dominance may serve as a disincentive factor to seeking care for some women as male dominance influence women's reproductive and healthcare choices (Bellows *et al.*, 2015).

In most African countries women have a lower position than men in society and they are socially, culturally and economically dependent on men. Men are largely influential in decisions regarding health seeking behaviour (Nielsen, 2008). In Nigeria, past research in maternal health service utilisation has suggested that gender roles play a significant part in decisions regarding health seeking behaviour (Adeusi, Adekeye and Ebere, 2014). Nussbaum (2000) suggested that gender inequality is the most important barrier to development of health promotion programmes. The author further stated that women's full potentials are undermined due to the unequal power between men and women and its effect on social, political and economic opportunities in a household, in a community and at national and global levels. A study on determinant of use of maternal health services (Babalola and Fatusi, 2009) in Nigeria has shown that there is a direct link between gender roles and women's status in the family and community in decisions to use health services. Pokhrel *et al.* (2005) suggest strongly that gender bias, for example women's low status in the family and community, is responsible for determining health seeking behaviour. Moreover, in many cultures being pregnant is considered as a shameful stage rather than as a joy of giving a new life which also influences seeking health care. In many cultures not involving male members and relatives in pregnancy and childbirth related matters, delays decisions and influence health seeking behaviour (Mumtaz and Salway, 2007).

Societies dominated by patriarchal structures pose a great barrier to women's empowerment. The structural relationships of power between males and females, where men hold the superior position cause a loss of freedom for women and may also increase the risk of violence against women (Bunch, 1990). According to Einspahr (2010) patriarchy is a structure of domination, where the relationship between men and women need to be

considered in terms of their relative position as members of a group. Thus, power relations and domination focuses on the ability of some groups to systematically interfere in the lives of other groups, whether such power is exercised by all individuals so capable. It is therefore important to recognise the differences between women and the intersections like class, race and age when discussing their role in a patriarchal society. Not all women are oppressed by men and some women have power over other women, or over men.

However, as members of a group women face greater interference in their lives by men, compared to the ability women must interfere in the lives of men. The individual woman may not face subordination by an individual male but nevertheless the freedom of women is hindered by the systematic domination by men in society. Men take the role as decision makers in virtually every aspect of life, even issues concerning reproductive health and the female body. By denying women the right to control their own body, society restricts their access to basic needs that might risk their health as well as that of their children (Mirembe and Davies, 2001).

Therefore, using gender analysis frameworks, the GAD approach helps to uncover implications of gender relations in productive, reproductive, and community management roles (Aina, 2012). These interests can then be translated into various needs when planning gender policies in developing countries, which become the means by which interests are achieved, distinguishing between the goals and tools of gender planning (Nielsen, 2008). For women to promote their strategic interests, practical needs must first be satisfied. Achieving practical interests requires that all women are given the access and capability to getting their needs met, which means considering the different conditions women find themselves in and removing the barriers that stand in their way (Payne, 2009). This will in effect improve the condition of their lives, but will not affect the factors causing their position, which is when strategic interests need addressing, by identifying both the practical and strategic gender interests for maternal health in Nigeria.

### **2.3.3 How the SF Links and Support the use of SEM and GAD**

The Silences Framework (SF) in **Figure 1.1** seeks to acknowledge and redress the balance of power relating to ‘what and whose’ experience counts in a research (Serrant-Green, 2010). In this context, it is the aim of this research to arrive at what constitutes barriers about access to maternal healthcare services from the lived experience of the study participants. The silences framework is considered appropriate for this research work as it acknowledges and seeks to

give voice to the experiences, subjects and issues which are often hidden, devalued or ‘silenced’ in research, silent from policy discourse and marginalised from practice (Serrant-Green, 2010).

The SF links and supports the use of the GAD and SEM because, SF seeks to explore areas of research which are under-researched or politically undervalued, absent or invisible (Serrant-Green, 2010), which indeed is the case with women of reproductive age in Nigeria. The SF is associated with the concept of marginal discourses. Marginal discourses are labelled as such as they are less prioritised by policy and frequently positioned as being far removed from what society considers to be ‘normal’ (Eshareturi *et al.*, 2015). The individual behaviour relevant to health is seen to be embedded and formed by aspects of everyday life, social relationships, and material resources. GAD approach argues that women’s status in society is deeply affected by their maternal conditions of life and by their position in the national, regional, and global economies (Nielsen, 2008). Both men and women create, and maintain society and shape the division of labour. However, they benefit and suffer unequally. Although interventions may target men, women should receive greater focus because they have been disadvantaged. It also recognises that women and men are socialised differently and often function in different spheres. Socialising women into accepting the “housewife” role as the only possible/acceptable role for women. Indeed, it was the only way to be a woman while socialising men to believe they were superior (Bauman and May, 2001). Women have a quadruple role (reproductive and domestic, productive and community work) whereas men usually assume a double role in most societies. Policy of a practical nature should assist women in the fulfilment of their roles, or at least should not make such fulfilment more difficulty. The GAD approaches stress that both men and women should be equally involved in identifying problems and solutions if the well-being of the community is to be served. The GAD approach thus strives to identify and address the practical gender needs of both men and women as well as identify and address their longer term strategic needs (Adenike, 2013).

Against this premise, GAD attempts to address inequality as a by-product of gender construct. GAD links the relations of production with the relations of reproduction, taking challenges and responsibilities of women’s lives into account (Adenike, 2013). GAD also recognises that development is a complex social issue and advocates of this approach stated this paradigm takes a holistic approach, exploring the totality of social organisation, economic and political life to understand the shaping of aspects of society (Annan, 2005).

Specific health-related behaviours are the product of the interaction between individuals and social structures, and health promotion strategies aiming to reduce variations in health must address the complexity and diversity inherent in socio-cultural setting of maternal health. Whereas, the socio-ecological models are useful because they can also incorporate constructs from theories and models that focus on social, cultural and organisational levels of influence to provide a comprehensive framework for integrating multiple theories, along with considerations of environments and policy in the broader arena.

The SF supports and is linked to the SEM and GAD approaches in the above-mentioned ways. These approaches can explain this research study because, maternal health issues can better be explained with the consideration of the roles regarding reproductive lives and some values, customs and other institutional arrangement in the society that may influence maternal health complications. Furthermore, SF has no one method of choice for conducting research. Again, both SEM and GAD advocate for holistic approach for investigating maternal health which is in line with TSF.

#### **2.3.4 Application of the socio-Ecological Model Combined with the Gender and Development Theory to Maternal Health Care Utilisation**

The following review of literature centres on the divergent factors influencing access to maternal health care services. In sub-Saharan African countries, especially Nigeria, several factors contributing to the use of maternal and child health care services have been proposed and this could be impacted by factors such as geographical regions, educational backgrounds, religions, culture, and socioeconomic status (Mekonnen and Mekonnen, 2002; Afari, 2015). The causes of delay in decision-making to seek treatment are multifactorial and these include the individual, social and physical environment and policies. These model and theory on maternal healthcare utilisation have been used as theoretical frameworks in past studies focusing on maternal health care utilisation (Sherman, Gielen and McDonnell, 2000). However, these has also been used in other areas, such as construction of gender in media coverage of male compared to female tennis players (Vincent, 2004) and the exploitation of women in lawn bowling (Boyle and Mckay, 1995). The application of these models illustrates the mechanisms that negatively affect women's health by making them vulnerable to maternal morbidities and mortality. The socio-ecological model and gender and development theory to maternal health care utilisation is used as the foundation for this study.

Although, the Socio-ecological framework of behaviour change is rooted and mostly applied in public health practice, its application in the construction industry practice has also been reported. Okoye (2016) applied the principles of socio-ecological model in developing a safety performance in Nigeria construction industry. When the data collected through questionnaires distributed to the construction workers were statistically analysed using Pearson Product Moment correlation, the study found that safety behaviour intervention factors were positively correlated with safety performance. Although the findings of Okoye study were found to be statistically significant, the attrition rate was found to be high which can introduce bias into the study findings. Again, the use of Likert scale kind of questions might have forced the participants to give answers that are not a true reflection of their views.

## **2.4 GLOBAL ACTION/TRENDS IN THE UTILISATION ON MATERNAL HEALTH CARE SERVICES**

Maternal and child health are both indicators to society's level of development as well as to the performance of the health care delivery system (WHO, 2008). The world leaders have put increased attention on the problems of maternal mortality over the past two decades while simultaneously intensifying initiatives to alleviate the number of maternal deaths in the world. Maternal mortality remains major global public health concern more than twenty years after the international Safe Motherhood Initiative was launched, particularly in sub-Saharan Africa (SSA). Awareness on maternal mortality began to be more serious in the 1980's but more precisely 1985 when Rosenfield and Maine published a thought-provoking article in the *Lancet* (Senah, 2003). In their article titled 'Maternal Mortality ---- a neglected tragedy --- where is the M in MCH?' Rosenfield and Maine warned the world of the fact that many countries were neglecting this important problem and that existing programmes were unlikely to reduce the maternal mortality rates (Senah, 2003). Immediately after this awareness, many authors went out to find out more. Harrison (1985) analysis of 22,774 consecutive hospital births in Zaria found that mortality was associated with childbirth. This was followed by the World Health Organisation's (1986) publication, 'Maternal Mortality: helping women off the road to death'. Maternal health outcomes are a key indicator of societal development where low maternal mortality translates to better social services and higher rates of development (WHO, 2009).

Nevertheless, there is an increasing imbalance among maternal health outcomes between developed and developing nations creating vast inequalities in health outcomes (WHO,

2009). Annually, 260,000 women die worldwide during pregnancy, childbirth and the immediate postpartum period; with most of these deaths occurring in developing countries, with sub-Saharan Africa alone accounting for 236,000 of these deaths (WHO, 2012) representing globally the highest regional maternal mortality rate. Studies from World Health Organisation (WHO) data and other international organisations (such as UNFPA, IAG) indicate that most maternal deaths in SSA are related to direct obstetric complications that occur around the time of childbirth, such as haemorrhage, hypertension, or obstructed labour (Khan *et al.*, 2006) as shown in Figure 2.2.

To alleviate these problems in low resource countries, particularly countries in the SSA, it is widely recognised that access to skilled delivery care at health facilities is key to reducing maternal and perinatal mortality and morbidity (Meda *et al.*, 2008; WHO, 2009). Senah (2003) assert regardless of continued high-level political and organisational commitments, maternal mortality remains as one of the greatest challenges facing the developing world, as well as a tragedy that has often been neglected or compromised. To these authors, the improvement on maternal mortality reduction target has been too slow to reach the set goal, a sad reality that many views as one of the most awkward display of health and social systems failure.

Many scholars argued that this is due to the infamously difficult means of measuring accurately the maternal levels in developing countries (Senah, 2003). A country measurement of the maternal mortality ration id further suffered from under reporting and variance in methodologies. United Nations Economic and Social Commission for Asia and The Pacific (2008) reports that although comprehensive and accurate estimate of MMR requires systematic vital registration, longitudinal studies of pregnant women and household surveys, the vital registration system is Nepal has limited coverage while national level survey especially focusing on estimating maternal mortality does not exist. Major and important reports, such as MDG Progress Report and Human Development Report are accused of using various sources of data having different sample size and methodologies to compare MMR data over a period (United Nations Economic and Social Commission for Asia and The Pacific (UNESCAP), 2008). Maternal health has emerged as global priority because of a great gap in the status of mother's wellbeing between the rich and the poor countries.

Senah (2003) reports that this disparity becomes even more frightening when cross-country comparisons of the lifetime risk are considered. For instance, out of 1 in 47,600 in Ireland,

there is 1 in 7 in Niger women dying in pregnancy or from childbirth. Filippi *et al.* (2006) further pointed out that the world's stipulated 500,000 and over maternal deaths but that is just the tip of the iceberg, as many more women are estimated to suffer pregnancy-related illness (9.5 million), near-miss events (1.4 million), and other potentially devastating consequences after birth (Filippi *et al.*, 2006).

Accordingly, the World Health Organisation has provided a summary of three critical factors underlying maternal deaths (Kunst and Houweling, 2001; Sari, 2009). The first of these vital causes of maternal death in the world is lack of access and utilisation of essential obstetric services. WHO reported that there is a negative association between maternal mortality rates and maternal health care utilisation. Its estimates suggest that 88 to 98 percent of all pregnancy-related deaths are avoidable if all women would have access to effective reproductive health care services (Kunst and Houweling, 2001). The report indicate low status of women can limit their access to economic resources and basic education, the impact is that they have limited ability to make decisions, including a decision related to their health. Sorosh (2009) added that families with lower income do not seek care until complications become severe.

A quantitative study carried out in Peru on the effects of education on utilisation of maternal health care services shows that there is a strong positive relationship between education and the use of maternal health care services (Elo, 1992). A woman's autonomy or level of independence in decision making is important in explaining utilisation of maternal and child health care services. Urban residence and husband's education have all been found to have a positive relationship to antenatal care utilisation (Dairo and Owoyokun, 2010). A cross sectional study in India by Jat, Ng and San Sabastian (2011) on the factors affecting the use of maternal health services in Madhya Pradesh state found that women delivering at young ages were more likely to use antenatal care, receive skilled attendance at delivery and use postnatal care services. Women in urban areas tended to use maternal health care services more than those living in the rural areas. The levels of skilled attendant at delivery and post-natal care decreased steadily with increased birth order. It was also found that an increase in the education of the mother enhances the use of the three indicators of the use of maternal health services namely prenatal care, delivery care, and postnatal care. Finally, child parity seemed to affect the use of skilled attendant at delivery and post-natal care.

Another study by Mondal (2009) carried out in Bangladesh found out that the level of education (both wife and husband) increased the likelihood of seeking help from a qualified medical professional. Women who reside in urban areas had a higher odd of seeking medical assistance than those in rural areas. Muslims women are less likely to have their delivery assisted by a medically trained person probably because of their conservatism and religious taboos. Women from families with a high socio-economic status are more likely to receive treatment from a doctor or nurse. Kalule-Sabiti, Amoateng and Ngake (2014) found that women in unions have been found to have an increased likelihood to seek maternal health care services compared to unmarried ones.

From the above studies, we can be able to deduce that socio-economic status as indicated by level of education (both wife and husband), place of residence and religion increase the probability that women of reproductive age will utilise maternal health care services. Interestingly though, no study has focused on whether the attitude of health care providers towards the patients affects maternal health care utilisation. Additionally, no study has focused on the attitude of the health care practitioners towards their work and utilisation of maternal healthcare services by pregnant women. It is within the confines of this study therefore to find out whether the attitude of health care providers towards their work and patients determines utilisation of maternal health care services.

## **2.5 MATERNAL HEALTH CARE UTILISATION IN AFRICAN**

Access to maternal healthcare services translate into the affordability, physical accessibility and acceptability of maternal health care services (Gulliford *et al.*, 2002). Poor access to maternal healthcare services is usually associated with socio-economic and geographical barriers faced by mothers while accessing maternal healthcare services (Danforth *et al.*, 2009). According to Afari (2015), there is a huge rural-urban divide in health care services utilisation. A study conducted in Ghana on improving emergency obstetric referrals revealed that most healthcare providers would rather want to practice in urban areas and that incentives may have to be used to attract healthcare providers to work in the rural areas (Afari, 2015). However, efforts to expand and make healthcare services accessible to pregnant women have been made, but many women irrespective of their geographical setting, still do not have access to emergency obstetric care (Oiyemhonlan, Udofia and Punguyire, 2013).



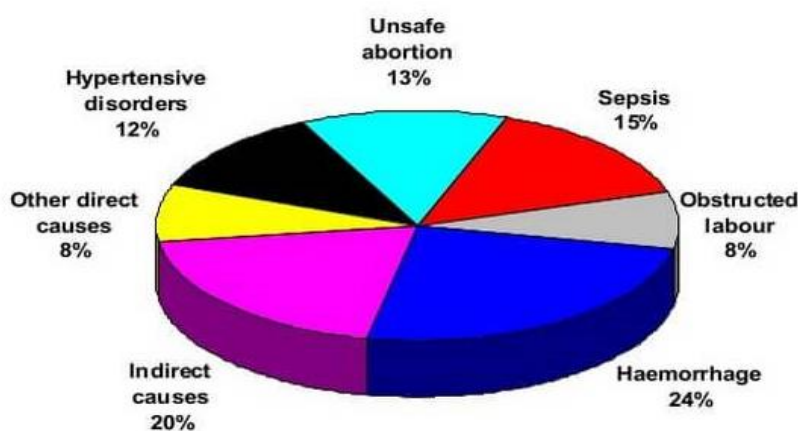
Several factors in the developing countries influence maternal mortality. These include family and societal factors such as poverty, inequality and poor attitude towards women and their health, cultural/traditional practices that prevent women from seeking delivery or post-partum care (UNICEF, 2008). Poverty has been identified as a major barrier to human development. It makes standard healthcare unaffordable (Bolatito, 2007). A woman classified as poor, cannot afford adequate nutrition in pregnancy, thus, she becomes malnourished. Nevertheless, Loudou (2000) has argued that poverty and the associated malnutrition play only a little part in determining the rate of maternal mortality. He states that lack of adequate obstetric service is a major determinant of maternal mortality. However, poverty and the lack of services are not the only significant reasons. Again, inequity and poor attitude towards women is a significant precursor of maternal mortality. Discrimination against girls, often resulting from son preference, endangers the health and well-being of women (United Nations, 1995).

A study carried out in Ethiopia on the utilisation of maternal health care services found out that there was low coverage of maternity service in the country. The place of residence, woman's education, marital status, religion, parity and number of children under five years were found to have an important influence on utilisation of maternal health services by women of reproductive ages. There was high level of utilisation of maternal health services among urban women compared with their rural counterparts (Mekonnen and Mekonnen, 2002). Additionally, married women were observed to be more likely to use antenatal care than their unmarried counterparts. Religion was also found to be an important predictor of antenatal care utilisation. Among urban women, utilisation of antenatal care is higher for those with two or more children than for those with one child. On the other hand, utilisation of delivery care services is lower for those with two or more children than those with one child (Mekonnen and Mekonnen, 2002).

In another study carried out in Ethiopia on factors influencing the use of maternal health care services, it was found that education of women determines use of antenatal care in that utilisation increased with education level. Religion also affects use of antenatal care in that those who followed orthodox, muslims and protestant religions exhibited comparable and higher use of antenatal care than those who followed traditional beliefs. Marital status and religion also had an impact in determining the use of antenatal care (Mekonnen and Mekonnen, 2002; Mekonnen and Mekonnen, 2003).

A qualitative study carried out in rural Gambia on access to emergency obstetric care found that structural factors in maternal health care provision discourage women from seeking care. For instance, where pre-natal care was provided on specific days in each community during week days, it hinders other people from attending. There may exist difficulties in transportation, such as poor condition of the road, lack of readily available transport, inadequate means of transportation, poor provider attitude towards patients, fear of punishment by health care providers based on previous experiences or just gossip can lead to delays in the decision-making process of visiting a health facility by patients (Cham, Sundby and Vangen, 2005).

A study carried out on the utilisation of antenatal care services in a Nigerian teaching hospital found that over two fifths (47%) of the women started attending antenatal clinic only in the third trimester of the pregnancy period even though antenatal care services in the state hospital that the study was carried out was offered free of charge (Peltzer and Ajegbomogun, 2005). In another study conducted in Nigeria, the use of maternal health services was significantly related to the level of maternal education, maternal age and marital status. Higher use was positively related to knowledge of where the Primary Health Care (PHC) service was located. Respondents with more than 4 children underutilised available maternal health services and utilisation of maternal health services by respondents was significantly related to satisfaction with quality of services received (Ebuehi, Roberts and Inem., 2006). Women’s and husband’s education and place of residence have strong positive associations with health care utilisation (Woldemicael, 2007).



**Figure 2.2: Common causes of Maternal Mortality in the African Region (Khan *et al.*, 2006)**

## **2.6 NIGERIA ACTION ON MATERNAL MORTALITY**

As already mentioned earlier, Nigeria has the second highest number of maternal mortality in the world (WHO, 2008). Several studies have shown high national maternal mortality levels, large urban-rural variations across geographic regions. The severity of this problem is more in the northern states (FMOH, 2001). This may be attributed to cultural practice which restricts women from seeking maternity care unless permitted by their husbands. In such a situation, permission may only be granted when severe complications develop. A study gave an estimate of MMR of 704 per 100,000 live births in the north. It was also found that the mortality ratio was higher in the rural areas (828 per 100,000) than in the urban areas (531 per 100,000). This probably because rural dwellers have limited access to skilled attendants and emergency obstetric care (Federal Office of Statistics and UNICEF, 1999). Although efforts have been made in the past aimed at reducing maternal mortality in Nigeria, such efforts, especially by the federal and state governments, have generally not proved very successful in achieving the desired results.

Shiffman and Okonofua (2007) noted that the high maternal mortality in the country will have to be tackled by generating sufficient political priority to make governments deploy enough resources to successfully reduce maternal mortality in Nigeria. National policies and strategies include the 1988 National Health Policy and strategy to Achieve health for all Nigerians, which was Nigeria's first comprehensive health policy (Mojekwu and Ibekwe, 2012). The 2004 Revised National Health Policy replaced the 1988 National Health Policy. Reproductive Health Policies include Nigeria's National Reproductive Health Policy and Strategy of 2001 (Federal Ministry of Health Abuja, 2008), the Integrated Maternal, New-born and Child Health Strategy in 2007 and the National Millennium Development Goals Report in 2004.

However, some promising results have recently begun to be recorded through some policy initiatives by few state governments. For example, in Anambra state, the state house of assembly approved a bill in 2005, guaranteeing free maternal health services to pregnant women (Mojekwu and Ibekwe, 2012). In Kano state, the state government included in its budget a line item for free maternal health services. The former state commissioner of health together with a senior obstetrician and gynaecologist, played central roles in creating this positive environment for maternal health. Also, in Jigawa state, state and local budgets have provided funds for the upgrading of obstetric care facilities in hospitals, the recruitment of

obstetricians and gynaecologists and the provision of ambulances at the local level to transport pregnant women experiencing delivery complications to health facilities (Shiffman and Okonofua, 2007). A common trend to these initiatives is that they were backed in each case by a state commissioner of health who obtained political commitment from the governor, state assembly and other relevant government officials, thus leading credence to the view that the battle to combat high maternal mortality is not just a medical or technical matter but rather requires high level of political commitment.

Again, another thing that is common to these initiatives is the attempt to introduce free maternal care, usually through user-fee waivers. Nevertheless, these policies mostly do not seem to be sufficiently planned for and are thus unsustainable. The main challenge to the introduction and implementation of user-fee waivers is the provision of adequate number of skilled healthcare personnel to handle the huge influx of pregnant women who come to avail themselves of the free maternal care services. Also, large amount of medicines is used up in very short periods of time. Hence, there is need for adequate planning before the introduction of user-fee waivers.

Nigeria is among the countries with the highest maternal mortality rates due to its poor health indicators with 54.5 years' life expectancy at birth (Bassey *et al.*, 2016). One of Nigeria's greatest challenges is that infrastructural development and economic prosperity is disproportionately shared amongst the population (IMF, 2012). The Nigerian health system has been plagued by problems of service quality, including unfriendly staff attitudes to women, inadequate skills, decaying infrastructures, and chronic shortages of essential drugs. The World Health Organisation in 2000 ranked the performance of Nigeria's healthcare system 187<sup>th</sup> among 191 United Nations member states. Mojekwu and Ibekwe (2012) estimated that in Nigeria, more than 70 percent of maternal deaths could be attributed to haemorrhage, infection, unsafe abortion, hypertensive disease of pregnancy and obstructed labour. Also, poor access to and utilisation of quality reproductive health services contribute significantly to the high maternal mortality level in the country. Factors given for poor access to and utilisation of health care services among Nigerian women is reported to be due to poverty, distance, education, and cost of treatment and negative cultural practices (Babalola and Fatusi, 2009). Many pregnant women in Nigeria do not receive the care they need either because there are no services where they live, or they cannot afford the services because they are too expensive or reaching them is too costly. Some women do not use services because

they do not like how care is provided or because the health services are not delivering high-quality care.

In addition, cultural beliefs or a woman's low status in society can prevent a pregnant woman from getting the care she needs. Studies have consistently show that social network effects on health care decisions, especially in developing countries where people acquire information through the informal sources and cultural values and norms plays a vital role in decision-making (Mukong and Burns, 2015). Again, in terms of norms, individual preferences may be influenced directly through views and indirectly through societal pressure. It is reported that individuals whose neighbourhoods are healthier are more likely to report better health outcome and lower exposure to diseases, while much is not known regarding the health care use effects on social networks (Ludwig, Duncan and Hirschfield, 2001; Mukong and Burns, 2015).

Hitherto, confidence on networks to use maternal health care services reduces patients' uncertainty about the actions of the health care providers, thereby improves patient and provider's relationship, and may also enhance provider's loyalty, and hence service satisfaction (Mukong and Burns, 2015). Inegbenebor (2014) stated that one of the major concerns of women is abject poverty. Due to the socioeconomic status of most Nigerian women, poverty continues to be widespread among women in Nigeria. Where a woman is not educated and unskilled, she must depend on her husband for all her needs (this include health care cost), thus encouraging financial slavery in which she has no say over anything that is financially attainable (Inegbenebor, 2014).

## **2.7 WOMEN'S HEALTH**

Current literature recognises that the importance of the processes which may determine our health and the interconnected nature of people's complex lives and contextualises biological health in its social, economic, cultural and psychological dimensions (Institute of Medicine, 2003). The 'life span' approach acknowledges human health and illness as an accumulation of conditions that begin early in life and sometimes even before birth, and recognises these as dynamic and on a continuum of risk over the entire course of a lifetime (Nielsen, 2008). Health, as such, is the sum of genetic determinism and a combination of physiological, psychological and environmental factors.

The term "women's health" usually signifies reproductive functions and, women's ability to produce and nurture children. According to the dominant medical theories, the female

reproductive organs were not only central to women's reproductive capacity but also controlled women's overall physical and mental condition (Weisman, 1997). Women's health movement of the 1960s and 1970s provided the first major challenge to the medical profession's view of women's health, and provided the basis for extending women's health concerns beyond reproduction (Ruzek, 1993).

The impediments to improving women's health/status in the developing countries are negative cultural practices targeted at women. These negative practices include division of labour according to gender role to the preference for male children over female children and with boys receiving more nutrients and larger portion of food than girls, boys are breast-fed longer and are given more solid foods after weaning than girls (Afaf and Ferial, 1997). Therefore, even when it is noticeable that women's health needs are greater than those of men, women may not utilise health care services for their health needs if they cannot access or if the health care services do not satisfactorily care for their health needs. Increased energy needs and deficient caloric intake affects girls' weights and heights. Many of these girls start their reproductive lives early, which drain more of their energy reserves, resulting to pregnancy-related complications. These nutritionally deficient women give birth to children with low birth weight, to start the vicious cycle again (Afaf and Ferial, 1997).

These factors condition women's reproductive intentions; that is, the number of children they want and how they want their births spaced. Women do not always get the support they need to fulfil their reproductive purposes. There is an increasing focus on health and health maintenance in today's western societies (Widmark, 2008). But the reverse is the case in the developing countries as there is a lack of health research prioritising on women. In these regards, it becomes evident that women are suffering from maternal mortality in developing countries, not because effective measures are too expensive or do not exist, but because structural forces are preventing poor women from accessing the services they require for optimal maternal health. As only women can suffer the direct effect of maternal mortality, it seems feasible to infer that ignoring maternal health in developing countries is discriminating against poor women, as their rights to life and optimal health are undervalued. It therefore seems evident that not prioritising on women's health by investing in research is a pertinent factor influencing the uneven global prevalence of maternal mortality, as societal structures appear to determine the level of vulnerability of suffering pregnant women face.

However, the challenges are how to deliver services and scale up interventions, particularly to those who are vulnerable, hard to reach, marginalised and excluded (Islam, 2007). This means structural factors need to be overcome to ensure equal access for all women to maternal health care, so that women are not excluded from necessary services based on their social characteristics.

## **2.8 ACCESS TO HEALTHCARE SERVICES**

The concept of access to healthcare services is complicated and as such an acceptable definition for access becomes difficult. Both access and utilisation have been used by many researchers to mean one and the same thing (Holmes and Kennedy, 2010). Access is the opportunities or the ability to secure a specified range of services at a specified level of quality (Holmes and Kennedy, 2010). While utilisation is the manifestation of these opportunities, differences in utilisation could be either for acceptable reasons such as personal preferences or unacceptable reasons such as information about service availability, direct costs such as user charges or indirect costs such as transportation and loss of wages (Allin *et al.*, 2015). Access is also affected by timing and outcomes, distance and the acknowledgement of good quality service when an individual needs it. When accessing care, an individual may encounter many obstacles such as financial, organisational, social or cultural barriers (Allin *et al.*, 2015). Studies have shown that when services are accessible and closer to home or place of work and the timing is appropriate for potential users that utilisation is more likely to be improved (Azuh, Fayomi and Ajayi, 2015).

Holmes and Kennedy (2010) states that long distances from home to the nearest facility and between health facilities add greatly to delays in reaching emergency obstetric care. In addition, Ravindran (2012) made it clear that distance influences family's decision to seek care in an emergency and that when services are made available closer to home and work place at times of the day convenient to women utilisation is more likely. Asweto *et al.* (2014) also added that the average time it takes a woman to travel to the nearest health facility had influence on the number of antenatal visits a woman would make.

Utilisation of maternal healthcare services by women of reproductive age helps in early identification of any illness present which in turn allows for an effective treatment being instituted promptly (Ravindran, 2012). Afful-Mensah, Nketiah-Amponsah and Boakye-Yiadom (2014) found that access to health information through the media such as television and radio is vital in explaining the demand for institutional delivery because such information

is anticipated to increase an individual's store of knowledge about the need for utilising the most suitable health services. However, these authors found that health information through the media was reported to be more important for women in the rural areas than for those in the urban areas in relation to health facility delivery.

## **2.9 THE IMPORTANCE OF PARTNERSHIP WORKING IN DELIVERING OF HEALTH CARE**

As many health issues are influenced by both social and individual behaviours, health professionals have recognised that policymakers, private individuals and community/organisations need to be targeted and consulted in order to elicit behaviour change (Parnell, 2016). Partnerships can potentially lead to innovative strategies for disseminating health messages and influencing positive behaviour change (Parnell, 2016). In a bid to successfully tackle health issues and in particular health inequalities, effective working partnerships between policymakers, individuals and community need to be implemented and maintained. Strong partnership and collaborations are at the core of effective interventional programmes. When partners take ownership of a programme, it is more likely to succeed. A strong communication programme should engage multiple partners at the national and local levels in a participatory manner; as no single being can achieve the results produced through multi-partner collaborations (UNICEF, 2008). The key to high-performance partnerships is continuous and open information sharing.

A survey conducted in 2004 by the Global Corporate Citizenship initiative established that 90% of the chief executives surveyed alleged that the world's development challenges could not be met without partnership working (Parnell, 2016). Further, it is not sufficient for the Government to put forward empty gestures and initiatives without seeking and ensuring effective partnerships that are cohesive all the way down to the consumer including ensuring that the funding is available for all partners concerned to implement the initiatives. Gillies (1998) study on the effectiveness of alliances and partnerships on health promotion stated that change effects ranged from 3 to 20% of the population involved in the interventions. Although the evaluation reviewed by Gillies looked specifically at behaviour change, partnerships and community programmes can affect the wider context of behaviour change. The review however suggested that the more the level of local community involvement and partnership working in the practice of health promotion, the greater the impact on behaviour



change. Therefore, the effect of alliance and partnership needs to be incorporated into evaluations.

## **2.10 FACTORS INFLUENCING THE USE OR NON-USE OF HEALTH SERVICES**

Tsawe *et al.* (2015) noted that woman's age has a significant influence on antenatal and delivery services usage. Tsawe *et al.* (2015) bivariate analysis revealed that women aged forty and above use maternal healthcare services less than those younger than forty. The bivariate analysis revealed that the use of institutional deliveries decreases with age, whereas use of non-institutional deliveries increases with woman's age. Mostly young women use institutional deliveries compared to adults. Similarly, Ishmael, Acheampong and Mirriam (2014); Ikamari (2004) found that health seeking behaviour increases with age and decreases at older ages. It can be said that change in health care seeking behaviour among older women is attributed to gain in experience due to increased age and limited pregnancies at such ages, over self-confidence, lack of information on increased pregnancy-related complications and risk associated with advancing age and parity. Age connotes the idea of superiority in terms of ability to think and make decisions. More so, under aged mothers are less likely to discuss reproductive health issues with their husbands or to seek help.

Lubbock and Stephenson (2008) carried out a study which revealed that health care services in most of the developing countries are theoretically free, but indirect costs such as travel cost to and from the clinic, leaving work to seek care, and paying for prescribed medicines are significant barriers to accessing care and treatment. Gage (2007) conducted a similar study in Mali and cited the following barriers: financial barrier was highly mention, distance from home to hospital and poor customer care in health centres and hospitals coupled with rude languages from nurses and doctors.

Simkhada (2007) investigated factors affecting the utilisation of antenatal care in developing countries using systematic review of literatures and both quantitative and qualitative approach. The results revealed that maternal education, husband's education, marital status, household income, women's occupation, media exposure, cultural beliefs and ideas about pregnancy were the most influencing factors of antenatal care use. Parity had a statistically significant negative effect on adequate attendance. Whilst women of higher parity tend to use antenatal care less, there is interaction with women's age and religion.

Some cultural beliefs have also been found to influence utilisation of first antenatal care (FANC). The study conducted by Simkhada, Porter and Van Teijlingen (2010) in Nepal found that mothers-in-law negatively influenced utilisation of FANC by their daughters-in-law. In this study Simkhada, Porter and Van Teijlingen (2010) found that mothers-in-law tend to persuade their daughters-in-law to fulfil household duties instead of visiting ANC care. Lee, Yin and Yu (2009) in a study conducted in Taiwan also found that mothers-in-law and spouse, heavily influence decision about where and whether to go for antenatal care. Engaging men as partners is a critical component of FANC, but their involvement has been low (Byamugisha *et al.*, 2011) and there's hence a need to encourage male participation to promote the uptake of FANC by pregnant women. The influence of male involvement on utilisation of FANC would then be established from qualitative studies which may be designed to investigate the direction of the influence (Mullick, Kunene and Wanjiru, 2005). Strategy to enhance culture-sensitive programme has been found to be accepted by the people (Shehu, 2000). The influence of male involvement on utilisation of FANC would then be established from qualitative studies which may be designed to investigate the direction of the influence (Mullick, Kunene and Wanjiru, 2005). Furthermore, in Zimbabwe Mathole *et al.* (2004), found that the early period of pregnancy was the most vulnerable to witchcraft associated fears, which was the reason for pregnant women not attending FANC in first trimester. A study conducted in Malawi by Chiwaula (2011) also demonstrated that cultural beliefs negatively influence utilisation on FANC. A study conducted in Nigeria by Amosu *et al.* (2011) found that health care provider and pregnant women ignorance about FANC was one of the factors affecting utilization of FANC.

Mukong (2012) showed that socio-economic factors such as household income, maternal education, paternal education, health knowledge as well as distance to facility were positively associated with maternal health care utilisation. Of the considered socio-economic factors, maternal employment did not have a significant influence on maternal health care utilisation. Regarding education of parents, maternal education has proven to have a stronger influence on care use relative to paternal education. On the other hand, full demand of prenatal care services is less likely in households with more children, geographical variability and among married women. However, postnatal care use is more likely among married women and in households where both partners take decision regarding care seeking.

Education functions as an alternative for information, cognitive skills, and values; education applies effect on health-seeking behaviour by many ways. These ways include greater level of health alertness and greater awareness of existing health services amid educated women,

enhanced ability of educated women to meet the expense of medical cost for their health care, and their enhanced level of self-sufficiency that effects in better ability and autonomy to make health-related decisions, including choice of maternal health care services utilisation (Azuh, 2011).

The gender and development approach has it that education is important for enabling women to become agents of their development (Connelly *et al.*, 2000), and therefore it is a central aspect of empowering women. Based on pooled data from 2005 to 2010, the world adult literacy level stands at 84% with WHO regional block of Southeast Asia, Eastern Mediterranean and Africa having less than the global average with literacy rates of 70%, 69%, and 63% respectively (WHO, 2013). Within the African subcontinent, the West African countries (Mali, Niger, Senegal, and Sierra Leone) have lower literacy rates with some having half of their population. Nigeria's current female literacy level is 61% (WHO, 2013). However, there are huge differences among the six geopolitical zones of Nigeria with some states in the North East and North West having female literacy of less than 20% (National Population Commission and ICF Macro, 2009).

Whilst education does relate to the income and social status of individuals. Nevertheless, evidence indicate that education is strongly related to reproductive health behaviour and use of maternal health services even after controlling for these variables (Onah, Ikeako and Iloabachie, 2006; Fatso, Ezeh and Oronje, 2008; Fawole, *et al.*, 2012). In line with the importance of information and awareness-campaigns regarding women's right and options concerning cost, lack of knowledge is a social risk factor in women suffering unnecessarily from pregnancy. Uneducated women are not only affected by lack of knowledge on their options and right, but they are also more vulnerable to poverty and thereby making them dependent on others. Adenike (2013) reported that education is a catalyst in terms of acceptance of orthodox health care services.

Women's access to education is crucial if female empowerment is ever to be achieved.

Education is an important tool that can be used to give women more power, improve gender equity and consequently also women's health. Research by McTavish *et al.* (2010) in sub-Saharan Africa showed that mothers in countries with higher female literacy rates are more likely to use maternal health care than women living in countries where national levels of female literacy are low. Furthermore, higher educated women will also have greater personal safety and access to resources and labour markets which may give them a greater freedom. Gender discrimination with regards to education often starts from childhood, where boys are given primary access to education.

This problem links into the role women have in society. As they are primarily viewed as child bearers and wives, society finds it unnecessary to invest money and resources into a girl's education as she will not engage in any waged labour and the money invested will therefore not generate any return to the family (Okojie, 1994).

Consequently, the gendered division of labour reinforces the discrimination of girls. If women would have more access to paid work the likelihood of families investing in their education would be higher as the girl would be able to pay back some of the money and support her parents when they get old. Because of this lack of education for girls, they often grow up to be illiterate hence further increasing their dependence on their husbands or other males for access to information (Sesay, 2010). A woman with none, or little education will be less inclined to seek health care as she will lack the necessary information on how to access it or what kind of services that are being offered.

However, education as a tool to empowerment also needs to be assessed in relation to the nature of the education provided. Simply improving the number of girls attending school will not necessarily improve their status. Education is not always enough to empower girls if the available schooling merely reproduces the patriarchal structures that subordinate them in the first place. The formal curriculum in sub-Saharan countries, such as Nigeria, is often inherited from the colonial powers and reflects the gender relations of that time.

Men, who are more likely to be literate than women have better access to information, and in a better position than women to inform themselves about issues of reproductive health, most often do not show interest because reproductive health, including pregnancy, labour and childbirth, is women's concern (Adenike, 2013). While they advised women to reduce their workload, they generally do nothing to help, except in some cases where they assist in domestic chores. Childbirth was women's concern, and men were mostly unaware of any problem (Adenike, 2013). Therefore, education was considered as one of the factor in understanding factors influencing decision-making to seek care.

Shija (2011) found that, inadequate infrastructure, poor communication and transport between health facilities and district hospital, inadequate number of skilled personnel and irregular supplies of essential medicines and equipment make the accessibility of this important intervention not possible to a greater number of women. This study was conducted to investigate maternal health in fifty years of Tanzania independence using cross sectional survey. Transportation availability including the conditions of roads to be used to reach

health facilities is an important physical barrier to consider. For many places with unpaved roads, this is mostly important during the rainy season (Kitui, Lewis and Davey, 2003).

### **2.10.1 Barriers of Utilising Maternal Health Care Services**

Dagne (2010) assessed the role of socio-demographic factors on utilisation of maternal health care services in Ethiopia: Umea University. Data was taken from the 2005 Ethiopian demographic and health survey which is a nationally representative survey of women in the 15-49 years age groups. Then logistic regression technique was used to estimate models of the outcome variables. The result showed that only 30% of the women received antenatal care while 11% received assistance during delivery. Dagne (2010) assessed the role of socio-demographic factors on utilisation of maternal health care services in Ethiopia. Data was taken from the 2005 Ethiopian demographic and health survey which is a nationally representative survey of women in the 15-49 years age groups. Then logistic regression technique was used to estimate models of the outcome variables. The result showed that only 30% of the women received antenatal care while 11% received assistance during delivery.

In a cross-sectional study conducted by Sibanda *et al.* (2001) investigated factors that determine attendance, and use of traditional or cultural practices that relate to postnatal care and found that 60% of the women attended postnatal care. Sibanda and colleagues concluded that postnatal care participation was greater than usually reported. According to Krakauer, Crenner and Fox (2002) barriers to utilisation of healthcare and social services like service accessibility, appointments schedule and continuity of care are not unique to new bearing mothers but are experienced by neurotic patients as well.

Babalola (2014,) assessed the factors associated with utilisation of maternal health services among women giving birth in Haiti from 2007–2012 using observational data derived from the 2012 Haiti mortality, morbidity and service use survey. Multilevel analytic methods were used to assess factors associated with use of antenatal services and skilled birth attendance. The strongest adjusted predictors include child's birth rank, household poverty, and community media saturation. Factors associated with use of maternal health service operate at multiple levels. Efforts to promote such services should identify and pay special attention to the needs of multifarious and uneducated women, address the distance-decay phenomenon, and improve access for the poor. Community mobilisation efforts designed to change norms hindering the use of maternal health services are also relevant.

Parkhurst *et al.* (2005) conducted a comparative analysis on health systems factors influencing maternal health services based on extensive case studies of maternal health and health systems in Bangladesh, Russia, South Africa, and Uganda. Many cross-cutting health system characteristics affecting maternal health were identified by comparing these diverse settings. The most important common systems issues underlying maternal health care were found to be the human resource structures, the public–private mix of service provision, and the changes involved with health sector reforms. Systems issues were found to influence the access to and utilisation of services, quality of care provided, and ultimately maternal health outcomes.

Falkingham (2003) study using survey data for Tajikistan, explored changes in the pattern of maternal health care and the extent to which inequalities in access to care have emerged. The links between poverty and women's educational status and the use of maternal health care services were investigated. The findings survey revealed a significant decline in the use of maternal health care services in Tajikistan since the country gained independence in 1991. Changes in the location of delivery and the person providing assistance, with a clear shift away from giving birth in a medical facility toward giving birth at home were shown. Women from the poorest quintile were three times more likely than women from the richest quintile to undergo a home delivery without a trained assistant. In addition, Afful-Mensah, Nketiah-Amponsah and Boakye-Yiadom (2014) stated that an improvement in women's economic status increases women's likelihood of utilising healthcare facility for delivery. In the same manner, Ishmael, Acheampong and Mirriam (2014) added that wealthy women make frequent visits, are more likely to deliver in public or in private hospitals than women in lower wealth index.

Fatmi and Avan (2002) studied the factors affecting utilisation of antenatal care services by women from a rural area in Sindh in Pakistan. Their findings pointed out that socio-economic status of women was a major determinant of utilisation of services. The authors recommended the increase and improvement of socio-economy status of women for the utilisation of prenatal services to be realised. Kaufmann (2002) reported an analysis of transport to Benedictine hospital, Nongoma, KwaZulu-Natal in Zululand health district and emphasised its importance for access to health services. Kaufmann linked availability of transport to health service utilisation. He further argued that transport consumes a major part of personal budgetary costs. A similar report was made by Gulliford *et al.* (2002) who found that distance from a service is inversely associated with its utilisation.

Adamu (2011) used an analytical ecological study design which involved the analysis of secondary data from the 2008 National Demographic and Health Survey to determine which socio-demographic factors predict utilisation of maternal healthcare services in the different regions of Nigeria. The study however, found that utilisation of maternal health care services varies across the regions of Nigeria. In general, women in the southern region were more likely to utilise services compared to those in the north. There are differentials and commonalities in the predictors of maternal health care service utilisation in the regions. Education, family wealth index and place of residence are strong predictors of service utilisation in all the regions. However, some factors are significant predictors in one region but not in the other. These include employment in the northern region; and mothers age and religion in the south.

Religion is foundation for values, norms and beliefs for many individuals, and may influence women's decision-making choices with regards to maternal health care utilisation. Duru *et al.* (2015) found that the role of traditional and religious beliefs and the perception of the efficiency and the orthodox medicine and traditional birth attendants may be a contributory factor to failure to have skilled birth attendants during labour and delivery. Martin and LeBaron (2004) discuss the issue that Muslim women value the concept of privacy from strangers, or those not well-known to them. Thus, they avoided gynaecological screening due to perception that American physicians are not sensitive to Islamic moral codes that place value on bodily privacy. Not surprisingly, this limits their health care experience, and may reduce gynaecological screening practices among this group.

It is therefore important to note that the religious affiliation of a person has effect on the accessibility and utilisation of maternal health care services either in a positive or in a negative way. Health care providers should understand variations in family composition, social class, health beliefs and behaviours and be able to bridge the gaps between the beliefs and behaviours.

Chakraborty *et al.* (2002) examined factors associated with the utilisation of healthcare services during the postnatal period in Bangladesh and found that the mother's age at marriage and the husband's occupation positively affect healthcare utilisation and the number of pregnancies and desired pregnancies were significantly associated with the utilisation of postnatal healthcare. Some of the results were, however, inconclusive on maternal education, antenatal visits, and access to health facilities. Hove *et al.* (1999) conducted a cross-sectional survey in Zimbabwe, to determine the prevalence and associated factors for non-utilisation of

postnatal services on a convenience sample of mothers of infants aged six weeks to twenty-three. The findings indicated 10.1% prevalence of non-utilisation among the respondents. Religion and non-medical birth attendance were found to influence postnatal service utilisation. The author recommended more training of the birth attendants on the need for their clients to attend postnatal care clinics.

Mwaniki, Kabiru and Mbugua (2002) conducted a cross sectional descriptive study on a sample of 200 mothers to determine the utilisation of antenatal and maternity services in four rural health centres in Mbeere district, Kenya. The findings of the study revealed that utilisation of health facilities was significantly influenced by the number of children a woman had and the distance to the health facilities. The more the number of children a woman had, the less likely she used the services. In addition, the mothers who were living in distance less than 5 kilometres to the healthy facilities utilised the services better than those who lived in distance 5 kilometres away and beyond. Other reasons for not utilising the services, which were mentioned in the study include, lack of satisfaction with the quality of the services, lack of cleanliness in the health facilities, poor quality of catering services, corrupt practices by health staff, staff insensitivity, ill equipped health facilities, lack of money for transport and hospital fee.

Paredes-Solis *et al.* (2011); Jain, Nundy and Abbasi (2014) in their study of social audits to examine unofficial payments in government health facilities in South Asia, Africa and Europe reported that unofficial payments in cash or kind to health care professionals or to institutions covers items already covered by the health system. Perceive quality of care has been reported to be a common obstacle to seek for care. Quality of services comprises of client-provider interaction. If the relation between the provider and the client is poor then it will affect the quality of the services and the subsequent use of the service as well. Other factors include; the range of services provided, privacy to the client, respect for the client, service hours, availability of supplies and facilities among others. Patient satisfaction with healthcare quality will result in an increase patient compliance and higher rates of patient retention, and this in turn has a direct effect on healthcare outcomes (Zeithaml, 2000).

Abrams *et al.* (2010) found that delay in seeking treatment at healthcare facilities is in the same way imperative as lack of good quality services in resource poor settings where women normally access and receive poor quality and post-partum care due to lack of a facility with essential EmOC services, lack of equipment, supplies, medications and severely limited human resources. Women previous experiences with poor-quality care or unclear instruction



in health facilities significantly impact on future behaviour towards the utilisation of maternal healthcare services. Poor communication or miscommunication is also backs to women's false impression and lack of understanding concerning healthy behaviour and potential pregnancy or delivery complications (Pandey *et al.*, 2014). Women's perception of care also influences their tendency to utilise maternal health care services.

However, other studies have shown that women pay attention to quality of health care received and their rating on satisfaction with care is determined by a variety of factors, among them; personal preference, values and expectations (Nilses *et al.*, 2002; Bazant and Koenig, 2009). They tend to be dissatisfied with long waiting time, poor facilities, lack of confidentiality and poor provider versus client interaction. The women know what care is expected through experience, knowledge from health talks and from peers. All these factors contribute to discouraged women further utilisation of health care facilities for maternity care. Health care providers should provide quality care with compassion, dignity and confidentiality and promote women participation in decision making if the women are to be motivated to utilise these services (Lule, Tugumisirie and Ndekha, 2000). Shaffer in his study suggest that cultural issues relating to language and staff insensitivity are important and deter some women from accessing antenatal care early and regularly (Shaffer, 2002).

Studies have consistently revealed that training of care providers is critical to the delivery of quality maternity care. Olenja *et al.* (2009) carried out a study to assess experiences in training initiatives for essential obstetric care in developing countries. These authors highlighted that the evaluation of training programmes needs more than an account of the numbers of midwives trained, and should also measure outputs such as improved provider knowledge, improved competence, behavioural change, and improved service performance. Olenja *et al.* (2009) also noted that many facilities offering obstetric services in Kenya lack the equipment and basic supplies that are needed to support the provision of quality antenatal care, delivery, and postnatal care. Constant lack of drugs, antibiotics and analgesics at hospitals was significantly associated with non-utilisation of healthcare facilities. All over the world it is reported that the contribution and significance of nursing to the wellbeing of the human population is recognised by many- demonstrated by the acknowledgement of the World Health Assembly of the vital role of nursing and midwifery to health systems, to the health of the people they serve, and the efforts to achieve the internationally agreed health-related development goals (John, 2007).

Studies have consistently shown that shortage of skilled care providers (doctors, nurses and midwives) has a negative effect on the utilisation of maternal and neonatal healthcare services in many healthcare facilities in Nigeria (Okeke *et al.*, 2015). One reason why pregnant/nursing women may not be using health facilities is the low number of skilled health care providers, which results in long hours of waiting (Kruk, *et al.*, 2010). A report by the National Primary Care Development Agency in Okeke *et al.* (2015) in a baseline survey conducted found that 50% of rural health facilities did not have a single midwife and lack of medical personnel in health care facilities is reported to be one of the contributory factors to the continued high rate of maternal mortality in the country. Due to the shortage in medical personnel, nurses and medical personnel are being forced to work with shortage of trained, qualified personnel, overwhelming workloads, and inadequate skill mix, resulting in avoidable deaths and injury, causing health personnel to abandon the profession, and compromising the health of the community.

Overwhelming workloads and low wages may explain the negative attitude of healthcare professional towards their clients, especially in the rural areas. Karen and Ballard (2003) found that error occurs when an intended arrangement of mental or physical activities fails to attain the anticipated result and when this failure cannot be ascribed to some chance intervention or occurrence. He further added that all healthcare personnel including doctors, nurses and pharmacists, are accountable for the services they provide to their patients.

Studies conducted in Nigeria have also found that lack of availability of healthcare providers in health facilities was a barrier to seeking care among women of reproductive age. This implies that if health care staff (midwives and doctors) are not always at the health facilities, it therefore means that access to care may not necessarily improve and thereby reducing the impact on utilisation despite the increase in the supply of medical and healthcare personnel (Okeke *et al.*, 2015). Providers' behaviour such as respect for privacy, short waiting times, availability of drugs and staff competence have been reported to promote public perception towards seeking health services in healthcare facilities. Pandey *et al.* (2013); Onah *et al.* (2006) stated that lack of lady doctors, excessive waiting time, embarrassing physical examination, use of abusive words, and lack of empathy and unrealistic standards of practice all contributes to discouraged women further utilisation of health care facilities for maternity care.

Leigh *et al.* (1997) in a quantitative study carried out at a district hospital in Makeni Sierra Leone serving about 50,000 population found that the facility had only one doctor, a general physician who was reported to lack training in obstetrics and was incompetent to carry out simple procedures. This indicates that a significant association exist between medical and nursing personnel levels of education and patient outcomes. In the same study, it was also noted that lack of doctors was an important obstacle to handling complications during pregnancy and labour was limited because of lack of a permanent stationed doctor at the clinic. Confidence in the utilisation of services in health facility for the management of complications was affected due to lack of a resident doctor at the facility.

Reasons given for lower coverage of skilled and institutional delivery compared to ANC coverage is the volatile nature of the onset of labour in the face of difficulty in accessing healthcare facilities in resource poor environments, however, the shortfall of midwives and doctors is a major contributory factor. Although training of service providers is an important element in the provision of quality maternity care; insufficient numbers of healthcare personnel at a facility is one of the major factor causing delays in patients' getting prompt treatment needed. This shortage is often not only a matter of staff numbers, but also a matter of competence. Care provided by qualified nurses/midwives has the capacity to save lives, prevent complications, suffering, promote wellbeing, save money and reduces the waiting time as well.

Lack of availability of enabling environment mainly resources have been reported (Goodburn *et al.*, 2001; Graham *et al.*, 2008). It is well acknowledged that use of skilled attendants at birth alone may not be sufficient to reduce maternal mortality mainly where there is imbalance with enabling environment resources and equipment (Goodburn *et al.*, 2001). Health facility requires adequate skilled staff as well as emergency obstetric care resources to deliver quality maternal services. It is highly recognised that reducing maternal mortality rates cannot be tackled only at primary health care level. Rather, there is need for collective efforts to ensure functional systems at all levels of service delivery and coordination between levels (Adegoke and Van den Broek, 2009). Olenja *et al.* (2009) reported that many facilities offering obstetric services in Kenya lack the equipment and basic supplies that are needed to support the provision of quality antenatal care, delivery, and postnatal care services.

The lack of qualified skilled birth attendants available is a major problem for maternal health in Nigeria, as skilled birth attendants are vital at the presence of each birth. Women's chances of survival through pregnancy is heavily reliant on skilled birth attendants (providers' level of knowledge, competency, improved communication and referral systems) thus not prioritising their presence and availability is equivalent to not prioritising women's health, ultimately discriminating against women and putting their lives at risk. To effectively achieve this strategy wider development issues are important, these include high level of political will to improving women's lives, investing in social and economic development to address gender and wealth inequalities.

### **2.10.2 Improving Utilisation of Maternal Health Care Services**

Mekonnen and Mekonnen (2003) conducted study on how maternal health care services can be improved and listed the following strategies: improvement of accessibility and improvement of awareness of such services. Shija (2011) on the other hand noted that there is a need of making sure that skilled doctors on maternity care are available in all health centres.

Addai (2000) calls upon stake holders to formulate health programmes to help local governments and civil society organisations to deliver high-quality, rights-based, and sustainable maternal and reproductive health services that will address the specific needs and priorities of their communities especially those of the most marginalised and vulnerable groups.

For instance, Shija (2011) found that inadequate infrastructure, poor communication and transport between health facilities and district hospital, inadequate number of skilled personnel and irregular supplies of essential medicines and equipment make the accessibility of this important intervention not possible to a greater number of women.

Olayinka (2014), found that the major variables associated with barriers to utilisation of maternal health services among respondents were poor knowledge of the existing services, previous bad obstetric history; attitude of the health care provider, availability, accessibility and husband's acceptance of the maternal healthcare services. It therefore become necessary for a good and workable human resources management to be put in place as this is currently lacking in the health sector, particularly in the public health sector.

## **2.11 CHAPTER SUMMARY**

Several silences lie at the heart of this study and impact the way meaning has been constructed in the search for knowledge. I have situated myself within this study as an outsider due to my lack of first-hand experience on the experience of seeking maternity healthcare services. In recognising the silence inherent in the research participants', this study posits that women health in developing countries especially sub-Saharan Africa is often constructed in a manner and way which blames the women without ever acknowledging the institutional and systemic biases such as education deprivation, gender inequities, etc. which may have led them not to utilise skilled birth attendants in the first place. Even though various studies have been undertaken to investigate the factors affecting utilisation of maternal health services still the results are not the same. The Silences inherent in the research participants for this study stem from the fact that as a group and despite their health needs during pregnancy and the immediate postpartum period, they are failed to be identified by the people and the community in which they live as such because they are not well represented at the policy level and therefore do not receive equitable health care. The Silences underpin the need for this study and informed the use of TSH as a theoretical guide.

Also, the reviewed empirical studies in the current study are characterised by differences in findings. These differences might be due to differences in objectives of the studies, research methodologies including research designs, target population, sampling techniques, procedures and instruments used in collecting data. Additionally, the different findings might be due to the use of different data analysis methods. To the best knowledge of the researcher, there is no study done in the Asaba council to investigate factors that affect the utilisation of maternal health care services among pregnant/nursing mothers even though there are problems in maternal health service utilisation. Therefore, this study was designed to address the gap with the aim of assessing factors that affect maternal health care utilisation among the study participants and suggest the measures that must be taken to make maternal health care services more accessible among women.

The next chapter presents the methods and approaches that were used in the conduct of this research study.

## **CHAPTER THREE - HEARING SILENCES- METHODOLOGY (SILENCES- STAGE II)**

### **3.0 INTRODUCTION**

This chapter outlines the methodology and methods employed to explore and explain the phenomena of factors influencing access to emergency obstetric care. It describes the background to pragmatism and identifies how it informs this study; the advantages of using pragmatism as a theoretical framework are discussed. The chapter also address the research philosophical paradigms. This chapter also discusses the selection and definition of a mixed method sequential design. The importance of this approach as a method is clarified and the methods used in the design are articulated, highlighting their validity and usefulness to the study data collection process. This chapter also discusses the specific selection of research participants, criteria and research context, preparation of research instruments, data analysis techniques that were utilised and ethical considerations for the study are presented as well.

Research methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried out. Essentially, the procedures by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research (Chinnathambi, Rajasekar and Philominathan, 2013). Methods are the tools and techniques that are used in the collection and analysis of data. The philosophical background to research can determine the types of methods that are appropriate (Hayman and Jackson, 2013). As soon as the most appropriate methodology has been identified, there are likely to be methods specific to that methodology. This thesis has been situated within a tradition of mixed methods (combination of quantitative and qualitative approaches) because these approaches offered an in-depth investigation of factors influencing access to emergency obstetric care. This tradition rejects the main assertions of the incompatibility thesis (Howe, 1988) that claimed different data types and their methods of analysis are not compatible with one another, and should therefore not be used together in the same study. In doing so, this research shares a vies that the careful combining together of different data types and analysis techniques can reveal contrasting dimensions of given social phenomena, thereby increasing depth of understanding of it.

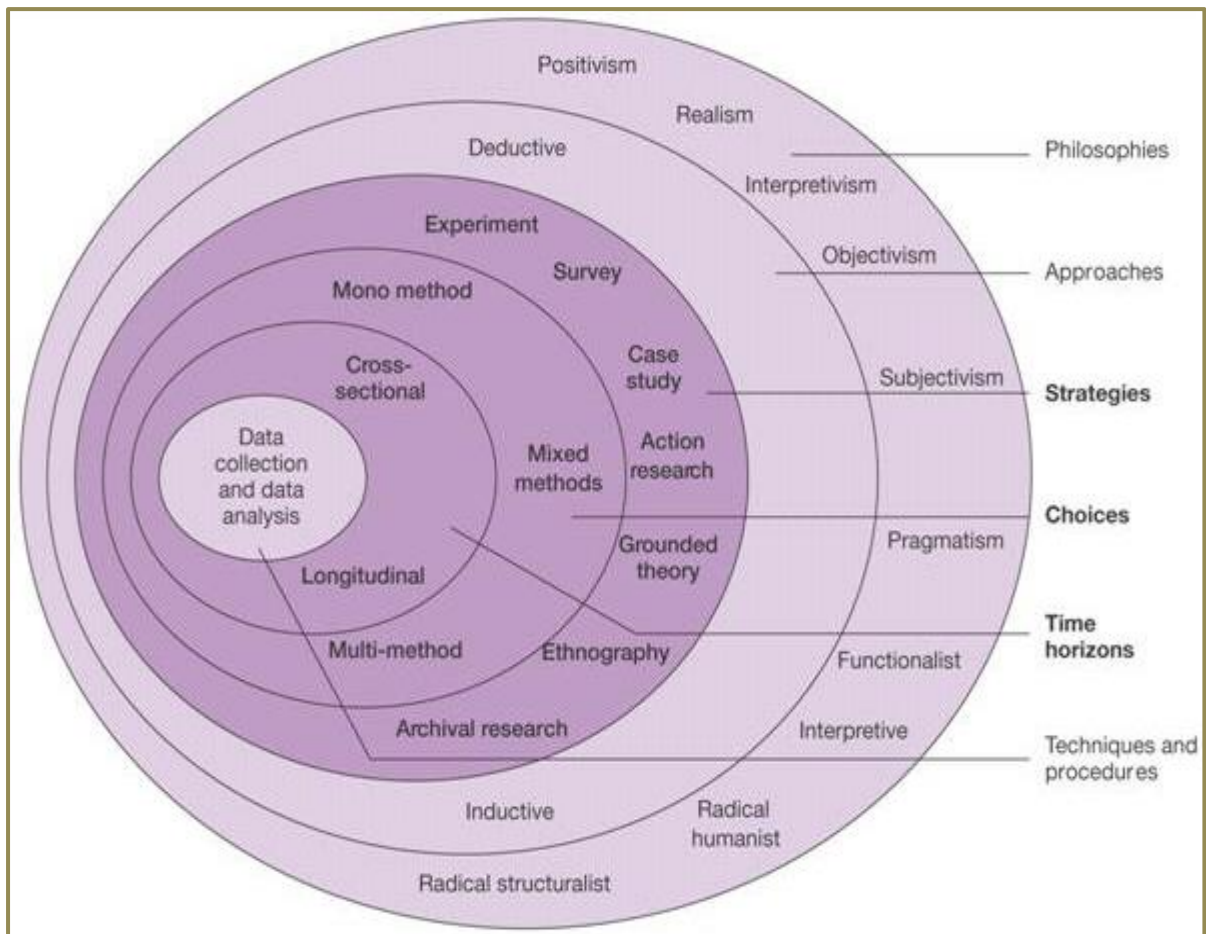
In general, mixed methods research represents research that involves collecting, analysing and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon (Onwuegbuzie and Leech, 2006).

### **3.1 RESEARCH PHILOSOPHIES/PARADIGMS**

The primary purpose of carrying out a research is to develop knowledge in a particular field. In order to reach the aim of this study, the researcher will use a variety of components chosen from the model of research ‘onion’ by Saunders, Lewis and Thornhill (2009). The research ‘onion’ is made up of six different layers;

1. Research philosophies
2. Research approaches
3. Research strategies
4. Researches choices
5. Time horizons and
6. Different techniques and procedures which is the last and centre layer of the onion.

According to Robson (2002) each layer of the research ‘onion’ contains an important component in the research process and influences way the process will be designed. The six layers finish with the final layer which is the centre layer known as the techniques and procedures layer. It is at this point of the process that is concerned with collecting and analysing the data, which allows the researcher to come to a conclusion (Saunders, Lewis and Thornhill, 2009). The research onion is demonstrated in figure 3.1.



**Figure 3.1: Research Onion (Saunders, Lewis and Thornhill, 2009)**

According to Saunders, Lewis and Thornhill (2009) research philosophy is important as it is what a researcher does when they are carrying out research in a topic; they are effectively expanding their understanding in a certain field. This layer identifies a range of philosophical approaches that the researcher can undertake to base his/her research strategy on and the different research methods that will be utilised to gather the required data needed to complete the research paper successfully (Saunders, Lewis and Thornhill, 2009). The authors also argue that the choice of research strategy/design is determined by: the research question (s); objectives; the research paradigm; the extent of existing knowledge; and the amount of time and other resources available.

Paradigms in research are of two traditional perspectives: the positivism; and the interpretivism paradigms which are both based on different stances of ontology, epistemology



and axiology (Walliman, 2001; Fellows and Liu, 2003). Ontology has to do with the nature of reality (Tan, 2002; Fellows and Liu, 2003) whereas epistemology is “the theory or science of the method or ground of knowledge” (Blaikie, 1993, p.6), and refers to how the researcher knows reality (Tan, 2002). Axiology refers to the role of values in research and involves values, ethics, and belief systems of a philosophy as well as assumptions about the value that researcher attaches to the knowledge (Creswell, 2007). In this research, it is assumed that maternal health services utilisation is informed by the socio-cultural values, attitudes and beliefs in Nigeria. This research acknowledges the significance of the influence of social and cultural values as a process rooted in the social system in which reproductive behaviours ensue.

In talking of philosophical views or positions in research, Fellows and Liu suggests that the scientist adopts a view from nowhere which implies the possibility of total objectivity and that phenomenon exist totally independent of any observer (Fellows and Liu, 2003). Unlike Fellows and Liu, Kuhn notes that ‘what a man sees depends both upon what he looks at and also upon what his previous visual-conceptual experience has taught him to see (Kuhn, 1996; Fellows and Liu, 2003). These assertions by Fellows and Liu, and Kuhn relate to the two major paradigms employed or adopted in research; positivism and interpretivism.

### **3.1.1 Positivism**

Based on the stances of ontology, epistemology and axiology, positivism, according to Fellows and Liu (2003), assumes that a phenomenon obeys natural laws and can be subjected to quantitative logic. To this end the positivists believe that reality can be observed, studied and modelled (Sutrisna, 2009). Positivists take a deductive approach to research (Fellows and Liu, 2003). Also known as the objectivist perspective, positivism suggests that reality can be independently observed as it is single and therefore experienced the same way by everyone and stresses on objective knowledge, empirical regularities and deductive tests (Tan, 2002). Based on this, the positivist researcher is seen as an objective analyst and interpreter of a tangible social reality without affecting or being affected by the subjects of the study. The positivist paradigm aligns mainly with the quantitative approach to research which seeks to gather factual data, to study the relationships between facts and how such facts and relationships accord with theories and the findings of previous research (literature) (Fellows and Liu, 2003). Positivism therefore is said to demand evidence, factual or mathematical.

### **3.1.2 Interpretivism**

Interpretivism on the other hand, assumes that a phenomenon does not obey natural laws but are interpreted based on peoples' conviction and/or understanding of the reality surrounding the phenomenon (Bailey, 1997; Walliman, 2001). For the interpretivist, reality cannot be observed or modelled but can only be interpreted (Sutrisna, 2009). Also known as subjectivism, interpretivism is based on an ontology in which reality is subjective: a social product constructed and interpreted by humans as social actors according to their beliefs and value systems (Darke, Shanks and Broadbent, 1998). Fellows and Liu (2003), suggest that the interpretivist construct reality based on the person involved and as such one person's reality is likely to be different from another person's due to the difference in observations and perceptions which are also modified by socialisation (upbringing, education and training). Interpretivism, for this reason supports the concept of a multiple reality.

Although applicable to quantitative theories (Fellows and Liu, 2003), the interpretivist paradigm is largely aligned with the qualitative studies as subjectivists tend to use the interpretive, qualitative or idiographic approach to science (Tan, 2002). Fellows and Liu however warn that, the impact of social structure should be considered when interpreting how society operates. 'Societal values help to determine social structure which then impacts on values'. This suggests a recycling or interactive cycle between values and social structure. Though interpretation of the observed phenomena is greatly emphasized in the interpretivist approach, the very act of interpretation 'implies the existence of a conceptual schema or model on the part of the interpreter such that what is being observed and interpreted is assumed to conform logically to the facts and explanations inherent in the model' (Fellows and Liu, 2003). The process of interpreting a response or the behaviour of a group of people, involves induction and generalisation from some scientific schema or model (Fellows and Liu, 1997).

### **3.1.3 Pragmatism**

To address the paradigm 'war' pragmatism was considered as the peacemaker in the paradigm wars. Pragmatism is generally viewed as the underlying epistemology or philosophy associated with using a mixed methods approach (Denscombe, 2010). Beside the two traditional paradigms in research which relate to the two main theories of research; qualitative and quantitative theories, a review of literature on philosophical positions depict other philosophical perspectives exist for carrying out research. Saunders, Lewis and

Thornhill (2007) mention other paradigms such as realism, pragmatism and the functionalist perspective. The comprehensiveness of reality means no one philosophical perspective is likely to fully explain all issues and based on this, Lee (1991) suggests the possibility of combining the traditional positivist and interpretivist perspectives to enable a better view of the same phenomena. From this position has emanated other combinations of the traditional perspectives and a notable one among these combinations is pragmatism. The pragmatic perspective is a philosophical stance which arises out of actions, situations and consequences (Murphy *et al.*, 1998; Patton, 1990; Creswell, 2007; Saunders, Lewis and Thornhill, 2007; Tashakkori and Teddlie, 2009). The pragmatic stance argues that methods and epistemology are not linked in the real-world research and research should continue independently from the paradigm debates (Bryman, 2006; Alshawish, 2016).

Unlike the traditional perspectives, pragmatism places more importance on the problem being studied as well as the questions being asked instead of the methods and as such focuses on the outcome of the research and its applications (Patton, 1990; Saunders, Lewis and Thornhill, 2007). Pragmatism focuses on ‘what works’ - and solutions to research problems (Patton, 1990). For this reason, pragmatics rely on both qualitative and quantitative sources (multiple methods) of data collection, focusing on the practical implications of the research as the best means to answer research questions and problems (Creswell, 2007). As positivism and interpretivism respectively relate to qualitative and quantitative methods, pragmatism applies to mix methods research and draw liberally from both quantitative and qualitative assumptions (Saunders, Lewis and Thornhill, 2007; Tashakkori and Teddlie, 2003). Although some methodological purists still argue that it is unsuitable to mix the positivist viewpoints of the quantitative research paradigm, and the constructionist viewpoints of the qualitative research paradigm due to epistemological and ontological incompatibilities (Johnson and Onwuegbuzie, 2004; McEvoy and Richards, 2006); many researchers now adopt a pragmatic standpoint whereby mixing of methodologies is often seen as complementary and in some cases beneficial. Furthermore, the mixing of methods design which can strengthen the interpretations that can be made about the data (Tashakkori and Teddlie, 2003).

The pragmatic stance does not commit to any one system of reality and philosophy and as such individual researchers are at liberty to choose among the methods, techniques, and procedures of research that best meet the purposes and needs of their research. The underlying principle for the pragmatic researcher is ‘what works at the time’ and as such it is not based on either dualism – between reality independent of the mind or within the mind.

For the pragmatic, the choice between ‘what’ and ‘how’ to research is based on its intended consequences (Creswell, 2007). As the philosophical underpinning for mixed methods research, Tashakkori and Teddlie (1998) and Patton (1990) stress on the importance of focusing attention on the research problem and then using a pluralistic approach to drive knowledge about the problem.

A pragmatic standpoint was adopted by the researcher in the design of this research. Polit and Beck (2012) defined pragmatic method as a research design whereby data are collected and analysed and findings are integrated and inferences made based on both approaches (quantitative and qualitative). Pragmatism is seen as debunking concepts such as ‘truth’ and ‘reality’ and focuses instead on ‘what works’ as the truth regarding the research questions under investigation” (Tashakkori and Teddlie, 2003, p.713). Instead pragmatics believes that a ‘bottom-top’ approach should be taken whereby research questions drive the research process and command the most suitable methodology (Adamson, 2005). Within the Nigeria society women have been consistently reported to have poor access to emergency obstetrics care in health facilities. Therefore, a need was identified to investigate the factors that influence women access to emergency obstetrics care in health facilities. Furthermore, a need was identified to explore women experiences in reaching the health facility and to examine the care experiences encountered by the women in receiving care at the health facility. The research will be an important step in identifying potentials areas of improvement which might help to improve women access to emergency obstetric care in health facilities.

### **3.2 RATIONALE OF MIXED METHODS**

The use of quantitative and qualitative approaches offers the researcher an ability to use both numbers and words to combine inductive and deductive thinking to address the research problem (Creswell and Clark, 2007). The philosophical rationale that compels mixing of quantitative and qualitative methods of research into a single study is pragmatism. Simply put, pragmatism is the belief in doing what works best to achieve the desired result. In this study a mixed method was used in the data collection and analysis, whilst pragmatism was the best paradigm for justifying mixed method research. Mixed method research provides stronger inferences, provides the opportunity for presenting a greater diversity of divergent views (Tashakkori and Teddlie, 2003). Mixed methods “mix” scientific methods of inquiry to evaluate the knowledge obtained where the researcher can influence what is observed yet she is conscious of biases with knowledge stems from interactions in the social “human” world,

that is pragmatic all the while recognising that change is likely in the self, beliefs and in lifestyle choices.

The relationship between the methodology and research philosophy lies in the fact that methodology of the research would normally be based on a particular philosophical underpinning. For the purpose of this research Creswell's definition of mixed method inquiry will be utilised as it incorporates a philosophical worldview, pragmatism, and accommodates the notion of mixed methods as a methodology whilst stressing the importance of method. The fundamental principle of mixed method research is that the combination of quantitative and qualitative approaches provides a better understanding of the problem than either approach can achieve alone (Creswell and Clark, 2007; Tashakkori and Teddlie, 2003). Support of this central concept can be made in several areas. Firstly, mixed methods research provides strength to the weaknesses of quantitative and qualitative research; this suited the current study as the researcher wanted to ensure rigorous approach to a complex issue. Further, researchers are able to draw on a wide range of tools of data collection in order to comprehensively study a problem. Mixed methods research also helps to answer questions that cannot be answered by a singular approach and encourages collaboration of researchers across the two fields of inquiry. It encourages the use of multiple worldviews and paradigms and is seen as a practical approach to research. The practicality of mixed methods research focuses on the notion that individuals tend to solve problem using both numbers and words. This study adopted a pragmatic approach to answer the research question (Creswell and Clark, 2007). In this study, no one method was set out to answer a particular research question. All the methods play a complementary role. Where a particular method could not provide an in-depth understanding of the phenomenon under study, a second approach was then employed to explore the issue in depth.

### **3.2.1 Advantages and Limitations of Mixed Method**

The use of mixed method in this study has both advantages and limitations. The advantages included a variety of information, different perspectives on the research project, and a balance of measurement biases. O'Cathain, Murphy and Nicholl (2007) reported that evaluators turn to mixed method methodology to address the practical challenges and resultant uncertainty of using any single method. For example, Johnson and Onwuegbuzie (2004) described the challenges to conducting randomised controlled studies, and the mechanisms to identify casual mechanisms in interpretative research have been considered to require further development. The methods used in this study represented a range of

methodological approaches which provided a balance of the biases inherent in each individual approach while providing diverse information that produced a comprehensive picture of the phenomenon. Mixed methods research allows for more divergent findings, the inferences made with mixed methods research can be stronger. It provides a deeper understanding of the examined behaviour or a better idea of the meaning behind what is occurring.

Mixed method research can include culture in the design by giving a voice to everyone involved in the behaviour being examined. The limitations included need for a variety of expertise, resources, time for data collection and report development, and synthesis of a large amount of information. Surveys, and interviews share the bias of self-report but interviews allow for more emergence of the ideas of the interviewees as opposed to the preconceived ideas of the survey developers. There are also limitations with sampling in mixed methods. There are analytic and interpretive issues with specific designs. When the researcher mixes the data in a sequential design; the findings maybe contradictory. Despite these limitations associated with a mixed method research, the researcher considered mixed method approach as the most appropriate as the advantages outweigh these limitations.

### **3.3 QUANTITATIVE AND QUALITATIVE RESEARCH DESIGN**

Quantitative and qualitative methods constitute distinctive research approaches (Johnson and Onwuegbuzie, 2004). Both these methods can provide valuable information in public health research (Mertens, 2010). A basic difference is that quantitative research methods are research methods dealing with numbers and anything that is measurable in a systematic way of investigation of phenomena and their relationships within measurable variables with an intention to explain, predict and control a phenomenon (Leedy and Ormrod, 1993). Quantitative method typically begins with data collection based on a hypothesis or theory and it is followed with application of descriptive or inferential statistics. Surveys and observations are some examples that are widely used with statistical association. Survey research is defined as a study on large and small populations by selecting samples chosen from the desired population and to discover relative incidence, distribution and interrelations (Pedhaz and Kerlinger, 1973). The goal of survey research is to learn about a large population by surveying a sample of the population. In this method, a researcher poses a series of questions to the respondents, summaries their responses in percentages, frequency distribution and some other statistical approaches. Survey research naturally employs face-to-face interviews,

telephone interviews or the common approach using questionnaires. Basically, information is acquired by asking respondents questions by using interviews and questionnaires.

Qualitative research is characterised by its aims, which relate to understanding some aspect of social life, and its methods which generate words, rather than numbers, as data for analysis (Patton and Cochran, 2002). Qualitative research has been increasingly utilised in health-service research as a methodology due largely to its ability to generate rich description of complex social phenomena (Bryman, 2012). Common criticisms include: samples are small and not necessarily representative of the broader population, so it is difficult to know how far the findings can be generalise; results lack rigour; and it is difficult to tell how far the findings are biased by the researcher's own opinions. Qualitative research does not attempt to manipulate the phenomenon of interest but to open it up in its natural setting with use of the participants' own words. It also does not seek casual determination, prediction and generalisation of findings (Patton, 2002). Using qualitative method in this study, it is hope that women maternity experiences and needs will be explore in depth. Golafshani (2003) stated that qualitative research is a naturalistic approach that seeks to understand phenomena in context-specific settings, that is, 'natural' and 'real world' settings. This study was able to explore women experiences and maternity needs on their own words.

However, for many research projects, there are different sorts of questions that need answering, some requiring qualitative methods, and some requiring quantitative methods. If the question is a qualitative one, then the most appropriate and rigorous way of answering it is to use qualitative methods. For instance, if you want to lobby for better access to emergency obstetric care in area where gender inequality is the norm, you might first undertake a cross-sectional survey which tells you that a certain percentage of your population does not have access to emergency obstetric care. This is essential information, but you might also have a number of other questions that the survey can't answer adequately, such as: what are the women experiences in reaching the health facility? What are the care experiences encountered by the women in receiving care at the health facility? These can be addressed through qualitative methods such as interviews or focus group discussion. The survey helps to identify the extent of the problem, and the interviews can be used to give some detail, and the 'lived experiences' of how gender inequality have affected women access to emergency obstetric care.

In this study, both quantitative and qualitative data were collected in a single study rather than in multiple studies over time.

### **3.3.1. Research Design**

In terms of research design, the research was cross-sectional in nature. Cross sectional studies give a snapshot of outcomes and factors associated with these outcomes at any point in time (Bowling and Ebrahim, 2005). Other limitations of cross-sectional studies are that generalisability is limited by sampled population, sample size requirements may be very large (especially when looking at rare outcomes or exposures), and cannot tell us about causal relationships (only correlation) (Ronald, 2006). Saunders, Lewis and Thornhill (2007), argue that the choice of research strategy/design is determined by the extent of existing knowledge; and the amount of time and other resources available. Creswell (2007) suggests the following features as the distinction between various quantitative and qualitative approaches: the focus of the study, the type of problem to be answered; the discipline background; data collection strategies and analysis. These conditions help a researcher to choose the most appropriate research approach for the study. Despite these limitations, a cross sectional study was considered more appropriate for this study instead of longitudinal surveys or cohort studies because the present research is interested in collecting retrospective data (maternal healthcare service uptake) and data over a short period (12 months).

Furthermore, the study also utilised the embedded design in its data collection process. This method of design is used when one data set provides a support, secondary role in a research based primarily on the other data type (Creswell, 2003). The idea of this design is that a particular data set is not adequate, that different questions need to be answered, and that each type of question involves different types of data. This design is used by researchers when they need to take in qualitative or quantitative data to answer a research question within a largely quantitative or qualitative study. Embedded design mixes the different data set at the design level, with one type of data being embedded within a methodology framed by the other data type (Greene and Caracelli, 1989).

Embedded design can either used a one-phase or a two-phase approach for the embedded data, and the quantitative and qualitative data are employed to answer different research questions within the study (Hanson *et al.*, 2005). However, in this study, a purely quantitative approach would not have adequately provided an understanding of the women experience while trying to access care in health facilities. Quantitative measurements of each mother's



experience were important to identify statistically significant differences, and were also used to steer the in-depth qualitative study to explore why these results occurred (Tashakkori and Teddlie, 2003). This type of design involves the collection of both quantitative and qualitative data, but one of the data types plays a complementary role within the overall design. In this study the methods play a complementary role and as such no one method was used to provide answers for a certain research question.

### **3.4 RESEARCH METHODS**

Crotty (2003) defines methods as the tools, procedures or techniques a researcher uses to generate and analyse data. Tashakkori and Teddlie (2003) provide a more in-depth definition of methods referring to them as two distinct types of research activities: data collection and analysis. Methods are ways, techniques, or tools for generating thoughtful accurate and ethical data as well as ways, techniques or strategies for manipulating that data (Tashakkori and Teddlie, 2003). In any form of data collection, it is particularly important for the researcher to know what he/she want to find out, as this is the motivation behind the initial choice of method (Miles and Huberman, 1994). Tashakkori and Teddlie (1998: 95) highlight that traditionally there is an element of “faithfulness” to either quantitative or qualitative data collection. However, the use of a mixed method design offers richer data than either approach could produce if used singularly (Sechrest and Sidani, 1995). Each data approach either validates the other or complements it adding greater depth and understanding to the research (Tashakkori and Teddlie, 1998). The choice of methods in this study was based on inquiry- ‘what did I want to find out?’ The study commenced with a quantitative phase. In the quantitative phase, the study aimed to identify factors that contribute to delays among women seeking emergency obstetric care. The aim of the quantitative phase of this study was to provide a numeric description that may be generalised to the specific population and provide tests of prediction. The qualitative phase method was used to explore women’s experiences and needs toward seeking emergency obstetric care in health facilities.

The aim of this research was to identify the factors that contribute to delays among women seeking emergency obstetric care, including barriers to accessing maternal health services from the perspective of the women using a pragmatic approach. Knowledge and understanding of the factors affecting maternal health care service utilisation during pregnancy, labour and delivery could be helpful in the efforts to increase skilled maternal health care service use and encourage women to utilise the services.

The aim of this study was achieved through the following research questions:

- a.) What are the factors influencing decisions to seek emergency obstetric care among women attending the health facility?
- b.) What are the women's experiences in reaching the health facility?
- c.) What are the care experiences encountered by the women in receiving care at the health facility?

The research questions listed above would be answered using both the questionnaire and the in-depth interviews. In this thesis, the two methods functioned as complementary components and strengthened the comprehensiveness of the study. The research used a sequential mixed methods research approach where data collection strategies involve collecting data in iterative process whereby the data collected in one phase contribute to the data collected in the next. Data were collected in these designs to provide more data about results from the earlier phase data collection and analysis, to select participants who can best provide that data, or to generalise findings by verifying and augmenting study results from members of a defined population (Creswell and Clark, 2007). The quantitative phase was conducted first followed by the qualitative phase. Integration is a key issue for mixed methods research (Flick, 2006) and within this investigation the quantitative research was designed to explicitly influence the qualitative study (the same research questions were used for both quantitative and qualitative study). Factors that emerged as important in the quantitative research were explored in depth within the qualitative phase.

### **3.4.1 Questionnaire**

Literature recognises that the goals of a particular study influence whether a standardised questionnaire can be used or a new one needs to be developed (McColl *et al.*, 2002). For the specific needs of this research study and the population to be sampled, it was determined that a standardised questionnaire would not obtain the information needed. Standardised questionnaires did not address the time that the obstetric problem started and when the women finally seek for treatment. Cultural particulars such as where women normally sought for care, medical and transportation cost, transportation options as well as reasons for choosing a particular option of care were not addressed in any questionnaire the researcher could find. However, research into the questionnaires became useful for guide to partly adapted and structured to a new questionnaire to mirror the factors pertinent to the objectives of this study. Other constituents of the questionnaire were created following the needs of the

study (McColl *et al.*, 2002) and the experiences of the researcher as appropriate (Synodinos, 2003).

The questionnaire used in this study was a self-administered questionnaire which was designed based on a number of themes arising from the literature. The aim was for the research objectives to be mirrored in the specific questions examined in the questionnaire. This assisted in eliciting information from the whole participants selected on specific topics. The pool of questions was discussed and critiqued by the supervisors as well as other professionals working within the field of education (Appendix I). The questionnaire was designed in a way that both socio-economic factors and maternal answers toward seeking care were caught. Basing on the information gathered from the literature review and putting into consideration the aforementioned about questionnaires, a research instrument for this study was developed. The research instrument was divided into five sections covering varying issues. The sequence of the sections and questions within was based on the sequence of the study's research questions which was considered logical.

Also, in line with Cohen and Manion's suggestions on questionnaire sequence moving from objective facts to subjective attitudes and opinions through justifications (Cohen, Manion and Morrison, 2000). A questionnaire was designed to collect participant demographics and information about factors influencing access to emergency obstetric care. The questionnaire covers socio-demographic characteristics, type of obstetric complications, outcome of delivery, mode of transportation, consent before seeking care, persons whose consent was sought from, frequent at ANC, booking status, trimester booked, problem requiring urgent medical attention, and how long has the problem started before seeking for care in hospital. A questionnaire can have both open-ended and closed ended questions. According to Polit and Beck (2004) open-ended questions allow the respondents to respond in their own words, while closed-ended questions offer responses from which the respondents have to select. Open-ended questions are easy to construct but difficult to analyse. Closed-ended questions are difficult to construct but easy to administer and analyse. In this study both open-and-closed-ended questions were used in order to accommodate some ideas that could have been missed in closed questions. The questions were kept short and clear instructions were given to guide participants through each question. Attention was given to the ordering of questions. They started with a more general and then to specific questions. The questionnaire contained 89 questions; eighteen of them were open ended questions. In the case of open ended

questions, sufficient space was left for detailed responses. There was a concentration on closed questions because they are easy to analyse and quick to answer. The responses resulting from the questionnaire therefore shaped the bases on which analysis were made.

### **3.4.2 Rationale for using a Questionnaire**

Questionnaires were chosen because of their ability to gather a lot of information at a time. According to Boynton and Greenhalgh (2004), questionnaires offer an unbiased means of obtaining quantifiable results about people's knowledge, beliefs, attitudes, and behaviour. A questionnaire is the link between the interviewer and the respondent. However, questionnaire reduces researchers bias, cheaper than personal interviewing and quicker to administer if the sample is large and widely dispersed (Kambaza, 2005; Mathers, Fox and Hunn, 2007). The use of a questionnaire provided a quick access route to women of reproductive age in Nigeria (mothers with direct obstetric complications recently seen at one of the health facilities in this case). Women with direct obstetric complication form a good percentage of women of reproductive age populations and using the survey made it easier to recruit participants for the study. Furthermore, as an initial contact it provided anonymity so that respondents could feel free to express their views and answer questions at their pace after considering each point carefully. In pragmatic approach, the research question plays an important and central role to the process that evolves and emerges (Onwuegbuzie and Leech, 2006). Although a modest sample was used, using a structured questionnaire would provide the researcher with some degree of generalisation within the Nigerian Community.

Using data from a questionnaire provides little insight into the subjective experience of the participants (Roer-Strier and Kurman, 2009). It is also imperative to consider the respondents and how best to gather the information that is required from them in a sensitive manner. And this touched mainly for this group of respondents because of their long history of being marginalised, misunderstood, devalued and not heard (Patel and Fatimilehin, 2005).

### **3.4.3 Content of the Instrument and Measures used in this Study**

Questionnaires are an important tool for data generation (see Appendix I). There are many types of attitudes scale as Likert scales, Thurston scales, Guttman scales and Semantic differential scales. In this study, the researcher used a mix of list questions and category type of questions to compose the questionnaire for the purpose of this research. The study intended to gather data directed towards understanding the perspectives of women about

factors that influence access to use of maternal health care services. The questions in section A and B of the questionnaire included questions on socio-demographic characteristics of the women and the spouses. Questions such as women booking status, frequency in ANC and where care was sought from, factors influencing decision to seek care, barriers to reaching the health facility, factors within the health facility and maternal and fetal outcomes of pregnancy. The study findings are expected to give a better understanding of the level of utilisation of maternal health care services in Nigeria, and of the constraints and barriers women face in accessing and utilising maternal health care service in health facilities. The list of questions provides the participant a list of responses which they pick any one response from the list they prefer, while category questions provided the participants a range of categories but only one will suit the participant's answer. The questions were scored in the following ways. The "yes" and "no" type of question were coded as 1 meaning "yes" and 2 meaning "no". Age group was classified into four categories from 15-25, 26-35, 36-45 and over 45 years. The categorical variables were coded in the same way that the responses were listed in the questionnaires. With the first as 1, second as 2 and so on.

#### **3.4.4 Qualitative Phase**

Subsequent to the collection of quantitative data in this study, the second, qualitative phase was conducted. Qualitative research methods are a means of understanding a social phenomenon from the perspective of those involved, to contextualise issues in social, cultural, or political environments or to transform or change social conditions (Glesne, 2010). The aim is to interpret how various informants in the social setting construct the world around them (Glesne, 2010). To achieve this, the researcher must use an exploratory open-mind in order to gain access to participants often multiple perspectives of the phenomena being studied (Glesne, 2010). Qualitative data collection for this study utilised semi-structured in-depth interviews of consenting participants (see appendix V for consent form).

#### **3.4.5 In-depth Interview**

Babbie (2013) defines a qualitative interview as an interaction between an interviewer and a respondent in which the interviewer has a general plan of inquiry, including the topics to be covered but not a set of questions that must be asked with particular words and in a particular order. Knowledge of the subject matter is important for the interviewee for a good process of the interview. Looking at the barriers to the access of emergency obstetric care with mothers as well as their experiences with the health care providers on health care services are

sensitive issues that needed to be studied using an approach that ensures mothers who participate in the study are comfortable enough to share their experiences and perceptions as they might not be comfortable to share such information in a group setting (Milena, Dainora and Alin, 2008).

Semi-structured in-depth interviews allow for an open relaxed approach to interviewing (Drever, 1995) (see Appendix II for interview guide). They are a means of communicating and gathering information that has a focus yet is less structured and intimating than formal structured approaches of interviewing (Drever, 1995; Tashakkori and Teddlie, 2003). In-depth interview was chosen as the research method within the qualitative investigation as they allowed the researcher to gain a unique insight into women's experiences and perceptions of the world. In-depth interviews have been argued to be most suitable when seeking to understand individual experiences, as they allow a deep individual focus whilst giving the researcher an opportunity to clarify issues and explore points of interest in greater detail (Lewis, 2003). This approach to data collection involves asking informants open-ended questions, and probing where necessary to obtain data deemed useful by the researcher (Appendix II).

Due to the nature of IDI of collecting information from different individuals, it is hard to compare the results, because each individual might have their own experiences and due to the small sample size, such result cannot be considered to represent any particular population (DiCicco- Bloom and Crabtree, 2006). In-depth interview, like focus group discussion, are time-consuming, especially when it comes to transcription and analyses of the data (Boyce and Neale, 2006). In-depth interviews can also generate emotional feelings, especially for this kind of sensitive research that is not easy to handle by the researcher (Johnson, 2002). This last challenge was especially observed for mothers who have given birth at home and for single mothers, who claimed they lacked sufficient help during their pregnancy and childbirth period. In most cases, the help that was evoked in these conditions was financial help. The validity and reliability of interviews is sometimes questioned.

However, some researchers argue that semi-structured interviews have high validity because they allow the participant to talk in detail and can explain meanings behind actions with little or no input from the interviewer (Drever, 1995; Tashakkori and Teddlie, 2003). Conversely, it has also been argued that semi-structured interviews have low validity because the researcher has no way of knowing if the participant is being truthful. Here the participants have the opportunity to deliberately fabricate a response or unconsciously respond with the

answer they feel the interviewer expects from them. These issues of validity are addressed later in this thesis.

### **3.5 PILOTING**

All research materials were pre-tested by distributing the questionnaire to 20 women and conducting interview for two (2) women of reproductive age in Ikot Ekpene, Akwa Ibom State outside the study area but with similar or close demographic and physical features to those in the study location. The 20 participants recruited for the pilot study were just on choice. Pre-test provided an important opportunity to test the research materials and obtain valuable feedback about whether they were easily understood by participants and whether they generated appropriate data (Tashakkori and Teddlie, 2009). This measure was performed to improve the validity of the tool by reducing its measurement error and enhancing face and content validity. After the pilot study with the twenty women, it provided me with orientation/experience in conducting the research procedure; and determining the length of time needed to complete the questionnaire. Overall the pre-test study helped to assess the adequacy of the research instruments, the feasibility of the study, and issues related to appropriateness and recruitment of the samples. It also contributed to the planning for the later stages, for example, collection of completed questionnaires and data entry. The pre-test studies helped the researcher to identify a range of issues. Furthermore, the pilot study clarified the appropriateness of questions and any aspects which posed particularly sensitive or ethical issues, for example if women had ever lost a pregnancy/child before.

Interestingly enough, some of the questions were not completed because the questions were not particularly clear to the participants. This was especially true for questions such as vaginal loss of fluid that is not urine before term and indication for emergency obstetric care. In this study these questions were asked because they were necessary for answering research question 1: What are the factors influencing decisions to seek emergency obstetric care among women attending the health facility? The participants also complained about the venue for the interview and the timing for the completion of the questionnaire

The suggestions and comments received from the pilot studies were used to make adjustments regarding the time and place of interviews, as well as in locating possible participants for the interview. In order to provide solution to these issues identified by the research participants, before a questionnaire was handed to the participants for completion, I

held debriefing sessions with potential participants to explain in detail about these questions that the participants in the pilot study complained about. The pilot study indicated the tentative time (30 minutes) that individual interviews might take. Then, a test-re-test reliability was conducted by re-administering the questionnaire to the same set of people after an interval of two weeks. The two sets of scores were correlated. Test retest reliability involves determining whether a measure obtains similar results when repeated with the same sample, as measured by the correlation coefficient. The scale is given at two-time points and the correlation between the two scores calculated. These range from -1 to +1, with a score as close to +1 as possible representing identical scoring at both time points. With the  $r$  value = 0.7 are identified by Kline (2000) as denoting acceptable test retest reliability.

External validity entails the degree to which the study can be generalised to the entire population or settings and be able to produce unbiased results for the population. In this study, the sample size was small and statistically unrepresentative, but the results can still be applicable to some other settings that are experiencing similar problems. However, there is need to be cautious when applying the findings of this study in settings other than the one where this study was conducted.

Reliability refers to the ability of a test to be used repeatedly (Streubert and Carpenter, 1999). It is the degree of the information obtained when the measurement is repeated on the same subject or the same group (Katzellenbogen, Joubert and Abdool-Karim, 2002) through supervision and periodic checks controlled for observer variation. The reliability and validity have been carefully considered at different stages of this study such as in development of questionnaires, choice of study site, sample selection and pre-test study, interviewing of participants and use of appropriate data analysis techniques. An extensive literature review was conducted before the survey questionnaire and interview schedule were developed. The aim of the study was explained to the study participants clearly before interviews took place. I applied the mixed method approach to data collection, which provided me with an opportunity to assess the transferability and trustworthiness of the study throughout the research process. Use of different methods and tools in the data collection would also help to identify whether there were inconsistencies in the data. Consistency of the data obtained by different methods supported the reliability and validity of data in the study. On concerns around the interview venue, I decided that interview venue would be decided by the participants about their preferred location.



## **3.6 STUDY AREA**

The study was conducted in Delta State, Nigeria. The capital of Delta State is Asaba, which is a developing town located at the River Niger to the Northern end of the state. It has a network of good roads, and a master plan for transforming it into a modern city. The state is divided into three Senatorial Districts namely Delta North, South and Central. Delta State is known as the “Big Heart” of Nigeria.

### **3.6.1 Demography**

The state has 25 local government areas with a population of 4,098,391, with 2,069,309 males and 2,043,136 females (National Population Commission, 2006). The state has a total area of about 18,050km of which 60% is land. One third of the state lies in mangrove swamp. Delta state is in the western part of the Niger Delta by the Gulf of Guinea in the Atlantic Ocean. The coast line is 167km. It is bounded on the south by Bight Benin, on the west by Ondo State, on the north by Edo State, on the east by Anambra State and south east by Bayelsa State. Its major tribes include Urhobos, Isokos, Itsekiris and Ibos. Basically, they have undistinguishable customs, beliefs and cultures. In addition, their structures of traditional administration tend to be same as well as their folktales, dances, arts and crafts. Historically, the major occupation of the people is farming, fishing, and hunting. The villages are inter-linked with narrow paths. Communications between settlements are generally different because of problematic topography during the rainy season certain routes become awful at certain points because of flooding. Modes of transportation include; boats, taxis, keke (tricycle), private cars that are hired out by the day with a driver, personal family cars, and scooters popularly called “okadas” and by foot. Fares are negotiable depending upon the number in the party and the distance to be travelled.

### **3.6.2 Study Setting**

This study was carried out in Asaba Local Government Area (LGA) of Delta State in South-south Nigeria. According to Delta State Government Strategic Health Development Plan (SSHDP), 2009-2015, Delta State has about 344 primary health care centres in addition to 25 public health clinics and 8 dispensaries. Again, at the secondary level, there are 62 government hospitals made up of; 53 general hospitals, six central hospitals, one specialist, one federal medical centre and one state teaching hospital. There are 53 registered private/mission hospitals and 345 private clinics as well as 186 private/mission maternity

homes in the state. In the area of human resources, in 2009 there were 300 medical doctors and 1,775 nurses. However, the state is responsible for the secondary health care while the local governments are responsible for the primary health care.

The study was carried out in one of the tertiary hospitals in Delta State, Nigeria, from January to April 2015. The hospital is a Federal Government-owned tertiary healthcare facility that provides tertiary healthcare delivery to the people of Delta State and neighbouring states in the southern part of the country. The hospital is located in the capital city of Delta State. The LGA has a population of 73,381 according to the 2006 population census. The hospital is a tertiary health care facility with emphasis on maternal and child health and the hospital plays a significant role in the local environ in terms of the number of deliveries taken in the unit annually. The rationale for conducting this study at this facility is twofold; firstly, the hospital is one of the health facilities providing obstetric services to Delta State residents. Secondly, it serves as a ready alternative to Delta State residents and other neighbouring States whenever there is an industrial action (which is rather frequent) in other State Government-owned hospitals. Hence any study which will enhance the operational efficiency of the hospital is highly desirable. Furthermore, the hospital is now affiliated with the post college medical training of Nigeria, West Africa College of surgeons and physicians for the training of specialists in “Internal Medicine, Family Medicine, Gynaecology, Paediatric and General Surgery”. This further emphasises its increasing relevance in the healthcare delivery in Nigeria and hence the need to enhance the operational efficiency of the hospital.

The health facility is a 460-bedded healthcare facility with a total of 117 beds for obstetric cases. The obstetric unit of the hospital is headed by a Consultant Obstetrician and Gynaecologist, who are assisted by 11 medical officers trained in provision of emergency obstetric care. The unit also has 19 trained midwives. Consultants in other fields of medicine like Surgery, Internal Medicine and Paediatrics are engaged in the services of the hospital for patient care as required. **Figure 3.2** below is the map of Nigeria showing the study area.



**Figure 3. 1: Map of Nigeria Showing the Study Area Source: Google Map**

### **3.6.3 The Study Population**

The study participants were identified and drawn from women aged 15-49 years in one of the tertiary health facilities in Nigeria. The chosen age bracket represents reproductive years of women as defined by the WHO (2006). This Age group 15-19 years though considered under age was included in this study because of existence of teenage pregnancies that contribute to maternal mortality. Eligible participants included patients with direct obstetric complications that have given birth in the last one year and/or pregnant, age between 15-49 years and must be attending the health facility for care at the time of this study. The facility offered a full range of maternity services, and women with post-delivery complications, which are not uncommon in this setting, received ongoing follow up care here up to 12 months after delivery. The inclusion of women who had given birth in the previous year is on the premise that their experiences would help to enrich data collected. They were included in this study because the researcher hopes that their experiences would help to enrich the data collected. The respondents were married, single, divorced, separated or widowed.

The study topic under discussion was on factors influencing access to maternal health care services utilisation and as such being a woman in the range of reproductive age was a relevant motivation to the discussion. Women who were not in their reproductive age and had no history of direct obstetric complication were excluded from taking part in the study as it

was felt that their experiences were outside the scope of this study. Women who were not willing to participate even when they met all the study criteria were also excluded from this study.

### **3.6.4 Sampling Techniques**

The choice of the sampling technique largely depends on the nature of the research questions and the availability of resources for the research. Whereas each method has its uniqueness and relevance, the research is enjoined to identify which sampling technique best suit his/her research and obtain valid justifications for any choices made. None probability sampling method was employed for the quantitative phase. As the study used a mixed method design for the data collection and analysis, different sampling procedures were used. Women presenting with direct obstetric complications and who were within the ages of 15-49 years were the eligible participants for this study. The process of recruiting research participants takes into account the importance of identifying appropriate participants who can best inform the study to successfully address the research question.

Non-probability sampling entails an infinite or unknown population and thus an unknown sample size. According to Denscombe (2010), the sample in non-probability sampling is selected based on relevance, availability and significance, and the members of the population do not have an equal chance of being selected. Consequently, Creswell (2009) opines that the larger the sample selected the more valid the findings would be. Tabachnick and Fidell (2007) posit that when the population in a research is unknown, using a sample size of 100 is poor, 200 is fair, 300 is good, 500 is very good while 1000 participants is excellent. Creswell (2009) further decries the challenges involved with generalisations when using non-probability sampling adding that the available sample may not be a true representation of the entire population being researched on. The different methods employed in non-probability sampling includes convenience, purposive, and stage methods. Table 3.2 also shows the different methods of non-probability sampling as well as their characteristics. Consequent to the advantages and disadvantages of the various sampling techniques, the preferred and hence adopted sampling technique was the non-probability sampling technique. Non-probability sampling is useful especially when randomisation is impossible like the population is very large. It can be useful when the researcher has limited resources, time and workforce. It can also be used when the research does not aim to generate results that will be used to create generalisations pertaining to the entire population (Etikan, Musa and Alkassim, 2016).

Convenience sampling involves identifying and selecting individuals or groups of individuals that have been selected from the target population on the basis of their accessibility or convenience to the researcher. This sampling technique was used because of the improbability of availability of the factors influencing access to emergency obstetric care in the health facility. The researcher sought to make use of this technique to interview respondents of convenient accessibility and proximity to the researcher (Smeeton and Goda, 2003).

In the absence of a suitable sampling frame covering the whole facility, a convenience sampling was employed to make up the sample for this research. The population for the research on factors influencing accessing to maternal health care services utilisation in Delta State, Nigeria consisted of all consenting patients presenting with direct obstetric complications in one of the tertiary health facilities, women who were within 15-49 years of age. The ability to arrive at a particular figure for the research population expressly influenced the adoption of non-probability sampling techniques for this research (Tabachnick and Fidell, 2007). In employing the convenience sampling techniques, the respondents were selected using criteria as mentioned in section 3.6.3. Selecting the sample size for the qualitative data was a concern due to small sample size used (Marshall, 1996). The sample size in qualitative research normally depends on the researcher's consideration of these related variables; usefulness, purpose of the study, credibility of the selected cases, resources and time available to the researcher (Patton, 2002). A total of 330 respondents attending the health facility for emergency care were requested to fill the questionnaires, while 6 interviews were held for women who were conveniently selected from a large (330) quantitative participants.

**Table 3. 1: Advantages and Disadvantages of various Sampling Techniques**

<b>Technique</b>	<b>Descriptions</b>	<b>Advantages</b>	<b>Disadvantages</b>
Simple random	Random sample from whole population	Highly representative if all subjects participate; the ideal	Not possible without complete list of population members; potentially uneconomical to achieve; can be disruptive to isolate members from a group; time-scale may be too long, data/sample could change
Stratified random	Random sample from identifiable groups (strata), subgroups, etc.	Can ensure that specific groups are represented, even proportionally, in the sample(s) (e.g., by gender), by selecting individuals from strata list	More complex, requires greater effort than simple random; strata must be carefully defined
Stage	Combination of cluster (randomly selecting clusters) and random or stratified random sampling of individuals	Can make up probability sample by random at stages and within groups; possible to select random sample when population lists are very localized	Complex, combines limitations of cluster and stratified random sampling
Purposive	Hand-pick subjects on the basis of specific characteristics	Samples are not easily defensible as being representative of populations due to potential subjectivity of researcher	Samples are not easily defensible as being representative of populations due to potential subjectivity of researcher

Convenience	Either asking for volunteers, or the consequence of not all those selected finally participating, or a set of subjects who just happen to be available	Inexpensive way of ensuring sufficient numbers of a study	Can be highly unrepresentative
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**Source: Black 199:118**

### **3.7 DATA COLLECTION FOR THE QUANTITATIVE PHASE**

The target population for this research were pregnant/nursing mothers aged 15-49 years seen at one of the tertiary health facilities in Nigeria. The researcher gained access into the health facility through telephone calls and were followed up by sending an email letter to the head of department with information on the research aim (Appendix VII). Once approved by the ethical committee board of the facility (Appendix IV), the researcher met with the head of obstetrics and gynaecology department to discuss additional recruitment strategies to recruit the participants. An information sheet recruiting participants was also sent (Appendix VI), which informed them that all data generated during the research process would be confidential and stored in accordance with the data protection act (1998) (The National Archive, 1998). The head of obstetrics and gynaecology invited the researcher to attend ANC with them. At the ANC, the researcher informed potential participants of the study's purpose, methodology, and answered questions. After explaining the research to the participants, an informed consent form was given to them, if potential participants signed the consent form or give verbal consent, they voluntarily agreed to participate in the study, which included completing the survey (Appendix V and XVI). The participants were explicitly told that participation was voluntary and they were free to withdraw from the investigation at any time without providing a reason. They were also assured that refusal to participate in the study would not in any way affect the treatment they received in the health facility.

Administration of questionnaires took place over a three months' period from (January to March 2015). A total number of 330 questionnaires were distributed. The women who completed the questionnaires were seen either in private consulting room in the health facility or in their respective homes. The questionnaires were either completed and return on the spot or respondents' who could not complete the questionnaire immediately were asked for their contacts so that the researcher can contact them for the collection. Every evening I make a phone call to the respondents to know when I can visit them again to collect the completed questionnaires. The respondents either complete the questionnaire themselves or the researcher asks questions orally but relies on the respondents to answer (Polit and Hungler, 1995). Forty questionnaires were administered on the average per week. Filling of the questionnaire took an average of 30-35 minutes to answer.



### **3.7.1 Data Collection for the Qualitative Phase**

After the completion of the quantitative data collection follows the qualitative phase.

Interviews were conducted when the women had recuperated from their complication and often took place on the last day of care before they were discharged. The face-to-face interview took almost month. The women for the interview were conveniently selected from existing participants in the quantitative phase who were willing to participate in the interview phase and had knowledge of the subject matter as this was important for the interviewee for a good process of the interview. The general purpose of the study and topic of the discussions were explained to the participants again. Informed consent was obtained from all persons participating in the research. The participants were appropriately informed about the audio recorder and permission to be recorded was requested.

Looking at the barriers to the access of maternal healthcare with mothers as well as their experiences with the health care providers on health care services are sensitive issues that needed to be studied using an approach that ensures mothers who participate in the study are comfortable enough to share their experiences and perceptions as they might not be comfortable to share such information in a group setting (Milena, Dainora and Alin, 2008). An interview setting is an important factor contributing to the success or failure of an interview. For a meaningful discussion to take place, it's important to choose a physical setting that is comfortable and intimate for the interviewees. It was particularly important for me to find a setting for my study participants', who were both rural and urban women, which is 'familiar', 'non- threatening', and 'formal' for them. The women who had never heard and had never been participated in a research before would be confused if they were exposed in a strange, unfriendly setting. Regardless to the location, the researcher tried to choose a warm, quiet and familiar atmosphere to the participants based on their interest and recommendations. However, the interviews with women were conducted in a private room in the health facility and some in their houses.

Participants were encouraged to speak freely about their experiences from the beginning of their pregnancy, recognition of obstetric emergencies, and onset of complications up to the time of the interview. The questions were selected in relation to the research questions while taking into account local knowledge and cultural sensitivities. The disarray of the topics generally progressed from the more general to the specifics. Six (6) interviews were conducted.

Of the six participants selected for the interview, two were divorced and three were 24- 35-year-old. Of the six interviews, four of them were conducted in a private room in the health facility, whilst two interviews were conducted inside their homes without being disturbed by any member of the participant's family or friends. The interviews lasted between 30 to 40 minutes. Probes used in the interview include the 'uh-huh' probe, the silent probe, and the echo probe (Bernard, 1994). All interviews were audio-recorded so the researcher was attentive to non-verbal cues. These were also used during the analysis to better understand the information from interviews. Sample size determination was linked with the concept of data saturation.

Data saturation in qualitative research is a function of the purpose of the study and the views of interest as opposed to statistical parameters that are commonly used in quantitative research (Francis *et al.*, 2010). These authors also argue further that data saturation is important as it addresses whether such interviews have achieved an adequate sample for content validity. Essentially, what data saturation means is that no new themes, findings, concepts or problems are evident in the data (Bowen, 2008).

### **3.7.2 Characteristics of Study Participants in the Qualitative Phase**

In keeping with the ideas of good research practice, participants in this study and for this phase needed to be those that are suitable for the purpose of collecting the appropriate information required to answer the research questions. This majorly informed the choice of the sampling strategy adopted to select the study participants. Set out in the table below is the profile of all the participants for the qualitative phase.

**Table 3. 2: Profile of Study Participants for the Interview**

S / N	Participant's ID	Age	Education	Income level	Occupation	Marital Status	Religion	Place of residence	Maternal Health Problem
1	Amaka	26 yrs	Secondary	Below minimum wage	Petty trader	Separated	Christian	Rural	Abnormal presentation
2	Chioma	34 yrs	Secondary	Below minimum wage	Petty trader	Married	Christian	Rural	Bleeding
3	Emmanuel	38 yrs	Secondary	Below minimum wage	A hair dresser	Married	Christian	Rural	Anaemia/retained placenta
4	Ijeoma	35 yrs	Above secondary	Above minimum wage	Hair dresser	Married	Christian	Urban	Retained placenta
5	Omoku	32 yrs	PhD	Above minimum wage	A banker	Married	Christian	Urban	Miscarriage
6	Justina	40 yrs	PhD	Above minimum wage	Lecturer	Divorced	Christian	Urban	Preeclampsia

### **3.8 DATA MANAGEMENT, ANALYSIS AND STATISTICAL METHODS**

Various steps were taken to prepare the data analysis, including data checking, transforming and entry. Filled-in questionnaires were checked for completeness and consistency of the responses. Open-ended questions were post-coded and entered on the questionnaire. Data were entered and analysed using Statistical Package for Social Science (SPSS) version 20.0

for windows. Editing of the data occurred after data entry by running frequencies and checking for out of range responses. The yes and no questions were coded as 1 means “yes” and 2 means “no”. The demographic data were categorised and coded as follows: Date of birth-age was calculated by subtracting the date of birth reported by the participants from the current year [2015]. Age group was classified into four categories from 15- 25, 26-35, 36-45 years and 45 years and above. The categorical variables were coded in the same way that the responses were listed in the questionnaire, with the first as 1, second as 2 and so on (see Appendix XV) for completed questionnaire.

Descriptive and inferential statistical methods were used to analysed the quantitative data. First, characteristics of the study sample were described using univariate analysis (frequency distribution and simple percentages). Descriptive statistics such as mean and standard deviation were also utilised. Bivariate analysis (cross tabulations), Pearson Chi-square test was utilised for categorical data and Fisher’s exact test was also used where appropriate. Fisher’s exact measures the exact probability value for the relationship between two dichotomous variables in a two by two contingency table. This test works in the same way as the Chi-square test for independence. Most of the independent variables were dichotomous, except age, travelled time, when treatment was finally sought for, waiting time to access a doctor, treatment and the collection of the prescribed medications. In addition, logistic regression was used for the multivariate analysis. The logistic model considers the relationship between binary dependent variable and a set of independent variables. Multivariate logistic regression analyses were performed in order to estimate the relative influence of the independent variables on maternal health services utilisation. Adjusted Odds ratios (AOR) were reported together with their 95% confidence intervals (CIs).  $P \leq 0.05$  was considered statistically significant. Logistic regression has two main uses. The first is the prediction of group membership. The results of the analysis for logistic regression are in the form of odds, since it calculates the probability of failure. It also provides understanding of the relationships and strengths among the variables (see appendix XIV for quantitative data analysis extracts).

The current study employed logistic regression for the multivariate analysis because of the above reasons. Although, there are several indices that can be used to capture factors influencing access to emergency obstetric care. However, in this study factors influencing utilisation of maternal healthcare services is considered as the existence or absence of barrier

as Yes (1) or No (2). This measured against some selected independent variables such as age, marital status, family type, education, place of resident. Health factors variable like medical doctor not on duty post, shortage of medicines, medical supplies and equipment and distance to health facility. Other variables are cultural beliefs, perception of health services delivered and means of transportation. This entailed an examination of the patterns of association between the dependent and some selected independent variables.

### 3.8.1 Description/Measurement of Variables

The definition and measurement scale of the dependent and independent variables are given in Table 3.3 and 3.4 respectively.

**Table 3. 3: Description and Measurement Scale of Dependent Variables**

s/no	Variables	Description	Type of Data
1	Decision to seek care	Expressed as the percentage of pregnant women who seek consent before attending health facility for care and was recorded as 'yes' and 'no'	Ordinal
2	Quality of Care	Quality of care was recorded as 'optimal' and 'sub-optimal'.	Nominal
3	Ever lost pregnancy	Expresses as the percentage of pregnant women that have lost pregnancy and was recorded as 'yes' and 'no'.	Ordinal
4	Ever lost a child	Expresses as the percentage of women that have lost a child and was recorded as 'yes' and 'no'.	Ordinal

**Table 3. 4: Description of Measurement Scale for Independent Variables**

s/no	Variables	Description	Type of Data
1	Mother's age	The age of the mother at the time of the most recent birth. Coding is done in three cohorts: 15-25 years, 26-35 years, and 36-45 years.	Ordinal
2	Husband's age	The age of the husbands at the time of the most recent birth. Coding is done in three cohorts: 15-25 years, 26-35 years, and 36-45 years.	Ordinal
3	Education	This measures the educational attainment of the women and their spouses and is recorded in four levels: 'no education', 'primary', 'secondary' and 'post-secondary'. Women who have never attended any form of schooling are categorised as having no education. Primary includes women who have had some number of years, or had completed primary schooling. This also applies to the secondary category. Post-secondary category represents women who have post-secondary school education.	Ordinal
4	Employment	This variable measures the proportion of women who are currently working. It is recorded as civil servant, trader, unemployed, student, artisan (hairdresser, tailoring etc.), multinational and clergy	Nominal
5	Income level	This is a measure of the earning of the women after work. For this study, it was recorded as: 'below minimum wage' and 'above minimum wage'	Ordinal
6.	Religion	Percent distribution of women by religious affiliation. It is categorised into: 'Christianity',	Nominal

		'Islam' and 'Traditionalist'.	
7.	Place of Residence	Location of a woman's residence. This is categorised as whether a woman is living in the 'urban' or 'rural' area.	Nominal
8	Ethnic group	This is a measure of the ethnic group of the women and is recorded in four levels: 'Igbo', 'Yoruba' 'Hausa' and others (Ibibio, Effik, Urohobo, Ijaws, etc.)	Nominal
9	Marital status	This is a measure of the marital status of the women and is recorded women who are 'married' and those 'single/widowed/separated'	Nominal

### 3.8.2 Qualitative Data Analysis

Data analysis stage is a very important stage of the research, since it changes the raw data obtained from the data collection tools into meaningful information if the procedures and statistical tests used are suitable for answering the research questions. The following sections summarise the data analysis process for the interviews. Data analysis is an iterative procedure (Creswell, 2003; Denzin and Lincoln, 2003). Qualitative research can produce vast amount of data (May and Pope, 2000). The aim of data analysis in research is to provide insight into what changes can be made in future. Data can be used to provide a baseline to explore what learning has taken place (Waterman, 2007). The analysis of findings of this phase of the study was done by the researcher. Qualitative content analysis was adopted for the analysis of the interview data collected. Qualitative content analysis is defined as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh and Shanmon, 2005). Qualitative data analysis essentially involves taking the data apart, understanding the components and how they relate to each other (Stake, 1995). Miles and Huberman (1994) summed up the idea of qualitative data analysis in the following words: to review a set of field notes, transcribed or synthesized, and to dissect them meaningfully, while keeping the relations between the parts intact, is the stuff of analysis. Creswell (2009) contends that regardless of the type of qualitative methodology employed, a common process to qualitative data analysis involving six steps is discernible, though the steps may not necessarily be linear. These are as follows:

- a) Organisation and preparation of data for analysis (including transcribing interview data and typing field notes.
- b) Reading through the data repeatedly to get the general sense of the data
- c) Coding (segregating data into chunks)
- d) Using the coding process to identify categories or themes and also to generate description
- e) Contextualising and finding linkages between the themes to identify how they fit together in the narrative
- f) Interpretation-making meaning of the data. Qualitative data analysis methods commonly employed by researchers using different qualitative research methodologies include thematic analysis and qualitative content analysis.

The audio recordings were transcribed verbatim by the researcher prior to the analysis. The analysis was done manually by grouping the themes and sub-themes from the collected data. Participants were given pseudonym for the purpose of maintaining confidentiality. The initial analysis was done by the researcher engaging in reflection, identifying and highlighting key words and, later, developing categories that were further systematically analysed for commonalities, variations and disagreements (Prince, 2008). Notes on body language and non-verbal communication were also analysed along with the data from interviews to better explain the findings. Data analysis involved line-by-line, open, and axial stages of coding in a constant comparative, iterative manner to capture emergent themes.

Codes identify information which appears interesting to the researcher that may form the foundation of repeated themes across the data set. A systematic coding of interesting features relevant to the research question across all of the data was carried out. The code was performed manually. Searching for themes involved collating codes into themes and gathering all data relevant to that theme. Themes developed when ideas recurred in the text: for example, I left my house for the hospital without food and by the end of the day I would be looking anaemic. Here the researcher began to gather some possible themes and wrote them down on pieces of paper. All codes that were considered relevant to the research question were incorporated (see Appendix XIII for qualitative data analysis process). The researcher was going constantly through the data checking that the themes corresponded and were appropriate for coded extracts. This helped the researcher to stay true to the data to see what themes emerge as highlighted by Bringer, Johnson and Brackenridge (2006), while interpreting and explaining the findings. Here separate themes were amalgamated to form one theme. Re-reading of the



data set was undertaken to ascertain whether the themes fitted well together and also to code any additional data that might have been initially missed.

In producing the report, the right extracts were selected to match different themes that emerged from data. These were grouped into four major categories: Individual/social cultural factors, logistic barriers, maternal health issues and healthcare incompetence (See Appendix X for sample of interview transcript specimen).

### **3.9 OBSERVATIONS DURING THE INTERVIEWS**

During the interview phase, it was observed that when questions on gendered division of labor were asked, three of the participants shuddered their heads when describing their roles as women. The participants used the non-verbal sign to express their frustration with gendered division of labour which is cultural prescribed. Their body language indicates disapproval to gendered division of labor. Their tone of voice mirrored that they were unhappy performing those duties prescribed to women in the Nigerian society. Considering the facial expression, body movement and tone of voice used by three of the participants, the non-verbal sign used to express their displeasure on gendered role by these women was only reflected in the spoken language of one of the women. Despite these women disapprovals of these cultural prescribed duties for women, they however still carried out these responsibilities even at their expense because of fear of being castigated or ostracised. Their non-verbal language mirrored that the approval of their submissive position is deep-rooted with Nigeria being a patriarchal society where men are exempt from participating in domestic chores.

Again, in an informal conversation with two of the interviewees on issues why maternal morbidity and mortality was still very high in the country despite the availability of both governments owned and private health care facilities? In their response, the two participants stated that the problem could be due in parts because some of the doctors and nurses managing some of the private clinics in the country were unqualified to practice and that refresher courses is not a common practice in such facilities as money making was their major concern as opposed clients' safety. However, all the women in the interview reported that most doctors and nurses in private clinics were more caring, friendly and uses words of encouragement with them than doctors and nurses in government hospitals.

### **3.10 CRITERIA FOR ENSURING TRUSTWORTHINESS**

The concern surrounding validity is rooted in the positivist and scientific traditional operating within the natural and human sciences. The rigorous (trustworthy) research is one which applies the appropriate research tools to meet the stated objectives of the investigation (May and Pope, 1995). This study used a descriptive design and a conventional content analysis approach to describe issues that are significance for women utilisation of maternal health care services in relation to their feelings, thoughts, beliefs and experiences towards services utilisation in health care facilities. According to Lincoln and Guba (1985) suggested that credibility, confirmability, dependability and transferability, and theoretical saturation explain the characteristics of trustworthiness in qualitative research. This section is an account of how trustworthiness was demonstrated within this study adopting the framework on rigour by Lincoln and Guba (1985).

#### **3.10.1 Credibility**

Credibility is the confidence that can be placed in the truth of the research findings (Anney, 2014). It establishes whether or not the research findings represent plausible information drawn from the participants, original data and is a correct interpretation of the participants' original views (Lincoln and Guba, 1985). Lincoln and Guba (1985) also stated that the measure of credibility can be evidenced by establishing prolonged engagement between the researcher and the participants and establishing that triangulation was done. Credibility in the current study was achieved in the following ways:

1. Prolonged engagement- prior to the data collection of data, I spent approximately two weeks interacting and developing rapport and trust with participants. This facilitated understanding and co-construction of meaning between the researcher and the participants which enabled me to build trust, rise above my own misconceptions and become oriented to the situation in which healthcare is assessed by women of reproductive age. The credibility of this study was also made possible by way of conducting the interviews in private consultation rooms where the participants feel comfortable with and this in turn created trust between the participants and the researcher. This atmosphere allows some of the participants to freely share their experiences, feelings, beliefs and thoughts with the researcher.

2. Triangulation- the use of multiple data sources was adopted to inform the findings of this study. The findings of this study were informed by women of reproductive age (silent voices) seeking care in health care facilities.

### **3.10.2 Transferability**

Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts with other respondents (Anney, 2014). Accordingly, this refers to describing a study in sufficient detail in order to facilitate the evaluation of the extent to which the conclusions drawn are transferable to other times, situations, settings, and people (Denzin, 2001). In alignment with this, this study clearly described the need for the research, the study inclusion criteria, the methodological instruments used in investigating the research question, method of analysis and the theoretical underpinning of the study. All the above-mentioned were clearly conveyed towards ensuring that adequate detail was provided in order to enable an independent evaluation of the extent to which the conclusions arrived at could be transferred to other settings.

### **3.10.3 Dependability**

Dependability is “the stability of findings over time” (Anney, 2014, p.278). It involves participants evaluating the findings and the interpretation and recommendations of the study to make sure that they are all supported by the data received from the informants of the study (Cohen, Manion and Morrison, 2011). Dependability is established using an external audit. External audit entails having a researcher not involved in the research process examine both the process and product of the research towards evaluating whether the findings, interpretations and conclusions are supported by the data (Lincoln and Guba, 1985). The ethos of external audit was applied to this research process through close monitoring and supervision received from the research supervisors which involved a lot of rigorous processes. The research was conducted solely by me with the supervision received oriented towards ensuring that the study outcomes were consistent and could be repeated. The supervision achieved this by ensuring that there was consistency in the standard by which the research was conducted, data was analysed and findings were presented and alongside conveying in exact language what was being done at every stage in the research process.

### **3.10.4 Confirmability**

Confirmability refers to the degree to which the results of an inquiry could be confirmed or corroborated by other researchers (Baxter and Eyles, 1997). Confirmability is concerned with establishing that data and interpretations of the findings are not figments of the inquirer's imagination, but is clearly derived from the data (Anney, 2014). The confirmability of this study was achieved using external audit as applied in the supervision received, and being reflexive by acknowledging my biases and preconceptions in the section on researcher identity. By adopting all the above-mentioned, this study ensured that the outcomes of the study were informed by the study participants and not the biases inherent in my position as the researcher.

## **3.11 ETHICAL CONSIDERATIONS**

Conducting research in and itself can be problematic. Accessibility, funding, time, and other factors may all impose problems. The reality there can be ethical concerns at every step of the research process (Munhall, (2012). Ethics in research has to do with a reflection of respect for those who take part in research. It ensures no unreasonable, unsafe or thoughtless demands are made by researchers. Ethical approval in developing countries is necessary. Procedural ethics involves ensuring that the research receives appropriate ethical approval (Guillemin and Gillam, 2004). The research received ethical approval from the University of Wolverhampton School of Health Wellbeing Ethics Committee (Appendix III) and approval from the Ethical Committee of the Tertiary Health Facility (Appendix IV). Procedural ethics has a medical focus and therefore, it is important to consider ethics in practice (Guillemin and Gillam, 2004). Although the research was not envisioned to be upsetting for participants; measures were put into place in case a participant became distressed, contact was made to the health facility to know if there was centre for managing distressed participants.

Fortunately, there was a centre for managing people who were distressed. In such an instance where a participant is distressed, the interview would be terminated by the researcher while trying to show empathy towards the participant but would try to remain as unbiased as possible to avoid saying things which would influence the participant to take a certain course of action. Where the participant refused to be consoled by the researcher, the researcher also asked the participant if there was anyone that could be contacted on their behalf. Where there was no one to be contacted, the researcher asked the participants if the researcher could refer

them to the distressed centre. If they say yes, they were sent to the distress centre in the facility for expert counselling.

The right of pregnant adolescents to consents varies widely from country to country and this age group is perceived to have difficulties in comprehending information or making decisions (Tillett, 2005). Although the age of consent in Nigeria is 18 and pregnant adolescents who were younger than 20 were considered to be minors due to the norms, culture, gender issues and beliefs of the Nigerian society. Tillett (2005) says that the Department of Human Services in the United Kingdom (UK) reported that consent of participants in research, whatever their age or competence, should always be sought, by means appropriate to their age and competence level. For children under 16 years of age and for other persons where capacity to consent may be impaired the additional consent of parents or those with legal responsibility for the individual should normally also be sought. However, in Nigeria this waiver has not been ratified and for this reason all pregnant adolescents who were younger than 20 years had their guardians countersigning the forms (see appendix XVI for signed consent form) or giving verbal consent granting permission to be interviewed. Consent was then taken from the women who were interviewed in a separate room to ensure confidentiality. Also, to maintain women's privacy, if someone came into the interview place, interviews were stopped in the interests of confidentiality and anonymity.

Informed consent (see Appendix V) from the respondents was obtained. Informed consent means that the participants have detailed information regarding the subject matter under investigation and are capable of understanding the information and have the control of free choice, allowing them to consent voluntarily to participate in the study or decline to participate in the research (Polit and Beck, 2004). Written or verbal consent was sought from the participants, the women and/or their guardians after an explanation of the purpose and benefits of the study. The participants were assured of confidentiality, anonymity and non-victimisation should they refuse to participate in the study, or discontinue their participation at any stage. Informed consent for both the questionnaire and interviews were managed the same way.

In undertaking research, researchers should be guided by some form of ethics (Shrader-Frechette, 1994). The author further emphasises that research ethics specify the conducts that researchers ought to demonstrate during an entire process of research. Because this research is on a sensitive issue and the research participants are the marginalised population, the

following ethical considerations were made to be of high priority because human participants are treated as collaborators rather than subjects (Bailey, 2007). Hence, the following were considered throughout the research process:

1. Prior to commencement of the interview process, a verbal consent was obtained from each of the participants before conducting the interview. Informed consent means that participants have adequate information regarding the research; can comprehend the information and have the power of free choice, enabling them to consent voluntarily to participate in the research or decline participation (Polit and Hungler, 1997). Thus, the principles of autonomy and respect for persons were upheld (see appendix VI).

2. Participants were assured that this study will not harm them in any way and that data collected is purely for the study and will not be passed on to another party. Data collected was stored anonymously in codes so that participants cannot be identified. To ensure anonymity, respondents were assured that they were not required to write their names on the questionnaires. This would ensure that the respondents are anonymous. If they are satisfied with the requirements of the study a consent form was signed before the questionnaire was issued to the participants to complete it and interview conducted for selected participants for the qualitative data. Anonymity ensues when even the researcher cannot tie a participant with the data for that person (Polit and Hungler, 1997).

3. Confidentiality and privacy was maintained, as the interview occurred face to face with the respondents alone, in a private consulting room in the hospital or in participants' own homes (as they preferred). Active listening, politeness and flexibility were applied while conducting the interviews with the aim of showing respect to the participants. The interviews were stopped if other people arrived during the interview or if participants were not willing to share their experiences. Further, enough time was given between agreeing to take part in the interview and the actual interview to prevent coercion or a feeling of obligation. Also, pseudonyms were used, apart from the researcher; no one was able to link individuals to their pseudonym.

Completed questionnaires and transcripts of the audio recorder were stored under lock and key in a secure drawer of the researcher. Data and copies of transcripts kept on computer was password protected, with the password known only by the researcher. Once the study is completed the data will be destroyed after a period of 4 years. Confidentiality was also

maintained in the collection of the completed questionnaires. I personally visited the participants either at the hospital or in their homes for the collection of the questionnaires.

Kvale and Brinkmann (2009) commented that anonymity in an interview on the one hand can serve as an alibi for researchers and on the other can protect the participant, but can also deny the participant credit. In some cases, participants who spend a long time providing valuable information may wish to be acknowledged for their contribution to the research.

4. Right to withdraw- individuals who did not wish to take part in the survey were told that they have the right to withdraw from the study at any point. They participants were also informed that they did not have to answer a question if they didn't wish to.

5. Appropriate handling of participants- The participants had to handled sensitively as the interview addressed some of those sensitive issues and consequently some questions were not fully probed in those instances where the respondent appeared to be uneasy or distressed.

6. Debriefing- At the end of the interview, I spent at least five minutes debriefing the interviewee to ensure that they had not experienced any harm answering any questions.

### **3.12 DIFFICULTIES FACED DURING FIELD STUDY, DATA TRANSCRIPTION AND ANALYSIS**

Several difficulties, biases and limitations were met during the study. However, there was no evidence that the findings were significantly affected by either difficulties or biases. The difficulties that occurred in the study are discussed in the following headings below.

#### **3.12.1 Difficulties Encountered in the Study**

Several difficulties were encountered during the study. The study site was in an urban setting. There was a problem of traffic hold-up and bad road links and it took nearly two hours of travel to reach the field site. The data collection period started at a period (January- April) when people are clearing their farm land for cultivation, so it was difficult to meet some of the participants who had been discharged from the hospital at home as they were busy on farm engaged in preparation for cassava planting. The study populations for this study were only women of reproductive age (aged 15- 49 years) who had direct obstetric complications and were pregnant/nursing mothers or had given birth within the last one year before the study took place. In some cases, it was difficult to conduct interviews at the appointed time due to the needs of the baby, in which case I had to wait, for example, for the woman to settle the baby.

Another constraint to this study was the problem of unwillingness and the sensitive nature of questions, which made it very intricate for people to appreciate the need to give relevant information. Even for those with some level of education, their attitude revealed that they give little or no importance to research. Furthermore, it was at times challenging to obtain adequate responses from the respondents. Some information was considered top-secret and private, even information that was thought to be for public consumption. This was an obstacle to the speedy completion of the fieldwork and made effective communication more difficult. Some participants were less educated and initially not willing to talk to a stranger. It took me more time to build rapport, describe the study purpose and reassure them. A female nurse played an important role in bridging the gap between the researcher and the respondents.

Some of the participants were suspicious of me because they felt I was asking them questions that were obvious which they expected me to know. They were also curious about where I came from and whether I was from the private sector. The women also wondered why I was collecting the information and what could be the benefit to them of giving the interviews. I had to show them my university identity card and my status described as a researcher and where the purpose of the study was stated as being to obtain a University degree then they were happy to take part in the study. One of the female nurses helped to build up trust as she was from the locality and a health staff in the health facility used for this study. Another difficulty that was faced during interview phase was that two women were distressed following the question that they were asked. Before the commencement of the study, contact was made to know if there were a distress policy in the facility where distress participants can be referred to. Luckily enough there was a facility for counselling for distress persons in the health facility and the two women were referred there.

Again, another major problem the researcher also came across was the problem of poor power supply. Electricity supply in the state was not encouraging as potential participants complained of heat and as such was unwilling to take part in the study due to the heat. The researcher had no alternative than to hire a generator set to power the fans in the ward during the periods of data collection (see appendix XII for reflective extract for my research journal). Compounding the challenge was the fact that the researcher had to make several visits to the health facility before interview was granted. There were also enormous financial commitments involved. The cost of printing the questionnaire, paying for a hotel as the researcher place of residence was far away from the study area, fueling a generator set for



power when there was no power supply in a bid to make the research participants comfortable while filling the questionnaire, and occasionally providing the participants with water for those who complained of thirst was enormous. Notwithstanding, the field work was valuable and gave the researcher more experience and exposure.

### **3.12.2 Difficulties Faced in Data Management and Data Analysis of the Questionnaires**

The difficulty faced in this phase was majorly on the data management. The respondents who completed the questionnaires themselves sometimes skipped some of the questions that were asked. However, when they handed the completed questionnaires I pleaded with them to give me about 3 to 5 minutes of their time to allow me to go through the questionnaires. During this process, I could ask them questions on the skipped questions. Another challenge faced on data analysis had to do with data cleansing, having to go through the data entered into the SPSS and comparing it with what is on the question. Another problem encountered was the issue of having to re-categorising the data again for the chi-square/logistic regression analysis. This also took a lot of my time. But, at the end of it was worth the time put in.

### **3.12.3 Difficulties Faced in the Qualitative Process of Data Transcription and Analysis**

The researcher faced numerous problems while carrying out the data transcription and analysis. I had to go through the recording repeatedly to be sure that what is being transcribed is representing what the participant says. Because of this, I spent much time in transcribing an interview. Another problem encountered was knowing when saturation has reached. Furthermore, the fact that the framework advocates for an iterative process which involves continuing the analysis phase until saturation is reached was an issue which I initially found hard to reconcile. It is a fact that as individuals our lived spaces alter with time, with our ideas and lived experiences continually shifting depending on our present circumstances at every point in time. Accordingly, I wondered initially when I set off to use this framework if saturation would ever be reached and how I would recognise this when it was achieved. However, as I began to carry out this piece of work in line with the stages recommended by The Silences Framework, I discovered that the stages addressed this issue as the framework is designed to continually check and recheck uncovered findings with the individuals researched.

### **3.13 CHAPTER SUMMARY**

This chapter described the research design and methodology that was used in the study. It highlighted aspects of sampling, data collection tools, data collection process, ethical issues and the data management. The research used a mixed methods research design to investigate factors influencing women access to emergency obstetric care. The investigation comprised of two studies; one quantitative and one qualitative. The quantitative research seeks to identify the factors that affect women access to emergency obstetric care. This information provided a contextual background to the qualitative and identified areas that could be explored further in details. The qualitative research explores women's individual experiences in reaching the health facility and in the health facility. Descriptive and inferential statistics were used for the quantitative data and qualitative content analysis was carried out for the qualitative data analysis. Three hundred-eighteen (330) women who were pregnant/nursing mothers were survey to gather quantitative data and six (6) women were interviewed for the qualitative information. Flexible methods and tools (self-administered questionnaires and semi-structured in-depth interviews) were employed to gather information and efforts were made to maintain a balance between academic integrity, confidentiality, research ethics and respondents' beliefs, values and attitudes during the process of this study. The results of the research are presented in the following chapters.

The next chapter presents the findings that emerged from the analysis of the quantitative data

## **CHAPTER FOUR (VOICING SILENCES-STAGE 111)**

### **4.0 INTRODUCTION**

This chapter presents the results which emerged from the analysis of the data collected in the first phase of this study. As a consequence of applying TSF to maternal health research, the presentation of the findings contained herein is done using the socio-ecological model combined with the gender and development theory. The findings of this research directly evidence the experience of respondents and presents facts from their perspectives because of their position in the social world at the time of conducting this research. A sample of the questionnaire is presented in the Appendix I illustrating information collected in this phase. The trends, pattern and relationship among data were identified and interpreted. The data classification has been carried out on the basis of pregnant and nursing mothers. Descriptive statistics were computed for all variables. Chi-square value was calculated and tested for significance at a significance level of 5%. P-values determined, using Pearson Chi-square test or Fisher's exact test, where appropriate, were considered statistically significant when less than 0.05. Adjusted odds ratios (AOR), 95% confidence intervals (95% CIs) were calculated for each of the individual logistic regression models and P-values were reported for bivariate analysis. Result will be reported by using the socio-ecological model. The analysis is divided into two – demographic data presentation and answers to research questions. Out of the total number of 330 questionnaires that were administered, 318 (96.4%) of them were returned and were utilised for the data analysis. Twelve (3.6%) out of 330 questionnaires could not be used because of incomplete information or non-return.

### **4.1 QUALITY OF CARE AT THE FACILITY**

Women's perceptions were used to identify quality of care. During the bivariate analysis, the variables used were re-categorise. Also, in the analysis of the multivariate association between maternal/fetal outcome and access to health facility, quality of care and socio-demographic factors, maternal and fetal outcome on delivery was re-categorised as good and adverse outcome for purpose of binary logistic regression. In the multiple logistic regression models selected factors were put together in a model process to estimate adjusted odds ratio (AOR).

The models were just on choice, since using stepwise process would have required even greater number of cases per variables. So, the researcher chose to do the Enter Method

selecting mainly variables that were significant in bivariate level. The Enter Method is a procedure that enters all the variables that predicts the contribution of each towards the achievement of the dependent variable (Norusis, 1990).

## **4.2 CHARACTERISTICS OF THE WOMEN**

The demographic data are essential to this research study. **Tables 4.1** and **4.2** below shows the descriptive analysis of individual and household factors. These data are divided into two parts. The first part shows characteristics data of respondents and the demographic data of their spouses. The second part shows the result of the bivariate analysis between the independent and predictor variables.

The information on the socio-demographic characteristics of respondents reveals that the age range of the women was 15-45 years with a mean age as  $26.4 \pm 5.4$ . Majority (54.1%) respondents were within 26-35 years of age, while (14.5%) representing 46 childbearing women were within the ages of 36-45+ years and above. Distribution of respondents by age clearly shows that women continue childbearing until their late 40s. **Table 4.1** below also shows that majority 238 (74.8%) of the respondents were married, while (1.9%) were single. Evidence found in the literature shows that marriage is very essential in the formation of family and maternal health. The implication of the marital status distribution is that women still found themselves taking care of their pregnancy or children alone as single mothers, separated, divorcees or widows. This situation increased the possibility of not having good health care because most women may not have the economic power to survive alone.

Two hundred and fifteen (67.6%) respondents were in a monogamous union, while (14.5%) were in a polygamous union. The questions that make up the results in table 4.1 can be found in question numbers 1, 2, 3 & 9 in section A of the questionnaire.

**Table 4. 1: Distribution of Socio-Demographic Characteristics of Respondents**

<b>Characteristics</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>	<b>Urban %</b>	<b>Rural %</b>
<b>Age at last birthday</b>				
15-25	100	31.4	65.0	35.0
26-35	172	54.1	81.4	18.6
36-45 <sup>+</sup>	46	14.5	85.2	14.8
<b>Marital Status</b>				
Married	238	74.8	79.4	20.6
Single	64	20.1	65.6	34.4
Separated	8	2.5	50.0	50.0
Widowed	6	1.9	100.0	-
Divorced	2	0.6	100.0	-
<b>Family type</b>				
Monogamous	215	67.6	83.3	16.7
Single parents	57	17.9	61.4	38.6
Polygamous	46	14.5	63.0	37.0

Table 4.2 below show details of respondents' occupation, education, income level, religion and ethnicity. The occupational information of respondents shows that 102 (32.1%) were civil servants, while the rest belonged to other occupations. Respondents' level of education ranged from primary to post-secondary education. The distribution of respondents by educational qualification shows that half (51.3%) respondents had completed post-secondary education, while 8 (2.5%) had no formal education. The variables in this table can be found in question numbers 4&5 of section A of the questionnaire.

**Table 4. 2: Continuation of Socio-Demographic Characteristics of Respondents**

<b>Occupation</b>				
Civil servant	102	32.1	93.1	6.9
Traders	65	20.4	66.2	33.8
Unemployed	58	18.2	62.1	37.9
Student	51	16.0	76.5	23.5
Artisan (hair dresser, tailoring etc)	31	9.7	67.7	32.3
Multinational	9	2.8	77.8	22.2
Clergy	2	0.6	100.0	-
<b>Educational status</b>				
Post-secondary education	163	51.3	90.8	9.2
Secondary education	92	28.9	76.1	23.9
Primary education	55	17.3	41.8	58.2
No formal education	8	2.5	25.0	75.0

The income distribution of respondents in table 4.3 revealed that (25.7%) respondents had income level below national minimum wage of #18000 per month; whilst (74.4%) reported income level above national minimum wage. In addition, (24.2%) reported no income level. Majority (84.9%) respondent were Christians, whilst the rest belonged to other (Islam, traditionalist) religions. On ethnicity, 130 (40.9%) were Igbos, whilst (9.4%) were Hausa's. The questions contained in the table 4.3 below can be found in section A of the questionnaire (6, 7& 8).

**Table 4. 3: Distribution of Respondents by Income, Religion and Ethnicity**

<b>Characteristics</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>	<b>Urban %</b>	<b>Rural %</b>
<b>Estimated monthly income</b>				
Below minimum wage	179	74.3	86.0	14.0
Above minimum wage	62	25.7	64.5	35.5
<b>Religion</b>				
Christianity	270	84.9	79.6	20.4
Islam	44	13.8	59.1	40.9
Traditionalist	4	1.3	50.0	50.0
<b>Ethnic group</b>				
Igbo	130	40.9	73.1	26.9
Others (Ibibio/Efik urohobo/ijaws, ishekiri/ukwani)	109	33.2	84.6	16.4
Yoruba	49	15.4	87.8	12.2
Hausa	30	9.4	46.7	53.3

### 4.2.1: Spouse's Demographic Characteristics

The socio-demographic characteristics of the spouses revealed that the age ranges from 15-45+ years, (41.3%) of them were within 26-35years, while (2.5%) representing 6 spouses were within the ages of 15-25years. The education, religion, occupation and income level of spouses reveals that (72.4%) had post-secondary education, while (5.7%) representing 14 spouses had no formal education. In addition, religion of spouses depicts that (76.0%) of them were Christians, while the rest belonged to other (Islam, traditionalist and atheist) religions. The occupational information of spouses shows that (53.8%) were civil servants, while the rest belonged to other occupations.

However, almost all husbands had a source of income. Majority (72.3%) earned income level above national minimum wage, while (2.5%) earned income level below the national minimum wage. In addition, **Table 4.4** below shows that (100%) partners' representing 6 respondents were urban dwellers and were within the ages of 15-25 years. **Table 4.4** also shows that (88.3%) who were age 36-45+ years and above were urban dwellers when compared to (30.3%) of them that were rural dwellers.

Also, see question numbers 1, 2, 3, 4, 5& 6 in section B of the questionnaire for the results in Table 4.4.

**Table 4. 4: Spouse’s Demographic Characteristics**

Characteristics	Frequency (n)	Percentage (%)	Urban %	Rural %
<b>Husband’s age</b>				
15-25	6	2.5	100.0	-
26-35	99	41.3	78.8	21.2
36-45	97	40.4	83.5	16.5
46+	38	15.8	73.7	26.3
<b>Husband’s Educational status</b>				
No formal education	22	8.9	63.6	36.4
Primary education	14	5.7	57.1	42.9
Secondary education	32	13.0	43.8	56.2
Post-secondary education	178	72.4	89.3	10.7
<b>Religion</b>				
Christianity	184	76.0	84.8	15.2
Islam	38	15.7	63.2	36.8
Traditionalist	6	2.5	66.7	33.3
Atheist	14	5.8	57.1	42.9
<b>Husband’s Occupation</b>				
Civil servant	128	53.8	89.1	25.0
Artisan	44	18.5	54.5	54.5
Trader	31	13.0	67.7	32.3
Multinational	18	7.6	100	-
Unemployed	11	4.6	45.5	54.5
Student	4	1.7	75.0	25.0
Clergy	2	0.8	100.0	-
<b>Husband’s monthly income</b>				
Above minimum wage	172	72.3	82.6	17.4
I don’t know	60	25.2	76.7	23.3
Below minimum wage	6	2.5	50.0	50.0

**4.2.2: Individual Factors**

Regarding parity, more (56.0%) respondents had 1-3 children while (3.8%) respondents reported having five children and above. Two hundred and sixty-five (84.9%) participants had lost a child. Out of grand total of 318 respondents who had reported being pregnant, (59.4%) respondents have been pregnant 1-2 times. In addition, (24.3%) respondents claimed to have lost a pregnancy. Again, (81.5%) respondents who had no child were urban dwellers when compared to (18.5%) who were rural dwellers. **Table 4.5** also shows that (66.7%) respondents who were urban dwellers had 3-5 children when compared to (33.3%)



respondents who were rural dwellers. Also, see question numbers 10, 11, 13& 14 in section A of the questionnaire for the results in table 4.5.

**Table 4. 5: Descriptive Statistics of Individual Factors on Maternal Characteristics**

<b>Characteristics</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>	<b>Urban %</b>	<b>Rural %</b>
<b>Parity</b>				
None	101	31.8	81.5	18.5
1-3	178	56.0	70.4	29.6
3-5	27	8.5	66.7	33.3
5+	12	3.8	70.3	29.7
<b>Number of times pregnant</b>				
1-2	189	59.4	76.2	23.8
3-4	89	28.0	82.0	18.0
5+	40	12.6	65.0	35.0
<b>Ever lost pregnancy</b>				
No	237	75.7	70.9	29.1
Yes	76	24.3	92.1	7.9
<b>Ever lost a child</b>				
No	265	84.9	75.5	24.5
Yes	47	15.1	83.0	17.0

The idea of trimester is used in this study to refer to divisions of three months during pregnancy that a pregnant mother had started ANC visits. It is also anticipated that women will start ANC services as soon as they realise that they are expectant. The variable trimester in pregnancy suggest which month the respondents began ANC visits during pregnancy. This variable was considered important in this research study as it hopes to shed some light on how well women of child bearing age utilise maternal health care services in Nigeria. The assumption being that they will start up taking ANC services on the first month that they realise they are expectant. Obstetric data of the respondents shows that majority (89.3%) of women booked for antenatal care. Ninety-eight (34.3%) participants attended ANC in the first trimester while the rest booked in later trimesters of their pregnancies. In addition, majority (67.6%) of the women who booked for ANC had regular visits. Forty (12.6%) respondents reported having cultural/religious factors prohibiting them from accessing care. About how barriers to accessing care were overcome, 53.8% respondents could overcome barriers affecting access to utilisation of health care services by friend's advice/experiences, while 20.5% respondents were because of the seriousness of the health complication. Of the

57 (17.9%) women who obtained consent before seeking care, 47.3% obtained consent from mothers-in-law whilst 2.2% seek consent from co-wives.

Also, see questions number 16, 17&18 in section A and questions 8, 10, 11&12 in section C of the questionnaire for the results in table 4.6.

**Table 4. 6: Obstetric Data of Respondents**

Characteristics	Frequency (n)	Percentage (%)
<b>Booking status in health facility</b>		
Booked	284	89.3
Not booked	34	10.7
<b>Gestational age at booking</b>		
1st trimester*	98	34.3
2nd trimester	91	31.8
3rd trimester	97	33.9
<b>Frequent at ANC*</b>		
Yes*	207	67.6
No	99	32.4
<b>Cultural/religious factors prohibit health facility utilisation</b>		
Yes	40	12.6
No*	278	87.4
<b>How health facility non-utilisation are overcome</b>		
Friend's advice	21	53.8
Mother's intervention	10	25.6
Seriousness of complication	8	20.5
<b>Consent obtained before visiting hospital</b>		
Yes	57	17.9
No*	261	82.1
<b>Persons whose consent was received</b>		
Mother in-law	26	47.3
Parents	16	5.0
Sister in-law	7	2.2
Co-wives	6	10.9

\*categories indicate adequate response

### Research Questions

Three research questions were raised and answered, the statements and questions gathered from the questionnaire were coded, analysed and reported.

### 4.3: FACTORS INFLUENCING DECISIONS TO SEEK EMERGENCY OBSTETRIC CARE

In giving answers to the research question one, respondents' responses were categorised into poor, fair and good decision.

#### 4.3.1 Respondents Decision to Seek Care

Recognition of warning signs in pregnancy as shown in **Table 4.7** was reasons why care was sought for by the respondents. Three hundred and four (95.6%) respondents correctly recognised bleeding in pregnancy as a warning signal, 251 (78.9%) recognised convulsion during pregnancy, 226 (71.1%) recognised vaginal loss of fluid that is not urine before term, 220 (69.2%) recognised onset of preterm contractions, and 203 (63.8%) recognised persistent headaches during pregnancy as a warning signal to seek care. However, as many as 117 (36.8%) respondents misunderstood vulval itching to be a warning signal. See question numbers 2-7 in section C of the questionnaire.

**Table 4. 7: Recognition of warning signs in Pregnancy**

Symptoms	Yes (n/%)	No (n/%)	I don't know (n/%)
Bleeding	304 (95.6)	6 (1.9)	8 (2.5)
Convulsion	251 (78.9)	20 (6.3)	47 (14.8)
Vaginal loss of fluid that is not urine before term	226 (71.1)	30 (9.4)	62 (19.5)
Onset of preterm contractions	220 (69.2)	46 (14.5)	52 (16.4)
Persistent headaches	203 (63.8)	57 (17.9)	58 (18.2)
Vaginal (vulval) itching	117 (36.8)	94 (29.6)	107 (33.6)

## **4.4 BIVARIATE ANALYSIS ON SOCIO-ECONOMIC FACTORS ASSOCIATED WITH MATERNAL DECISION TO SEEK CARE**

### **4.4.1 Women's Decision to Seek Sare**

Respondents' decision to seek emergency obstetric care was determined by computing a summary variable overall decision to seek care by aggregating 14 items on decisions and attitude of women. Options viewed to be more acceptable attitude of women towards seeking care was given a score of 1 point while unacceptable attitude was given a score of 0. Total decision score was 14 points. Overall decision of women was characterised as poor (if aggregated score  $\leq 4$ ), fair (if aggregated score  $\geq 5$  and  $\leq 9$ ) and good (if score  $\geq 10$ ).

The result in Table 4.8 shows bivariate analysis of determinants of maternal health care utilisation. Cross tabulations were used and Chi-square test was also checked. Marital status, family type, monthly income and place of residence had significant association with maternal decision to seek care. A slightly higher (44.1%) of the respondents with income level above minimum wage were more likely to make good decision than those with income level below minimum wage. The current study also shows that married respondents (40.8%) were more likely to make good decision to seek care than those who were single/widowed/separated. The result shows that (43.2%) of the respondents who live in the urban area were more likely to make good decision to seek care than those who live in the rural area. Respondents (44.3%) who were in a monogamous union were more likely to report good maternal decision to seek health care compared to 26.1% who were in a polygamous union and 14.0% who were single parents respectively (P-values are included in the table below). See section A of the questionnaire for questions numbers 2, 3, 6 &9.

**Table 4. 8: Maternal Decision towards seeking care and selected Individual Factors**

Characteristics	Maternal Decision			Total	X2	df	P
	Poor	Fair	Good				
<b>Marital Status</b>							
Married	20 (8.4)	121(50.8)	97 (40.8)	238	8.711	2	<b>0.013</b>
Single/widowed/separated	8(10.0)	54 (67.5)	18 (22.5)	80			
<b>Family type</b>							
Monogamous	6 (2.8)	114(53.0)	95 (44.2)	215	52.112	4	<b>0.000</b>
Polygamous	14(30.4)	20 (43.5)	12 (26.1)	46			
Single parent	8 (14.0)	41 (71.9)	8 (14.0)	57			
<b>Estimated monthly income</b>							
Below minimum wage	12(19.4)	27 (43.5)	23 (37.1)	62	21.786	2	<b>0.000</b>
Above minimum wage	4 (2.2)	96 (53.6)	79 (44.1)	179			
<b>Place of residence</b>							
Urban	16 (6.6)	122(50.2)	105 (43.2)	243	24.276	2	<b>0.000</b>
Rural	12(16.0)	53 (70.7)	10 (13.3)	75			

Table 4.9, shows socio-economic factors associated with maternal decision to utilise maternal health care services. Results show that mode of transportation was ( $p=0.004$ ) related to good maternal decision to utilised maternal health care services, with those who came on-foot having more good decision to seek care than those that came on motorised transport. The respondents were asked how long it would take for them to travel to the health facility by maternal decision to seek care. Travel time to the facility was significantly related to maternal decision to utilised maternal health care services ( $P=0.000$ ), those who travelled  $\leq 30$  mins were more likely to report good maternal decision compared to those who travelled more than 30 minutes. See section D of the questionnaire for questions number 2&3.

**Table 4. 9: Association between Maternal decision to seek Care and Socio-Economic Factors**

Characteristics	Maternal Decision			Total	X2	df	P
	Poor	Fair	Good				
<b>Means of transportation to health facility</b>							
On-foot	2 (7.1)	10 (35.7)	16(57.1)	28	44.927	3	<b>0.000</b>
Motorised transport	26 (9.1)	165(58.9)	89(31.8)	280			
<b>Travel time</b>							
<30mins	10 (5.2)	104(54.5)	77(40.3)	191	13.355	4	<b>0.010</b>
30mins-1hr	8 (11.0)	41 (56.2)	24(32.9)	73			

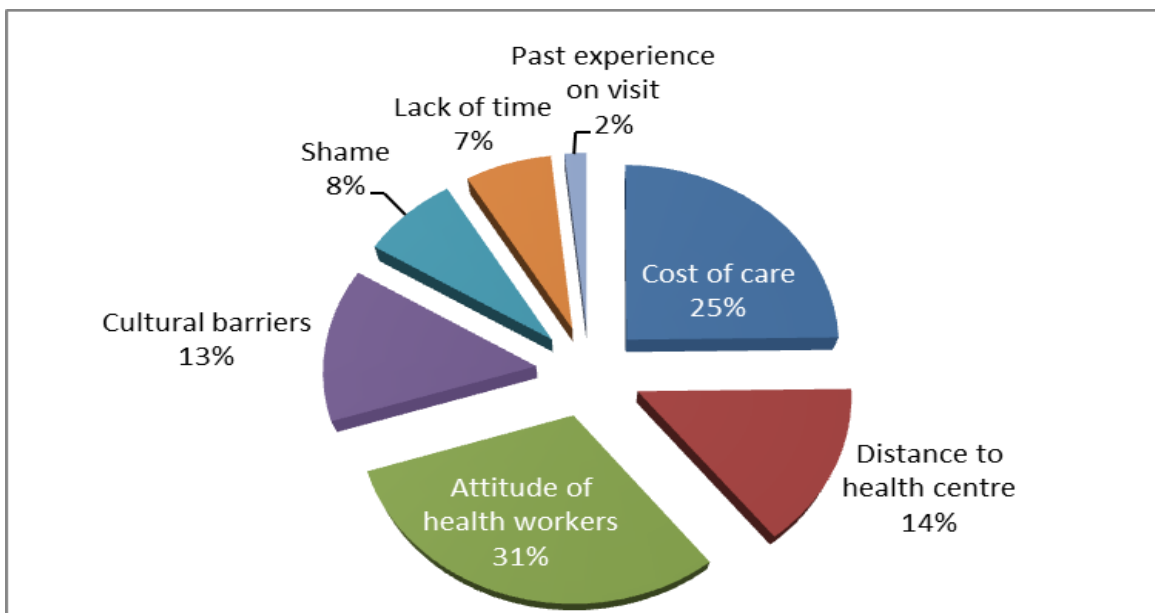
>1hr	10 (20.0)	28 (56.0)	12(24.0)	50			
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#### 4.4.2: Combined Socio-Ecological Barriers to Utilisation of Antenatal Care

The variables include factors/reasons for low-attendance of antenatal care, other factors that prohibit respondents’ utilisation of maternal health care services, barriers to deciding to seek emergency obstetric care, distance of participants to the health facility, perceived quality of care, pregnancy/care experiences, delay in seeing a doctor, delay in obtaining medications, and delay in carrying out laboratory test and time interval between arrival and commencement of treatment.

##### 4.4.2.1 Reasons for Non-Regularity for Antenatal Care (ANC)

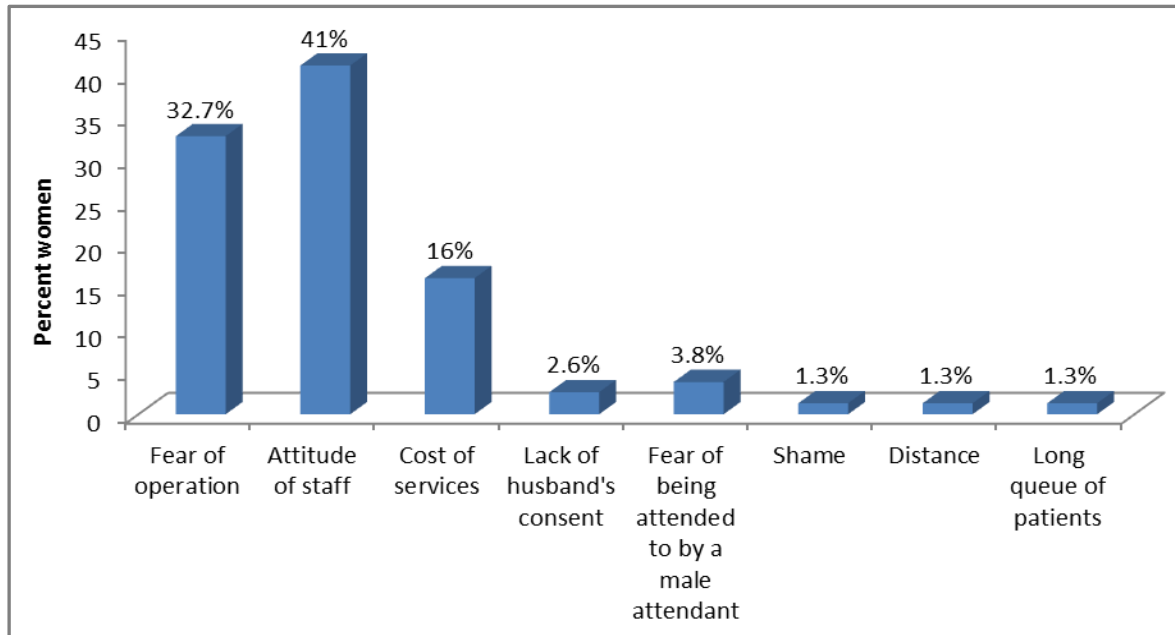
From question number 19 in section A of the questionnaire, the respondents gave their reasons for non-regularity at ANC as shown in Figure 4.1. The reasons given for non-regularity at antenatal care ranged from attitude of health workers (31%) to past experiences as reported by 2% respondents. As was evidenced in Table 4.6, almost an equal number of women booked for ANC in the first, second and third trimester. See question number 19 in section A of the questionnaire.



**Figure 4. 1: Reasons for Non-Regularity for ANC**

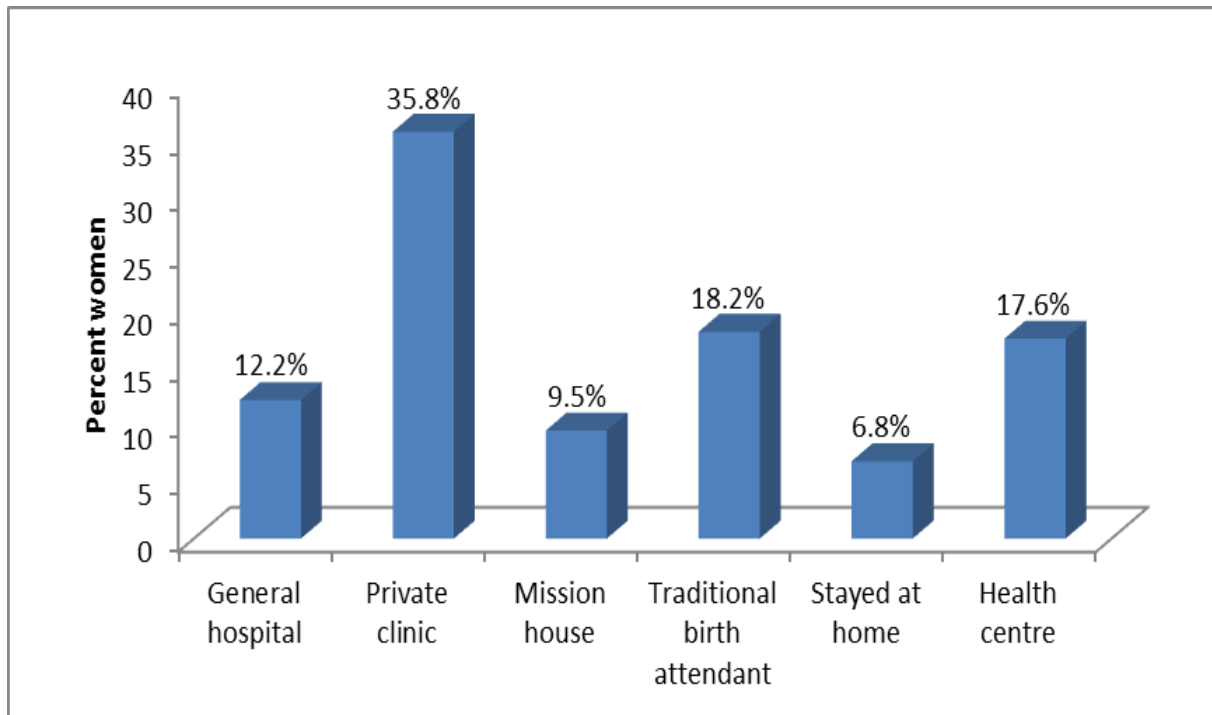
Mothers provided various reasons that hindered them from taking decision to seek health care as depicted by **Figure 4.2**. Reasons range from fear of operation (32.7%) respondents, shame,

distance and long queue as experienced by (3.9%) respondents. See section C for questions number 33-38 in the questionnaire.



**Figure 4. 2: Reasons for Delay in Deciding to Seek Care**

A summary of places were women usually sought for care is shown in Figure 4.3. It was revealed that 35.8% respondents usually sought for care during pregnancy in the private clinics while 6.8% respondents stayed at home. See question number 1 in section C of the questionnaire.

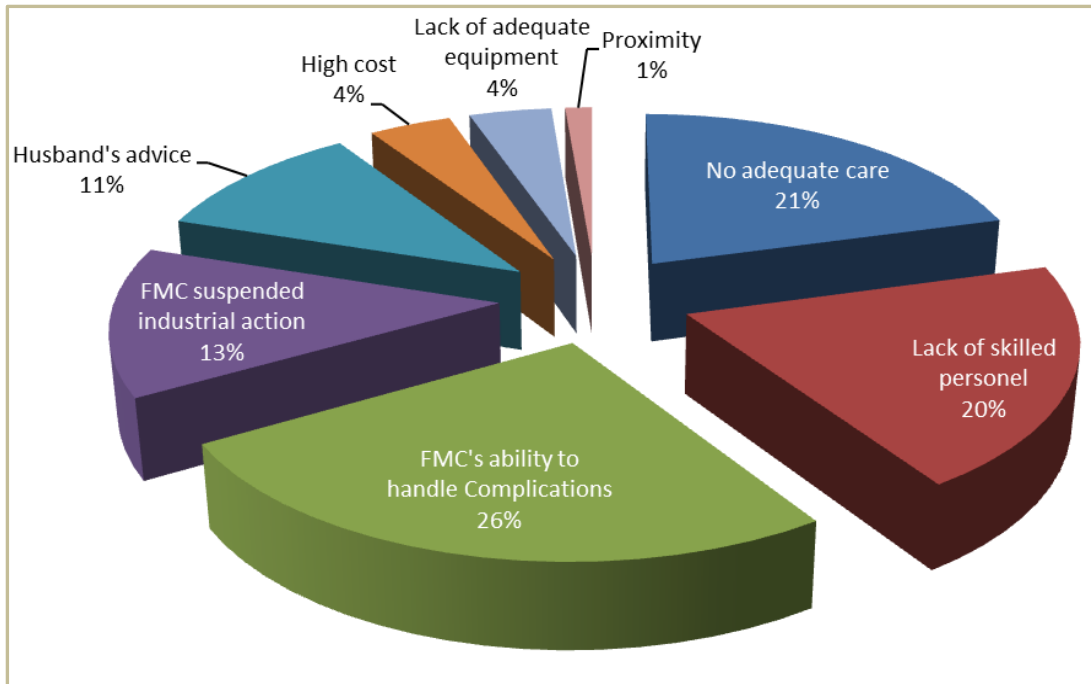


**Figure 4. 3: Places where Care for Pregnancy is Usually Sought**

#### **4.4.3 Reasons Why Patients Leave Other Care Facilities in Favour of the Health Facility Where this Study was Conducted**

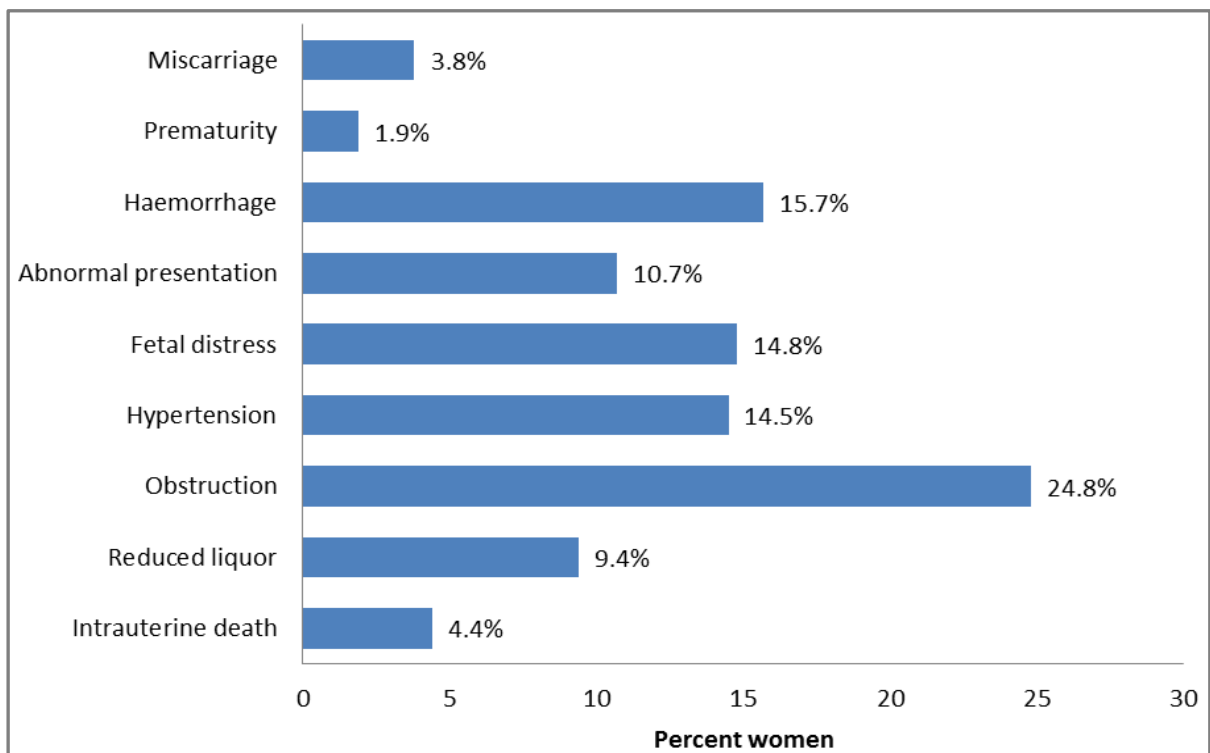
Mothers provided various reasons for leaving their current care facility to the health facility where this study was conducted as shown in **Figure 4.4** below. Whilst 26% moved because of perceived expertise to handle complications, the rest being the majority moved because of perceived failure or shortcoming in their original facility. See question numbers 13-27 in section C of the questionnaire.





**Figure 4. 4: Reasons Patients Moved from other Health Facility to the study site**

**Figure 4.5** below suggests that out of the nine known categories of signs for emergency obstetric complications during labour and childbirth, obstruction has the highest (24.8%) when compared with prematurity as experience by 1.9%. See question 1 in section F of the questionnaire.



**Figure 4. 5: Obstetric complications among the study participants**

Table 4.10 below shows that, cost of transportation was marginally (P=0.003) related to good decision making to seek maternal health care services, with those who did not pay for transportation and those that paid #100 having more good decision to seek care than those with cost of transportation between #100-#250. The table 4.10 also shows that there was an association between difficulty associated with transportation and good decision to seek maternal health care services (P-value is included in the table below). See questions 4, 6-10 in section D of the questionnaire.

**Table 4. 10: Association between Maternal Decision to Seek Care and Cost of Transportation**

Characteristics	Maternal Decision			Total	X2	df	P
	Poor n (%)	Fair n (%)	Good n (%)				
<b>Cost of transportation</b>							
No cost	6 (6.1)	49 (50.0)	43 (43.9)	98	32.319	8	<b>0.003</b>
100- 250 naira	22 (10.0)	126(57.3)	72 (32.7)	220			
<b>Difficulty associated with transportation</b>							
Yes	22 (21.0)	60 (57.1)	23 (21.9)	105	36.648	4	<b>0.001</b>
No	7 (2.8)	115(54.2)	91 (42.9)	213			

**4.5 MEANS OF TRANSPORTATION**

Means of transportation to the nearest health facility was considered an important variable of this study as it presented to us one of the challenges that expectant or nursing mothers may encounter as they seek maternal health care services in their respective health care facilities. The respondents were asked to report which was their mode of transportation to the health facility during clinic visits for maternal health care services. Findings of the means of transportation women used are presented in Table 4.11 below. Respondents’ means of transportation to the hospital shows that majority (91.2%) of the respondents travelled to the health facility by motorised transport, while 8.8% representing 28 respondents came on-foot.

### 4.5.1 Barriers to Getting to the Hospital

One hundred and five (33.0%) respondents reported having difficulties associated with transportation. Respondents provided various reasons associated with difficulty in transportation, 58.8% respondents claimed that too far a distance was the major difficulty associated with transportation, when compared with 3.1% respondents that reported high transportation fare as the difficulty associated with transportation. Two hundred and sixty-nine (84.6%) respondents did not call the hospital before presentation. Respondents provided various reasons for not calling the hospital to seek advice before presentation at the health facility as shown in **Table 4.11** below. See questions 2, 5, 6-10 in section D of the questionnaire.

**Table 4. 11: Distribution of women according to access to health facility factors**

Characteristics	Frequency (n)	Percentage (%)
<b>Means of transportation to health facility</b>		
Motorised Transport	290	91.2
On-foot	28	8.8
<b>Difficulty associated with transportation</b>		
Yes	105	33.0
No	213	67.0
<b>Kinds of difficulties associated with transportation</b>		
Too far	77	58.8
Lack of ready transportation	28	21.4
Traffic hold-up	12	9.2
Problems of bad road	10	7.6
No transportation fare	4	3.1
<b>Telephoned hospital for advice</b>		
Yes	49	15.4
No	269	84.6
<b>Reasons why respondents did not telephoned hospital telephoned before presentation</b>		
Hospital phone number not known	157	49.4
Not necessary	63	19.8
No access to a telephone	55	17.3
Husband's refusal	43	13.5

The results in **Table 4.12** indicates that, majority 73.6% respondents presented in one of the tertiary hospitals in Nigeria after 24 hours of onset of complication while 1.9% presented in

less than an hour and presentation was  $35.1 \pm 3.6$  hours. Sixty-seven 21.3% respondents who visited health facility where this study was conducted were referred from other health facilities. Also see questions 29 & 30 in section C of the questionnaire.

**Table 4. 12: Onset of Complication and Presentation in the Hospital and visits based on referral**

Characteristics	Frequency (n)	Percentage (%)
<b>Time interval between onset of complication and presentation at the hospital</b>		
<1 hr*	6	1.9
1-6hrs	50	15.7
6-12hrs	12	3.8
12-24hrs	16	5.0
>24hrs	234	73.6
<b>Visits based on referral</b>		
Yes	67	21.3
No	247	78.7

\*categories indicate adequate response

#### 4.6 QUALITY OF HEALTH CARE FROM MOTHERS PERSPECTIVE

Bivariate analysis, using Chi-square tests was used to examine the relationship between maternal characteristics with selected Individual Factors. Women's perceptions were used to identify quality of care. The following 8 variables were used: delay before obtaining medications, time spent on waiting to obtain medicines, delay before doing lab test, time spent on waiting to obtain medicines, delay before doing lab test, time spent on waiting to get lab test done, delayed access to treatment, time spent before treatment was administered were used to compute a summary quality of care variable. For each of the 8 questions, options that represented adequate quality of care received at health facility were given a score of 1 point, while inadequate options were given 0 point. Total score for overall quality of care was 8 points. Quality of care was then characterised as sub-optimal (if aggregated score  $\leq 4$ ) and optimal (if aggregated score  $\geq 5$ ).

The results in **Table 4.13** below shows that quality of care was significantly associated with age ( $p=0.041$ ). The association was such that respondents who were within the ages of 36 - 45 years were more likely to report optimal quality of care compared to women in other age groups with mothers age 15-25 years having the lowest percentage. Monthly income below

minimum wage was also significantly associated with quality of care ( $p=0.009$ ). Respondents' occupation was also found to be statistically associated with quality ( $P=0.003$ ). Respondents who were clergies were more likely to report having sub-optimal quality of care compared to respondents in other occupations. Respondents' educational level was also associated with quality of care ( $p=0.000$ ). The association was such that the higher the educational level of respondents; the more likely they were to report optimal quality of care. Respondents with a monthly income below national minimum wage were less likely to report optimal quality of care compared to women with monthly income above national minimum wage. Also, there was an association between husband's income level and quality of care ( $p=0.007$ ).

**Table 4. 13: Quality of care according to selected socio-demographic and maternal characteristics**

Characteristics	Quality of care		Total	X <sup>2</sup>	df	P
	Optimal	Sub-optimal				
<b>Age at last birthday</b>						
15-25	58 (58.0)	42 (42.0)	100	8.272	3	<b>0.041</b>
26-35	123 (71.5)	49 (28.5)	172			
36-45+	32 (69.6)	14 (30.4)	46			
<b>Occupation</b>						
Unemployed/student	72 (66.1)	37 (33.9)	109	19.74	6	<b>0.003</b>
Employed	141 (67.5)	68 (32.5)	209			
<b>Educational status</b>						
No formal education	32 (50.8)	31 (49.2)	63	8.39	3	<b>0.000</b>
Post-secondary education	181 (71.0)	74 (29.0)	255			
<b>Estimated monthly income</b>						
Below minimum wage	36 (58.1)	26 (41.9)	62	6.730	1	<b>0.009</b>
Above minimum wage	135 (75.4)	44 (24.6)	179			
<b>Husband's income</b>						
Below minimum wage	2 (33.3)	4 (66.7)	-	6	8	<b>0.007</b>
Above minimum wage	18 (10.5)	70 (40.7)	84	172		

The current study found that (89.5%) respondents who never lost a child were among single/widowed/separated than those who were married. Surprisingly, a slightly higher (83.3%) respondent who earned below minimum wage reported no child lost than those who earned above minimum wage (P-values are included in the table below).

**Table 4. 14: History of losing child by selected socio-demographic characteristics**

Characteristics	Ever lost child		Total	X2	df	P
	Yes	No				
<b>Marital Status</b>						
Married	39 (16.5)	197(83.5)	236	1.617	1	0.204
Single/widowed/separated	8 (10.5)	68 (89.5)	76			
<b>Educational status</b>						
No formal education/primary	9 (15.3)	50 (84.7)	59	5.736	3	0.125
Secondary and above	39 (15.4)	215(84.6)	254			
<b>Estimated monthly income</b>						
Below minimum wage	10(16.7)	50 (83.3)	60	0.281	1	0.596
Above minimum wage	35 (19.8)	142(80.2)	177			

Table 4.15 surprising shows that (78.7%) who never lost a pregnancy were among respondents who had primary or no formal education compared to those with secondary education and above. The study showed that (70.6%) of the respondents who reside in the urban area reported no pregnancy lost while the corresponding value for rural residence was found to be 50.6%. No pregnancy lost was surprisingly higher (81.7%) among respondents who were unemployed/student than respondents (72.5%) who were employed (P-values are included in the table).

**Table 4. 15: Association between Ever Lost Pregnancy and Some Demographic Characteristics**

Characteristics	Ever lost pregnancy		Total	X2	df	P
	Yes	No				
<b>Educational status</b>						
No formal education/primary	13 (21.3)	48 (78.7)	61	1.724	6	0.485
Secondary and above	93 (33.0)	189 67.0)	282			
<b>Place of residence</b>						
Urban	70 (29.4)	168(70.6)	238	14.221	1	<b>0.000</b>
Rural	6 (50.0)	6 (50.0)	12			
<b>Occupation</b>						
Unemployed/student	20(16.7)	89 (81.7)	109	7.108	1	<b>0.034</b>
Employed	56 (27.1)	148(72.5)	204			

Educational level in general did not appear to influence quality of care (P=0.063), but those with secondary school level education and above were more likely to report optimal quality of care. There were no statistical differences in care quality between the categories of place of residence, ever lost pregnancy and ever lost a child (P > 0.05).

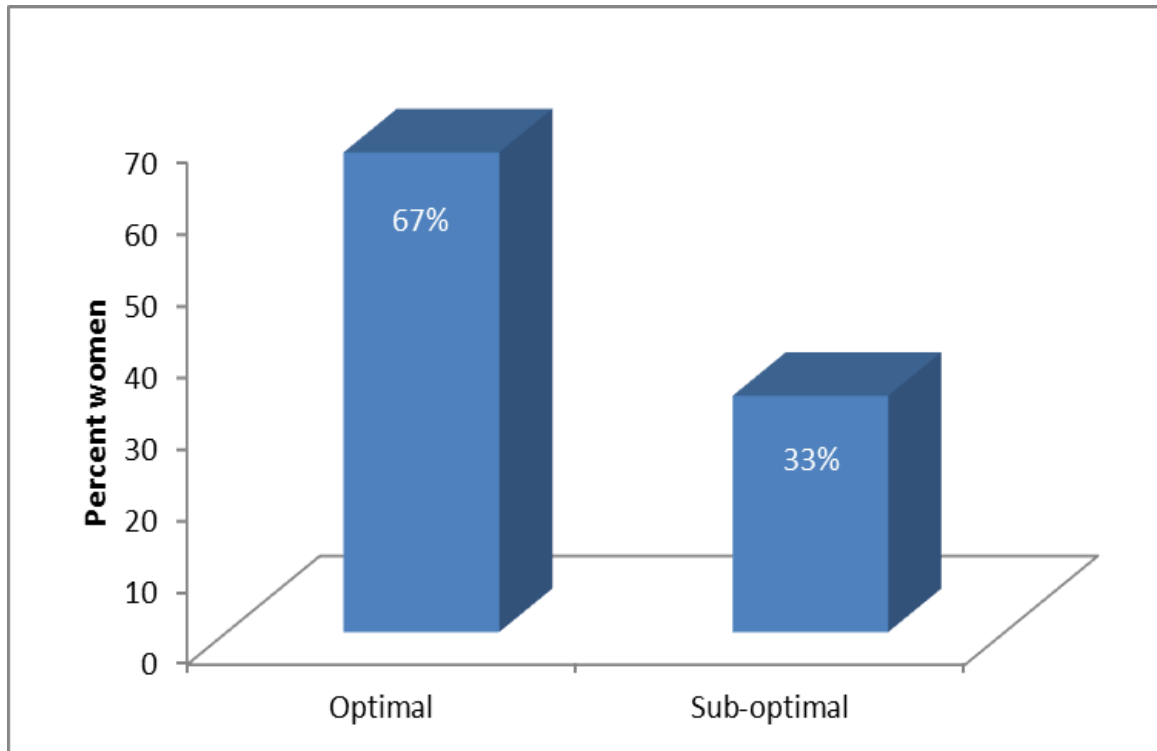
**Table 4. 16: Association between Quality of Care and Husband’s Education, Ever Lost Pregnancy, Ever Lost a Child and Place of Residence**

Characteristics	<u>Quality of care</u>		Total	X <sup>2</sup>	df	P
	Optimal n (%)	Sub-optimal n (%)				
<b>Educational status</b>						
No formal/Primary	20(55.6)	16(44.4)	36	7.3026	3	0.063
Secondary & above	151 (71.9)	59(28.1)	210			
<b>Place of residence</b>						
Urban	162(66.7)	81(33.3)	243	0.046	1	0.830
Rural	51(68.0)	24(32.0)	75			
<b>Ever lost pregnancy</b>						
Yes	33 (61.8)	14 (38.2)	76	0.281	1	0.263
No	178(68.8)	87 (31.2)	237			
<b>Ever lost a child</b>						
Yes	6 (70.2)	41 (38.2)	47	0.169	1	0.681
No	107(67.2)	65 (37.8)	172			

#### 4.6.1 Quality of Care and Pregnancy Experiences at the Study Site

Women’s perceptions were used to identify quality of care. The following 8 Items: delay before obtaining medications, time spent on waiting to obtain medications, delay before doing lab test, time spent on waiting to get lab test done, delay in accessing treatment, time spent before treatment was administered were used to compute a summary quality of care variable in Figure 4.6. For each of the 8 questions, options that represented adequate quality of care received at health facility were given a score of 1 point, while inadequate options were given 0 point. Total score for overall quality of care was 8 points. Quality of care was then characterised as sub-optimal (if aggregated score ≤4) and optimal (if aggregated score ≥5).

Of the two categories on how quality of care was experienced by the women at the health facility suggest that (67%) respondents reported their care experience as being optimal when compared with (33%) respondents who reported their care experience as being optimal.



**Figure 4. 6: Percentage of women on qualitative of care from mothers' perspective**

#### **4.6.2 What Contributed to Delay in Seeing a Doctor**

**Table 4.17** below reveals that 203 (63.8%) respondents had trouble in seeing a doctor promptly on arrival in the hospital. Respondents provided various reasons on what contributed to difficulty in accessing a doctor promptly on arrival as depicted by **Table 4.17**. Reasons ranged from long queue (57.2%) to doctor busy in theatre as experienced by (2.3%). Time spent before seeing a reveal that (36.5%) respondents could see a doctor in less than 30 minutes on arrival to the health facility, while (6.9%) respondents waited for between 60 minutes to 90 minutes. The mean waiting time before consulting with a doctor was 28.6 minutes, with a median of 10 minutes. (Also see questions 1, 2 &3 in section E of the questionnaire).



**Table 4. 17: Quality of care factor experience at the Facility**

Characteristics	Frequency (n)	Percentage (%)
<b>Delay in seeing a doctor</b>		
Yes*	203	63.8
No	115	36.2
<b>What contributed delay in seeing a doctor</b>		
Long queue of patients waiting to see doctor	123	57.2
Doctor not on site	42	19.5
Lack of adequate manpower	25	11.6
No money for registration	20	9.3
Doctor in theatre	5	2.3
<b>Time spent on waiting before seeing doctor</b>		
About 30mins*	116	36.5
About 30-60mins	54	17.0
About 60-90mins	22	6.9
About 90-120mins	36	11.3
>120mins	90	28.3

\*categories indicate adequate response

**Table 4.18** below shows that 161 (50.6%) respondents experienced delay in obtaining medication. Time spent before obtaining medication shows that (46.9%) respondents spent less than 30 minutes on waiting to obtain medicines, while 18.6% spent more than one hour before obtaining medicines. Also see questions 4 & 6 in section E of the questionnaire.

**Table 4. 18: Delay in receiving Medications and Time spent**

Characteristics	Frequency (n)	Percentage (%)
<b>Delay before receiving medication</b>		
Yes*	161	50.6
No	157	49.4
<b>Time spent on waiting to obtain medications</b>		
30mins	149	46.9
30-60mins	110	34.6
>60mins	59	18.6

\*categories indicate adequate response

One hundred and ninety-one (60.1%) respondents had laboratory test done before receiving treatment. Out of 191 respondents who had laboratory test, 91 (44.8%) respondents

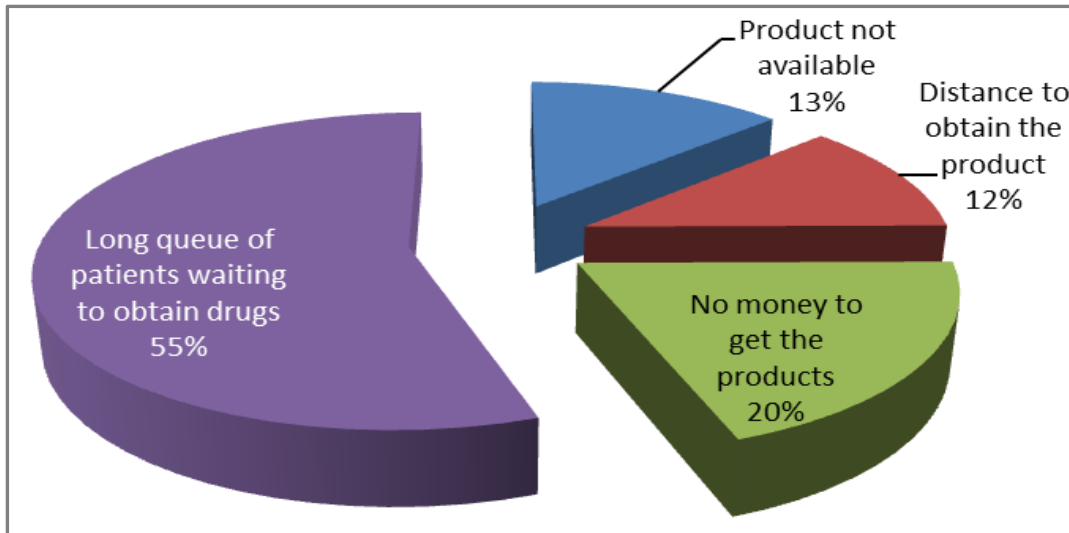
experienced delay in carrying out laboratory test. In addition, 49.4% respondents were delayed for less than 30 minutes, when compared with 8.5% who were delayed for between 60 minutes to 90 minutes. The results in **Table 4.19** show that (33.0%) respondents were delayed in accessing treatment on arrival to the hospital. Majority (94.7%) sampled women received treatment in more than one hour of arrival in the hospital. The mean time interval between arrival and commencement of treatment at the health facility was  $2.28 \pm 1.40$  hours. See questions 7, 8, 10, 11 &13 in section E of the questionnaire.

**Table 4. 19: Delay in getting laboratory test, and time spent, time interval and commencement of treatment at the health facility**

Characteristics	Frequency (n)	Percentage (%)
<b>Laboratory test before receiving treatment</b>		
Yes	191	60.1
No	127	39.9
<b>Delay before doing lab test</b>		
Yes*	91	44.8
No	112	55.2
<b>Time spent on waiting to get lab test done</b>		
<30 minutes*	157	49.4
30-60mins	43	13.5
60-90 mins	27	8.5
>90 mins	91	28.6
<b>Delayed access to treatment</b>		
Yes*	105	33.0
No	213	67.0
<b>Time spent before treatment was administered</b>		
1hr or less*	17	5.3
more than 1hr	301	94.7

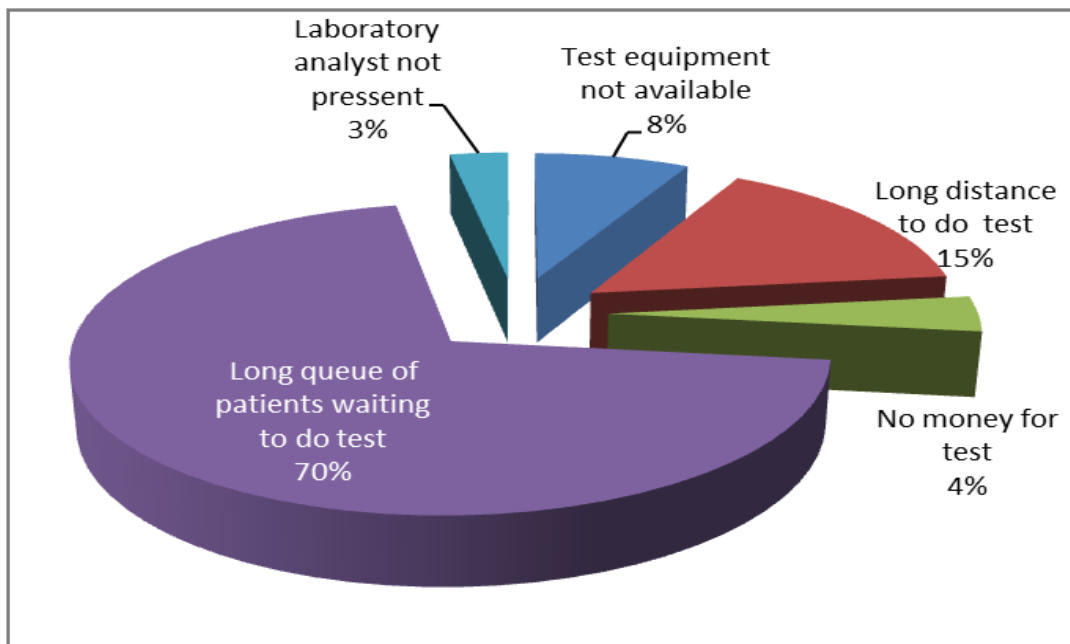
**\*categories indicate adequate response**

**Figure 4.7** below suggests that long queue of patients was the cause of delay in 55.0%, when compared with 12% respondents who reported distance to obtain products as a factor contributing to delay in obtaining medicine at the health facility. See question 5 in section E of the questionnaire.



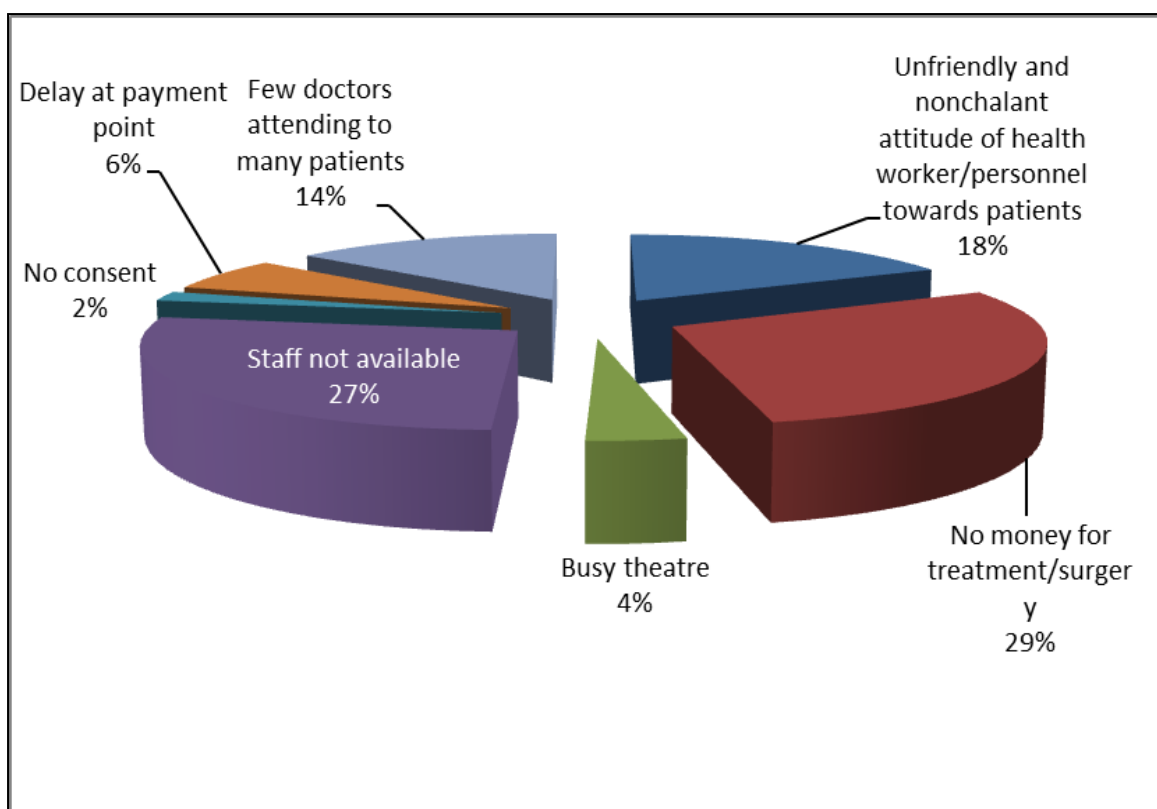
**Figure 4. 7: What Contributed to Delay in Obtaining Medication?**

Causes of delay in carrying out laboratory test as depicted in **Figure 4.8** shows that 70.0% respondents were delayed due to long queue of patients while 3.0% were delayed because the laboratory analyst was not on site. See question 9 in section E of the questionnaire.



**Figure 4. 8: What Contributed to Delay in Carrying out laboratory test?**

Other factors that contributed to delay in accessing care are shown in **Figure 4.9**. See question 12 in section E of the questionnaire.



**Figure 4. 9: Other Factors that Contributed to Delay in Accessing Treatment**

#### **4.7 MATERNAL AND FETAL OUTCOME ON DELIVERY**

The results in **Table 4.20** below show that majority (88.1%) respondents were alive and well, when compared with 8.2% with long term disability. In addition, (68.9%) respondents had their babies alive and well, when compared to 10.7% with fetal death. See section E of the questionnaire for questions 2 & 3.

**Table 4. 20: Distribution of Maternal and Fetal Outcome on Delivery**

<b>Outcome</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Maternal outcome</b>		
Alive and well	280	88.1
Short term disability	12	3.8
Long term disability	26	8.2
<b>Fetal outcome</b>	51	16.0
Alive and well	219	68.9
Apparent disability	65	20.4
Fetal death	34	10.7

#### 4.7.1 Association Between Maternal Outcome and Different Demographic and Socio-Economic Factors

The bivariate analysis in **Table 4.21** evaluated these measures in relation to maternal decision to seek care. The essence among others, is to observe the inter connection between selected indices and maternal decision to seek care. Bivariate analysis (table 4.21) showed that married status and ever lost pregnancy were positively associated with maternal outcome among the respondents. The association was such that married respondents were more likely to be alive and well than single respondents/widowed/separated. Respondents who did not report pregnancy lost were more likely to be alive and well than those who reported pregnancy lost (P-values are included in table 4.21).

**Table 4. 21: Association between Maternal outcome, Marital Status and Ever lost Pregnancy**

Characteristics	Maternal outcome			Total	X2	df	P
	Alive and well n (%)	Short term disability n (%)	Long term disability n (%)				
<b>Marital Status</b>							
Single/widowed/separated	220(92.4)	6 (2.5)	12 (5.0)	238	15.29	3	<b>0.000</b>
Married	60 (75.0)	6 (7.5)	14 (17.5)	80			
<b>Ever lost pregnancy</b>							
Yes	62 (81.6)	2 (2.6)	12 (15.8)	76	7.408	2	<b>0.025</b>
No	215(90.7)	8 (3.4)	14 (5.9)	237			

#### 4.7.2 Association Between Fetal Outcome and Different Demographic and Socio-Economic Factors

In this study, fetal outcome was assessed in terms of different demographic and socio-economic characteristics of women who had alive and well baby, fetal death or apparent disability. Table 4.22 demonstrates that there was a significant association between maternal income and fetal outcome. The association was such that (74.9%) women with monthly income above minimum wage were more likely to have alive and well baby compared to (45.2%) of those with income level below minimum wage. Alive and well babies were found to be higher (73.6%) among respondents whose husbands had secondary education and above compared to those who had primary/no formal education (45.5%). Table 4.22 also shows that a higher (77.6%) respondents who reported alive and well baby were among respondents

who had never lost pregnancy compared to (42.1%) that reported pregnancy lost (P-values are included in table 4.22).

**Table 4. 22: Association between Fetal outcome and different demography and Socio-economic Factors**

Characteristics	Fetal outcome			Total	X2	df	P
	Alive and well n (%)	Fetal death n (%)	Apparent disability n (%)				
<b>Estimated monthly income</b>							
Below minimum wage	28 (45.2)	8 (12.9)	26 (41.9)	62	25.218	2	<b>0.000</b>
Above minimum wage	134 (74.9)	22 (12.3)	23 (12.8)	179			
<b>Husband's Education</b>							
No formal edu./primary	14 (45.5)	10 (27.3)	10 (27.3)	34	34.46	8	<b>0.000</b>
Secondary and above	149 (73.6)	20 (7.9)	41 (18.5)	210			
<b>Ever lost pregnancy</b>							
Yes	32 (42.1)	26 (34.2)	18 (23.7)	76	61.529	2	<b>0.000</b>
No	184 (77.6)	8 (3.4)	45 (19.0)	237			

Quality of care was positively associated with fetal outcome. The association was such that (75.1%) of the women who reported optimal care were found to have alive and well baby compared to (56.2%) of women who reported sub-optimal care. Maternal decision to seek care was associated with fetal outcome. The result was such that (76.6%) of respondents who reported fair decision to seek care had alive and well baby compared to (63.5%) who reported good decision and (42.9%) with poor decision respectively (P-values are included in table 4.23).

**Table 4. 23: Association between Fetal outcome, quality of care and maternal decision to seek care**

Characteristics	Fetal outcome			Total	X2	df	P
	Alive and well n (%)	Fetal death n (%)	Apparent disability n (%)				
<b>Quality of care</b>							
Optimal	160 (75.1)	18 (8.5)	35 (16.4)	213	11.759	2	<b>0.003</b>
Sub-optimal	59 (56.2)	16 (15.2)	30 (28.6)	105			
<b>Maternal decision to seek care</b>							
Poor	12 (42.9)	6 (21.4)	10 (35.7)	28	15.390	4	<b>0.004</b>
Fair	134 (76.6)	14 (8.0)	27 (15.4)	175			
Good	73 (63.5)	14 (12.2)	28 (24.3)	115			

The result in the table 4.24 below shows that fetal outcome was significantly associated with maternal age. The association was such that a slightly higher (73%) of the women within the ages of 15-25 years reported having alive and well babies compared to 68.6% and 60.9% who were within the ages of 26-35 years and 36-45<sup>+</sup> respectively. There was no significant association between fetal outcomes and ever lost a child (P-values are included in table 4.24).

**Table 4. 24: Association between Fetal outcome, maternal age and Ever lost a Child**

Characteristics	Fetal outcome			Total	X2	df	P
	Alive and well n (%)	Fetal death n (%)	Apparent disability n (%)				
<b>Maternal age</b>							
15-25	73 (73.0)	8 (8.0)	19 (19.0)	100	13.356	4	<b>0.006</b>
26-35	118(68.6)	16 (9.3)	38 (22.1)	172			
36-45+	28 (60.9)	10 (21.7)	8 (17.4)	46			
<b>Ever lost a Child</b>							
Yes	27 (57.4)	6 (12.8)	14 (29.8)	47	3.755	2	0.153
No	188 (70.9)	28 (10.6)	49 (18.5)	265			

#### **4.8 MULTIVARIATE ANALYSIS OF COMBINED FACTORS ON THE ASSOCIATION BETWEEN MATERNAL DECISION AND ACCESS TO HEALTH FACILITY, QUALITY OF CARE AND SOCIO-DEMOGRAPHIC**

Ordinal logistic regression was used to model a relationship between the two independent factors maternal income and cost of transportation to the health facility with maternal decision as presented in Table 4.25. The model including the independent factors was statistically different from the constant only model before the independent factors were included as the model statistic showed. This indicates that the model with the independent factors added significantly predicts the outcome maternal decision. However, the model estimating the adjusted odds ratios (AOR) was not a very good fit as the pseudo  $R^2$  statistic for the model, measured by the Nagelkerke  $R^2$  statistic was 0.102. This also implies that the amount of variance on the outcome contributed by the independent variables was only about 10%. The models were just on choice, since using stepwise process would have required even a greater number of cases per variables. The entered method was employed selecting mainly variables that were significant in bivariate level to model.

Both maternal income and cost of transportation to health facility remained predictive of maternal decision. Women with low income had lower odds of exhibiting good maternal decision compared with their counterparts who had higher income (AOR: 0.33, 95% CI: 0.19, 0.60). Also, when the cost of getting to a health facility was low, there was a high likelihood of making good decision compared with an instance where cost of reaching a health facility is high (AOR: 2.06, 95% CI: 0.19, 3.45), this was statistically significant at  $p < 0.05$ .



**Table 4. 25: Results of Ordinal Logistic Regression for factors predicting good maternal decision to seek care**

	<b>B</b>	<b>(95% CI)</b>	<b>S.E</b>	<b>AOR</b>	<b>(95% CI)</b>	<b>Wald</b>	<b>P</b>
<b>Estimated monthly income</b>							
Below minimum wage	-1.08	-1.65, -0.50	0.320	0.33	0.19, 0.60	13.533	0.000
Above minimum wage (R)	0			1			
<b>Cost of transportation</b>							
No cost & 50-100 naira	0.726	0.20, 1.24	0.324	2.06	1.22, 3.45	7.422	0.006
≥100-150 naira (R)	0			1			

R-reference category. Model Chi-square=25.064,  $p=0.000$ , Nagelkerke  $R^2=0.102$

Maternal and fetal outcome on delivery was re-categorised as good and adverse outcome for purpose of binary logistic regression. In the multiple logistic regression models selected factors were put together in a model process to estimate adjusted odds ratio (AOR). Conversely, the model predicting adverse maternal outcome was statistically significant after adding the predictor variables monthly income, history of losing pregnancy and quality of care in a model, implying an improved model from the constant only model (Model Chi-square=29.147,  $p=0.000$ ). Psuedo  $R^2$  statistic showed a poor model fit (Nagelkerke  $R^2=0.0.232$ ). Analysis showed that women who earned below the minimum income were surprisingly less likely to experience adverse maternal outcome (AOR: 0.69, 95% CI: 0.24, 1.97) compared with those who earned more than the minimum income. With respect to history of pregnancy, loss of pregnancy in the past was a risk factor to adverse maternal outcome (AOR: 3.43, 95% CI: 1.41, 8.37). Quality of care at the facility had an impact on adverse maternal outcome as the likelihood of experiencing adverse maternal outcome was significantly lower when quality of care was reported to be optimal (AOR: 0.14, 95% CI: 0.05, 0.35).

**Table 4. 26: Adjusted for factors predicting adverse maternal outcome**

Predictors	B	S.E	Wald	AOR	(95% CI	P
<b>Estimated monthly income</b>						
Below minimum wage	-	0.538	0.476	0.69	0.23, 1.97	0.490
Above minimum wage (R)	0.37			1		
<b>Ever lost pregnancy</b>						
Yes	1.23	0.455	7.372	3.43	1.41, 8.37	0.007
No (R)				1		
<b>Quality of Care</b>						
Optimal	-	0.472	17.285	0.14	0.05, 0.35	0.000
Sub-optimal (R)	1.69			1		

R- Reference category, Model Chi-square=29.147, p=0.000, -2log likelihood=134.575, Nagelkerke R<sup>2</sup>=0.232.

Factors that remained predictive of adverse fetal outcome in the multivariate model are shown in Table 4.27. Being employed, earned below minimum wage, more traveling hours, lost pregnancy before and sub-optimal quality of care were more predictive of adverse fetal outcome. Surprisingly, unemployed women were less likely to have adverse fetal outcome (AOR: 0.23, 95% CI: 0.07, 0.75). Women who earned below minimum wage were five times significantly more likely to experience adverse fetal outcome compared with those who earned more than minimum wage (AOR: 5.17, 95% CI: 2.11, 18.35). Women who spent less number of hours when travelling to health facility were significantly less likely to experience adverse fetal outcome compared with those who spent more number of hours travelling to receive treatment at the facility (AOR: 0.18, 95% CI: 0.07, 0.45). Women who had lost a pregnancy before were nearly five times more likely to have adverse fetal outcome compared with those who had never lost a pregnancy (AOR: 4.65, 95% CI: 2.13, 10.13). As with maternal outcome, quality of care at the facility equally had an impact on adverse fetal outcome as the likelihood of experiencing adverse fetal outcome was significantly lower when quality of care was reported to be optimal (AOR: 0.37, 95% CI: 0.17, 0.82).

**Table 4. 27: Adjusted for factors predicting adverse fetal outcome**

<b>Predictors</b>	<b>B</b>	<b>S.E</b>	<b>Wald</b>	<b>AOR</b>	<b>(95% CI</b>	<b>P</b>
<b>Occupation</b>						
Unemployed/students	-1.43	0.589	5.939	0.23	0.07, 0.75	0.015
Employed	0			1		
<b>Educational status</b>						
Non/primary	0.94	0.586	2.575	2.56	2.11, 12.665	0.109
Secondary & above (R)	0			1		
<b>Estimated income</b>						
Below minimum wage	1.64	0.456	12.987	5.17	2.11, 12.65	0.000
Above minimum wage	0			1		
<b>Place of residence</b>						
Urban	0.47	0.590	0.640	1.60	0.50, 5.10	0.424
Rural	0			1		
<b>Traveling time</b>						
<30mins	-1.70	0.471	13.085	0.18	0.07, 0.45	0.000
≥30	0			1		
<b>Cost of transportation</b>						
No cost & 50-100 naira	0.37	0.463	0.642	1.44	0.58, 3.58	0.423
≥100-150 naira (R)	0			1		
<b>Ever lost pregnancy</b>						
Yes	1.53	0.397	15.015	4.65	2.13, 10.13	0.000
No	0			1		
<b>Quality of care</b>						
Optimal	-0.98	0.401	5.993	0.37	0.17, 0.82	0.014
Sub-optimal	0			1		
<b>Maternal decision to seek care</b>						
Poor	0.63	0.756	0.704	1.88	1.88, 0.42	0.40.1

Fair	-0.51	0.373	1.919	0.59	0.59, 0.28	0.166
Good	0					

R- Reference category, Model Chi-square=80.062, p=0.000, -2log likelihood=214.816, Nagelkerke R<sup>2</sup>=0.406.

#### 4.9 SUMMARY OF RESULTS

In chapter 4 the study investigated factors associated with use of maternal health care services in health facilities in Nigeria between the periods of January to April 2015 of the same year. The study utilised univariate, bivariate and multivariate analytical approaches to estimate determinants of maternal health care service utilisation. Cross tabulations and Pearson Chi-square tests were employed to determine which factors was significant regarding the use of maternal healthcare services. The variables that were found to be significantly influencing decision to seek care among the study participants include marital status, family type, education, and income, place of residence, partners' income and education. Quality of care, travel distance, mode of transportation, cost of transportation, ever lost pregnancy and a child, maternal decision-making power to seek care were also among the factors that were found to be significantly influencing access to maternal health care services.

The result on the multivariate analysis shows that both maternal income and cost of transportation to the health facility remained predictive of good maternal decision to seek care. Mothers with income below minimum wage having lower odds of exhibiting good maternal decision when compared with respondents with maternal income above minimum wage. Women with no cost of transportation and #50-#100 as transportation cost were also more likely to have good maternal decision compared to respondents with transportation cost  $\geq$ 100-150 naira. For the purpose of binary logistic regression, maternal and fetal outcome were re-categorised as good and advise outcome. Model predicting adverse maternal outcome was statistically significant after the predictor variables monthly income, history of losing pregnancy and quality of care were added in a model. Mothers with income level below minimum wage were less likely to experience adverse maternal outcome than women who earned above minimum wage. Quality of care also had an impact on adverse maternal outcome. The likelihood of experiencing adverse maternal outcome was significantly lower when quality of care was reported optimal than those who reported sub-optimal care. Factors that remained predictive of adverse fetal outcome were income level below minimum wage

and when travel time was  $\geq 30$  minutes. For example, while women who had lost a pregnancy increased the odds of adverse fetal outcome than those who had never lost a pregnancy (AOR: 4.65, 95% CI: 2.13, 10.13). The next chapter presents findings for the qualitative phase of the study.

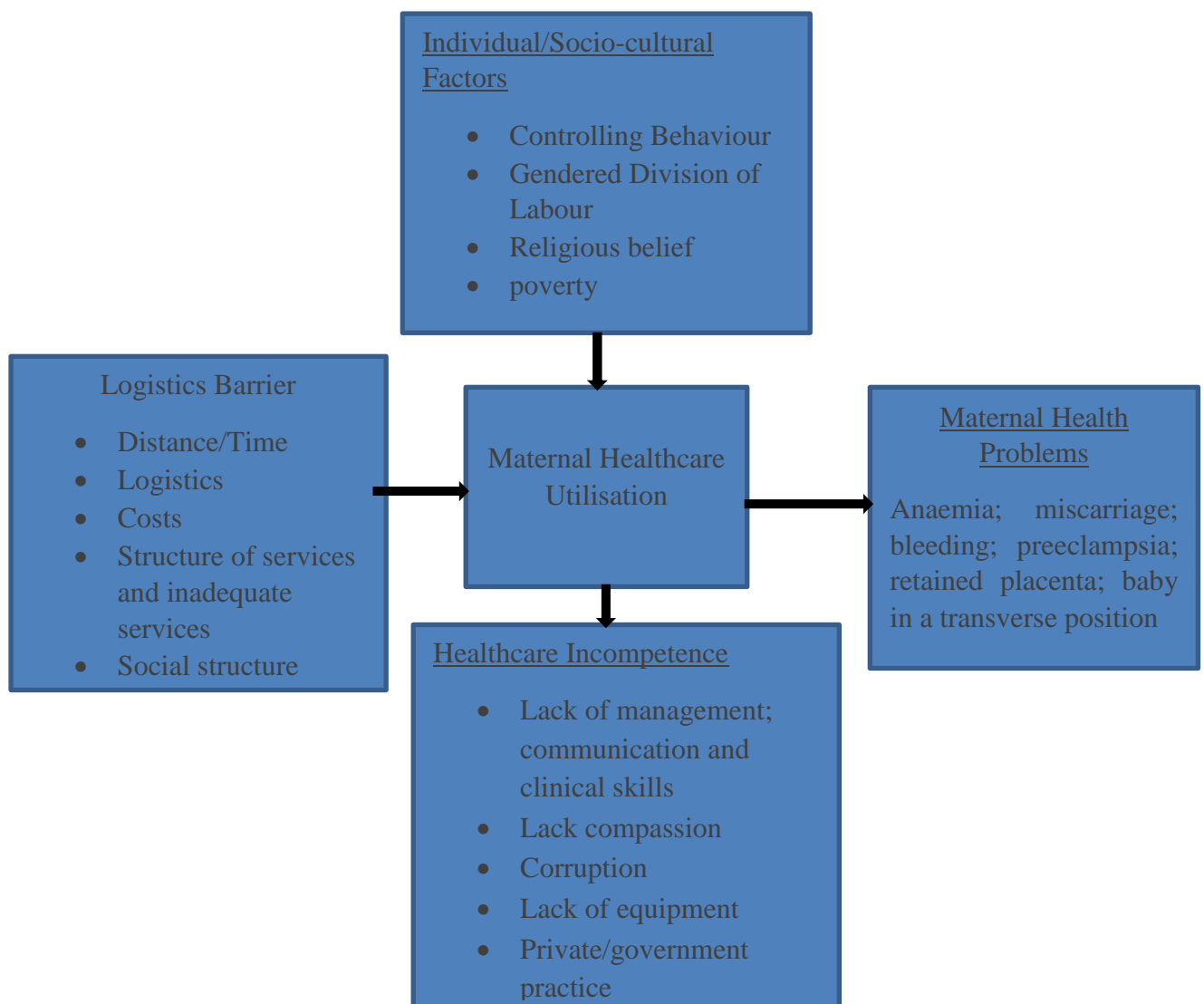
## **CHAPTER FIVE- QUALITATIVE ANALYSIS (STAGE THREE - VOICING SILENCES)**

### **5.0 INTRODUCTION**

This chapter aims at setting out the findings of the data analysis that was carried out to achieve the research aim (p.24) which was set out to explore factors influencing decision to seek maternal healthcare services utilisation in Nigeria. This study uses a mixed method where both quantitative and qualitative data were gathered sequentially. As a consequence of applying TSF to maternal health research, the presentation of findings contained herein is done using the main themes. The overall aim of this phase was to explore the women's feelings, thoughts, and beliefs on factors affecting skilled maternal health care services utilisation. The purpose of the analysis was intended to ensure that the voices of the researched group were not further silenced, and the intent of the researcher to ensure that the researcher's position or practice did not prevent uncovering the silences heard by the study listeners. Listeners are pregnant and nursing mothers who met the study inclusion criteria. It is important to state that all names used to identify research participants in this study are pseudonyms. They however, represent real persons interviewed in the field for this research. The purpose for the pseudonym is to maintain confidentiality.

Six in-depth interviews were conducted involving pregnant/nursing mothers who had experienced direct obstetric complications and were attending the health facility for care. Semi-structured interview guide was used and this allowed the researcher to use prompts to solicit further information or clarification as subsequent questions are based on what the interviewee says. Planned prompts or probes were used to elicit further explanation or when a deeper exploration is needed. Probes seeking recapitulation are used when the interviewee is asked to retell part of the response and by doing that, new details may be added. Following the coding of the data from the face-to-face interviews, major themes emerged showing the factual information the participants hold about factors affecting access to and use of maternal health care services during pregnancy, delivery and the immediate postpartum period. The participants for the interviews ranged from 26-40 years of age. Majority of the women interviewed (5) reported seeking care at the health facilities. All the participants except one delivered in health facilities. One of the participants delivered at home but was brought to the facility following complications due to heavy bleeding. Participants had between one and

four children whilst three of the participants reported having miscarriage before. After data collection, transcription and analysis, four (4) themes were identified. The identified themes include: Individual and socio-cultural barriers, logistic barriers, maternal health problems, and healthcare incompetence. These four (4) themes were use in the final discussion of the study. These themes will be discussed in sequence. Through these four themes mentioned, factors influencing women’s decision to seek care is explored by using direct quotations extracted from the interview transcripts to support and reaffirm the points as constructed by the research participants. Quotes were applied according to their appropriateness to the theme under discussion. See Figure 5.1 for the schematic representation of the main themes and sub-themes in the utilisation of maternal health care services. The role of this schematic representation of the main themes and sub-themes is to show how they all function to influence maternal health care utilisation.



## **Figure 5. 1: Schematic Representation of the Main Themes and Sub-Themes in the Utilisation of Maternal Health Services**

The role of individual factors that may influence Nigerian women to utilise or not to utilise health facility for care include controlling behaviour from partners or other significant family member, gender division of labour, religious belief and poverty.

The social environment factor in the SEM which involves relationships with family, peers, friends and colleagues that may influence a woman's decision to seek care. One example of a factor in this level is the healthcare providers-client relationship. Women who perceive their health care provider's as someone who is compassionate, competence, trustworthy and trying to help may be more likely to heed to the health care provider's advice. Conversely, a Nigerian woman who views the health care provider's-client relationship as one where the client is discriminated against or disempowered may be less likely to utilise health facility for maternal health care services and are also less likely to heed to the advice of the health care provider. Lack of policies may be an influence in the poor utilisation of health facilities for care among women of reproductive age.

### **5.1 THEME1: INDIVIDUAL AND SOCIO-CULTURAL FACTORS**

This phase of the analysis explores the individual and socio-cultural factors influencing women's decisions to seek care towards uncovering the consequence of these factors on their ability to access health care services. As shown in Figure 5.1, individual and socio-cultural drivers dictating healthcare utilisation amongst the study participants are: controlling behaviour, gendered division of labour, religious belief, and poverty.

#### **5.1.1. Controlling Behaviour**

This phase of the analysis explores controlling behaviour that women experience and how this impacted on their ability to seek antenatal care in health facility. Women exclusively are the ones that get pregnant but in this study setting, most women do not participate in decision concerning their care. Husbands or significant members of the family take decisions that are binding on the women. Mothers-in-law have a strong influence in women utilisation of maternal health care services in health care facility in Nigeria where most people are still living in extended families. In the Nigerian society, an older woman has a higher position in the family than the younger woman so she has power over her daughter-in-law's decision-making to seek care. Below are responses from some of the participants about such decisions.



*“Not even my husband consent. Does he care for me and my children? Not having a male child is seen as my fault. My mother-in-law told me that because I cannot position myself well during intercourse with her son (my husband) is the reason for my inability to conceive a male child. She (mother-in-law) introduced another lady to my husband because her family is male dominated and she also believe that she can position herself right during intercourse to allow her to bear her son (my husband) a male child. These wicked women (mothers-in-law) are not helpful in our struggle as women” (Emmanuella).*

Similarly, Amaka associated controlling behaviour with certain factors such as not having male children.

*“Hmm! Hmm!! That time of my life I don’t ever want to remember, especially during my last pregnancy. I really was suffering. My husband abandoned me and my children because he claimed that I only gave him baby girls as though I am God that gives children. He moved in with his girlfriend he so much believes will deliver him a baby boy someday. What can I do? When the only person (his mother) who can talk to him is in support of his action and so nobody can tell him that what he is doing is wrong” (Amaka).*

*“I have a very wicked mother-in-law that thinks that each time I leave the house that I go to visit other men (lovers). Because of this untrue accusation I get scared obtaining permission from her (mother-in-law) thereby not attending antenatal care. I was not ready to make her (mother-in-law) feel like the god of my life she thinks she is. The woman (mother-in-law) is like a bone in my throat. .... I took permission from my mothers-in-law a few times that I went to the hospital since my husband wasn’t having much interest on me and in the baby because according to him he said I was only giving birth to girls” (Chioma).*

However, two of the participants argued on the contrary and posited as follows:

*“Hmmm not really consent. Consent, consent... I wouldn’t really call it consent but rather inform him (her husband) about my attending the facility for care” (Omoku).*

In the same manner, Justina explained:

*“It’s really not permission but just to let him know about my where about at every time in point ...my father is the one taking care of my kids so I have to tell him whenever I’m coming here. And more so, because of my educational qualification and the fact that I can cater for*

*myself financially and otherwise. I owe no one that. Even if there were to be any cultural or religious factors it won't affect me. I think so because I am not under any man. It is mostly the uneducated and women who are not financially empowered that suffered all these things. So, I'm lucky on this aspect. Hahaha, Yeah!"* (Justina).

Factors associated with controlling behaviour from the perspectives of the participants have been presented. Fear due to lack of trust by the mothers-in-law, inability to bear a male child and not knowing the right position to take during intercourse prevent or reduces women decision power to seek maternal healthcare services. Furthermore, women who were highly educated and were financially empowered did not seek consent from their husbands or other significant person before taking decision to seek care but only informed their significant others for the purpose of letting them know their where about at that point.

### **5.1.2 Gendered Division of Labour**

Although the question on gendered division of labour was not originally asked in the interview schedule. The question on gendered division of labour came up as a result of using prompts when the interviewees were asked to retell part of the response and by so doing, new information arose. Many women were busy due to their multifunctional responsibilities within the family like caring for children, preparing food, cleaning the house etc. So, the opportunity cost of losing a day's work might discourage women from utilising health facilities for care.

According to another participant:

*"My husband did not support me throughout this pregnancy. With my pregnant state, I was battling with the cooking, fetching water, cleaning and even taking the older children to school before I proceed to market to make sales. Men in this country don't help their wives because of how society made it"* (Amaka).

*"Even though I was heavy (pregnant) I still was the one doing all the domestic chores. Because I am a woman I was still expected to carry out all the work without support from the father of my children. Doing domestic work without support from my husband was also a hindrance to care"* (Chioma).

*"It was very hard for me and with the fact that my husband and mother were not supportive in any way. It wasn't easy. People get pregnant and have people encouraging them*

*throughout pregnancy, but mine was the reversed. I did all the domestic work alone. No support from the supposed man of the house” (Emmanuella).*

On the contrary, Omoku has this to say:

*“... I have money and educational influence to facilitate things for me. I have my mother and a maid in the house to help me fix all the domestics work and other things that need to be attended to in my absence” (Omoku).*

### **5.1.3 Religious Belief**

Interestingly, all the interviewees in this study were Christians. This may be because Christianity is the leading religion in the region where this study was conducted or it may be due to the sampling bias of convenience sampling. One of the participants also expressed the influence exerted on the seriousness of access and use of skilled maternal health care services during pregnancy and delivery by some religious practices. Some churches discourage women from hospital delivery, which means that these women are deprived from the care of skilled birth attendants.

*“In my husband’s Church, they don’t believe in modern (orthodox) medicine but rather in prayers. But I was willing to take a chance to utilise the services that were being offered to pregnant mothers, but my circumstance of being married into a family that doesn’t believe in modern medicine wouldn’t permit me” (Chioma).*

A participant stated that God has always been her help which is the reason why she doesn’t have to struggle.

*“No, because in all of these, God has always been my help that I don’t really have to struggle so much to have things work for me” (Ijeoma).*

*“I was abandoned to my faith and that of my child” (Amaka).*

*“But God has always been faithful ever since then” (Emmanuella).*

Religious beliefs and practices as they impact on maternal health care service utilisation from the perspectives of the participants have been presented.

### 5.1.4 Poverty

Poverty was a common complaint among the participants as an underlying factor for non-use of skilled maternal health care services. As the participants claimed inability to afford skilled birth attendants during pregnancy and delivery. Poverty limits Nigerian women's choice and their right to access reproductive health care services. The findings of the study revealed that poverty is one of the main reasons for not seeking a skilled birth attendant and instead consulting a traditional birth attendant. Participants in the interview brought up poverty as the obstacle for seeking MHCS. Cost (medical and transportation) often make the visit unaffordable for poor women. Interviews with the participants indicate that majority of the women were economically dependent on their spouses. Even though maternal health care services are said to be free on paper in the state where this study was conducted, medications and laboratory test were not given freely. Poverty in this study was expressed as lack of money.

*“When labour started, I did not have money for delivery in the hospital and my stupid husband abandoned me and my children for another woman. He (husband) said he cannot spend money on me and my unborn child to be deliver in the hospital.....But I don't blame women who patronised these local people like the TBAs, instead I will blame poverty. When you have no money, you cannot do many things for yourself including paying for your medical expenses” (Chioma).*

*“My experience was a mixed experience. One I was happy because I was going to have another baby and sad because most of the time I leave for the clinic without food and by midday I will be looking very miserable and even anaemic because I was not eating properly due to lack of money. .... I was not financial ok. So, at the early stage of the pregnancy I was like drinking garri (cassava flake). We had accommodation problem and so many other things. It was really toughed” (Emmauella).*

Another participant explained:

*“I just think every other problem is surrounded by money. When you have money, you can overcome many difficulties. With money, I can get a good health care. My sister money for me oh.... is everything” (Amaka).*

Considering the comments of the study participants, it could be said that the state of uncertainty in these women's socioeconomic status threatens their ability of having good health to carry out activities that requires money such as buying food and payment for their healthcare cost. Most of the interviewees brought up poverty (expressed as lack of money) as the main obstacle to seeking health care in health facility. The women were burdened with numerous tasks for which money and good health were required. They identified areas of lack that suggested money to be a focus in decision-making to seek skilled maternal healthcare services in health facilities. This notion was shared by the participants during the interview. Having presented data on the individual and socio-cultural factors affecting maternal health care utilisation from the perspectives of the participants, I now follow up with the next main theme which consists of findings on logistic barriers to seeking care.

## **5.2 THEME 2: LOGISTICAL BARRIERS TO SEEKING CARE**

This phase of the analysis explores logistic factors that can hinder women utilisation of maternal health care services. The categories here associated with logistic barrier include travel distance and time, logistics and direct and indirect costs (cost, structure of services and inadequate of services and social structure and culture).

### **5.2.1 Distance and Time as a Determining Factor to Health Care Utilisation**

Women face numerous problems in accessing appropriate maternity care during pregnancy and delivery. Women reported that limited or lack of public transport services and police stops make maternal health care service use difficult. The timing of the transport and distance to the health facility added further difficulty and costs to use of services particularly during emergency period at night. One of the aspects that affected the belief structure of Nigerian women remains access to reproductive health care services. Distance influences people's decision-making and on the other hand, it determines the times spent in reaching a facility early is influenced by lack of readily available transport, police stops for bribe from the drivers, location and geographical distribution of these facilities. Once a decision to seek care has been made, other obstacles must be overcome in reaching the facility. In Nigeria, the modes of transportation mainly vary based on where you reside and who you are (in terms of socio-economic status). In rural areas delays due to distance and the unavailability of transportation are common.

Amaka has this to say:

*“My inability to utilise the maternal healthcare services as much as I would have loved to, was partly due to the distance and the time to reach the hospital. Secondly, because of the time of the day when these services are being provided. I get discourage to come to seek care here because my house is too far from here and the timing for these services provided is not favourable to me. This is about the same time I go to the market to make some sales. You know that some of these goods can only be sold easily at a time. Meaning, if I don’t go before the said time my goods may not be sold” (Amaka).*

Similarly, another woman has this to say:

*“Proximity! It’s a workable distance from my house. Also, because of the fact that I know some of the health workers there who are good at what they are doing. So, distance and efficiency actually took me there” (Justina).*

*“Distance was the reason for utilising the facility” (Ijeoma).*

In the same manner, Emmanuella explain:

*“Closeness. I don’t have to pay so much on transportation” (Emmanuella).*

*“Police should be banned from standing on the check points because to me they don’t do anything useful standing on the roads than to collect bribe and delay people from getting to their destination on time” (Chioma).*

*“Because police usually demand for bribe from the drivers, it also makes some of the drivers to double their transportation fare” (Omoku*

## **5.2.2 Logistics**

Analysis of the narratives indicatives that the logistics of the health systems of Nigeria have a lot of barriers in the form of transport services due to unavailability of fuel in the ambulance within the health systems to assist in moving patients from one facility to another.

*“If there is an ambulance available in the facility the might be no fuel in it and sometimes the might suggest that the patient should buy fuel for the ambulance, and the roads condition is very bad. The problem is just too much that I can’t say them all in just a day” (Chioma).*

*“I was referred to this hospital by the doctor for the management of delivery complication but I was not provided with an ambulance or other form of transport services for my referral” (Emmanuella).*

*“There is always the issue of no fuel or driver to drive the ambulance. In most cases, the patient is asked to fuel the vehicle” (Justina).*

*“lack of reliable transport. Most time you come out to the motor park to board a car to the hospital only to spend the whole day at the park and getting to your destination very late. Sometimes, we had to resort to boarding taxis which is not so comfortable for most of us because of the outrageous prices” (Omoku).*

### **5.2.3 Direct and Indirect Costs in the Utilisation of Health Care Services**

The participants reported that costs are a significant constraint in seeking maternal health care services during pregnancy and delivery. These costs are not only the direct costs of services but also involve indirect costs. The participants interviewed reported that both direct and indirect costs have a significant effect on the utilisation of maternal health care services. The later include structure of services and inadequate services, social structure and culture.

#### **5.2.3.1 Costs**

Cost emerged as the barrier to utilising maternal health care services. Many participants reported that costs are a significant constraint in seeking maternal health care services during pregnancy and delivery. Women commonly reflected these views during the interviews. One woman said:

*“It took me almost an hour to travel down here and the transport fare is very expensive too. And because of the transportation being too expensive for me and my mother to afford, we had to walk down here on-foot from the first hospital I went to following the bleeding I had. Aside ...money for transportation also discourages me from using the hospital for treatment. Everything about hospital is expensive. The drivers complained of bad road, traffic and giving bribes to the police as part of the reason they had to hike their fare” (Chioma).*

In the same manner Omoku explained:

*“The cost of coming to the hospital is enormous including time wasting and all that” (Omoku).*

*“..... On a normal day without emergency is like 150 naira. But because mine was an emergency situation we had to hire a taxi and this cost us so much money. We paid 3500 naira” (Emmanuella).*

Mother's intentions to visit the health facilities for skilled maternal healthcare services were often hindered by their inability to afford medical costs, particularly during emergency situations.

*"Medical cost is just too expensive for me. At the time I was pregnant for this my baby, I was not financially stable. I used the money from my earnings to take care of the family"* (Amaka).

*"A lot of money! More than 1500 naira because of my state of mind as of the time of referral. The driver just took advantage of my situation and charged me this much. On a normal day the fare is like 100 naira"* (Justina).

During the field study, I came to know that women like Chioma had to deliver at home due to lack of finance. I was astounded that her mother who has no prior experience in delivery took her delivery as there was no money for medical cost at the time of her labour. The need for free maternal health care services was echoed in most of the conversation with the participants. They have been deprived in terms of access to health care due to poverty. Most importantly, they do not have any good means of livelihood thereby resorting to petty trading that barely provide them with their basic needs. Emmanuella expressed her anger by saying that she was not provided with an ambulance for her referral thereby resulting in her taking a taxi with high cost.

### **5.2.3.2 Structure of Services and Inadequate Services**

With regard to availability of services to ensure effective delivery of maternal health care services, the participants reported a common problem related to structure of services and inadequate services. Once a decision to seek care has been made, other obstacles must be overcome in reaching the facility. Overcoming transportation difficulties in the community and reaching the health facility does not mean the transportation problem is over. Some health facilities are without an ambulance and even those with an ambulance, it may be practically unavailable at certain times. This shows that transportation difficulties that could happen when obstetric emergencies are to be referred from one facility to another. In addition, reaching a health facility does not necessarily mean the end of the journey as the nearest facility may not be equipped to manage patient's condition. Where the facility does not have the needed equipment to manage patients care, patients are referred to another facility and sometime without providing the patient with an ambulance service. Lacks in medical equipment to carry out needed test were also mentioned by most of the participants



during the interview. Mothers were often asked to go to private clinics/laboratories/pharmacies to carry out prescribed tests and buy recommended medicines which most of the time required the women going long distances to get these tests done.

One of the participants has this to say:

*“..... on several occasions. Sometimes they give you the simple things they have and the major ones are not there. So, you have to go and look for them outside to buy”* (Justina).

*“The medical bills and medications to buy which at times you don’t see it to buy from the pharmacy here in the hospital. The prices of these medications are too expensive outside the hospital environment”* (Chioma).

*“..... Most of the occasions the hospital doesn’t have the instrument to conduct medical test. They ask you to go some miles to a private laboratory for the test. In short, many of the items prescribed for patients to buy are mostly not available in the hospital, so you have to go outside the hospital to buy and the distance is far”* (Emmanuella).

### **5.2.3.3 Social Structure**

In Nigeria, the modes of transportation mainly vary based on where you reside and who you are (in terms of socio-economic status). People may have to travel long distances over difficult terrain to reach the few functional health facilities that exist.

One of the participants has this to say:

*“Most drivers do not want to operate in areas with poor roads and because of this, one will have to wait for many hours before getting a vehicle”* (Amaka).

*“Basically, I will say structures itself and then the manpower, most of them are not committed. They prefer to stay in towns and those of them posted to the villages stay in town and don’t go to their workplaces. ....in the rural areas, some of them don’t have light (electricity) and the conditions there are not conducive. Even the apartments they give to these medical personnel are in a very bad condition. They are mostly mosquitoes infested with broken windows. You know some of them feel why I should leave town and come to the rural areas to suffer”* (Justina).

*“There was no alternative to maternal health care services for maternity care in the town where I live. When you are having an emergency, you must travel to the city where you can*

*access health facilities for care. .... the road from my community to this facility is bad with many pot holes” (Ijeoma).*

Having presented data on the logistic barriers influencing maternal health care utilisation from the perspectives of the participants, I now follow up with the next main theme which consists of findings on maternal health problems.

### **5.3 THEME 3: MATERNAL HEALTH PROBLEMS**

The participants reported various health problems as consequences of travelling on bad roads, beating from husband and lack of proper nutrition. Problems related to retained placenta and preeclampsia was also mentioned. All the participants mentioned factors that are directly related to pregnancy as the maternal health problems they encountered and their causes.

*“I couldn’t deliver my baby through the normal way because of the abnormal presentation of the child. The doctors tried everything to make the baby position well but to no avail. At the end of it I went through Cs” (Amaka).*

*“I have heart burnt, sometime dizziness, tiredness and anaemia” (Chioma).*

The participants also identified retained placenta, anaemia and preeclampsia as some of the maternal health problems they experienced during pregnancy and childbirth.

*“.... Although, I was a bit late getting to work. I wasn’t up and doing as I used to before the pregnancy set in. I go late for my business and at other time I don’t even show up at all. Just general body weakness like that. I had retained placenta and this was because I had uterine rupture” (Ijeoma).*

In the same manner Emmanuella explained:

*“I was anaemic due to the fact that I was not eating well. I wasn’t having money to eat well and I couldn’t even buy the prescribed medication as well. My mother helps me with plenty fruits and I also took some vitamin C as well. That was all I did to treat myself. But I did not fully recover before delivery. .... I was having difficulty in getting the placenta out after delivery. According to the doctors the retained placenta was because of the uterine rupture I had” (Emmanuella).*

Miscarriage was also one of the issue among the participants, where two participants expressed they suffered from miscarriage.

*“The miscarriage I had was due to a long-distance trip I made and the road was very bad. In trying to avoid the pot holes on the road, the drive had no choice other than to jump the pot holes. These jumps affected me which resulted in the miscarriage I experienced” (Omoku).*

Another participant has this to say:

*“It wasn’t a good time for me. I had preeclampsia so I was in the hospital for a month before I was induced to give birth to the baby preterm. I had a very bad experience during my last pregnancy. The situation was much wired, I had to be given bed rest for about a month in order for my condition to be monitored and be managed properly. I was induced to give birth because my Bp had risen up 190/160 due to the fact that I suffered from preeclampsia. Yeah, I was due for operation but then I declined because the baby was so small. You know what I mean? We first counted it was 2.2 and after that it became 2 from there 1.8. So, I felt how can I go through Cs for a baby that was weighing just 1 point something. We weren’t even sure of his survival so I was infused at the end of the day and then by the time the baby came out he was just about 1.5. I also suffered from oedema. Water gathering all over my body” (Justina).*

## **5.4 THEME 4: HEALTHCARE INCOMPETENCE AS A BARRIER TO SEEK CARE**

This phase of the analysis explores how healthcare incompetence can impact on participants’ future behaviour towards the utilisation of health care services during pregnancy, labour and the immediate postpartum period. As part of the discussion on factors affecting access to skilled maternal health care services utilisation, some health facilities issues were identified. The categories here associated with health facilities issues included lack of management, communication and clinical skills, corruption, poor staff attitude, lack of compassion, lack of healthcare equipment and private/government practice.

### **5.4.1 Lack of Management, Communication and Clinical Skills**

Some of the participants expressed a level of satisfaction with health care services, however most participants were not happy with health care facilities during and after delivery. The participants identified lack of management, communication and clinical skills as factors associated with health care incompetence in health facilities. When other obstacles are overcome and a pregnant/nursing mother and/or her newborn baby with complications reached medical facility, there may be other problems that threaten their chances of survival. The challenge of receiving prompt and appropriate treatment/care after reaching the health

facility may start by not meeting the consulting physician/midwife on their duty post. The dismal story of Emmanuella, Amaka and Ijeoma may illuminate the situation. The other cause of considerable delay in receiving appropriate care after reaching health facilities, more often mentioned in the testimonies, was related with lack of general basic skills such as failure to calm patients before referral, and absence of readiness of receiving facility.

*“General basic skills are lacking in some of them my sister. A patient comes in with a situation and you as a doctor and nurse will be shivering because he doesn’t know what to do. Unreliable standards of care and monitoring are a serious issue in our healthcare system. Failure to stabilise patients before referral, errors in existing protocols for referrals, lack of readiness of receiving facility, poor documentation and monitoring indications for referral. My dear, name them. There are so many. In most of the time, if not all accompanying person with the patient have no knowledge of the case and the reason for referral. I feel some of the health workers here need to go on refresher courses. They need to see and know what is going on” (Emmanuella).*

The expectation was not met when they reached health care facilities. The experiences were described as below.

*“The consultant.... left me and my unborn child in the hands of a young doctor who lack the basic skills to manage my situation and was lacking in confidence” (Amaka).*

*“Women die from very minor complications because of lack in medical equipment and lack of knowledge of the health problem by the doctor.....As a patient in the hospital, even in an emergency, the healthcare staff expects you or your family to buy card and make some deposit before you can be attended to. This action by the health staff has left many women in need of prompt care death” (Chioma).*

In the same manner, Ijeoma explained:

*“... Most times doctors and nurses responsible for a patient’s care are often not on their duty post. Sometime even when they are there, they might just be seated in their offices doing nothing. Most times you have to wait for like an hour or more before you can be attended to. I actually find this to be a very bad practice on their part” (Ijeoma).*

On the contrast, Justina have this to say.

*“Agreed, that some of our hospitals are lacking in basic equipment and our health staff can be very abusive at times, they are still very safe than home delivery or at the mission houses. If there is any issue of complication, they will know what to do to avert the situation. And again, because I want myself and my baby to be safe and be free from any form of deformity”* (Justina)

However, one of the participant noted that the health facility where this study was conducted have competent personnel to handle complications but further explained that personnel’s in another health facilities within the same town do not immediately swing into action.

*“In this same town, we have other hospitals. But the reason why I choose this one is because they have more competent hands to handle any complication that may arise. Though.... like me I had to weigh the options. There is a particular one; the reason why I didn’t go for care there is because of .....is not as if they don’t have competence hands but in the event of complication those personnel’s there don’t usually swing into action but this particular one when there is a complication, immediately they swing into action”* (Omoku).

#### **5.4.2 Corruption**

The women reported unofficial payments and neglect as a challenge when utilising MHCS. Although services are said to be free to pregnant/nursing mothers on paper, giving staff incentives to get express care and healthcare staff asking women to bring things not necessary for delivery still threaten many mothers from seeking emergency obstetric care at larger facilities like the one where this study was conducted. Cost that they did not expect to pay. While some of the women interpreted the cost as a challenge, others thought it was ok. Although women concern about giving incentives to healthcare staff to get express care was not clearly linked to decision-making to seek help in health care facilities.

*“My sister, the problem of our people is beyond poor people like us. Even if such things are available, someone of my class can never have access to it. Number one, I don’t have any healthcare staff as a friend. The corruption here is too much. Everything is based on who you know, or you have money to make things work for you. But I don’t have any of these things that I have mentioned to you. ....know a nurse, doctor or a pharmacist they can help you to get those items before someone that was there before you. Also, if you have money to bribe health staff to facilitate things for you. I believe someone like you might not understand this because you have the money and education which enables you to have your*

*care in the best facility in any place. They will be scared to ask you for bribe because they wouldn't know whose daughter or wife you are” (Chioma).*

On further questioning Chioma explained her frustration as follows:

*“They can answer you if God touches their heart. Like I said everything here is money. The doctors and nurses in this country are plague with corruption. If you are here for delivery, you are expected to bring deltoid, soap, money for so many things and all these things delayed your being attended to immediately” (Chioma).*

Interestingly, Omoku has this to say:

*“I have everything working out for me. Most of the health staff are my friends and I also have the money to do what is required of me” (Omoku).*

On further probing on what she meant by having money to do what is required of her.

In her words:

*“I don't need to say everything out. If you're of this place, you'll know what I mean. But if you don't, there is no problem but I'm not going to go further on this” (Omoku).*

*“..... though, there are cases where people skipped the queue and get attended to before you that came first just because they have healthcare staff as friends and family members. By the way, nothing is ever done right here” (Emmanuella).*

Another participant has this to say:

*“There are a whole lot of issues with the health system here. Starting from supervision to the management. Our health system still has a long way to go. Aside this, we have the issue of corruption in the health system. Most of the health workers just want to make money from every situation. Patients' wellbeing is not paramount as compared to how much they could make from your person” (Justina).*

### **5.4.3 Lack of Compassion**

The participants also complained about the hideous attitude of the health staff as a contributory factor to non-use of skilled maternal health care services. Most of the women in this study commented that the staffs were rude, impolite and disrespectful to them during

ANC, labour and delivery. The results showed that some of the participants were not satisfied with the harsh language used by health care providers and being critical about if they were informed when she decided to get pregnant, which was a potential barrier for further questions on issues around pregnancy and delivery. There were comments on the need for health care staff in the health facilities to change their attitude towards pregnant women. Although almost all the participants in the study complained about poor attitude of health staff towards their clients, only one of those interviewed was a victim of mistreatment at the hands of the health care providers. This is reiterated in the comments below:

*“The health care staff don’t ever use words of encouragement. They are too full of themselves. They use your condition to make mockery of you. Abusive words are their thing. I don’t blame them but the country. The government just allowed these doctors and nurses to take laws into their hands, especially the young ones that even lack the skills and experience. Most of them, if you ask me I will say they know next to nothing other than being pompous”* (Chioma).

On further questioning, Chioma also reported that she was humiliated by two nurses and a young doctor for approaching them to complain about the abdominal pains she was experiencing. In her words:

*“I was humiliated by some of the healthcare staff in this hospital. I approached two of the nurses and a young doctor to complain of the abdominal ache that I was having and I was even crying as well. Oh...my God! I regretted ever approaching them that day. They (the two nurses and a young doctor) insulted my life saying when I was opening legs for whoever that got me pregnant if I informed them before doing so? That did I not enjoy it? Please, don’t join (involve) us in something that we are not responsible for. If I wanted to die that I should go back to my house and do so. Or better still, you can go to the person that got you pregnant and cry to him. They (the two nurses and a young doctor) made me felt like I did something wrong by being pregnant. Thank God that I had a husband who was responsible for my pregnancy. Else, maybe I would have taken my life”* (Chioma).

Another interviewee:

*“Very few of them can be nice. They rest of them are not. They can be very arrogant”* (Emmanuella).

The participants felt bad about the way they are dealt and being treatment because they went to the facility to seek care.

*“When you go they’ll be tossing you around, asking you obvious questions and sometimes in an abusive language.....so next time I will be discouraged to go”*  
(Amaka).

Surprisingly, one of the participants reported that only few of the healthcare staff could be nasty but that in general they were nice.

According to Justina:

*“Oh... Yes. Let me give it to them. They tried. It’s only few of them that could be nasty. I had a problem with one of them and you know as humans some of them have their own personal problems and these problems interfere with their job. They come to the hospital with it and sometimes they can be very hostile. Hmm! Like using abusive words on the patients, calling you names and all sorts of things. They (the doctors and nurses) sometimes do say to patients that they’re dirty and smelling and that the hair in their genitals is overgrown. You know these things are private. But when communicating to their clients they shout it to the hearing of other close by persons in the facility. This attitude must change. It is really unfair on the part of the patients”*  
(Justina).

*“At times, the health workers can be very rude. They treat you as though you are a nobody or that they are doing you a favour. In short, most of them have nonchalant attitude to work”*  
(Omoku).

*“Some of the health staff lacks empathy. The way they talk to women can be very embarrassing. This poor attitude actually discouraged many women from using health care facilities for delivery and other services provided to women of childbearing age”* (Ijeoma).

Poor attitude and poor rapport was cited by the participants as some of the factors that can limit or reduce women utilisation of skilled health care services. However, some of the participants felt that few of the healthcare staff can be nice whilst others are nasty, not friendly especially when they have their own personal issues.



#### 5.4.4 Lack of Healthcare Equipment

Another dimension was mentioned regarding the state of lack of medical equipment in the health facility. Regarding availability of medical equipment and essential supplies required to ensure effective delivery of maternal health care services, the participants reported a common problem related to that medical resource and supplies availability. Overall the participants complained that there are times when they are prescribed medicines that are not available in health facility pharmacies and in such cases these women have to buy medication on their own from private pharmacies which tend to be very expensive. A lack in medical equipment and in essential supplies indicates that the quality of care in many health institutions is inadequate which in turns pose challenges to healthcare providers in providing patients with timely treatment. Lack or insufficient healthcare equipment was reported by three of the participants. As the facility offering maternal care services, the facility should have been able to offer incubator, gas and basic theatre equipment. Justina, a 40-year-old lecturer and a divorce mother expressed her dissatisfaction with lack of an incubator at the facility:

*“The hospital I was, there was no incubator. No!! They were just trying their best. Like I told you when I had my baby he was supposed to be kept in an incubator or in the nursery but, there was nothing like that. They didn’t have. We just had to use the local means by wrapping him in several sheets of rappers and you know trying to create warm for the baby”* (Justina).

*“Our health facilities in this country are not adequately equipped”* (Ijeoma).

In the same manner, Amaka explained that:

*“The health system in Nigeria is just nothing to write home about. Most times an equipment as little as incubator isn’t there for use for preterm babies. I don’t give credit to the health system here but to God”* (Amaka).

*“Some equipment for treatment is actually lacking in this facility. They don’t have enough ambulances to carry patients in the event of an emergency. Things like an incubator, gas and basic theatre equipment seem to be lacking too”* (Omoku).

Another interviewee:

*“Prescribed medications are at times not available in the health facility pharmacy”* (Chioma).

The women statements above showed their disappointment with the services at the health facilities which also explain their low utilisation levels.

#### **5.4.5 Private/Government Practice**

The choice of place of ANC and delivery was not only determined by income. The qualitative data and researcher observations during the fieldwork revealed that quality of service, attitude of health staff, and promptness in instituting treatment was perceived to play a major role in choice of place of ANC and delivery. Although some government health facilities have the necessary facilities and manpower to carry out treatment; and treatment in government facilities is cheaper or free, some of the women revealed that they will prefer the private clinic if they can afford the cost. One of the participant described that she had visited both government and private health care facilities during ANC. She explained that her initial approach was government healthcare facility.

According to Amaka:

*“I went for antenatal care both in the general hospital and in a private hospital. You know here the general hospitals are always on strike. So, when they went on strike I had to go to the private hospital to register. My sister, they have safe hands there. Here in the general hospital, although there are also safe hands, but the patient interest usually comes last. Only in few cases that you will see healthcare staff on their toes for a patient in need.... I had a very ugly experience at the time of my last pregnancy/delivery in the general hospital. Although, I came to this hospital on referral, I was not given proper attention to my health needs. I was abandoned to my faith and that of my child. Government hospitals in Nigeria are the worst place to give birth as the doctors and nurses don't usually care what becomes of their clients. They (government hospitals) are like a dead trap. Doctors in private clinics would do everything to keep their patients alive where possible” (Amaka).*

In the same manner, Chioma explained:

*“But I will rather go to the private where I can get all the attention and love. But the money to patronised private hospital is the issue .... Even when there is everything, some of the health workers might not know how to use them. Sometimes, they might know how to use them but just want you to go to their own/friends' private clinics in a bit to make profit on you. Private is the answer if you have the money. At the private, they bring the best hands from various health facilities to handle any serious issue” (Chioma).*

On the contrary, Emmanuella have this to say:

*“We..... had to get a taxi from the private hospital where we were referred from to this facility and the cost was high. The situation was so discouraging” (Emmanuella).*

Further questioning on why she chooses to attend a private clinic that were unable to manage her complications revealed that Emmanuella only visited this facility due to proximity.

*“When I went to the private hospital, the health staff in private clinics are very nice set of people. They also keep to time unlike in the government hospitals where patients wait the whole day before they can see a doctor. Things are so orderly in the private clinics and the environment very tidy and free of bad smells” (Ijeoma).*

Another participant has this to say:

*“Although patients in the private clinics are given prompt attention/treatment on arrival to the clinic. .... but there are also other concerns with some of these private clinics, if not all. In an emergency situation, some of these private practices do not have all the necessary personnel on ground as they are limited with the number of staff due to the financial implications. There is no such thing as intensive care unit (ICU). As for me, I still prefer government practice to private” (Omoku).*

## **5.5 EMERGENT SILENCES FROM THE STUDY**

This section of the study focuses on the silences that were emerged from the study on women experiences in decision-making to seek healthcare. In exploring women thoughts, beliefs and feelings about the factors influencing access to skilled maternal healthcare services, many challenging issues emerged within the women understudy. The common response was that there were many issues that reinforced the social construct issues among women of reproductive age in Nigeria to accessing healthcare. The concerns of dispute among the research participants were sensitive and were difficult to say by the women as some of them could only do this by using non-verbal language to express their frustration. The used of skilled maternal healthcare services among the participants is built around two notions branded as: negative and positive silences.

It therefore becomes vital to elaborate on these negative and positive silences of dispute within the Nigerian communities as it affects women decision to seek care. This section would start by presenting the negative silences that emerged as an outcome of the findings.

### **5.5.1 Negative Silences**

It was also revealed that another reason for the existence of violent within the household was a habit of the husband of the participants being alcohol drinker who beat his wife whenever she tried to ask him where he was coming from. For fear of being judged by the society, one of the participants who was beaten decided to stay quiet without reporting the spouse to the authority. Physical violence was mentioned by one of the participant.

*“My husband caused three of the miscarriages I had because he was always beating me. He will always come back home drunk and when I talk he will just start pounding on me....”*  
(Justina)

On further questioning if she reported the abused to the authority or any other person, Justina explained that:

*“What for? When women are seen like slaves. I just had to endure it because if I say it, it is me that people will blame. But thank God that we are now divorced. I sincerely love my freedom notwithstanding the fact that the entire financial burden for the children is on me”*  
(Justina).

Another participant has this to say:

*“There is always long queue of patients waiting to be attended to. Again, I think this might be due to the unequal proportion of health staff to patients’ ratio. Also, the unwillingness and I don’t care attitude on the part of the health staff is also a contributory factor to the long queue thereby resulting in delay”* (Emmanuella).

Negative silences that emerged from the findings of this study that discourages the utilisation of skilled birth attendants were presented from the perspectives of the participants. Subsequently, I will be discussing issues about positive silences that emerged as a consequent of conducting the interviews.

### **5.5.2 Positive Silences**

Similarly, as for the negative silences, some concerns were raised about positive silences that emerged while accessing skilled birth attendants. When the participants were asked if they

will use the health facility for pregnancy and delivery care in their next pregnancy. Women had varying experiences and perceptions regarding the choice of SBA use for their pregnancy and delivery.

A woman stated:

*“Despite some of the bad experience that I had in the health facility, I will still choose to attend ANC and deliver my baby in a health facility next time that am pregnant again.”*

(Justina).

In the same manner, Chioma explained:

*“.....because I don’t want to die and my baby as well. They have capable hands here. Their doctors and nurses went to school unlike the local midwives and some local people in the chemist claiming to be doctors without any formal training in schools. People die because they went to all these local fake (unskilled) doctors and midwives”* (Chioma).

*“to the women, no matter how bad you may be treated by the healthcare staff please make sure you encourage yourself to attend all the services if you can. It is for your own good and that of your children and other well-wishers. As women, we must learn to encourage one another. We are the only one who can understand the pain and trauma women pass through in trying to bring another life”* (Emmanuella).

The positive attitude expressed by the participants about the safety and security of health care facilities could be the facilitators to utilising health care facilities in present and in future.

## **5.6 WOMEN’S SUGGESTIONS FOR IMPROVEMENTS**

Since the current research intent to offer contribution by way of making suggestions to the government, policy makers and the health care professionals, participants were asked for their views on what could be done to improved access to skilled maternal health care services. Some ideas were presented by the participants’ preventive measures.

Among the improvements that women suggested, first, women wanted a free or subsidised health cost for every citizen particularly the women.

*“To the health workers, it will be nice to put yourself in your clients’ shoes, this way you can be able to treat people as humans and not animals. They should also have proper documentation and monitoring of indications for the referral. To the government, a lot still*

*needs to be done for this our health system oh... I know that they don't have a clue what is happening here cause themselves don't patronized these ones. They go for the best health facilities here or they travel abroad. Please let them do all that is necessary to help we the poor ones. Health care can be made free for every citizen or subsidised the cost for people particularly the women. Needed health care equipment should be provided as well because the resources are there just for a good leader to apply them appropriately” (Emmanuella).*

*“.....Healthcare for women should be made free as poverty is the major reason why most women cannot access skilled birth attendants during pregnancy and delivery. Access roads should be built while keeping older roads in worthy condition” (Ijeoma).*

Another participant also suggested that the government should support the management board to enable them conduct frequent and consistent monitoring visits to health facilities.

*“To improve services, health care service is quite expensive and you don't get it when you need it because of all the obstacles I highlighted earlier. Government need to subsidize the cost of health for pregnant women thereby making healthcare affordable. Punishment should be giving to health staff that uses abusive words on their patients. Building and improving the existing roads thereby making it motorable. Finally, incentives should be giving to medical personnel posted to rural areas” (Justina).*

A participant suggested that to encourage women to utilise skilled birth attendants and benefit from the services provided to women during pregnancy, delivery and the immediate postpartum period, she therefore called on health care staff particularly nurses to show a positive outlook towards mothers.

*“I will advise the health care staff to change their negative attitudes toward mothers to encourage women utilise health care services and benefits from it. Health care staff are supposed to be charming, respectful to their patients and not being rude and nasty to their patients” (Omoku).*

The participants suggested that the state government should ensure that roads were maintained in worthy conditions and first-hand access roads are built to expedite access for people living in surrounding area and provision of free maternal healthcare services for pregnant and delivery care were also highlighted.

## **5.7 SUMMARY**

This chapter has outlined the findings by exploring the women beliefs, thoughts and feelings on factors influencing women decision to seek care in healthcare facilities. The participants' stories show that their decision to seek care was influenced by individual and sociocultural factors, logistic barriers, and maternal health problems. Issues were also raised about the health facilities which pose a barrier to the utilisation of skilled maternal health care services. The participants' stories/experiences have significant influence on their health seeking behaviour.

The presentation of the Silences Framework as a guide underpinning this research work lets the participants to involve fully with the concerns understudy as well as issues that were sensitive and difficult to talk about. The silences created by the women in the interviews were concerns that were considered unsuitable for conversation, sensitive to say or reluctant to make it known to the public. The silences associated with the social construct of decision making to seek skilled maternal healthcare services were evidently voiced and made obvious through the research study.

The next chapter presents the discussion of findings.

## **CHAPTER SIX – DISCUSSION OF QUANTITATIVE AND QUALITATIVE FINDINGS (WORKING WITH SILENCES)**

### **6.0 INTRODUCTION**

In this discussion chapter which is presented as the stage 4 of the Silences Framework and the researcher's reflection of this study. The focus of this chapter is to emphasise key issues that linked both the quantitative and qualitative findings in relation to the following research aims and objectives (see p.10) and with regard to present-day literature. Previous studies in Nigeria which had worked on factors influencing access to emergency obstetric care using survey, and data from population based studies to collect information from various stakeholders such as pregnant women, community leaders, traditional birth attendants and health care professionals used either questionnaire or a focus group discussion in carrying out their research (Onwudiegwu and Ezechi, 2001; Babalola and Fatusi, 2009; Awusi, Anyanwu and Okeleke, 2009; Adamu, 2011). Access to skilled birth attendants allows women in developing countries particularly in Nigeria the chance to preserve and improve their overall health status. However, this access is often limited. To improve access to health care, an understanding of the barriers should be a priority. This study therefore investigated factors influencing access to emergency obstetric care for women in Nigeria.

This study, however, adopted a pragmatic approach design with content analysis for its investigation. This approach allowed for determination of the proportion of delays attributable to each factor identified and exploration of possible determinants of these factors. The discussion of these findings will begin by showing where and how both findings link or not. The Socio-Ecological Model suggests that maternal health care utilisation is embedded in a larger system, and that interactions between providers and mothers, should affect health care utilisation. Maternal healthcare utilisation can be influenced by the culmination of multiple exposures that women of reproductive age are faced with daily. Each level of the SEM allows the researcher to identify factors that may, in this case, influence Nigerian women to use maternal health care services including services for emergency obstetric care. The results from the previous chapters (4 and 5) will be presented under the four main headings: Individual/sociocultural factors; logistic barriers; maternal health problems and healthcare incompetence. Lack of finance was the main driving factor interwoven in several social ecological levels. Lack of finance was present at the individual, social and physical



level in both the quantitative and qualitative findings. Financial need was identified as being a driving factor for poor decision making to seek care in health facility. Participants either could not afford medical and transportation costs to access treatment, or did not have money to meet their financial demands and as such resort to using the available resources to buy food and payment of school fees for older children as opposed the utilisation of maternal health care services. As a result of financial burdened participants had to sale in the market to make a living thereby denning themselves access to care. Along with lack of finance, controlling behaviour, distance to health facility, attitude of health staff, delays in seeing a doctor and in obtaining medications, and gender division of labour played a role in delaying women utilisation of health facility for treatment. Women showed their feelings of displeasure in fulfilling incompatible roles as wives and mothers while pregnant which contributes to pressure to the body during pregnancy and the immediate postpartum period.

The current study further reveals that having support from one's family and a good cordial relationship with health care providers contributed to improved maternal health care utilisation. For example, in the qualitative findings a positive association was observed among women who had their relatives' supporting/assisting them in domestic chores and taking care of their older children in their absence and maternal health care utilisation, whereas this was the reverse for women who had no support from husbands and relatives'. Therefore, it is evident that financial hardship created a unique interrelationship across several levels resulting in an increased risk of non-utilisation of maternal health care services among the women. It would take more than working with a specific individual and increasing their standard of living to reduce their non-utilisation of maternal health care services; an intervention would have to be introduced at multiple levels. Even if one individual's barrier to health care utilisation was reduced, the prescribed cultural norms of the community would make it difficult, and potentially impossible, for the new positive health behaviour to continue due to the tightly woven roles, cultural norms, and interactions of the community.

Connelly *et al.* (2000) stated that the condition of pregnant/nursing mothers needs to be improved by meeting the immediate practical needs before the position of women can be addressed. The practical needs identified here are the needs pregnant Nigerian women require for accessing health care, in other words how these barriers in access can be overcome, as the barriers they face reflect their position and vulnerability to obstetric complications and maternal mortality.

## 6.1 INDIVIDUAL/SOCIO-CULTURAL FACTORS

The most personal characteristics and behaviours of a woman are found within the individual level (Institute of Medicine, 2003). The relationship between the individual and the community is reciprocal and its effects are seen across the various levels of the social ecological model. Research has consistently shown that maternal mortality is disproportionately experienced by women from low socioeconomic status. Studies have consistently revealed that women's socioeconomic status underlines and shapes utilisation of maternal health care services (Mekonnen and Mekonnen, 2002; Babalola, 2014; Afari, 2015). In this study, the disparities between socioeconomic status and maternal health care utilisation were very clear in both quantitative and qualitative findings. This was seen with an increased likelihood of low income women exhibiting lower odds of making good decision to seek care.

Studies have shown that utilisation of maternal health care services increases with higher levels of education (Ebuehi, Roberts and Inem., 2006; Bolatito, 2007). This may also explain the fact that about 89% of respondents booked for antenatal care in an orthodox health facility as almost all (97.5%) respondents in the current study had at least primary education. Education of women has repeatedly been identified within the field of development as a determinant of the degree of autonomy and power women have, as well as a guiding factor for women's reproductive and health care choices. This is in keeping with findings of previous studies which showed that both husband and wife education had positive influence on utilisation of antenatal care services (Simkhada *et al.*, 2008; Mukong, 2012).

The high proportion of educated respondents in the current study may also explain the fact that at least three quarters of respondents could rightly recognise bleeding, convulsion, onset of preterm contractions, vaginal loss of fluid before term and persistent headaches as warning signs of obstetric complications. It could therefore be argued that failure to recognise warning signs of obstetric complications did not play a significant role in the decision-making to seek care as most of the respondents were able to recognise warning signs in pregnancy. Education is a key determinant of maternal health. Education does not only lead to higher income and greater awareness; it also enhances the value for a healthy life-style. Studies have shown that educated women are more likely to take measures to protect themselves, accept change and be more receptive to preventive messages (Babalola, 2014; Azuh, 2011).

The high percentage of respondents gainfully employed in the current study with a median income of #18,000.00 per month may have contributed to women's autonomy in taking decision to seek care. Because most respondents in the current study were gainfully employed, only a tenth of respondents required spousal consent before seeking care, while fewer required approval of another significant person in the absence of the spouse before the uptake of maternal healthcare services. The current study revealed that poor maternal outcome was reported among respondents with income level below minimum wage. This finding is similar with findings of Afful-Mensah, Nketiah-Amponsah and Boakye-Yiadom (2013) who stated that an improvement in women's economic status increases women's likelihood of utilising healthcare facility for delivery. Ishmael, Acheampong and Mirriam (2014) revealed that wealthy women make frequent visits, and are more likely to deliver in public or in private hospitals than women in lower wealth index. However, the need to make good decision to seek timely care was underscored in this study. In addition, Fatima and Avan (2002) stated that women's financial autonomy was considered to have a link with the use of maternal healthcare services in Pakistan; Falkingham (2003) added that women from the poorest quintile were three times more likely than women from the richest quintile to undergo a home delivery without a trained assistant.

The trend of finding in this study showed that a larger proportion of respondents gainfully employed and earning above the national minimum wage did not require spousal consent before seeking care compared to those who earned below minimum wage. This can be explained by the fact that unemployed women and those with low income would require financial assistance from others to access care while single women in the absence of a husband must be accountable to some other significant person. It can also be argued that no matter how well equipped a health facility is, it is the level of utilisation that makes the difference to good health of the mother and child. Decision making supremacies of husbands and other significant persons before seeking care were theorised on religious and cultural obligations and the conventional beliefs of men being main providers and keepers of finance. Some of the participants in the current study had to deny themselves the benefits of attending antenatal care to stay with their older children at home since they had no one to take care of the older children in their absence. Financial difficulty served as a barrier to maternity care as some participants felt it was much more important to use available resources to buy food and pay for older children's school fees. Poor women thus structurally suffer because they live in a vulnerable societal position-that of being poor and being a woman, thereby making them

victims. Thus, reducing maternal mortality in Nigeria and in other similar setting requires ensuring every woman has the capability to access the necessary services, so that no woman becomes a victim of maternal mortality because of her societal position.

The socio-cultural background of an individual plays a major role in access to, and the utilisation of, maternal health care services among the study participants. The consequence of these influences on maternal health care utilisation is one of the main effects of maternal morbidity and mortality in the country. The level of poverty shapes women and their family's member decision to seek care. Sorosh (2009) reported that families with lower income do not seek care until pregnancy complications become severe.

The current study concludes that because of the low status of women, husband's and mothers-in-law supremacy, all contributes to worsen uptake of maternal health care services. Women's roles of childbearing, mothers to young children, wives to their husbands and high expectations by her family to carry out domestic chores alone without any support from their husbands and other significant family members denied them the opportunity of getting good employment where the work environment is conducive and wages are good enough to meet their health cost and other demands. More so, due to the fear of being judged wrongly, women had to deal with the responsibilities as employers, mothers and without any protest. Taking up all these responsibilities by the women was at their detriment of making personal sacrifices. This however, was largely seen as social responsibility and such practices were reported to be supported by other women and men as it was a sign of good motherhood. The structure of the family is a very basic component to a woman's home environment. This study found that women in households that have supportive spouse, relatives and a cordial relationship with healthcare personnel have a much lower likelihood of making poor decision to seek care. While women with a lack of support have been found to have an increased likelihood of having poor decision to seek care (Sorosh, 2009).

Male societal dominance may perhaps serve as a disincentive factor to seeking care for some women as male dominance influences women's reproductive and healthcare choices (Bellows *et al.*, 2015). Culture plays a vital role among the Nigerian people in their everyday life including beliefs regarding pregnancy and childbirth. In some parts of the country, especially in the western part of the country, pregnant women are not expected to announce their pregnancy state to anyone to prevent harms which may perhaps bring impairment to the mother and the new-born child. In situations where things go wrong during the period of

pregnancy and childbirth the woman is usually to be blamed for the concerns, hence her actions during birth is refereed based on her loyalty to certain cultural beliefs as advocated by her family members (Adeusi, Adekeye and Ebere, 2014). Tsawe *et al.* (2015) added that lack of financial autonomy, lack of decision-making power, fear of being detested of being pregnant without marriage might prevent these young women from seeking professional care.

The mean age of respondents in the current study was  $26.4 \pm 5.4$  years with an age range between 15 and 45 years. Eighteen percent of younger mothers in the current study aged 15-25 years were more likely to report poor maternal decision making in seeking care from skilled birth attendants than those 26-35 years. It could be argued that poor decision-making to seek care recorded among younger women in the current study could be due to lack of financial autonomy and seeking husband's approval or other significant person before accessing care. Another possible factor is that young girls are sexually active that may result in pregnancy. The fear of being detested might prevent these young girls from seeking help from health care professional. This finding agrees with the finding of Chakraborty (2002) and Tsawe *et al.* (2015) which found that non-use of maternal healthcare services was highest among mothers who were under the aged of 20 years than those who were 20-34 years. Ikamari (2004) found that health care seeking behaviour increases with age and decreases at older age. The current study concludes that poor decision-making to seek care recorded among older mothers aged 36 years and above could be due to over self-assurance, ill-informed of increased pregnancy-related complications and risk associated with advancing age and parity, especially if no complication is envisaged.

Many of these individual barrier factors that are significantly associated with maternal healthcare utilisation might be difficult to change. When disparities in maternal health care utilisation and maternal mortality are seen in factors such as age, gender, and income level, it is important to look more closely at the system or construct that originally facilitated the disparity. The idea of maternal mortality puts more responsibility on the individual and the environmental and ignores the system in which the individual lives (Institute of Medicine, 2003). One of the objectives of this study was to investigate factors influencing decision to seek emergency obstetric care among women attending the health facility. The purpose of this objective was to understand all components of a woman's environment in order to identify not only behavioural changes but also needed system changes.

The interpersonal level explores the exposures common to a woman's family and home life. Women who have supportive spouses and relatives have been shown to be very influential to maternal health outcomes and behaviours (Institute of Medicine, 2003). The type of family a woman come from is responsible for the decision women make to seek for help, the rules they follow, and the access they have to resources that promote and hinder positive health behaviours. The structure of the family is a very basic component to a woman's home environment. The current study found that women who were married and in a monogamous union were less likely to report poor decision to seek care. Single/widowed/separated women were more likely to report poor decision to seek care. Women in unions have been found to have an increased likelihood to seek maternal health care services compared to unmarried ones (Kalule-Sabiti, Amoateng and Ngake, 2014). This is because of the likelihood that married women are more likely to be supported by their spouses, and are more likely to have disposable income required to access maternal health services and are less likely to be autonomous. Maternal health is predominantly a product of the woman's own health behaviours.

Within the family, mainly maternal health, history of past pregnancy loss, is a proven indicator associated with adverse pregnancy outcome. Closely related to history of past pregnancy loss is lack of phoned call to the health facility for advice before presentation at the facility. Lack of phoned call to the facility had an impact on adverse maternal outcome as the likelihood of experiencing adverse maternal outcome was significantly reduced when phoned call was made to the facility. Also, women who reported quality of care to be optimal were less likely to experience adverse maternal outcome.

## **6.2 LOGISTIC BARRIERS**

Logistic barriers to seeking treatment as a significant theme in accessing care among the study participants include medical and transportation cost, distance and time. Transportation, distance and time are important means of accessing healthcare. In both quantitative and qualitative findings cost of transportation particularly during emergency was reported as the reasons for the delays in deciding to utilise health facilities for maternity care, particularly among women who were unemployed. This finding was resonated in many previous studies; a study of men's involvement in care and support during pregnancy highlighted that many of the women did not have readily available transportation to come to the hospital in the event of an emergency (Oiyemhonlan, Udofia and Punguyire, 2013), Sorosh (2009) pointed out that

costs of transportation, treatment, and other opportunity costs are important factors which determine service utilisation.

The women's stories suggested that medical and transportation cost was a major factor in deciding to seek care in health care facilities. The choice of health care facility in the current study was associated with the distance and the time it will take a patient to get to the nearest health care facility. The study findings regarding distance as highlighted by most of the women (both in the quantitative and qualitative findings) utilised health care facilities due to proximity. Holmes and Kennedy (2010) explained that long distances from home to the nearest facility and between health facilities add greatly to delays in reaching emergency obstetric care. In addition, Ravindran (2012) made it clear that distance influences family's decision to seek care in an emergency and that when services are made available closer to home and work place at times of the day convenience to women that utilisation is more likely. This finding echoed in some other previous studies; Mwaniki, Kabiru and Mbugua (2002) reported that mothers who lived in distance less than 5 kilometres to the health facilities utilised the services better than those who lived in distance 5 kilometres away and beyond. Asweto *et al.* (2014) added that the average time it takes a woman to travel to the nearest health facility had influence on the number of antenatal visits a woman would make.

The current study also shows that most (60.7%) of the respondents travelled to the health facility by public transport. In addition, forty percent of respondents who spent less number of hours travelling to health facility were significantly less likely to experience adverse fetal outcome. The major transport difficulties encountered by the participants were distance in reaching the health facility and traffic hold-up, suggesting that road network was inadequate and there was a need for more access roads to bypass traffic hold-up. Other transportation difficulties like police delay, lack of ready transportation and lack of transportation fare were also reported by some of the participants. Holmes and Kennedy (2010) reported significant improvements in access to and utilisation of emergency obstetric services following interventions in the transport system. It may therefore be suggested that with less transit time and with provision of readily available ambulance services by the government, more people would have faster access to emergency obstetric care than now.

### **6.3 MATERNAL HEALTH PROBLEMS**

Some of the participants identified some of the obstetric conditions as the maternal health problems they encountered and their causes. These were anaemia, heavy bleeding, miscarriage, preeclampsia, and dizziness, retained placenta and baby in a transverse position.

They participants did not mention obstructed labour, haemorrhage; prematurity, reduced liquor, intrauterine deaths, fetal distress in the interview, however, this was mentioned in the questionnaire. The implications of their experiences and knowledge on maternal health care problems and their causes mentioned is that, the participants have some level of awareness of some of the health problems that requires emergency care as these problems can lead to maternal deaths. Similar findings have been identified by Igberase, Isah, and Igbekoyi (2009) on causes of maternal deaths.

#### **6.4 HEALTHCARE INCOMPETENCE**

Previous literature suggests that poor quality healthcare or perceived healthcare quality is a significant barrier to, and use of maternal healthcare services. Patient satisfaction with healthcare quality will result in an increase patient compliance and higher rates of patient retention, and this in turn has a direct effect on healthcare outcomes (Zeithaml, 2000). Karen and Ballard (2003) found that error occurs when an intended arrangement of mental or physical activities fails to attain the anticipated result and when this failure cannot be ascribed to some chance intervention or occurrence. All healthcare personnel including doctors, nurses and pharmacists, are accountable for the services they provide to their patients. Healthcare professionals are required to make certain that their individual competency level is meeting the standard agreed by their institutions. Healthcare incompetence as was identified in the current study was affected by many factors which include misdiagnosis (incompetence clinical skills) or delayed diagnosis, error, negligent, insufficient/late referral system, and lack of ambulance for the referred cases, lack of medical equipment, lack of trained healthcare staff, as well as inadequate management and communication skills.

A deficiency in any of these factors can limit health services to take hold of the last opportunity to save a patient's life. In addition, considering that the health facility used for the current study were lacking in the above-mentioned skills and equipment to manage many of the obstetric complications, there is a need to educate the proprietors of this facility on early diagnosis of warning signs and the need for prompt referral to an appropriate facility for care. The women's experience of misdiagnosis, delay in referral, negligent also made these women lose confidence in the quality of health care provided at the health facility. They rely on their faith and prayed whenever they became ill and presented at the health facility only as a last resort.

The quality of care and pregnancy experiences at the healthcare facility in the quantitative finding was reported to be optimal by 67% of respondents compared to 33% who reported



sub-optimal. This finding was in contrast with the qualitative finding of the current study. A high level of dissatisfaction on the management, communication and clinical skills was observed. Onah, Ikeako and Iloabachie (2006) in their study of patients' perception of actual care conditions and patient satisfaction with care quality in hospital stated that the overall view of patients' perceptions of quality of care mostly was good and that patient satisfaction was high. Other studies have suggested that patient satisfaction scores present a limited and optimistic picture, since questions about specific aspects of patients' experiences showed that inpatients who rated the satisfaction as 'excellent' at the same time reported several problems (Onah, Ikeako and Iloabachie, 2006).

A possible explanation to this contradiction in both findings in the current study could be because of a fixed option in the questionnaires where there was no provision made for patients to express their views about quality of care received at healthcare facilities unlike in the qualitative findings where participants could express their views the way they like. A negative reaction to the adequacy of information given during antenatal care visits revealed that the women were not satisfied with the quality of information being provided. Most of the participants in the current study expressed their concerns by suggesting that refresher courses were necessary for acquiring basic skills as there is a lack in basic skills among some of the healthcare personnel. The current study underlined that communication on risk factors and warning signs in pregnancy given to women at the healthcare facilities were inadequate, unclear and as such need more responsiveness and evaluation. Other scholars have underlined the desire of women in the developing countries especially in Nigeria to have accurate and easily understood information about the warning signs in pregnancy.

This result was resonated in the study of Lerberg *et al.* (2014) that communication, education and information given to women during antenatal care by healthcare personnel was poor with less time for consultation. Moreover, Abrams *et al.* (2010) found that delay in seeking treatment at healthcare facilities is in the same way imperative as lack of good quality services in resource poor settings where women normally access and receive poor pregnancy, delivery and post-partum care due to lack of a facility with essential EmOC services, lack of equipment, supplies, medications and lack/severely limited human resources. In addition, Homles and Kennedy (2010) revealed that poor inter-personal relationships may build poor communication that hindered healthcare professionals providing women the information that they need to know about family planning, nutrition, delivery and birth preparedness and skilled attendance at delivery, new-born care and infant feeding. The current study concludes

that lack of good inter-personal relationships between health care providers and their patients can lead to poor treatment of patients by the healthcare providers during labor, and especially being neglected can cause women to experience a loss of sense of control which can lead to emotional and psychological problems later in life. This also could be a factor that influenced the late presentation to health services by some of the participants.

Pandey *et al.* (2013) study also revealed that lack of lady doctors, excessive waiting time, embarrassing physical examination, use of abusive words, lack of empathy and unrealistic standards of practice all contributes to discouraged women further utilisation of health care facilities for maternity care. Another study on factors associated with the use of maternity services in Enugu, South-eastern Nigeria, found that affordable cost of care, competence of the person who attended the delivery and promptness of care where they perceived factors influencing the choice of place of delivery. Promptness of care, competence of care providers and friendliness of staff among other factors explain the quality of care delivered by any health facility (Onah, Ikeako and Iloabachie, 2006). The women acknowledged that unsatisfactory attitude of health care providers lead to the continued delay and underutilisation of health care facilities for care among Nigerian women. The women negative experiences with the health care facilities as was explained by the women in the current study and arrogant attitudes towards the patients made them lose confidence in the efficacy of services provided and thereby reduced their utilisation of such services.

On the other hand, some of the delays in accessing a doctor in the current study are delays associated with no money for consultation (registration), absence of the doctor, long queue of patients waiting to see the doctor, doctor busy in the theatre, fear of operation, lack of equipment and poor attitude of staff to work. Delays in obtaining medication and getting medical test done were also experienced by some of the respondents in the current study. Factors accounting for this are long queue of patients waiting to obtain medication and getting medical test done, lack of money for needed items, having to go a distance outside the health facility for the test and refusal to give consent for the test to be done.

The findings of the current study echoed in many other studies; Mathole *et al.* (2004) in their study conducted among the people of Zimbabwe, reported that negative staff attitudes towards their clients were barriers to utilisation of healthcare services. Lule, Tugumisirie and Ndekha (2000) reported that constant lack of medications, antibiotics and analgesics at hospitals was significantly associated with non-utilisation of healthcare facilities, and Okeke *et al.* (2015)

reported that lack of availability of healthcare providers in health facilities was a barrier to seeking care among women of reproductive age. Olenja *et al.* (2009) also noted that many facilities offering obstetric services in Kenya lack the equipment and basic supplies that are needed to support the provision of quality antenatal care, delivery, and postnatal care services.

Long queue of patients was a recurrent factor in delaying access to treatment at the facility in both the quantitative and qualitative findings, either in consulting clinic, at the pharmacy or at the laboratory. In addition, respondents were delayed in seeing the doctor for reasons such as absence of the doctor on duty, and where the doctor is available; he is otherwise occupied in the theatre. These might suggest that there is inadequate number of necessary personnel in these departments in the hospital to adequately cater for the patient load and ensure smooth and prompt care. Scarcity of needed personnel as well as limitations of available health staff in performing functions essential for obstetric emergencies were reported in the literature (Olenja *et al.*, 2009; Okeke *et al.*, 2015). Short waiting time, empathy, availability of essential supplies and staff competence were responsible for decision-making to seek help. The best way of encouraging a person to utilise health care services is the belief that using such services will positively impact on their health and this belief is very much influenced by knowledge about risks, opinions about the available help and support at the health facility and previous experiences with the health facility. Both the situation of the women, maternal and reproductive health situation in Nigeria, suggests that women have few capabilities over the situation without concerted commitment from the government.

Corruption in the current study appeared as one of the factors that affects women's access to, and use of maternal health care services. This study, like many before it (Paredes-Solis *et al.*, 2011; Jain, Nundy and Abbasi, 2014) has highlighted the impact of corruption on healthcare utilisation. Jain, Nundy and Abbasi (2014) revealed that corruption such as unofficial payments, buying of items which are already included in the official payment, giving of incentives to health workers to get express treatment and unnecessary referrals may be one of the barriers to utilising maternity care, and Paredes-Solis *et al.* (2011) in their study of use of social audits to examine unofficial payments in government health services in South Asia, Africa and Europe reported that unofficial payments in cash or kind to health care professional or to institutions covers items already covered by the health system. The current study confirmed this idea that corruption influences the utilisation of maternal health services for emergency obstetric care. The interview transcripts of two participants clearly showed

that the health system of Nigeria is plague with corruption. There is a general assumption that money given to health workers allows the giver (the patient) to access care more quickly. The finding of the current study suggested that not having healthcare staff as friends or money to pay your way through can delay patients access to care.

#### **6.4 SUMMARY**

This chapter discussed the quantitative and qualitative findings focusing on issues that Nigerian women face in trying to seek for care. These include factors such as controlling behaviour, gendered division of labour, lack of finance (for medical and transportation costs), delays in seeing a doctor and in obtaining medication, corruption and poor attitude of health care staff, lack of compassion, communication, management and clinical skills all played a role in delaying women access to, and utilisation of maternal health care services. In addition, long queue at the facility and lack of basic supplies were covered. There is ample evidence that the critical economic situation of women is a factor that has prevented a significant number of women from paying prompt and adequate attention to their health needs during pregnancy. Most women rely on petty trading as their main source of income and would not attend to their health because of economic and domestic activities. On the other hand, low level of education and lack of financial empowerment affects the rationality and sensitivities of the women to the demand of pregnancy, thereby leading to ineffective health decision. As such late presentation at health facility results to complications and even late detection of possible complications. Therefore, women often face many health risks which sometimes induce morbidity and even death. The next chapter will provide the study's recommendations and their implications for healthcare providers especially the nurses and midwives, further research and policy.

#### **6.5 CONCLUSION**

This study found multiple barriers associated with maternal healthcare utilisation in each of the four levels of the SEM. The findings from each level provide insight as to the factors that significantly influence maternal healthcare utilisation in each major environment that a woman experience. When all the individual levels were combined four risk factors that were significant at their respective levels were no longer significant. This reveals the importance of researching and embarks upon maternal health from multiple facets instead of one focal point.

The next chapter presents the study conclusion and recommendations for this study.

## **CHAPTER SEVEN – CONCLUSION, RECOMMENDATION AND SUGGESTED FUTURE-RELATED RESEARCH**

### **7.0 INTRODUCTION**

This chapter is designed to conclude on the entire research study, and as such has been divided into sections. In the first section of this chapter, the overview is presented followed by the development of best practice framework, how the research questions and aim was accomplished, outcomes of the study, the contribution to knowledge. This followed by the strengths and limitations of the study, critical reflections on the research experience, recommendations, summary and conclusion.

The justification for conducting this study was to provide understanding into factors that influenced the decisions to seek maternal health care; with the potential to provide policy tools to strengthen the health care system and contribute to the development of rational and strategic policy to improve maternal health in developing countries generally, and Nigeria in particular. From this perspective, a framework that can put together all the best practices required to enhance the possibility of achieving sustainable maternal health would make an immense contribution towards reduction in maternal mortality rate within Nigeria and in sub-Saharan Africa. The results indicated that women level of involvement in decision-making to seek care varies according to their socio-economic status. It therefore becomes imperative to have a clear and systematic framework that takes into cognisance these essential factors that encourages women to utilise maternity care. The framework takes into account the four key partners – the individual, community, health professional, and the policy makes. Strong partnerships and collaborations are at the core of effective maternal health care programmes. When partners take ownership of a programme, it is more likely to succeed. Section 7.2 addresses the development of a best practice framework that addresses the concerns and potential inhibitors of maternal healthcare utilisation from the perspectives of the participants. The best practice framework for sustainable maternal health (Figure 7.1) is built based on the issues identified through the research to have influence on access to maternal health care service utilisation.

### **7.1 OVERVIEW OF THE RESEARCH STUDY**

A mixed method research design was employed in this research study. The study started with the quantitative questionnaire survey, followed by the analysis of the quantitative data

targeted at identifying factors influencing access to maternity care, which helps in the understanding and generalisation of the quantitative findings (Creswell, 2003), next was the development of the research instrument for the collection of the qualitative data by employing an in-depth interview and its analysis was conducted. Finally, the integration and discussion of both findings was conducted.

A total of 330 questionnaires were distributed of which 318 were returned and were used for the analysis. The second phase of the study used in-depth interviews by conveniently selecting six participants from the 318 women in the quantitative phase to explore women experiences, thoughts, feelings and behaviour on the possible barriers and facilitators to the utilisation of maternal healthcare services. The study was conducted between January and April 2015. Generally, the approaches used in the study were well thought-out to be the most appropriate for achieving the research aims at the time of conducting this study because the use of quantitative and qualitative approaches in combination provides a better understanding of the phenomenon under study.

More so, a mixed method research can harness the strength and balance the weaknesses of both approaches. Descriptive and inferential statistical methods were utilised to analyse the quantitative data. The copies of the completed questionnaires were processed and the data were analysed using the Statistical Package for Social Sciences (SPSS) version 20. The transcribed in-depth interviews (face-to-face interviews) were manually analysed using qualitative content analysis, and common responses were identified for each included topic in the interview guide. Responses to each topic were summarised and vital quotations were reported verbatim to highlight individual views.

## **7.2 BEST PRACTICE FRAMEWORK FOR SUSTAINABLE MATERNAL HEALTH**

This study has been able to identify that the problem of maternal health is multifaceted and as such requires a partnership and collaborative approach in solving the problem. This spanned from the individual level, physical environment, social environment and at the policy/regulatory level. Because at different levels of nested structure including the social and political structure, community and individual and household factors, maternal healthcare utilisation is significantly influenced. As an outcome of this research, best practice framework that incorporates SEM and GAD on how a sustainable maternal healthcare can be

achieved has been produced in Figure 7.1 which seeks to aid programmes targeted at improving maternal health.

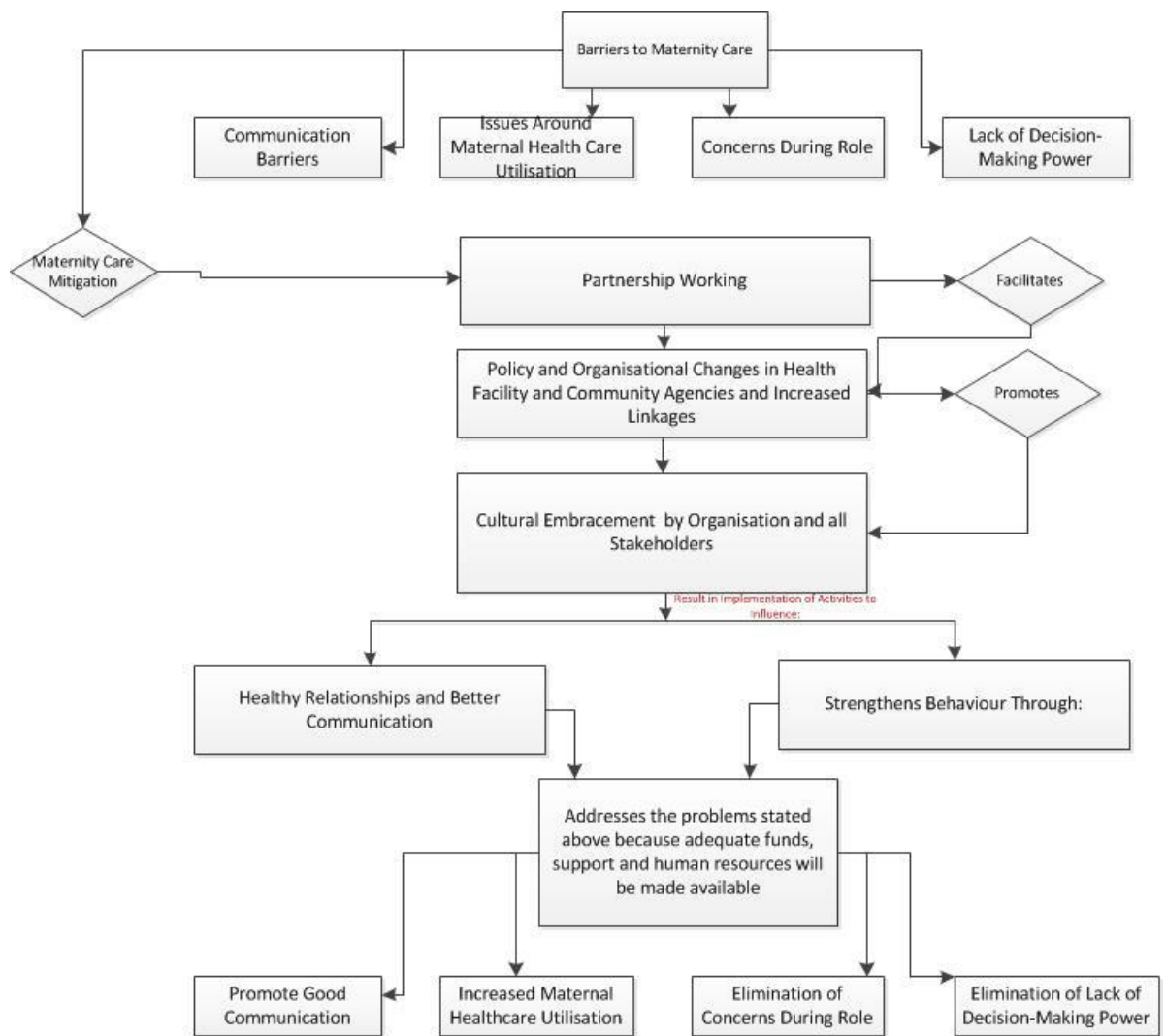
These theories are incorporated into best practice framework that addresses the concerns and potential inhibitors of maternal healthcare utilisation (see Figure 7.1), which serves to put the two theories into a unified whole. Therefore, it is imperative to have a clear and systematic framework that takes into cognisance those factors that have been found to influence maternal health. Bronfenbrenner (1994) SEM is a framework that aims at achieving a better understanding of the many factors and barriers that impact health behaviours and outcomes. As indicated in the literature review, Bronfenbrenner (1994) model is based on four main components which are: the individual, social environment, physical environment and the policy component. Nevertheless, GAD is a social structural model that seeks to understand women's risk because of their different social structures (Brindis, Sattley and Mamo, 2005). GAD also recognises that development is a complex social issue that takes a holistic approach, exploring the totality of social organisation, economic and political life to understand the shaping of aspects of society (Annan, 2005). Whereas SEM emphasises the behaviour of large numbers of individuals in various 'behaviour settings'; behaviours are strengthened through the process of reinforcement or weakened through punishment or extinction. Therefore, there is need to recommend a best practice framework that incorporates these two theories.

As it was evidenced in the current study, factors influencing maternal healthcare utilisation spanned through the four levels (individual, social, and physical and policy components). Bronfenbrenner (1994) described the influences on behaviour as a series of layers, where each layer had a resulting impact on the next level. The outcome of this process, evidenced in this study included controlling behaviour, lack of finance, poverty, costs, long distance to a health facility, lack of medical equipment, communication barrier and lack of skilled manpower at health facilities. This led to reduction in the uptake of services of skilled birth attendants, delay in referral of pregnant women with obstetric complications by the next health facility. The importance of the four levels of the socio-ecological model by Bronfenbrenner (1994) was acknowledged in this study as reflected in the persons involved in the inclusion criteria and data generated clearly demonstrated the interplay among these various levels with resultant potential for high incidence of low utilisation of maternity care. For example, the participants demonstrate that controlling behaviour was a barrier to maternal health care service use; their situation is made grave by poverty and lack of money

and the general unfriendly attitude of health care staff as well as the unavailability of health staff in the facility. Best practice framework in the form of partnership working has been strongly recommended due to its ability to address the various concerns that was mentioned by the participants.

This framework will also facilitate cultural embracement which will in turn result in healthy relationships and better communication amongst all stakeholders. This eventually can help address the communication barriers that currently exist amongst clients and healthcare providers, between women and their family as well as the institution/its policy. A strong communication programme should engage multiple partners at the national and local levels in a participatory manner; no single entity can achieve the results produced through multiple-partner collaborations. This framework will equally be useful in situations where all stakeholders share different objectives about maternal health. In situations where the partners have a different objective, there is a need for all stakeholders to revisit the shared goal, visions and objectives about maternal health and communicate effectively amongst one another to arrive at a joint decision on the best way to improve maternal health care. Continuous implementation of this framework will help address some of the concerns raised by participants about women access to and utilisation of maternal healthcare services.





**Figure 7. 1: Best Practice Framework for Sustainable Maternal HealthCare Utilisation**

Additionally, cultural embracement by partnership working allows policy makers and stakeholders aware of the need for better resource allocation for maternal health care programmes. Partners can provide programme support through expertise, capacity building, and resource mobilisation, which can broaden the reach and profile of the programme through network affiliations, and can help to avoid duplication of efforts. Better resource allocation will ensure that appropriate funds are apportioned and adequate skilled health staff recruited to meet the demand of women seeking care at health facilities. This study indicated that time wasting before patient were attended to by health care professional have effect on women utilisation of maternal health care services. Time was both a motivating and inhibitory factor to maternal health care utilisation and if nothing is done to reduce the number of hours that a patient will have to wait before they can access care, the effectiveness of maternal health care services utilisation will be downplayed.

The utilisation of maternal healthcare service needs to perceive the institution and its leadership as a motivator rather than an inhibitor of maternal healthcare services utilisation. This is because such institution and its leadership will develop partnership, collaborative, ownership leadership approach that facilitates power balance amongst main stakeholders. When power is centralised, it allows partners to be engage in a participatory process to manage the programme, thereby making such programmes more successful. Also, this sort of collaborative leadership approach builds a healthy relationship amongst stakeholders that helps to create the culture of the partners and develop working relationships. It also allows resources to be adequately allocated for programmes with all stakeholders perceiving themselves as joint decision makers.

In the end, this will enhance the valuable impact of healthcare utilisation to maternal health. On the other hand, critically examining the concept of partnership working, it does not come on very easily because of the behaviour of the individual has been set by personal and cultural traits. Therefore, its initiation requires great tact by all parties to enable a level playing ground with all members involved to ensure that no power relationship is perceived. This is an important determinant of the success of the process. Serrant-Green (2010) had suggested that the professional should legitimise the belief that the people are equal partners in the project, the professional's role include that of offering support to strengthen the people and as a facilitator as opposed to a provider of services, bearing in mind that the code of partnership working viewed all parties involves as equal partners with a shared vision and objectives.

### **7.3 ANSWERING THE RESEARCH QUESTIONS**

The research aim for this study was clearly stated in chapter 1 of this thesis. During this research, these research aims have been successfully achieved, further providing answers for the research questions. A synopsis on how the research questions were achieved is therefore presented.

**Research Question 1:** What are the factors influencing decisions to seek emergency obstetric care among women attending the health facility?

Both quantitative and qualitative methods were used to assess factors influencing women's decision to seek emergency obstetric care. Chi-square test and Fisher's exact test were use were appropriate in determining individual associations between each independent variables and maternal health seeking behaviour. Adjusted odds ratios (AOR), 95% confidence

intervals were calculated for each of the individual logistic regression models and p-values were reported for bivariate analysis. The goal of this research question was to try to understand factors that still served as a barrier to women utilisation of skilled health care services. Findings reveal a connection between socio-economy status and maternal health care utilisation. Married women, women in polygamous union, higher income level, low cost of transportation, not seeking consent before accessing care, had money to pay for services and transportation and less traveling time were more inclined to use available maternal services. Both maternal income and cost of transportation to health facility remained predictive of maternal decision. Individual factors such as income level were found to influence maternal health seeking behaviour. Women with low income had lower odds of exhibiting good maternal decision compared to women with higher income. Also, when the cost of getting to a health facility was low, there was a high likelihood of making good decision to seek care.

**Research Question 2:** What are the women's experiences in reaching the health facility?

To answer this research question 2, it was proper to explore the experiences, thoughts, beliefs, and feelings of the women when trying to access care in the context of their daily lives. By drawing on both the quantitative and qualitative data, the findings reveal that although skilled maternal health care service is regarded as highly useful and important, especially with respects to improving health outcomes for women and children, accessing skilled birth attendants during pregnancy, delivery and the immediate postpartum period remain problematic for a wide segment of the women. Specifically, bad roads, traffic hold-up, lack of readily available transportation, and high cost of transportation all make access to healthcare services a challenge. This occurs mainly because these women are expected to make out-of-pocket cash payments for transportation to health facility and for getting the required items for delivery in the facility. This however, limits women who are petty traders with little to no cash incomes. Despite several challenges including lack of transportation, this study found that the use of a health facility for skilled care was high.

**Research Question 3:** What are the care experiences encountered by women in receiving care at the health facility?

This was accomplished using both the quantitative and qualitative studies. To obtained in-depth knowledge of care experiences encountered by the women in receiving care at health facilities. An in-depth interview was conducted to complement the findings of the

quantitative survey. Six interviews were carried out to explore experiences, feelings and thoughts of the women. In exploring how women with the health facility may have influenced their utilisation of skilled birth attendants in public hospitals, the findings were clear on the fact that most women tend to encounter negative attitudes and embarrassment from health personnel. It was in this light, many women indicated they prefer to patronise the private clinics and health personnel in the private clinics were reported to be kind and nice. One of the participant indicated that she prefers to go to the market to sale her goods instead of visiting the health facility and experience the rudeness, pushed around whilst further receiving insult and degrading treatment from the nurses and doctors. A high degree of unprofessionalism surrounding appropriate patient care was reported in the current study. For instance, some women reported poor records and monitoring signs for referral. Thus, there is a need for educational programmes aimed at improving health workers about appropriate referral, records and monitoring teachings.

#### **7.4 OUTCOMES OF THE STUDY**

The aim of the study was to identify key factors that influence access to, and use of maternal healthcare services among women seen at one of the tertiary hospitals in Nigeria. These key findings from the current study could be generalised to other Nigerian women in other parts of the country since the people of Nigeria have similar culture and values. The age of the respondents showed that majority of the women who participated in the study were 26.5 years. The youngest being 15 years whilst the oldest was 46 years. The distribution of respondents by age shows that women continue child bearing till their late 40s.

Education was reported to be associated with access to maternal health care services. The association was such that the higher the level of education and financially empowered a woman was the more likely they were able to take decision to seek for treatment from health care providers in health facilities. Lack of money was reported to have hindered some of the women from seeking healthcare from skilled birth attendants and has also limited their ability to access food whilst pregnant. This situation presents a complexity of causative factors of maternal mortality in this area and, therefore, suggests a comprehensive approach to the prevention of maternal mortality. To ensure the comprehensiveness to mitigate these issues, I recommend that such preventive approaches should include poverty relief measures in the process of empowerment of the people to act to prevent maternal deaths. This approach should complement the strategy of the WHO on the prevention of maternal mortality which are skilled birth attendants and emergency obstetric care.

The findings of the current study suggest that medical and transportation cost has a negative effect on the healthcare seeking behaviour of the participants. Lack of transportation and cost of transportation was a major health facility issues among the participants. In emergencies, the people needed to travel a long distance in the midst of transportation difficulty to the referral hospital in another health facility for treatment. In addition, the more serious the economic situation of a woman the less likely it was to seek timely care as most women in the current study were involved in unskilled employment thereby giving them little or no time and finances to attend to their health needs. The financial constraint was about the insistence on payment of some fees before service was rendered, even during obstetric emergencies.

This suggests that the hospital laid more emphasis on income generation than saving lives. In addition, government should make available ambulance services which can be easily accessible and affordable to persons in need of urgent medical evacuation and a monitoring team put in place to monitor the activities of those in charge of these services. This finding resonated in a number of studies (Mekonnen and Mekonnen, 2002; Babalola and Fatusi, 2009; Ingbenebor, 2014; Afari, 2015). This finding is not surprising since women comprise the marginalised population and are mostly less developed and live in abject poverty. This is the case of women who live in a socio-cultural and in an established context where they have little or no access to education, and have experienced the greatest gendered discrimination. In addition, since it is only women that experience maternal mortality, policies around reproductive health is weak, where programmes are carried out with political and medical rationale, without considering the economic and socio-cultural conditions and needs of the different groups. I recommend that the state ministry of health would set up machineries to ensure the effective implementation of recent policy on free healthcare for pregnant women, formulated by the state government.

The current study also revealed that pregnant women in households where social support is not accessible had more difficulties in handling decision to seek care in healthcare facilities. Therefore, a woman's access to and use of maternal healthcare services and experiences varied because of their status in the society. This study concludes that family support during pregnancy and the immediate postpartum period enhance the utilisation of maternal healthcare services. The study also shows that most pregnant women did not have control over decisions made about their pregnancies, particularly regarding decision to seek care in health facilities. Such power resided with others, such as their husbands, mothers-in-law and co-wives. This has an implication for practice, particularly in this area where this is an

accepted norm, therefore, the researcher suggests that these persons be included in any community health programme to prevent maternal mortality as a way of empowering them to make decisions that are supported by scientific knowledge. Strategy that would enhance culture-sensitive programme which has been found to be acceptable by the people (Shehu, 2000).

Having cultural knowledge will help health care providers to be able to recognise behaviours and responses that are viewed in one way in one cultural context, or may be seen and viewed in another way and may have a different meaning in another cultural context. Even though the women in the current study may come from the same cultural background, their individual experiences need to be considered when developing interventional strategies.

The findings of the current study suggest that inadequate/lack of management, communication and clinical skills was a determinant factor in the utilisation of maternal health care services in health facilities. The participants expressed concerns on the standard of services received at the health facilities as being unreliable, unclear information and that the services provided were reported to be substandard. Communication skills between healthcare personnel with their clients were also reported as being poor. This study adds to the knowledge that perception or feelings on the efficacy of the services provided in a health facility is influenced by experience of the individual, friends or relatives with that health facility. More thought should be given by policy makers on the need for medical personnel to undertake refresher courses regularly to improve their knowledge on skills needed for an efficient delivering of care. As it is a common knowledge that the use of any orthodox health care services is many at times influenced by individual responsiveness of the effectiveness of such services. Again, on communication, nurses and midwives should carry out their responsibilities in an unbiased professional fashion and avoid use of words or comments that may be interpreted wrongly by their clients. In addition to the oral information given to clients, educational videos which explain all the information necessary should be provided.

It is suggested that more social participatory research be done in this field to explore more effective ways that the health care providers, especially the nurses and midwives can be empowered to acquire good management, communication and clinical skills for an efficient delivery of care. The need for healthcare personnel to show compassion to their client to encourage utilisation of maternal healthcare services was underscored in the findings of the current study. This study suggests that health care providers need to be oriented on how to

uphold the ethics of the medical profession and on the fundamental principles of human relations to deliver healthier and pleasant services to their clients. In this study, a lack in medical equipment was apparent as a significant factor in utilising healthcare facility for skilled care. This study broadens the knowledge that having medical equipment to carry out test and availability of medications and health care staff in health facilities was linked with higher confidence in the utilisation of maternal health care services in health facility.

This suggests that the quality of care in many health institutions is inadequate because of ill equipped facilities. The practical implication is that, this facility lacks basic equipment for the provision of emergency obstetric care. It lacks skilled birth attendants to provide care within 24 hours daily. This means that the WHO strategy of prevention of maternal mortality emergency obstetric care and skilled birth attendants are not met here. By recommending a policy which is presently unachievable, means that, the risk of women dying in the process of childbirth due to preventable and treatable conditions will continue in this facility. It appears to me that the current Nigeria policy where the federal government supervises the activities of both the local, state and federal government health services is not efficient. I suggest a review of the present policy so that the State Government, through the Ministry of Health to control the activities of the state health facilities. The reason is that, practically, the state government is closer to the people than the federal government at the grass-root, therefore, the proximity can facilitate monitoring. As evidenced in this study that health care staffs were lacking in basic skills, I recommend the reinforcement of continuous education for midwives and nurses to empower them with the necessary skills for practice. These should be considered in the national and local orientation programmes to prevent maternal mortality.

Arising from the findings of the current study, a new issue for the women in this study was that healthcare providers in private hospitals were friendlier with their clients, uses words of encouragement and accessing treatment was described as prompt, unlike in the government hospitals, where most of the health care providers were described as rude, nasty, unfriendly, never use words of encouragement with their clients, and with delay service delivery. It therefore become necessary that the hospital management board be strengthened by the government to conduct regular monitoring visits to healthcare facilities to ensure that minimum standard of practice is maintained and the requisite equipment for each level of healthcare provided by the health facility are available and in serviceable form.

## **7.5 CONTRIBUTION TO KNOWLEDGE**

As stated in an early chapter of this research, the methodological and practical contributions of this study were greatly significant in enhancing the study in the areas of access to skilled maternal health care services, which are linked to maternal health care services utilisation and maternal health outcome. The contribution made by this research is presented in two sections: Methodological and Practical contributions.

### **7.5.1 Methodological Contributions**

This study was guided by The Silences Framework as the underpinning theoretical concept. Though the subject factors influencing access to emergency obstetric care have been widely studied, research investigating the subject using The Silences Framework is non-existent in the literature, since its emergence from a doctoral study conducted to explore the experiences of black Caribbean men in their sexual decision making and risk taking (Serrant-Green, 2004). This framework has not been used to explore access to maternal health care service utilisation. It is therefore important to note that this is the first time that this framework is being used to explore access to maternal health care service utilisation. Although it has been employed in three successful PhD studies following the call for researchers to test the framework (Serrant-Green, 2010).

Furthermore, The Silences Framework underpinning this study situated this research within the theoretical framework which is best suited for investigating factors influencing utilisation of maternal health care services and thereby enabling the exploration of research area where little is known/researched. This allowed the Silences of the researched to be heard, explored and brought to the fore the intrigue influence of neglected seemingly factors that affect women access to care which could be used for programme intervention. The main aim of the Silences framework in the current study was to uncover Silences situated in the context of access to care among women of reproductive age. In addition, this framework also enabled the researcher to locate self within the study. This was pragmatically useful as this ensured that trustworthiness of the study could be assessed in light of the silences which emerged rather than in spite them. The user friendliness of TSF and the linearity and logical nature in which the stages of the framework built upon self was a pragmatic gain which was achieved as a result of using this framework to underpin the study. Using this framework was like building a pyramid in which the building plan had been provided and the researcher could see at every stage how each level was crucial for the development of the next.



Additionally, it was a plus underpinning this research to the Silences framework as the framework is not tied to a single method. This ensured that the research methods used in this study were informed by the research design alongside considerations for achieving the study objectives.

### **7.5.2 Practical Contribution to Study**

The current study helps to inform future research, policy and practices to promote Nigerian women's health or access to maternal and child healthcare services by providing best practice framework that incorporates the SEM and GAD that provides a practical guide for policy and medical practice in pursuing sustainable maternal health care interventional programmes.

This single framework provides a better understanding of the requirements for sustainable maternal health programmes for individual, community and policy makers making it a holistic guide for maternal health care interventional programmes. This framework could serve the following purposes:

- A road map for directing interventional programmes on maternal health,
- A basis for directing a sustainable maternal health care training and education to inculcate factors that influence the outcome of maternal health efforts; and
- An alternative or supporting document for maternal health programmes planning on interventional programmes.

## **7.6 STRENGTHS AND LIMITATIONS**

This section of the chapter focuses on the strengths and limitations of this research study. This chapter is designed to conclude on the entire research study, and as such has been divided into sections. In the first section of this chapter, the overview is presented followed by the contribution of the study, next was the discussion of key findings that highpoint the significant points and the implications for research. Section four provides the research recommendations for healthcare providers and policy makers. This is quickly followed by the research strengths and limitations. Sequel to that in section 7.7, the study recommendation for further research with regards to developing interventional strategies aimed at reducing barriers to making decision to seek care and to monitor and regulate medical practices in the state.

The following discussion will help to develop a critical understanding of the findings in the study. The first section will start by discussing the strengths followed by the limitations of this study.

### **7.6.1 Strengths of the Study**

A number of strengths are inherent in this research study. Whilst many studies conducted in Nigeria on access to, and use of maternal healthcare services used population based data and observation, the current study employed a mixed method approach for investigation. The reason behind the choice of this methodological approach was because a mixed method is more interested in obtaining results that can be linked practically and pragmatic positions works better with both quantitative and qualitative design. The use of mixed method approach provided a suitable decision line from which conclusions could be made. This approach provided the best opportunity for collecting the desired information to address the research questions in section 1.4.1.

However, in Chapter 3, the research methods used in this research and issues around reliability, validity, and trustworthiness associated with this approach was described in detail. One of the strengths of this study is that the participants for the interviews were selected from a larger quantitative study and as such the findings of the study could be set in the perspective of those from the quantitative findings as presented in chapter four. Furthermore, the questionnaires were either completed and return on the spot or respondents' who could not complete the questionnaire immediately were asked for their contacts so that the researcher can contact them for collection. Every evening I make a phone call to the respondents to know when I can visit them again to collect the completed questionnaires. The respondents either complete the questionnaire themselves or the researcher asks questions orally but relies on the respondents to answer.

Additionally, the use of face-to-face interviews in the qualitative phase of this research provided the researcher the opportunity to take note of the non-verbal signs that helps to enhance the quality of data analysis. In order to ensure that participants with the right characteristics were selected for this study, a number of strategies were employed as discussed in Chapter 3. This research has been able to bridge the gaps that exist in the literature by way of using a mixed method approach and the silences framework in investigating the phenomenon. More so, the study will help to provide a point of reference for healthcare professionals, particularly nurses and midwives, in understanding the barriers and facilitators of access to, and use of emergency obstetric care services on the geographical area studied.

The issue of confidentiality and privacy are considered critical for participants' enrolment in research. This is especially true of this study where women were expected to disclose very sensitive and personal information regarding their experiences in accessing care. It is possible women may fear that participating in the research may affect the quality of care they receive from the health facility in future. The pledge of confidentiality also allowed the participants to express their experiences, thoughts, and beliefs towards access to and use of maternal healthcare services freely without fear of pressure. In addition, being a female Nigerian may have influenced the way the participants were able to respond freely.

### **7.6.2 Limitations of the Study**

Although the study was successfully conducted and concluded, however, there were some limitations that were encountered during the study period. They included the following;

A possible limitation of this research can be found in the methodological approach. However, The Silences Framework underpinning this research study acknowledges that potential relevant limitations and biases were clearly articulated at the onset of the study (Crotty, 2003; Serrant-Green, 2010). The following were weaknesses arising from the methodological approach of this study. The convenience sampling technique used did not afford the study participants equal opportunities to be selected into the study. The use of a convenience sampling which the researcher employed for the study may have introduced selection biases as participants were selected based on the subjective judgement of the researcher. The views of women who did not attend the facility for care/delivery were not represented in this study because they could not be accessed and therefore did not participate in the study. This suggests the need for large scale study which is representative of the entire population of women of reproductive age and which seeks the view of women of reproductive age accessing care in hospitals alongside those outside the health facility as their experiences could be different. The main source of data collection was self-report of respondents. The validity of such responses would be uncertain. Also, recall and social desirability bias would further compound on the uncertainty of the findings. To reduce the recall bias, for instance, only women who gave birth in the last one year were included. A further limitation to this study is that the sample for this study did not include women who benefited from other health facilities and the TBAs services. In addition, because of the selection difficulties and the limited time and resources available to the researcher to carry out this PhD research study, it was difficult for more interviews to be conducted.

Finally, the findings of this study focus only on the experiences, thoughts, feelings, behaviour and beliefs of women with direct obstetric complications. Whilst it was not unlikely as part of this research study, it could have been worthwhile to interview their husbands and health care providers to get their perspective as well. Further exploration around this issue would be worthwhile.

## **7.7 CRITICAL REFLECTION ON THE RESEARCH PROCESS**

The art and science of researching is influenced to a large extent by the background, and disposition of the researcher, which ultimately affects the areas of research, the angle of investigation, methods for conducting the research and the conclusions drawn from the research. This section presents my reflections on the research process, by considering my background, beliefs, professional experiences and pre-conceptions that are likely to have influenced the research process.

Interests in the research started because of experiences from my masters and my role as a lecturer in Nigeria. Having started lecturing, I became aware of the dilemmas and statistics regarding poor access to maternal health care services among women of reproductive age; the stereotypes and the negative cultural prescription on women which in turns affect the utilisation of health facilities for skilled care. Having seen the dilemmas that women in their reproductive age must pass through before they can access care birthed my interest in researching on this subject matter. Again, due to my previous experience in conducting a research on morbidity patterns and pregnancy outcome of mothers seeking care in one of the health facilities in Nigeria, I came to this research with the notion that understanding factors that influenced women access to care must be the aim. Investigation of factors influencing access to emergency obstetric care literatures which formed the basis for my understanding of factors affecting access to care are not just at the individual level but it cut across both the individual, social, physical and the policy level.

Before I commenced researching on this topic, I pondered about the consequences and the worth of researching a topic that I as a researcher have had personal knowledge and some experiences about. I asked myself questions such as; could I be objective and unbiased in my pursuit of researching this sensitive issue? In conducting this study, I also endeavoured to locate my contribution to constructs and meanings throughout the research process and acknowledged the impossibility of remaining ‘outside’ of the subject matter whilst conducting this research.

Whilst quantitative research stresses the need to minimise as much as possible researcher effects on the research process, qualitative research acknowledges that researchers do influence the research process (Higginbottom and Serrant-Green, 2002). Foster (2009) regards research as a process of human thought and meaning making including that of the researcher. I agree with other researchers who have carried out research with participants with whom they share similar experiences or ethnicity in terms of the difficulties, challenges but opportunities that might present (Serrant-Green, 2002).

In exploring personal reflectivity, I recognised the ways in which my values, experiences, interests, beliefs, wider aims in life and social identity have shaped this research. Whilst I endeavoured through my use of The Silences Framework to be aware of my beliefs, value and assumptions in order to ensure that I convey as accurately as possible the research process, my engagement in this study enabled me to understand that I cannot view any part of the world without affecting it as an individual. This idea is central to this work.

Furthermore, in analysing the different types of data obtained from the participants for this study, there was need to make interpretations of underlying meanings which was to some extent influenced by my personal beliefs, values and sense making as a researcher. Despite striving to maintain good balance as well as reflect the multiple views from the participants, I acknowledge there must be some level of subjectivity within the process.

As an early career researcher, I encountered certain challenges with using the TSF to underpin this study. TSF allowed for a great deal of flexibility due to its non-prescriptive nature which was quite daunting for me as a new researcher. Although, I acknowledged that this has its own merits, the flexibility of the framework meant that I consistently had to be reflexive at every stage with regards to given thought to rationale behind every activity employed in the study.

However, the underpinning of this study using The Silences Framework situated the study within a theoretical framework which is ideally suited for investigating the health needs of marginalised group and consequently facilitating the exploration of the under researched area. Although the use of this framework was aimed at hearing the silences of women situated in the context of access to and utilisation of skilled maternal health care services, this framework also enabled the researcher to locate self within the study.

Using this framework was like building a pyramid in which the building plan had been provided and the researcher could see at every stage how each level was crucial for the development of the next level. Also, the non-prescriptive nature of The Silences Framework on the choice of methods for a research study was a pragmatic gain which was achieved because of the use of this framework. This ensured that the research methods which were employed were informed by the study research design alongside considerations for achieving the study aim and objectives. This research has increased my knowledge and awareness of women access to and utilisation of maternity care services and has offered me the opportunity to understand that the process of conducting a research is as important as the end result produced. I hope that this reflection has demonstrated how the silences framework, my background, personal values, and prior knowledge as a researcher may have influenced the research process.

## **7.8 RECOMMENDATIONS**

This part of the chapter will give recommendations for future related-research for healthcare providers, especially the nurses and midwifery practice. This study identifies barriers to accessing emergency obstetric care amongst pregnant/nursing mothers presenting with obstetric complications at the health facility. There is still need for information on how skilled attendants can be made available to Nigerian women. This study proposes further related-research in these areas;

### **7.8.1 Recommendations for Future Research**

- Intervention research with midwives needs to be conducted to identify ways on how midwives and nurses' skills can be improved and consequently quality of care. This is important because this study has identified that some of the health workers were lacking in basic skills.
- A similar study should be conducted in two-three health facilities using this approach to evaluate the causes of the unethical and unprofessional behaviours by skilled health care providers in government facilities, to provide information on appropriate and effective ways of dealing with these unprofessional behaviours by health care providers in Nigeria.
- An exploratory study should be conducted and should involve husbands and health workers to identify their role in the utilisation of maternity care during pregnancy, delivery and the immediate postpartum period in health facility.

## **7.8.2 Recommendations for Medical (especially nursing/midwifery) Practice and for Policy**

Based on the findings of this study, many gaps in the provision of maternal healthcare services and health workers educational programmes; gaps in structural and organisational barriers relating to availability of needed services were revealed. Thus, to improve on health care delivery to women of reproductive age, I make the following recommendations.

- Nursing and Midwifery education needs to prepare them to pay attention to individual patient's subjective experience that may impact or enhance their utilisation of health care facility for care. This will therefore promote the provision of nursing care that will not only meet the patients' needs but will be satisfying for them.
- More nurses and midwives should be trained and employed, to increase the population of skilled birth attendants to meet patient demands.
- In addressing the effect of women's subordination and women double role which appear to negatively influence on maternal health care utilisation, increased attention should be given to the strengthening of natural social support system to assist women during pregnancy and the immediate postpartum period. Again, it is not sufficient to stop at education for girls, as education is a process that takes time to truly impact gender equality, and will not solely diminish the effect of gender inequality on maternal mortality. Government strategies therefore also need to implement effective measures for tackling this, as well as offering services to overcome the problem of controlling behaviour and gender division of labour with the woman's best interest at heart.
- To improve women utilisation of maternal health care services in rural areas, there is need to establish and strengthen national policies and locally adopted guidelines to protect the right of all women irrespective of their socioeconomic status. There is a need for evidence-based guidelines at the national level detailing the essential minimum components of ANC and postpartum care, in line with the country epidemiological profile and country policies and based on WHO guidelines and recommendations.
- There should be a budgetary allocation to support the strengthening of community education following participatory research, to facilitate adequate distribution and sustainability of the change.

- There is need to improve the implementation of public health interventions in terms of both coverage and effectiveness, to provide prompt and adequate care.
- Implementation of free medical care is needed to reduce the financial burdened faced by women of reproductive age while trying to seek care especially during emergencies when fee payment is required before commencement of treatment.

## **7.9 SUMMARY**

The barriers experienced while trying to access obstetric care in health facilities in Nigeria spanned through all stages of the SEM similar to what has been documented in the literature. The findings of the current study demonstrate that women who were not financial empowered and who were not highly educated face barriers to accessing maternal health care services across the four levels specified in the SEM: individual, social, physical and policy levels. By incorporating these levels in the quantitative and qualitative study, the barriers to accessing maternal healthcare services by women of reproductive age were more readily understood. The major identified barriers to making decision to seek care were fear of operation, transportation and medical cost, attitude of healthcare staff, perceived quality of care experience, controlling behaviour, gendered division of labour, distance and time, unofficial payment and long queue at health facilities. Nonchalant attitude of health care providers to work, unnecessary referral and ill staffed facilities also accounted for many of the delays experienced by many of the women seeking emergency obstetric care (EmOC).

The results further showed that the leading causes of obstetric complication among participants seen at the health facility were obstruction; pregnancy induced hypertension, fetal distress, and abnormal presentation, bleeding, haemorrhage and reduced liquor. Despite these barriers in the decision making to seek care and in reaching appropriate facility for treatment, overall maternal outcomes were mostly satisfactory while fetal outcomes were good. Early recognition of warning signs and access to treatment on arrival is likely responsible for these favourable outcomes.

The embedded socio-ecological factors combined with gender and development factors causing women, and particularly poor women's vulnerability to maternal health care services utilisation, nowhere seem sufficiently challenged in the government policies and strategies, which according to the conceptual framework means that gender inequality especially among poor women will persist, as they are lacking in efforts to empower women. Consequently, the underlying causes will remain unchallenged, sustaining unequal gender relations, and likely



continue to prevent women from equitably participating in society alongside men. The adverse effects of this on maternal health is that women will continue to be ‘victims’ of pregnancy, as lack of education and susceptibility to gender inequality which gives them little control over their reproductive health, thereby putting them at risk of involuntary pregnancy and thus the risk of maternal mortality. Again, because of the complexity of maternal health, the solutions to maternal health issues need to be complex too. Maternal health issues are not caused by one factor, so government’s effort to fight maternal mortality and morbidity must focus on the various levels of the social ecological model of maternal health. A good knowledge and understanding of the influences is very important to improving maternal health.

Interventional strategies aimed at reducing barriers to making decisions to seek care and to monitor and regulate medical practices in the state is crucial to reducing maternal morbidity and mortality. The current study also brings to light the need for practical and sustainable development which could help bring the country out of its epidemic of high maternal mortality rate as it is done in developed countries around the world. The findings of this study reveal that the achievement of the SDG3 would be an illusion if the current poor infrastructure and basic amenities, growing poverty and deteriorating health outcomes are not forcefully and sustainably managed. Implications of this research study for health care providers, especially nurses and midwifery practice and recommendations for future related-research were recommended.

## **7.10 CONCLUSION**

This study has shown that mothers in this region where the study was conducted were not significantly utilising health facilities for skilled birth attendants during pregnancy and delivery care. The study results also highlighted the need for improvement to promote present and future health care utilisation. The findings based on the views of the study informants indicated many issues that should be improved upon for better utilisation of health care services. These issues include: to keep proper documentation and monitoring of indications for referral, health care to be made free or cost subsidized, training of more health staff to eliminate long waiting hours, needed health equipment should be provided, health care staff to change their unprofessional attitude towards patients, building and improving on existing roads, shortage of healthcare staff and incentives to be provided for health care staff posted to the rural areas. The effects of staff shortages on health and its outcomes are well documented. For example, Okeke *et al.* (2015); Onah, Ikeako and Iloabachie (2006) reported that due to

staff shortages nurses are having to work long hours which results in fatigue, injury and job dissatisfaction. Tired and dissatisfied nurses will have poor attitudes to work, are more prone to mistakes which will ultimately affect patient safety. As a long-term measure to address the issues in the healthcare system of the country, I suggest that the UK NMC code of conduct (2015) be adopted and tailored to meet the local need of the country, so that they are at par with international standards such as the UK nursing and midwifery council, who have a code which is functional and rightly enforced.

Universities and colleges of nursing must work with the government especially the ministry of education to increase intake of nursing students. The government should also consider offering scholarships and bursaries to aspiring students to encourage uptake of nursing by financially disadvantaged students. The use of bursaries to increase nursing uptake has been tried in other countries like the UK and have been shown to increase the number of nurses. The nursing and midwifery council of Nigeria code of ethics must be revisited to ensure that it is at par with international standards whilst being suitable for local application. To achieve this, the council must liaise with colleagues in other countries like the UK who have a code which is functional and rightly enforced. The government is tasked to formulate policies that would favour staffing to prevent maternal mortality. More importantly, strategies to ensure the code is enforced rightly and justly must be put in place. Again, the nursing practice is bounded by the principles of justice, trust and equity which dictate that do not cause injury to their patients. I would suggest that any nurse found guilty of these principles either by way of using abusive words on patients should be punish by way of taking away his/her license to practice or a temporary suspension from practice. Corruption is known to be endemic in the Nigerian society as this is one of the issues that the current Government is tackling, it is important to work alongside the police and the judicial system to ensure this is enforced. Proper monitoring and regulation of all places where nursing care is provided must be investigated.

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## APPENDIX I: QUESTIONNAIRE

**To Investigate Factors Influencing Access to Emergency Obstetric Care Among Women Seen at one of the Hospital in Delta State, Nigeria**

### Section A: Socio-Demographic Characteristics

- 1.) Age at last birthday.....
- 2.) Marital Status?
  - (a) Single
  - (b) Married
  - (c) Separated
  - (d) Divorced
  - (e) Widowed
  - (f) Others (specify)
- 3.) What is your family type? .....
- 4.) What is your occupation (Specify).....
- 5.) What is your educational status?
  - (a) No formal education
  - (b) Primary education
  - (c) Secondary education
  - (d) Post-secondary education
  - (e) Others (Please specify) .....
- 6.) What is your average income (write whichever is appropriate)
  - a.) Daily.....
  - b.) Weekly.....
  - c.) Monthly.....
- 7.) What is your religion?
  - a.) Christianity
  - b.) Islam
  - c.) Traditional religion
  - d.) Others (Please specify)
- 8.) Which is your ethnic group?
  - a.) Igbo
  - b.) Hausa
  - c.) Yoruba

d.) Others (Please specify)  
9.) Place of residence?

- a.) Rural
- b.) Urban

10.) How many children do you have? .....

11.) Have you ever lost any child?

- a.) Yes
- b.) No

12.) If yes, how many? .....

13.) How many times have you been pregnant? .....

14.) Have you ever lost any pregnancy?

- a.) Yes
- b.) No

15.) If yes, how many? .....

16.) Booking Status for antenatal care (ANC)

- a.) Booked
- b.) Unbooked

17.) If booked, at what trimester?

- a.) 1<sup>st</sup> trimester
- b.) 2<sup>nd</sup> trimester
- c.) 3<sup>rd</sup> trimester

18.) Where you frequent at ANC?

- a.) Yes
- b.) No

19.) If no, why.....?

**Section B: Partner's Socio-Demographic Information**

- 1.) How old was your spouse /partner as at his last birthday? -----
- 2.) What is his highest educational attainment? (A) No formal schooling (b) Primary (c) Secondary (d) Tertiary (e) Others |(please specify)-----
- 3.) What is your spouse/partner's religion? A) Christianity (b) Islam (c) Traditional (d) Free thinker (e) Others (please specify) -----
- 4.) What is your spouse/partner's occupation? A) Petty trading (b) Civil servant (c) Artisanhip (d) Unemployed (e) Others (please specify)
- 5.) What would you say is your husband's/partner's estimated income per month? -----
- 6.) What is your spouse place of residence?
  - a.) Urban
  - b.) Rural

**Section C: Factors Influencing Decision to Seek Care**

- 1.) Where did you go for the care of this pregnancy?
  - a.) Stayed at Home
  - b.) Mission House
  - c.) Traditional Birth Attendant's
  - d.) Health Centre
  - e.) Private Clinic
  - f.) General Hospital
  - g.) Others (specify)

Which of the following do you consider as problems requiring urgent medical attention?

Signal	Yes	No	I don't know
2.) Bleeding during Pregnancy			
3.) Convulsion during pregnancy			
4.) Vaginal (Vulval) itching during pregnancy			
5.) Onset of contractions			
6.) Vaginal loss of fluid that is not urine before term			
7.) Persistent headaches during pregnancy			

8.) Are there any cultural or religious factors, which prohibit your coming to the hospital?

a.) Yes

b.) No

9.) If yes, what are these factors? (Explain)

.....

.....

.....

.....

10.) How did you overcome these factors?

.....

.....

.....

.....

11.) Did you have to obtain any other person's consent aside from your husband before coming to the hospital?

a.) Yes

b.) No

12.) If yes, who are these persons? (Please list)

.....  
.....  
.....

What other places did you go to before coming to this Hospital? (List in chronological order stating how much time you spent at each place and the reasons for leaving)

Place visited for care	Time spent	Reason(s) for leaving
13)	14)	15)
16)	17)	18)
19)	20)	21)
22)	23)	24)
25)	26)	27)

28.) What was the problem that brought you to this hospital?

.....  
.....  
.....  
.....

29.) How long had the problem persisted before you came to this Hospital?

.....  
.....  
.....  
.....

30.) Were you referred to this hospital?

- a.) Yes
- b.) No

31.) If yes, from where were you referred?

- a.) Traditional Birth Attendant's
- b.) Mission house
- c.) Private Clinic
- d.) Health Centre
- e.) General Hospital
- f.) Others (Specify).....
- g.) Not applicable

32.) Were you reluctant to come to the Hospital?

- a.) Yes
- b.) No

If yes, what factors contributed to your reluctance? (Tick all that is appropriate)

- 33.) Fear of operation
- 34.) Attitude of staff
- 35.) Cost of services
- 36.) Lack of Husband's consent
- 37.) I did not want to be attended to by a male attendant
- 38.) Others (Specify).....

**SECTION D: Barriers to Reaching the Hospital**

1.) What is the name of the community from which you came to this hospital?  
.....  
.....  
.....

2.) What was your means of transportation between that community and this hospital? (Check all that apply)

- a.) On-foot
- b.) Public Transport

- c.) Private Vehicle
- d.) Ambulance service
- e.) Others (specify).....

3.) How long did it take to travel from that community to this hospital?

.....  
 .....

4.) How much did it cost to travel from that community to this hospital?

.....  
 .....

5.) Did you encounter any difficulties associated with transportation in coming to this hospital?

- a.) Yes
- b.) No

If yes, which one(s) (Tick all that are appropriate)

- 6.) Too far a distance
- 7.) Lack of ready transportation
- 8.) Lack of transport fare
- 9.) Problems of bad road
- 10.) Others (please specify) .....

11.) Did you call the hospital to seek medical advice or inform them of your coming?

- a.) Yes
- b.) No

12.) If no, why not?

- a.) I had no access to a telephone
- b.) My phone was not working
- c.) I did not know the hospital's telephone number
- d.) Others (specify) .....

.....

**SECTION E: Factors within the Health Facility**

1.) Did you have to wait for long before seeing a doctor?



- a.) Yes
  - b.) No
- 2.) If yes, what factors contributed to the long wait?
- a.) The doctor was not on seat
  - b.) Long queue of patients waiting to see the doctor
  - c.) I had no money for registration
  - d. Others (specify).....
- 3.) How long did you have to wait before seeing a doctor? .....
- 4.) Did you have to wait for long before obtaining drugs and consumables?
- a.) Yes
  - b.) No
- 5.) If yes, what was responsible for this delay?
- a.) The product were not available
  - b.) I had to go a long distance to obtain the product
  - c.) I had to go and get money for the products
  - d.) Long queue of patients waiting to obtain drugs
  - e.) Others (specify) .....
- 6.) How long after seeing the doctor did you obtain drugs and consumables?  
 .....  
 .....
- 7.) Did you have to do laboratory test(s) before receiving treatment?
- a.) Yes
  - b.) No
- 8.) If yes, was there a delay in doing the test(s)?
- a.) Yes
  - b.) No
- 9.) If yes, what was responsible for this delay?
- a.) The test equipment was not available
  - b.) I had to go a long distance to do the test(s)
  - c.) I had to go and find money for the test(s)
  - d.) Long queue of patients waiting to do test(s)

e.) Others (specify).....

10.) How long did it take to have the test(s) done? .....

11.) Did you have any other factors delaying access to treatment?

a.) Yes

b.) No

12.) If yes, what were these factors?

.....  
.....  
.....  
.....

13.) How long after the obstetric problem had started did you finally receive treatment?

.....  
.....

**SECTION F: Outcomes**

1.) Indication for emergency obstetric care .....

2) Maternal outcomes

a.) Alive and well

b.) Clinically apparent long-term disability

c.) Clinically apparent short disability

3.) Fetal outcome

a.) Alive and well

b.) Clinically apparent long-term complication

c.) Fetal deaths

## **APPENDIX II: INTERVIEW GUIDE**

### **To Investigate Factors Influencing Access to Emergency Obstetric Care Amongst Women Seen at on the Hospitals in Delta State, Nigeria**

#### **Pregnancy Experience/Factors influencing decision to seek care**

- Can you please tell me what life is like as a pregnant woman?
- How many children do you have? Have you had any miscarriage?
- Why?
- Did you go for ANC? Where did you go to and why?
- Where did you give birth?
- What type of health challenge do you normally have during pregnancy and what did you do to treat yourself?
- Do your cultural/religious factors prohibit you going to the hospital to seek care during pregnancy?
- Do you have to obtain any other person's consent aside from your husband before going to the hospital?
- Where you reluctant to come to the hospital? And why?

#### **Barriers to Reaching the Hospital**

- How long did it take to travel from your community to the hospital, and how much did it cost to travel from that community to this hospital?
- Where there any difficulties associated with transportation in coming to this hospital, and what where these difficulties?
- Did you call the hospital to seek medical advice or inform them of your coming?
- And if not, why?

#### **Factors within the Health Facility**

- Did you have to wait for long before seeing the doctor? How long and why?

- How long after seeing the doctors did you obtain drugs and consumables?
- What were responsible for these delays in the facility?
- How long did it take to access treatment? And what were the factors delaying access to treatment?
- How long after the obstetric problem had started did you finally receive treatment?

APPENDIX III: ETHICAL APPROVAL FROM THE UNIVERSITY OF  
WOLVERHAMPTON



Date 16.12.14

Mandu Ekpenyong

University of Wolverhampton

Faculty of Education, Health & Wellbeing

Dear Mandu Ekpenyong (Supervisor Denise Bellingham-Young)

**Re: 'To investigate factors influencing access to emergency Obstetric Care (EmoC) Amongst women seen at one of the Hospital in Delta State, Nigeria' submitted to The Faculty of Education, Health and Wellbeing Ethics Panel (Health Professions, Psychology, Social Work & Social Care)**

The Faculty Ethics Panel (Health Professions, Psychology, and Social Work & Social Care) has considered and reviewed your submission.

On review your Research Proposal was passed and the Panel believes that the ethical issues inherent in your study have been adequately considered and addressed. Therefore, the Panel is giving you full ethical approval for your study (**Code 1 - Approved**). We would like to wish you every success with the project.

Yours sincerely

H Paniagua

Dr. H. Paniagua PhD, MSc, BSc (Hons) Cert. Ed. RN RM


Chair – Ethics Panel

D Chadwick

Dr. D. Chadwick PhD, MSc, BA (Hons). PGCE, CPSYCHOL.

Chair – Ethics Panel

# APPENDIX IV: ETHICAL APPROVAL FROM HOSPITAL X



**FEDERAL MEDICAL CENTRE**  
**P. M. B. 1033**  
**ASABA**  
**DELTA STATE**

Chairman  
Mr. R. A. Tyough  
Medical Director/Chief Executive  
Dr. L.O. Erhunmwunsee  
Head of Clinical Services  
Dr. G. O. Obu  
Dep. Director of Administration  
Mr. O.A. Farombi

3<sup>rd</sup>, February, 2015

Our Ref:..... FMC/ASB/T/A8/200

Date:.....

Mandu Ekpenyong,  
University of Wolverhampton,  
Faculty of Education, Health & Wellbeing.

Thro: The Head, CS&T/CMAC,  
Federal Medical Centre,  
Asaba.

**RE: TO INVESTIGATE FACTORS INFLUENCING ACCESS TO EMERGENCY  
OBSTETRIC CARE (EMOC) AMONGST WOMEN SEEN AT THE FEDERAL  
MEDICAL CENTRE, ASABA.**

With reference to the above subject matter, the research and ethical committee wishes to convey its approval for you to collect your data. However, we advise you to ensure that no data concerning any of the subjects will be published in full or in part in such a way that may breach the confidentiality of the subjects involved.

I am to add that this approval will be withdrawn if the confidentiality of the subjects is threatened or breached or if you fail to comply with the other requests demanded of you above at any point during the study.

Please do not hesitate to seek more clarification or assistance if you do desire.  
Wish you the best of luck.

*Dr. N. I. Orhue 3/2/15*  
*Dr. N. I. Orhue, FMPCH (Member) FWACP*  
Chairman

Cc: HCS&T/CMAC

Head, Dept of Medical Records

## APPENDIX V: CONSENT FORM

**To Investigate Factors Influencing Access to Emergency Obstetric (EmoC) Care  
Amongst Women Seen at one of the Hospital in Delta State, Nigeria**

**Name of researcher: Mandu Ekpenyong**

Please tick boxes and sign below.

1. I confirm that I have read and understood the information sheet  
Provided for the above study.
2. I have had the opportunity to ask questions and any questions  
have been answered to my satisfaction.
3. I understand that my participation is completely voluntary and  
i am free to withdraw at any time.
4. I understand that the researcher may wish to publish this study  
and any results found, for which I give my permission.
5. I agree for the interview to be audio recorded and for the data to  
be used for the purpose of this study.

Signed: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Print Name: \_\_\_\_\_

I have explained the nature of the study to the participant and have answered any questions  
that the volunteer had relating to the study.

Researcher: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Print Name: \_\_\_\_\_

## APPENDIX VI: INFORMATION SHEET

### To Investigate Factors Influencing Access to Emergency Obstetric Care Amongst Women Seen at one of the Hospital in Delta State, Nigeria

You are being invited to take part in a research study. Before you decide, it is important that you understand the reasons for conducting the research and what the process will involve. Please take time to read the information carefully. If you have any questions, do not understand something or would like further information please do not hesitate to ask.

.....

#### 1. What is this study about?

This study is about factors influencing access to emergency obstetric care. This study therefore, seeks to explore your opinions and views on the motivations and experiences in seeking maternal healthcare.

.....

#### 2. Why have I been chosen?

You have been invited to take part in the study as you represent part of the women of reproductive age in Nigeria that regularly seek maternal healthcare.

.....

#### 3. Do I have to take part?

No. Taking part in the study is completely voluntary. If you do decide to take part, you will be given this information sheet to keep as reference and be asked to sign a consent form. You are entirely free to withdraw at any time without giving a reason.

.....

#### 4. What will I have to do if I take part?

You will be invited to complete a questionnaire and also attend a short interview lasting approximately 50-60 minutes. You will be asked questions regarding factors influencing decisions to seek maternal healthcare. The responses to these questions will be used to produce the results of this study.....



5. What are the possible benefits?

There are no direct benefits to the participants, but the general benefit of this study will highlight any in general the study will help to establish factors influencing decisions to seek maternal health care and how they were overcome. These findings may then be useful in providing policy tools to strengthen the health care system and contribute to the development of rational and strategic policy to improve maternal health in developing countries generally, and Nigeria in particular.

.....

6. What will happen to the results of the research study?

Any information collected is purely for the purpose of the study and will not be passed on to another party. Data will be stored anonymously on a password protected computer. Any hard copies of the information will be stored in a locked briefcase at a secure facility. Once the study is complete, the data will be destroyed.

.....

7. Who has reviewed the study?

The Research Ethics Committee at the University of Wolverhampton has reviewed the study. An experienced supervisors based at the university will monitor the progress of the study and work closely with the researcher.

.....

Thank you for your time in reading this information sheet. Your participation in this study will be highly appreciated. If you wish to know more about the study you can contact the following:

Contact Details:

Email: D.Bellingham-Young@wlc.ac.uk

Phone no: +44(0)1902 518760

Email: Laura. [Serrant@wlv.ac.uk](mailto:Serrant@wlv.ac.uk)

Phone no: +44(0)1902 518627

Email: angela.clifford@wlv.ac.uk

Email: alfyne96@yahoo.com

Phone no: +2348133757872

.....

## APPENDIX VII: LETTER TO THE HEAD OF FACILITY

Dear Sir/ Madam,

As part of my PhD Research Work in Public Health at the University of Wolverhampton, I am proposing to conduct a research project into investigating Factors influencing access to emergency obstetric care (EmoC) and the experiences of the women in reaching/receiving care. The benefits of this research will help in providing policy tools to strengthen the health care system and contribute to the development of rational and strategic policy to improve maternal health in developing countries generally, and Nigeria in particular.

I am therefore writing to seek your permission to conduct the study in your facility among women seeking maternal healthcare in order to gain an insight into their views and experiences. I enclose a copy of my research proposal for your information. If you have any questions, please feel free to contact me.

Yours sincerely,

Mandu Ekpenyong

[m.s.ekpenyong@wlv.ac.uk](mailto:m.s.ekpenyong@wlv.ac.uk), phone number: +447831065195, +447459106358

If this study is approved by the committee, please sign below and return a copy of this letter to me.

Signed: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

## **APPENDIX VIII: LETTER OF INVITATION TO PARTICIPANTS**

Dear participants,

I am writing to invite you to participate in a research project, which I am conducting as part of a PhD research project in Health and Wellbeing at the University of Wolverhampton. I enclose an information sheet, which explains the title and aims of the project. Please take time to read it carefully.

If you are willing to be involved in the study, the questionnaire filling and interview would take no longer than 60 minutes. Anything you say would be totally confidential and any notes made as a result of the interview would be destroyed afterwards. The interview would take place in a private ward. A report will be written of the findings and all names will be coded by numbers so that you cannot be identified.

If you feel that you would like to participate in the study, please contact me at. If you would prefer not to be involved, please destroy this letter. I would also like to assure you that if you do not wish to participate, the level of service received by the health facility will not be affected in any way.

Yours sincerely,

ManduEkpenyong

Emil:m.s.ekpenyong@wlv.ac.uk

Phone no: +447831065195, +2348032623139

## **APPENDIX IX: SEARCH STRATEGY AND LITERATURE FLOW CHAT SEARCHING ELECTRONIC DATABASES**

This study's literature review extracted results from studies using qualitative analysis, quantitative analysis or a combination of both with the hope of establishing areas of gap. To achieve this, thorough literature searches of studies investigating factors influencing access to, and use of maternal healthcare services was conducted to identify the relevant studies that were eligible for inclusion in this study.

### **Keywords Used**

The search was done using standard electronic databases such as MEDLINE, CINAHL, WEB OF SCIENCE, EMBASE, PUBMED, GOOGLE SCHOLAR, PSYCINFO, SCOPUS, and SCIENCE DIRECT were useful, as they afforded the opportunity to search numerous journals simultaneously.

### **Selection of Keywords**

Based on the broad scan and material gotten therein, search keywords were determined. These were: 'Access to healthcare services', 'healthcare provision', 'Access to and Utilisation of maternal health services', 'Maternity care', 'Child care', 'Sub-Saharan Africa' 'Developing Countries', 'Socioeconomic factors', 'Factors affecting access to treatment'.

The keywords used were selected based on an initial survey of current literature, as well as prior knowledge of the area. However, it should be noted that the process of identifying literature was an iterative one which needed to be repeated and refined as the search progressed.

### **Search Results**

An initial combination of the search terms yielded above 2676 hits. However, not all hits were relevant to this study. Consequently, the search was modified further and the results skimmed to exclude irrelevant materials. The main criterion for determining what counted as good evidence was the broad view of 'fitness for purpose' as explained in Nutley, Walter and Davies (2007).

**Inclusion criteria:** The inclusion criteria for studies were those which focused on the aim of this research and also met the following criteria: Access to healthcare, maternal healthcare service, Publications used for this study were studies and titles that were applicable to this study were accessed, studies which used a quantitative, qualitative or mixed methods approach, because they are considered as high-quality studies, studies in English, Published

between 1990- 2017. However, other relevant materials, which did not fall within these years, were also included when they happened to be retrieved.

**Exclusion criteria:** Studies that did not meet the above inclusion criteria.

### **Snowballing:**

Electronic search was predominantly used to retrieve relevant papers. Unavoidably however, a few important papers would have been missed if this was the only strategy employed (Lipsey and Wilson, 2001). Therefore, to identify and retrieve missed papers, Glasziou *et al.* (2001) recommend the snowballing approach. Accordingly, and where appropriate, the bibliographies of some accessed papers were inspected to locate other relevant studies. In addition, using the Science Citation Index available at [www.isinet.com](http://www.isinet.com), a citation search was performed. These two strategies of snowballing, referred to as *ancestor search* and *descendant search* respectively (DeCoster 2004, p.9), yielded additional studies which were initially missed during the electronic search.

### **Hand Searching of Journals**

As the research papers were retrieved and examined, it became increasingly clear that certain journals aimed to publish papers which revolve around access to maternal health care services and therefore; published a great number of relevant studies. Accordingly, the formal literature search was complemented by a search through relevant journals and websites to identify articles that may have been missed in the database search. Thus, using the University of Wolverhampton's OPAC system, Google Scholar and Google search engine, the indices and table of contents of the following relevant journals were hand-searched:

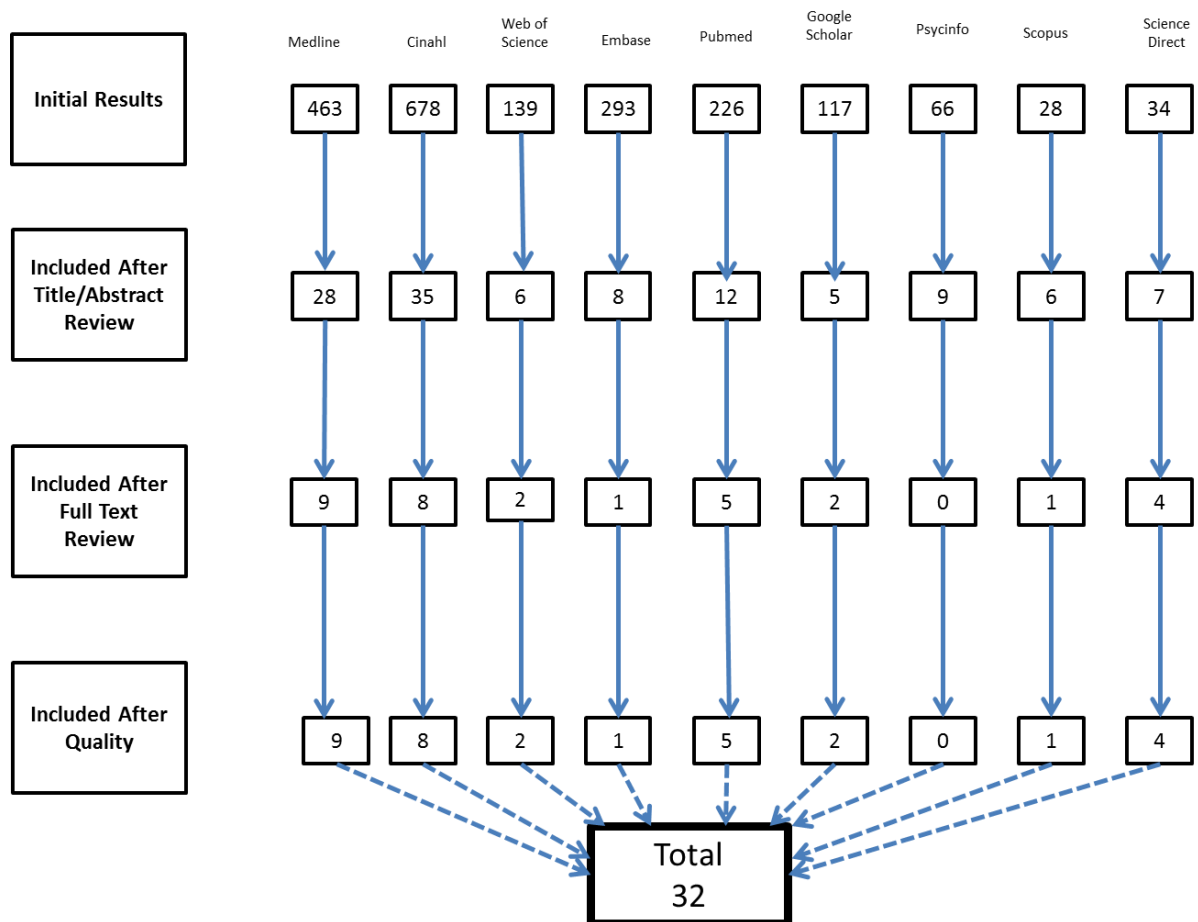
1. International Journal of Humanities and Social Sciences
2. Tropical Medicine and International Health
3. Journal of Human Development
4. British Medical Journal
5. American Journal of Health Promotion
6. International of Obstetrics and Gynaecology

7. Internal Journal of Public Health Research

8. Journal of Research in Nursing and Midwifery

### Searching Grey Literature

According to Rumsey (2004), The term ‘grey’ literature is used to denote publications that are not easily identified nor accessed via the usual sources, such as books, journals, or where publishing is not the primary activity of the organization. In this case, these included conference proceedings, newspaper reports, organisational official publications, as well as research papers prior to publication. Google was employed as search engine utilized to retrieve grey literature relevant to this study.



## APPENDIX X: INTERVIEW TRANSCRIPT ANALYSIS SPECIMEN

### Interview Transcript

Pseudonym: Justina

R: what is your age as at last birthday?

P: I was 40 years October 2014

R: What is your level of education?

P: PhD

R: what do you do for a living?

P: I am a lecturer

R: place of residence

R: urban

R: could you please tell me what life is like as a pregnant woman?

P: it wasn't a good time for me. I had preeclampsia so I was in the hospital for a month before I was induced to give birth to the baby preterm. I had a very bad experience during my last pregnancy. The situation was much wired, I had to be given bed rest for about a month in order for my condition to be monitored and be managed properly. I was induced to give birth because my Bp had risen up 190/160 due to the fact that I suffered from preeclampsia. Yeah, I was due for operation but then I declined because the baby was so small. You know what I mean? We first counted it was 2.2 and after that it became 2 from there 1.8. So I felt how I can go through Cs for a baby that was weighing just 1 point something. We weren't even sure of his survival so I was infused at the end of the day and then by the time the baby came out he was just about 1.5

Health problem

R: and the baby survived?

P: Yes. The baby survived. You know without incubator because our health system here the hospital **it was there was no incubator so they just** used wrapper, the local wrapper about four wrappers to wrapped him to create warm. We didn't bath him. He he.. So and then he was so small and couldn't even suck. I was feeding him with the syringe. I did that in the hospital for one week and the baby gain some weight.

Lack of Health equipment

R: How many children do you have at the moment?

P: at the moment?

R: Yeah at the moment

P: I have three children

R: Have you had any miscarriage?

P: yes, I had about four miscarriages.

R: what was the cause of the miscarriage?

P: my husband caused three of the miscarriages I had because he was always beating me. He will always come back home drunk and when I talk he will just start pounding on me. — negative silences

R: Did you ever report this to any of the authorities?

P: what for? When women are seen as slaves. I just had to manage with it because if I say it, it is me that people will blame. But thank God that we are now divorced. I sincerely love my freedom notwithstanding the fact that all the financial abandoned for the kids are on me. — negative silences

R: Did you go for Antenatal care (ANC)?

P: yes, I attended antenatal care

R: where you regular?

P: No

R: why?

P: Lack of time

R: ok

R: Where did you go for antenatal care

P: at kwale general hospital

R: Why the choice of this very facility?

*Distance*  
P: Proximity. It's a workable distance from my house. And also because of the the fact that I know some of the health workers there who are good at what they are doing. So distance and efficiency actually took me there.

R: where did you give birth?

P: At kwale general hospital.

R: So what brought you here to the FMC since you had your ANC and delivery at kwale general hospital?

P: Because of the complications I had

R: What sort of complications?

P: Preterm delivery. My baby was preterm. And I felt he was not going to survival because he was weighing so low as I have mentioned earlier. The previous facility had no incubator for my preterm baby and my Bp was very high as well, reason I was referred here. Pardon me because I don't want to go deep again on this as it brings bad memory.

R: That's fine. But is it still possible for you to continue with the interview- Considering your state of mind at this point?

P: yes, I can. Just that I didn't want to talk deep again about the complications I had during my pregnancy.

R: ok. Thank you

R: What type of health challenge do you normally have during pregnancy?

P: Ok. The major health challenge like i said is preeclampsia (pregnancy induced hypertension) so because of that I also suffered from oedema. Water gathering all over my body. *maternal health problem*

R: what did you do to treat yourself?

P: they will normally place me on an antihypertensive drug

R: who are the they?

P: the doctors and nurses

R: ok

R: Do cultural/religious factors prohibit your coming to the hospital to seek care?

P: No! No! No!!

R: You don't have any factor prohibiting you?

P: Not really apart from my inability of talking time off my formal employment to attend ANC as much as I would have wanted.

R: Do you have to obtain any other person's consent aside you husband before going to the hospital?

P: it's really not permission but just to let him (my dad) know my where about at every time in point, because my father is the one assisting in talking care of my kids so I have to tell him whenever am coming here.. I owe no one that.

R: ok

P: And moreso, because of my educational qualification and the fact that I can carter for myself financially and otherwise I own no one that. Even if they were to be any cultural or religious factors it won't affect me. I think cause I am not under any man. It is mostly the uneducated and women who are not financially empowered that suffered all these things. So I'm lucky on this aspect. Hahaha. Yeah.

R: Where you reluctant to come to the hospital?

P: hmmm, yes I was

R: And why were you reluctant?

P: Because kwale general hospital is in the local government area headquarters. So women from around the neighboring villages/towns were housed by the hospital and this in turned causes delay in accessing treatment in time, because the number of patients outweighs the number of doctors/midwives and nurses attending to patients. Sometimes I get there and just work away because of the queue of patients. And more so, the health facilities in those neighboring towns and villages were not functional. So by the time you get to the hospital you meet a whole crowd of women seeking for care. And this could be sickling and most of the time when I get to the hospital I see myself spending the whole day there.

R: You said that most of the health facilities in the neighbouring communities were not functional. Right?

P: Yes

R: So what could have been the reason why these facilities were not functioning?

*Controlling behaviour*



P: Basically, I will say the structures itself and then the manpower most of them are not committed. They prefer to stay in towns and those of them posted to the villages stay in the town and don't go to their workplaces.

Social Structure

R: what do you think could be done to correct this abnormally?

P: Hmm, most probably I think if they are compensated in form of incentives they will be encourage to take their work seriously. And also falter should be punished for others to learn. Because in the rural areas, some of them don't have light and the conditions there are not conducive. Even the apartments they give to these medical personnel's are in a very bad condition. They are mostly mosquitoes invested with broken windows. You know some of them feel why I should leave town and come to the rural areas to suffer.

Social Structure

R: so your major reason of feeling reluctant was because of the queue at the facility. Right?

P: Yes. Queue because it takes time before you get attended to.

R: How long did it take to travel from your community to the hospital?

P: no my house is very close to the hospital. It doesn't take time. Is about 5-10mins walk to the hospital. Like I said it was majorly the proximity that makes me to consider the facility I used for my ANC.

R: Ok!! That's for kwale general hospital. I guess?

P: Yes

R: I am asking how long it took you to travel from kwale general hospital to this facility where you were referred from following the complication you had?

P: I see. It took like 45 minutes from there to this facility

R: That far?

P: not so far but because of the bad roads, traffic and lack of readily available transport

R: How much did it cost to travel from that facility to this facility?

P: a lot of money. More than 1500 naira because of my state of mind as of the time of referral. The driver just took advantage of my situation and charged me this much. On a normal day the fare is like 100 naira. The difference is much.

Costs

R: where they no ambulance service at the referred hospital?

Logistics

P: There is always the issue of no fuel or driver to drive the ambulance. In mostly cases the patient is asked to fuel the vehicle. There is a whole lot of issues with the health system here. Starting from supervision to the management. Our health system still has a long way to go. Aside this, we have the issue of corruption in the health system. Most of the health workers just want to make money from every situation. Patients' wellbeing is not paramount as compared to how much they could make from your person.

Corruption

R: Where there any difficulties associated with transportation in coming to the hospital?

P: yes! Yes!! Traffic, police stopping the driver at every check point, the cost of transporting myself here.

R: Did you call the hospital to seek medical advice or inform them of your coming?

P: no no

R: And if not, why?

P: because you have a schedule. We have a schedule. When you are booked all your appointment is on your card for all your appointments. Moreover, their number is not made known to clients unless through a health worker

R: what if there is an emergency before your scheduled time?

P: you can just walked into the hospital and will get attended to

R: And you will get attended to?

P: Yes, if there is no crowd

R: Okay

P: And the maternity ward was always opened to pregnant women

R: is it?

P: yes

R: Did you have to wait for long before seeing the doctor?

P: Yes. Crowded of patients

R: How long?

P: you can stay there for 5-6hours. Sometimes for the whole day without getting to see the doctor.

R: How long after seeing the doctors did you obtain drugs and consumables?

P: eh... ok. The same crowded? Those who have finished with the doctor will go back and line up to obtain their drugs at the pharmacy so you will still have to go and join the crowded in order to obtain your consumables

R: ok

P: yes oh...

P: Do you have cases whereby the consumables/drugs you need to purchase is not available in the health facility?

P: Yes! Yes!! In several occasions. Sometime the give you the simple things they have and the major ones are not there. So you have to go and look for them outside to buy

R: Do they have all the equipment to handle the health problems that might arise following pregnancy and delivery?

P: No!! They were just trying their best. Like I told you when I had my baby he was supposed to be kept in an incubator or in the nursery. But there was nothing like that. They didn't have. We just had to use the local means by wrapping him in several sheets of rappers and you know trying to create warm for the baby.

R: You said your major factor delaying access to treatment was long queue and that there were few hands to provide care for the patients?

P: Few hands and maybe one major health staff. And sometimes they health personnel especially the doctors are hardly at their duty post

R: What were responsible for these delays in the facility?

P: same reasons

R: How long did it take to access treatment?

Structure of Services & consumable services

Lack of Health equipment

P: 5-6hours. Some days you spent the whole day and no doctor to attend to you

R: Where the health workers friendly and used words of encouragement?

P: oh... Yes. Let me give it to them. They tried. It's only few of them that could be nasty cos I have a problem with one of them and you know as humans some of them have their own personal problems and these problems interfere with their job. they come to the hospital with it and sometimes they can be very hostile

R: what do you mean by being hostile?

P: hhm! Like using abusive words on the patients, Calling you names and all sorts of things. They the doctors and nurses sometimes do say to patients that they're dirty and smelling and that the hair in their genitals is over grown. You know these things are private. But when communicating to their clients they shout it to the hearing of other close by persons in the facility. This attitude has to change. It really not fair on the part of the patients.

P: if you were to still give birth again, would you still use the health facility your pregnancy and delivery care?

P: despite some of the bad experience that I had in the health facility, I will still choose to attend ANC and also deliver my baby in a health facility next time that am pregnant again. Agreed, that some of our hospitals are lacking in basic equipment and our health staff can be very abusive at times, they are still very safe than home delivery or at the mission houses. If there is any issue of complication, they will know what to do to avert the situation. And again, because I want myself and my baby to be safe and be free from any form of deformity. Lack of mjt, communication & clinical skills

R: What advice will you offer to the mothers and to the policy makers?

P: To improve services, health care service is quite expensive and you don't get it when you need it because of all the obstacles I highlighted earlier. Government need to subsidize the cost of health for pregnant women thereby making healthcare affordable. Punishment should be giving to health staff that uses abusive words on their patients. Building and improving the existing roads thereby making it motorable. Finally, incentives should be giving to medical personnel posted to rural areas.

Lack of Compassion

Positive Silence

women suggesting for improvement

## APPENDIX XI: COPY OF ORIGINAL RESEARCH PROPOSAL WITH APPLICATION FOR ETHICAL APPROVAL

### 1. ETHICS APPLICATION FORM: PSYCHOLOGY, HEALTH, SOCIAL WORK & SOCIAL CARE

1. Please enter your surname and first name below. (SURNAME, FIRST NAME)

EKPENYONG MANDU

2. Please enter your University e mail address (e.g. M.Name@wlv.ac.uk)

[M.S.Ekpenyong@wlv.ac.uk](mailto:M.S.Ekpenyong@wlv.ac.uk)

3. Please enter the name of your Project Supervisor, Director of Studies, or Principal Investigator.

Dr Denise Bellingham-Young

4. Please enter date by which a decision is required below. (Note that decisions can take up to 4 working weeks from date of submission)

13/10/2014

5. Which subject area is your research / project located?

1. Science (including Pharmacy)
2. Engineering & the Built Environment
3. Computing
4. [Health and Wellbeing](#) (including Psychology)
5. Education
6. Business
7. Social Sciences & Humanities
8. Art
9. Sport

6. Please select your Faculty, Department or Research Centre

1. Faculty of Social Science

2. Faculty of the Arts
3. Faculty of Science and Engineering
4. [Faculty of Education Health and Wellbeing](#)
5. CADRE
6. CEDARE
7. Centre for Discourse and Cultural Studies
8. Engineering and Computer Science Research Centre
9. CHSCI
10. RIHS
11. Centre for Historical Research
12. RILLP
13. Centre for Research in Law
14. Centre for Transnational and Transcultural Research
15. Management Research Centre
16. RCSEP
17. Centre for Academic Practice
18. IT Services
19. Human Resources
20. Learning Information Services
21. Registry
22. Don't know
23. Other (please specify below)

**7. Does your research fit into any of the following security-sensitive categories? (For definition of security sensitive categories see RPU webpages ([www.wlv.ac.uk/rpu](http://www.wlv.ac.uk/rpu)) follow links to Ethical Guidance).**

1. commissioned by the military
2. commissioned under an EU security call
3. involve the acquisition of security clearances
4. concerns terrorist or extreme groups
5. [not applicable](#)

**8. Does your research involve the storage on a computer of any records, statements or other documents that can be interpreted as promoting or endorsing terrorist acts?**

1. YES
2. [NO](#)

**9. Might your research involve the electronic transmission (eg as an email attachment) of any records or statements that can be interpreted as promoting or endorsing**

terrorist acts?
1. YES 2. NO

10. Do you agree to store electronically on a secure University file store any records or statements that can be interpreted as promoting or endorsing terrorist acts. Do you also agree to scan and upload any paper documents with the same sort of content. Access to this file store will be protected by a password unique to you. Please confirm you understand and agree to these conditions?
1. YES I understand and agree to the conditions 2. NO (please explain below) 3. I do not understand the conditions
No because my research will not involve the collection of data that can be interpreted as endorsing or promoting terrorist acts

11. You agree NOT to transmit electronically to any third party documents in the University secure document store?
1. YES I agree 2. NO I don't agree

12. Will your research involve visits to websites that might be associated with extreme, or terrorist, organisations? (for definition of extreme or terrorist organisations see RPU webpages ( <a href="http://www.wlv.ac.uk/rpu">www.wlv.ac.uk/rpu</a> ) and follow links to Ethical Guidance.
1. YES (Please outline which websites and why you consider this necessary) 2. NO

13. You are advised that visits to websites that might be associated with extreme or terrorist organisations may be subject to surveillance by the police. Accessing those sites from university IP addresses might lead to police enquiries. Do you understand this risk?
1. YES I understand 2. NO I don't understand

#### 14. What is the title of your project?

To Investigate Factors Influencing Access to Emergency Obstetric Care (EmoC) Amongst Women Seen at Hospital x, Delta State, Nigeria.

#### 15. Briefly outline your project, stating the rationale, aims, research question / hypothesis, and expected outcomes.

##### **Background Information**

Complications of pregnancy and childbirth are a leading cause of maternal morbidities and mortalities for women of reproductive age (15 – 49 years) in developing countries. The WHO estimates that over 500,000 women and girls die from complications of pregnancy and childbirth each year, worldwide, with approximately 99% of these deaths occurring in developing countries. National health indicators have shown that the health status of the Nigerian populace is poor. With a maternal mortality ratio of 545 deaths per 100,000 live births (NDHS, 2008).

Maternal Mortality Ratio (MMR) has failed to reduce significantly in the last decade despite various interventions such as safe motherhood, Life-Saving Skills (LSS) and many others initiated to change the situation. MMR in Nigeria was about 800 per 100,000 live births in 1988 (committee to study female morbidity and mortality in sub-Saharan Africa, 1996) and was about 704 per 100,000 live births as at 1999 (Babalola et al; 2009).

Complications of pregnancy and childbirth are a leading cause of maternal morbidities and mortalities for women of reproductive age (15 – 49 years) in developing countries. The WHO estimates that over 500,000 women and girls die from complications of pregnancy and childbirth each year, worldwide, with approximately 99% of these deaths occurring in developing countries. National health indicators have shown that the health status of the Nigerian populace is poor. With a maternal mortality ratio of 545 deaths per 100,000 live births (NDHS, 2008).

Furthermore, MCH approach has often focused on medical and facility –based interventions, whereas the issues involved in maternal health also include social, cultural economic, legal and even religious factors, which equally need to be addressed for any meaningful improvement in maternal health (HERFON, 2006). Consequently, safe motherhood which eludes many women due to inadequate knowledge about reproductive health is complicated

by unmitigated socio-cultural and economic backgrounds of women (Okemgbo *et al.*, 2002). Such as poverty, high risk social environment, inconsiderate working policies as well as role conflicts that lead to both emotional and physical stress which ultimately induce complications during pregnancy. The scenario seems to explain why several women lose their lives daily as a result of pregnancy-related complications (WHO, 2008). Availability of health care service is only one component necessary for safe pregnancy. There are other militating factors against healthy pregnancy that need to be considered to ensure maternal health and to prevent maternal complications. The issue of maternal mortality in Nigeria has been adduced to both medical and socio-economic factors and it is believed that the way to take on maternal mortality is to deal with all factors simultaneously (HERFON, 2006; Global Media, 2010). However, while numerous studies have focused on the medical factors that are inimical to maternal health, very few studies have focused on factors influencing access to emergency obstetric care.

Maternal mortality is the most important indicator of maternal health and wellbeing in any country (HERFON, 2006). From recent estimates, the number of deaths each year from maternal causes worldwide decreased from 536,000 in 2005 to an estimated 358,000 in 2008 and 273,500 in 2011. For every woman that dies from pregnancy-related causes, 20 – 30 more will develop short- and long-term damage to their reproductive organs resulting in disabilities such as obstetric fistula, pelvic inflammatory disease, a ruptured uterus, etc (WHO, 2007). Even though maternal mortality is a worldwide phenomenon, the critical issues associated with it are most profound in developing countries.

### **Justification of the Study**

Maternal health is a major challenge in most developing countries, including Nigeria. Despite the call to improve access to maternal health care services and reduce maternal mortality, access to maternal health in Nigeria has remained poor. Though some women have been found to receive antenatal care during pregnancy, most of them lack supervised delivery (Doctor *et al.*, 2011).

Hence the study is necessary for understanding factors that can be manipulated to contribute to the promotion of health behaviour change, and the achievement of Millennium Development Goal 5 in Nigeria. Understanding the factors influencing the decisions to seek maternal health care has the potential to provide policy tools to strengthen the health care system and contribute to the development of rational and strategic policy to improve

maternal health in developing countries generally, and Nigeria in particular.

### **Aims and Objectives of the Study**

The overall aim of this study is to investigate factors influencing decisions to seek emergency obstetric care among women attending the Federal Medical Centre (FMC) Asaba, Nigeria.

1. To investigate factors influencing decisions to seek emergency obstetric care (EmoC) among women attending the Federal Medical Centre.
2. To identify the women experiences in reaching the health facility.
3. To explore care experiences encountered by the women in receiving care at the health facility

### **Research Questions**

1. What are the factors influencing decisions to seek emergency obstetric care among women attending the Federal Medical Centre Asaba?
2. What are the women experiences in reaching the health facility?
3. What are the care experiences encountered by the women in receiving care at the health facility?

### **Expected Research Outcome**

- The expected outcome of this research is to clarify some factors that may contribute to hindered women to accessing emergency obstetric care.
- This research work will assess women experiences in reaching the health facility and the care experiences encountered by the women in receiving care having reached the health facility.
- This new knowledge will help provide policy tools to strengthen the health care system and contribute to the development of rational and strategic policy to improve maternal health in developing countries generally, and Nigeria in particular.



**16. How will your research be conducted? Describe the methods so that it can be easily understood by the ethics committee. Please ensure you clearly explain any acronyms and subject specific terminology. Max 300 words**

The number of deliveries taken in the unit recording an annual average of 3260 deliveries between 2008-2011. Using a standard formula for sample size as follows:  $n = z^2 pq/d^2$ , which is used in calculating the minimum sample size when the universe contains 10,000 subjects or more (Babalola, 1998).

Where n=minimum sample size

Z=the normal deviate corresponding to the desired confidence level= $1.96^2$ ,

P=proportion of people in the study population thought to have the key characteristic being measured=0.7

$$N = \frac{1.96^2 \times 0.7 \times 0.3}{0.0025} = \frac{3.8416 \times 0.21}{0.0025} = 0.806736$$

$$= \frac{0.806736}{0.0025} = 322.69, n=323$$

5 participants will be conveniently selected for the interview.

**Data Analysis:**

Subsequent to data collection, the two sets of data gathered will be analysed using different methods. Data for quantitative variables will be analysed using Statistical Package for Social Sciences. First, characteristics of the study sample will be described using univariate analysis. While bivariate analysis (cross tabulations) will be utilised as well. Data for interview will be analysed using qualitative content analysis.

**17. Is ethical approval required by an external agency? (e.g. NHS, company, other university, etc.)**

1. NO
2. YES - but ethical approval has not yet been obtained
3. YES - see contact details below of person who can verify that ethical approval has been obtained)

**18. What in your view are the ethical considerations involved in this project? (e.g. confidentiality, consent, risk, physical or psychological harm, etc.) Please explain in full sentences. Do not simply list the issues. (Maximum 100) words)**

The ethical considerations involved in this research project are as follows;

Potential participants will be assured that this study will not harm them in any way. The data collected is purely for the purpose of the study and will not be passed on to another party. Data will be stored anonymously in codes so that participants cannot be identified. Participation is completely voluntary and participants are free to withdraw at any stage of the research.

Interview will occur face to face with the respondents alone, in a private consulting room in the hospital. Completed transcripts of the interview and the audio recorder will be stored under lock and key in a secure drawer/computer of the chief investigator with the password known only by the researcher.

**19. Have participants been/will participants be, fully informed of the risks and benefits of participating and of their right to refuse participation or withdraw from the research at any time?**

1. **YES** (Outline your procedures for informing participants in the space below).
2. **NO** (Use the space below to explain why)
3. Not applicable - There are no participants in this study

The participants will be fully informed verbally by the researcher and also an information sheet providing information on the risks and benefits of taking part in the study at any stage will be provided before the study is carried out.

**20. Are participants in your study going to be recruited from a potentially vulnerable group? (See RPU website ([www.wlv.ac.uk/rpu](http://www.wlv.ac.uk/rpu)) and follow link to Ethical Guidance pages for definition of vulnerable groups )**

1. **YES** (Describe below which groups and what measures you will take to respect their rights and safeguard them)
2. **NO**

The participants for this study will comprise of women of reproductive age (15-49 years) who are pregnant or had given birth in the last one year. Potential participants will be assured that information given would be used for the purpose of the research project and that

information will not be passed on to another party. They will be informed that participation is voluntary and that they are free to refuse to participate or withdraw at any time. No names will be collected.

**21. How will you ensure that the identity of your participants is protected (See RPU website ([www.wlv.ac.uk/rpu](http://www.wlv.ac.uk/rpu)) and follow link to Ethical Guidance pages for guidance on anonymity)**

No names will be collected as data would be stored anonymously with pseudonyms so that participants cannot be identified.

**22. How will you ensure that data remains confidential ((See RPU website ([www.wlv.ac.uk/rpu](http://www.wlv.ac.uk/rpu)) and follow link to Ethical Guidance pages for definition of confidentiality)**

I will ensure that no other person has the key and password to the facility where the data are kept.

**23. How will you store your data during and after the project? (See RPU website ([www.wlv.ac.uk/rpu](http://www.wlv.ac.uk/rpu)) and follow link to Ethical Guidance pages for definition of and guidance on data protection and storage).**

Both the hard and soft copies of the data collected would be stored under lock and key in a secure drawer of the chief investigator. Data and copies of transcripts kept on computer will be password protected, with the password known only by the researcher.

**24. Append study documentation (Please append below the materials you will use to carry out your study. These should typically include letters of contact, consent forms, information sheets, data collection materials (e.g. interview schedules, surveys, experimental materials, training and intervention materials etc.), debrief and, if appropriate, a risk assessment document/lone worker policy.)**

### **Potential Problems/barriers**

- Biased
- Gaining access to the facility and potential participants

- Distressed participants
- Internet access
- Power supply
- Insecurity

### **Solution to the identified problems**

- As the researcher has a deep insight into the topic, the researcher will need to be careful to remain unbiased and be aware of any pre-conceptions they have that could influence data collection or analysis.
- As the researcher knows some of the participants, some rapport has already been established, however, it is vital that the research is carried out in an appropriate and professional manner.
- The researcher has contacted the health facility to know if there was a facility for managing distress patients, and I was told that there was a counselling facility in the hospital that handles distressed patients.
- A modem for internet service will be purchased for use during the duration of the data collection.
- Power will be generated by hiring a generator set. The essence for this to make sure the participants are comfortable by providing workable fans in the room where the participants would stay in filling the questionnaire and for the interview.
- A youth leader/designated person will accompany the researcher to the data collection site to liaise with the militants should the need arises.

## APPENDIX XII: REFLECTIVE EXTRACT FROM MY RESEARCH JOURNAL

*The pot carries its maker's thoughts, feelings, and spirit. To overlook this fact is to miss a crucial truth, whether in clay, story, or science* (Krieger cited in Finlay, 2002). This quote by Krieger is a cue that the process of conducting research that has a qualitative component means that the researcher is a central character in the process (Finlay, 2002). Growing up in one of the Nigerian communities I was already aware of some of the barriers in accessing care and the Nigerian woman; the stereotypes and the controlling behaviours. I reflected about the ethical implications and the efficacy around researching a topic in which I as a researcher had personal knowledge and experience.

Whilst quantitative research stresses the need to minimise as much as possible researcher effects on the research process, qualitative research acknowledges that researchers do influence the research process (Higginbottom and Serrant-Green, 2005). Foster (2009) regards research as a process of human thought and meaning making including that of the researcher. I agree with other researchers who have carried out research with participants with whom they share similar experiences or ethnicity in terms of the difficulties, challenges but opportunities that might present (Serrant-Green, 2002).

This was a very challenging project to undertake. I did not fully appreciate the depth of the process. The design of the questionnaire was my first ever attempt at producing a questionnaire and on reflection I think that some of the questions were too general (for example, I did not directly ask a question on gender division of labour) and more specific questions particularly relating to attitude of midwives were needed.

From as far back as I can remember I have struggled with words and anything to do with interviews. Studying and understanding interviews was one of the biggest hurdles I knew that I would have to face whilst doing this research. 7 years previously, when I studied at undergraduate/postgraduate level, I chose quantitative study for my dissertation because of this. During the course of my six months placement with the society for family health in Nigeria, I became challenged about my insecurity and fear of working with interviews. It felt quite hypocritical working on issues about behaviour change/modifications with clients whilst my own fears remained unabated. I wanted to face my fear and try and deal with it. I

took on one of the biggest challenges that I have done in a long time. I chose to use a method that was not my strength and one that I was familiar with. I used a mixed methodology.

My field trip was one of my historical events, a dream comes true. It is good to make a history that could bring change in the society or at least change a perspective.

A week before my trip for Nigeria, people who were aware of the insurgency there and the 2015 general election would say, “hey! How are you going to collect your data? Won’t you rather remind in the UK at this point? Won’t you change your research approach and method? Must the research be done in Nigeria?” It was a difficult and dreadful period for me but I must go. I love my country Nigeria and must contribute to her growth and stability, try to influence policies that will change the position and life of women in Nigeria. The late Nelson Mandela once said, ‘Education is the most powerful weapon which you can use to change the world.’ If girls’ education is being fought for on a daily basis by our parents, in the face of the alleged abduction of over 200 Chibok girls from their school, then this weapon to change the world is jeopardized. I must say that the world will not be complete without an educated female child. What happens to our nurses, midwives, teachers etc?

*Steinbeck gets it just right, many of my most memorable travel experience occur where the planned elements of the trip succumb to expected fleeting moments, that I have experienced something surprising and new, changed in some way. I was once involved in an artist exchange to Calcutta, India, just being on the streets was exhilarating. A night trip to a farmer house, via labyrinthine passages in the dimly lit heat of the city, sticks in my memory more than seeing the Taj Mahal. I suppose it will be good to keep it in mind this week when eventually no more planning can be done.*

These were some of the thoughts going on in my mind as I prepared for this trip. I should mention the vital two;

- Lack of power supply
- Insurgency in Nigeria

On the night before I was to travel, luggage and travelling documents were set in a corner of my room. I had a sleepless night as I kept experiencing erratic thoughts. Insurgency issue in Nigeria and constant kidnapping and even at times bombing in the Niger Delta region heightened my worry. My immediate family stays in the Region and it was really a horrible situation. Imagine coming back with the story that bombers have killed everybody and all are

gone just like that, or that your loved ones were anxiously waiting for your arrival and you were lost on the way and gone forever because of a Boko Haram attack, which was my late elder sister's fate.

On the 10<sup>th</sup> of January 2015 at about 7:00am, I left UK for Nigeria. At 8pm the same day, the pilot announced our landing. I smiled, "Home again to my dear country Nigeria, I missed you!"

14<sup>th</sup> January 2015, I left my family in Uyo to go to Delta state to start my fieldwork. I was vulnerable as an outsider even though I was an insider. I was aware of the risk involved as a lone researcher. I had already written possible problems/barriers to my fieldwork and submitted as part of ethical consideration, such problem as insecurity (kidnapping) and all associated violent behaviours. Even though I was prepared for the potential risks I was to encounter, the manner in which they might occur differed in time and space. I was afraid that I might be a target as some of the people believe that I belong to the elite class. Boko Haram might not be so visible in the South-south, but the people still suffered from the incessant menace of armed robbery and kidnapping. I could only hope and pray for safe passage.

15<sup>th</sup> January 2015, on the day of my first visit, I had arranged with the gate-keeper on the venue and time to meet with the women. I remembered my friend's advice to me to package gifts for these women because they may not listen to me. I was concerned that in my present experience people would not expect such. This merely made her hiss and node her head sarcastically. Listen to me, Mandu, she said. "This country and other developing nations are plagued with corruption and political instability where most people cannot give support to others without gift of any form. So, package some gift as you are going and don't put yourself in a tight space. These women know where you are coming from and would definitely use this opportunity to exploit you.

"But why?" I said.

"You are acting as if you are a stranger. Yes, I can understand with you because of your background. You have people running errand and doing most things for you. I think your dad failed in his responsibility by not allowing you girls to integrate with the people. Integration is necessary for this kind of exposure. This is how it's done here, so welcome back and happy adulthood where you have to do stuffs yourself". No doubt her opinion was reasonable, she made a good point but there are other options if I may say. At least I know one that might work, fingers crossed!

1:35pm, it was a hot afternoon, when I say hot, it was 36 degrees centigrade. I got into the HOD of obstetrics and gynaecology office and I sat down wiping my face with a white hand towel to keep dry from sweat flowing through my head down to my neck like a river. Although it was not my first time of experiencing such warm weather, I needed to adjust after a long time of being away from the environment. No electricity, I could hear noise from the generating plant, I was still sweating but the fan was blowing hot wind instead. Surprisingly, I was welcomed with an overwhelming reception different from my friend's advice. I was presented with a cold drink and some biscuits to ease my thirst.

As I walked into the clinic that morning, I was bewildered with the distressing sight of the women waiting to be attended to by the midwives. My heart skipped in fright and I breathed deeply to control my anxiety. I can't even explain why I felt that way, but it was obvious that the women were filled with so much misery for their immediate environment of no electricity, increase poverty and their pregnancy space. A thought came into my mind right there: "what a world of women, pregnancy today, childbirth tomorrow, husband's subjugation and all that. It was only then that it occurred to me that it was all about my assumption. But I am part of the world, why am I different? Has something gone wrong with me. No, in this world, things need to be understood as they are experienced not as how they appear.



**APPENDIX XIII: A TABLE AND A FLOW CHART FOR  
QUALITATIVE DATA ANALYSIS PROCESS**

Meaning Units (selected)	key words	Codes	categories
<p><i>“General basic skills are lacking in some of them my sister. A patient comes in with a situation and you as a doctor and nurse will be shivering because he doesn’t know what to do. Unreliable standards of care and monitoring are a serious issue in our healthcare system. Failure to stabilise patients before referral, errors in existing protocols for referrals, lack of readiness of receiving facility, poor documentation and monitoring indications for referral. My dear, name them. There are so many. In most of the time, if not all, accompanying person with the patient have no knowledge of the case and the reason for referral. I feel some of the health workers here need to go on refresher courses. They need to see and know what is going on”</i></p> <p><i>“Women die from very minor complication because of lack medical equipment and lack of knowledge of the health problem by the doctor. As a patient in the hospital, even in an emergency, the healthcare staff expects you or your family to buy card and make some deposit before you can be attended to. This action by the health staff has left many women in need of prompt care death”.</i></p> <p><i>“Most times doctors and nurses responsible for a patient’s care are often not on their duty post. Sometime even when they are there, they might just be sited in their offices doing nothing. Most times you have to wait like an hour or more before you can be attended to. I actually find this to be a very bad practice on their part</i></p>	<p>General basic skills lacking</p> <p>Unreliable standards</p> <p>Failure to stabilise patients before referral</p> <p>Accompanying person with the patient have no knowledge of the case</p> <p>Refreshers courses</p> <p>Women die of minor complication</p> <p>Lack of medical equipment and knowledge of the</p>	<p>Lack of Management, communication and clinical skills</p>	<p>Healthcare incompetence</p>

	<p>health problem</p> <p>Action by health staff has left many women in need of prompt care death</p> <p>Doctors and nurses not on duty post</p> <p>Sited in offices doing nothing</p> <p>Very bad practice on their part</p>		
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<p><i>“I have everything working out for me. Most of the health staff are my friends and I also have the money to do what is required of me”</i></p> <p><i>“Though, there are cases where people skipped the queue and get attended to before you that came first, just because they have healthcare staff as friends and family members. By the way, nothing is ever done right here”</i></p> <p><i>“There are a whole lot of issues with the health system here. Starting from supervision to the management. Our health system still has a long way to go. Aside this, we have the issue of corruption in the health system. Most of the health workers just want to make money from every situation. Patients’ wellbeing is not paramount as compared to how much they could make from your person”</i></p> <p><i>“The health care staffs don’t ever use words of encouragement. They are too full of themselves. They use your condition to make mockery of you. Abusive words are their thing. I don’t blame them but the country. The government just allowed these doctors and nurses to take laws into their hands, especially the young ones that even lack the skills and experience. Most of them, if you ask me I will say they know next to nothing other than being pompous”</i></p> <p><i>“Very few of them can be nice. They rest of</i></p>	<p>Health staff are my friends</p> <p>Have money to do what is required of me</p> <p>People skipped queue</p> <p>Nothing is ever done right here</p> <p>Issue of corruption in the health system</p> <p>Most of the health workers just want to make money from every situation</p> <p>Don’t ever use words of encouragement, Abusive words, mockery, take laws into their hands, pompous</p>	<p>Corruption</p> <p>Lack of compassion</p>	
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<p><i>them are not. They can be very arrogant”</i></p> <p><i>“When you go they’ll be tossing you around, asking you obvious questions and sometimes in an abusive language.....so next time I will be discouraged to go”</i></p> <p><i>“My baby was delivered preterm and needed to be kept in an incubator, but this hospital and even neighbouring hospitals were lacking in it (incubator). So, we had to use the local wrapper about four wrappers to wrap him to create warm”</i></p> <p><i>“The health system in Nigeria is just nothing to write home about. Most times an equipment as little as incubator isn’t there for use for preterm babies. I don’t give credit to the health system here but to God”</i></p> <p><i>“Some equipment for treatment is actually lacking in this facility. They don’t have enough ambulances to carry patients in the event of an emergency. Things like an incubator, gas and basic theatre equipment seem to be lacking too”</i></p> <p><i>“Our health facilities in this country are not</i></p>	<p>the rest of them are not, very arrogant</p> <p>Tossing you around, abusive language</p> <p>discouraged</p> <p>Baby delivered preterm</p> <p>Needed to be kept in an incubator</p> <p>This hospital and neighbouring hospitals were lacking</p> <p>Use local wrappers</p> <p>To create warm</p> <p>An equipment as little as incubator not there</p> <p>For use for preterm babies</p>	<p>Lack of healthcare equipment</p>	
---	--	-------------------------------------	--

<p><i>adequately equipped</i></p>	<p>Don't have enough ambulances</p> <p>lacking in Incubator, gas and basic theatre equipment</p> <p>not adequately equipped</p>		
<p><i>“My inability to utilise the maternal healthcare services as much as I would have loved to, was partly due to the distance and the time to reach the hospital. Secondly, because of the time of the day when these services are being provided. I get discourage to come to seek care here because my house is too far from here and the timing for these services provided is not favourable to me. This is about the same time I go to the market to make some sales. You know that some of these goods can only be sold easily at a time. Meaning, if I don't go before the said time my goods may not be sold”</i></p> <p><i>“Proximity! It's a workable distance from my house”</i></p>	<p>Due to distance and time</p> <p>My house is too far from here</p>	<p>Distance</p>	<p>Logistics barrier</p>

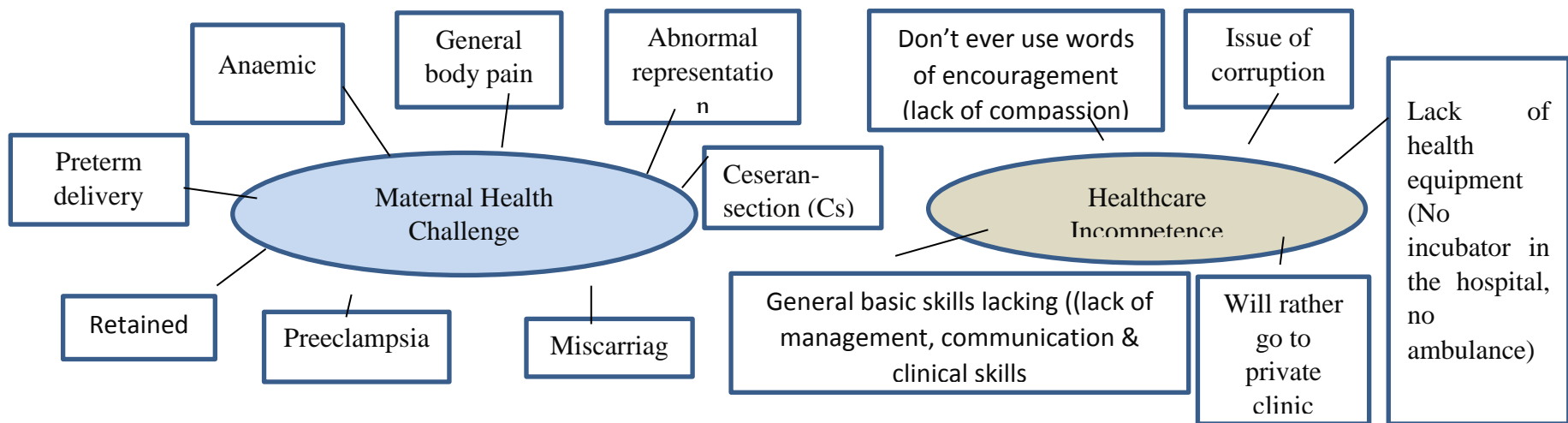
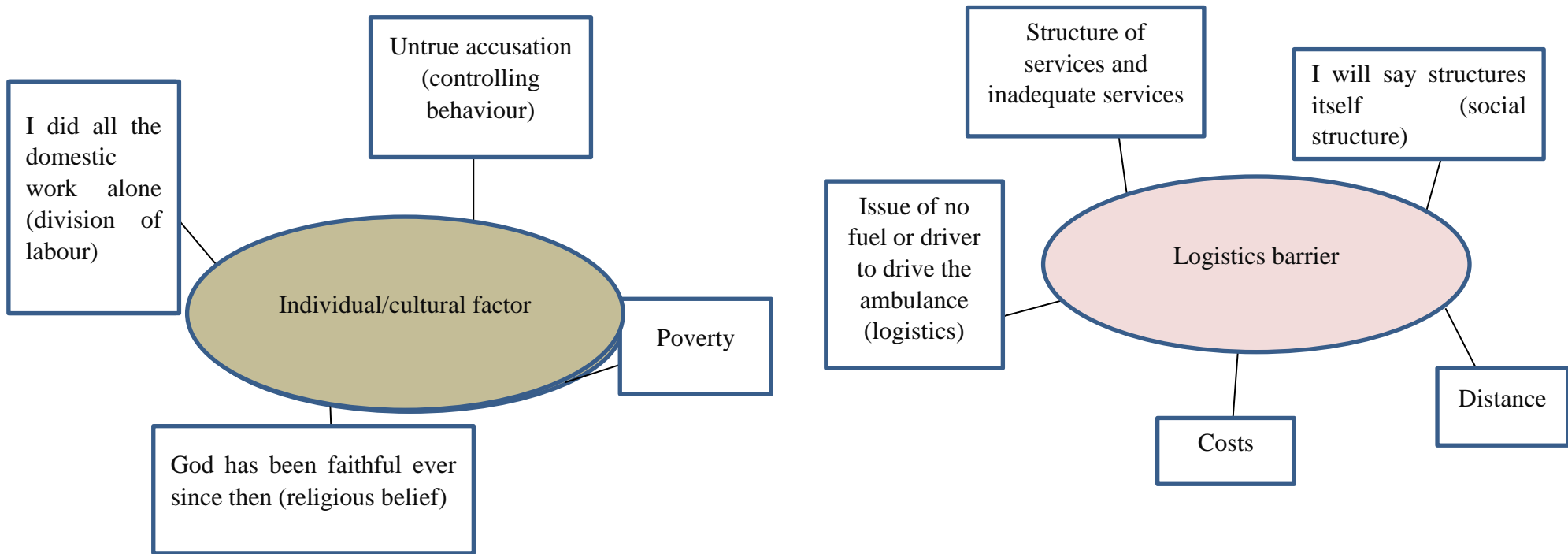
<p><i>“If there is an ambulance available in the facility the might be no fuel in it and sometimes the might suggest that the patient should buy fuel for the ambulance”</i></p> <p><i>“I was referred to this hospital by the doctor for the management of delivery complication but I was not provided with an ambulance or other form of transport services for my referral”</i></p> <p><i>“There is always the issue of no fuel or driver to drive the ambulance. In most cases, the patient is asked to fuel the vehicle”</i></p> <p><i>“It took me almost an hour to travel down here and the transport fare is very expensive too. And because of the transportation being too expensive for me and my mother to afford, we had to walk down here on-foot from the first hospital that I went to. Aside .....money for transportation also discourages me from using the hospital for treatment. Everything about hospital is expensive. The medical bills and medications to buy”</i></p> <p><i>“We..... had to get a taxi from the private hospital where we were referred from to this facility and the cost was high. The situation was so discouraging”</i></p>	<p>proximity</p> <p>No fuel in the ambulance</p> <p>Not provided with an ambulance or other form of transport for my referral</p> <p>No drive to drive the ambulance</p> <p>Patient asked to fuel the vehicle</p> <p>Transport for is very expensive</p> <p>Walk down here on-foot</p>	<p>Logistics</p> <p>Costs</p>	
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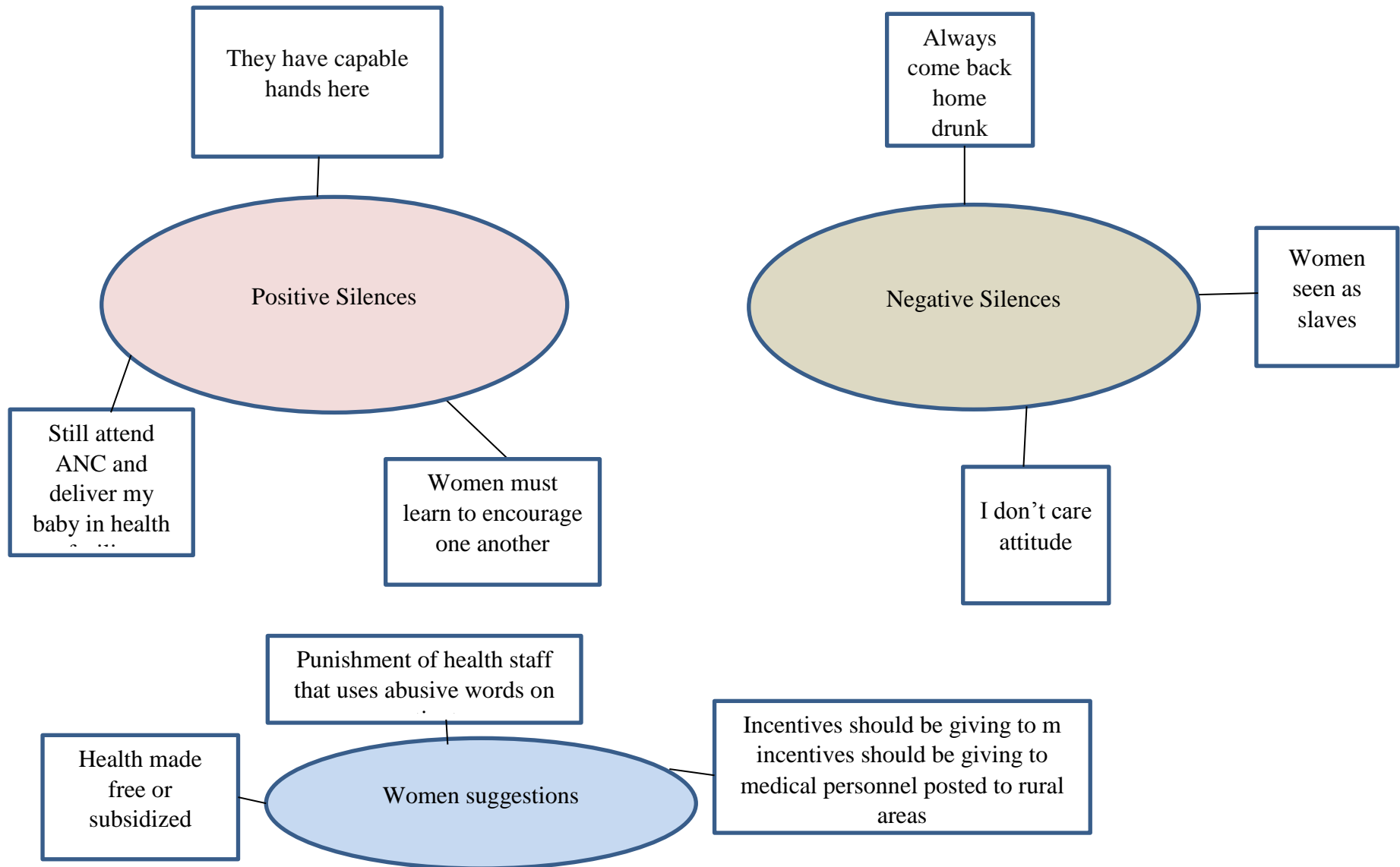
<p><i>“..... on several occasions. Sometimes the give you the simple things they have and the major ones are not there. Items that are not available in the local pharmacies and chemist shops are bought from other nearby towns which sometimes it takes about an hour to get there”</i></p> <p><i>The medical bills and medications to buy which at times you don't see it to buy from the pharmacy here in the hospital. The prices of these medications are too expensive outside the hospital environment”</i></p> <p><i>“..... most of the occasions the hospital doesn't have the instrument to conduct medical test. They ask you to go some miles to a private laboratory for the test. I short, many of the items prescribed for patients to buy are mostly not available in the hospital, so you have to go outside the hospital to buy and the distance is far”</i></p>	<p>Money for transportation discourages using the hospital</p> <p>Medical bills and medications to buy</p> <p>Everything about hospital is expensive</p> <p>Get taxi</p> <p>Cost was high</p> <p>On several occasions</p> <p>Bought from other nearby towns</p> <p>Takes about an hour</p> <p>Don't see to buy from the pharmacy here in the hospital</p> <p>Too expensive outside the hospital environment</p>	<p>Structure of services and inadequate services</p>	
--	---	--	--

<p><i>“Most drivers do not want to operate in areas with poor roads and because of this, one will have to wait for many hours before getting a vehicle”</i></p> <p><i>There was no alternative to maternal health care services for maternity care in the village where I live. When you are having an emergency, you must travel to the city where you can access health facilities for care. .... the road from my community to this facility is bad with many pot holes”</i></p> <p><i>I will say structures itself and then the manpower, most of them are not committed. They prefer to stay in towns and those of them posted to the villages stay in town and don't go to their workplace. ....in the rural areas, some of them don't have light (electricity) and the conditions there are not conducive. Even the apartments they give to these medical personnel are in a very bad condition”</i></p>	<p>Hospital doesn't have the instrument to conduct medical test</p> <p>Some miles</p> <p>To a private laboratory for the test</p> <p>Items prescribed for patients to buy most not available in hospital</p> <p>Have to go outside hospital to buy</p> <p>Distance is far</p> <p>Drivers do not want to operate in areas with poor roads</p> <p>Wait for many hours</p> <p>No alternative maternal healthcare services</p> <p>Villages</p> <p>Travel to city</p> <p>Road is bad with</p>	<p>Social structure</p>	
---	--	-------------------------	--



	<p>many pot holes</p> <p>Structures itself</p> <p>Posted to villages</p> <p>Prefer to stay in towns</p> <p>No light</p> <p>Conditions not conducive</p> <p>Apartments in very bad condition</p>		
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# APPENDIX XIV: DATA ANALYSIS EXTRACT FOR QUANTITATIVE DATA

## everlostachild \* fetaloutcome

**Crosstab**

Count		fetaloutcome			Total
		alive and well	fetal death	apparent disability	
everlostachild	yes	27	6	14	47
	no	188	28	49	265
Total		215	34	63	312

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.755 <sup>a</sup>	2	.153
Likelihood Ratio	3.535	2	.171
Linear-by-Linear Association	3.742	1	.053
N of Valid Cases	312		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.12.

## everlostpregnancy \* fetaloutcome

**Crosstab**

Count		fetaloutcome			Total
		alive and well	fetal death	apparent disability	
everlostpregnancy	yes	32	26	18	76
	no	184	8	45	237
Total		216	34	63	313

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	61.529 <sup>a</sup>	2	.000
Likelihood Ratio	53.292	2	.000
Linear-by-Linear Association	14.229	1	.000
N of Valid Cases	313		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.26.

## Income recoded \* fetaloutcome

### Crosstab

Count		fetaloutcome			Total
		alive and well	fetal death	apparent disability	
Income recoded	below minimum wage	28	8	26	62
	above minimum wage	134	22	23	179
Total		162	30	49	241

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.218 <sup>a</sup>	2	.000
Likelihood Ratio	23.127	2	.000
Linear-by-Linear Association	24.170	1	.000
N of Valid Cases	241		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.72.

**Block 1: Method = Enter**

**Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	80.062	10	.000
	Block	80.062	10	.000
	Model	80.062	10	.000

**Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	214.816 <sup>a</sup>	.292	.406

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

**Hosmer and Lemeshow Test**

Step	Chi-square	df	Sig.
1	11.209	8	.190

**Contingency Table for Hosmer and Lemeshow Test**

		Fetal_logit = Dearth or apperent disability				Total
		Fetal_logit = Alive and well		Fetal_logit = Dearth or apperent disability		
		Observed	Expected	Observed	Expected	
Step 1	1	23	21.996	0	1.004	23
	2	22	20.479	0	1.521	22
	3	20	21.612	4	2.388	24
	4	18	20.066	6	3.934	24
	5	21	20.112	5	5.888	26
	6	15	13.889	4	5.111	19
	7	11	13.794	10	7.206	21
	8	14	11.696	10	12.304	24
	9	5	7.631	18	15.369	23
	10	6	3.724	20	22.276	26

**Classification Table<sup>a</sup>**

	Observed	Fetal_logit	Predicted		Percentage Correct
			Fetal_logit		
			Alive and well	Dearth or apperent disability	
Step 1	Fetal_logit	Alive and well	134	21	86.5
		Dearth or apperent	31	46	59.7

**Parameter Estimates**

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Overall_Decision2 = 1.00]	-2.609	.291	80.432	1	.000	-3.179	-2.039
	[Overall_Decision2 = 2.00]	.445	.188	5.586	1	.018	.076	.814
Location	[Income_recod=1.00]	-.653	.296	4.881	1	.027	-1.232	-.074
	[Income_recod=2.00]	0 <sup>a</sup>	.	.	0	.	.	.
	[Cost_transport_recoded_Forlogit=1.00]	.646	.260	6.194	1	.013	.137	1.155
	[Cost_transport_recoded_Forlogit=2.00]	0 <sup>a</sup>	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

```
PLUM Overall_Decision BY Income_recod Cost_transport_recoded_Forlogit
/CRITERIA=CIN(95) DELTA(0) LCONVERGE(0) MXITER(100) MXSTEP(5) PCONVERGE(1.0E-6) SINGULAR(1.0E-8)
/LINK=LOGIT
/PRINT=FIT PARAMETER SUMMARY.
```

**PLUM - Ordinal Regression**

[DataSet1] C:\Users\ekerete\Desktop\Mandus wrk\mand's phd data original.sav

**Case Processing Summary**

		N	Marginal Percentage
Overall_Decision	Poor	66	27.4%
	Good	175	72.6%
Income recoded	below minimum wage	62	25.7%
	above minimum wage	179	74.3%
Cost_transport_recoded_Forlogit	No cost and 50-100 naira	101	41.9%
	?100-150 naira	140	58.1%
Valid		241	100.0%
Missing		77	
Total		318	

**Model Fitting Information**

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	36.991			
Final	16.548	20.443	2	.000

Link function: Logit.

**Goodness of Fit**

**Block 1: Method = Enter**

**Omnibus Tests of Model Coefficients**

Step	Chi-Square	df	Sig.
Step 1	80.062	10	.000
Block	80.062	10	.000
Model	80.062	10	.000

**Model Summary**

Step	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
1	214.816 <sup>a</sup>	.292	.406

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

**Hosmer and Lemeshow Test**

Step	Chi-Square	df	Sig.
1	11.209	8	.190

**Contingency Table for Hosmer and Lemeshow Test**

Step	Fetal_logit =	Fetal_logit = Alive and well		Fetal_logit = Death or apparent disability		Total
		Observed	Expected	Observed	Expected	
		1	23	21.996	0	
2	22	20.479	0	1.521	22	
3	20	21.612	4	2.388	24	
4	18	20.066	6	3.934	24	
5	21	20.112	5	5.888	26	
6	15	13.889	4	5.111	19	
7	11	13.794	10	7.206	21	
8	14	11.696	10	12.304	24	
9	5	7.631	18	15.369	23	
10	6	3.724	20	22.276	26	

**Classification Table<sup>a</sup>**

Step	Observed Fetal_logit	Predicted Fetal_logit		Percentage Correct
		Alive and well	Death or apparent disability	
Step 1	Alive and well	134	21	86.5
	Death or apparent disability	31	46	59.7

Information area

**PLUM - Ordinal Regression**

[DataSet1] C:\Users\ekerete\Desktop\Mandus wrk\mand's phd data original.sav

**Case Processing Summary**

		N	Marginal Percentage
Overall_Decision	Poor	66	27.4%
	Good	175	72.6%
Income recoded	below minimum wage	62	25.7%
	above minimum wage	179	74.3%
Cost_transport_recoded_F orlogit	No cost and 50-100 naira	101	41.9%
	?100-150 naira	140	58.1%
Valid		241	100.0%
Missing		77	
Total		318	

**Model Fitting Information**

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	36.991			
Final	16.548	20.443	2	.000

Link function: Logit.

**Goodness-of-Fit**

	Chi-Square	df	Sig.
Pearson	.038	1	.846
Deviance	.038	1	.846

Link function: Logit.

**Pseudo R-Square**

Cox and Snell	.081
Nagelkerke	.118
McFadden	.072

Link function: Logit.



---

**Frequencies**

[DataSet1] \\prs-store3.unv.wlv.ac.uk\home05\1321801\Profile\Desktop\mand's phd data original.sav

**Statistics**

ifeswhafactorscontributedtot  
helongwait

N	Valid	318
	Missing	0
Mean		3.7767
Std. Error of Mean		.09538
Std. Deviation		1.70094
Variance		2.893

FREQUENCIES VARIABLES=howlongdidyouhavetowaitbeforeseeingthedoctor  
/STATISTICS=STDDEV VARIANCE SEMEAN MEAN  
/ORDER=ANALYSIS.

**Frequencies**

[DataSet1] \\prs-store3.unv.wlv.ac.uk\home05\1321801\Profile\Desktop\mand's phd data original.sav

**Statistics**

howlongdidyouhavetowaitbefo  
reseeingthedoctor

N	Valid	318
	Missing	0
Mean		2.7799
Std. Error of Mean		.09441
Std. Deviation		1.68365
Variance		2.835

**howlongdidyouhavetowaitbeforeseeingthedoctor**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
.30mins	116	36.5	36.5	36.5
30-60mins	54	17.0	17.0	53.5
60-90mins	22	6.9	6.9	60.4
90-120mins	36	11.3	11.3	71.7
>120mins	90	28.3	28.3	100.0
Total	318	100.0	100.0	

---

**ifeswhafactorscontributedtothelongwait**

---



8.) Which is your ethnic group?

- a.) Igbo (1)
- b.) Hausa (2)
- c.) Yoruba (3)
- d.) Others (Please specify) (4)

*Calabio/efik, unwhol/ijaws, isheroni/ukwami*

9.) Place of residence?

- a.) Rural (1)
- b.) Urban (2)

10.) How many children do you have? ..... 2 .....

1-3 (1)

4-6 (2)

Above 6 (3)

11.) Have you ever lost any child?

- a.) Yes (1)
- b.) No (2)

12.) If yes, how many? ..... 1 .....

1-2 (1)  
3-4 (2)  
Above 4 (3)

13.) How many times have you been pregnant? ..... 3 .....

14.) Have you ever lost any pregnancy?

- a.) Yes (1)
- b.) No (2)

15.) If yes, how many? ..... / .....

1-2 (1)  
3-4 (2)  
Above 4 (3)

16.) Booking Status for antenatal care (ANC)

- a.) Booked (1)
- b.) Unbooked (2)

17.) If booked, at what trimester?

- a.) 1<sup>st</sup> trimester (1)

b) 2<sup>nd</sup> trimester (2)

c.) 3<sup>rd</sup> trimester (3)

18.) Where you frequent at ANC?

a.) Yes (1)

b) No (2)

19.) If no, why.....? I no get time because of my sales business and also because for me to go to the hospital I must tell my husband & his mother so that they can let me go.

**Section B: Partner's Socio-Demographic Information**

1.) How old was your spouse /partner as at his last birthday? 45

2.) What is his highest educational attainment? (A) No formal schooling (b) Primary (c) Secondary (d) Tertiary (e) Others (please specify)-----  
-----

3.) What is your spouse/partner's religion? A Christianity (b) Islam (c) Traditional (d) Free thinker (e) Others (please specify) -----

4.) What is your spouse/partner's occupation? A) Petty trading (b) Civil servant (c) Artisanship (d) Unemployed (e) Others (please specify).....

5.) What would you say is your husband's/partner's estimated income per month? 42,000

6.) What is your spouse place of residence?

a.) Urban

b) Rural

**Section C: Factors Influencing Decision to Seek Care**

1.) Where did you go for the care of this pregnancy?

- a.) Stayed at Home
- b.) Mission House
- c.) Traditional Birth Attendant's
- d.) Health Centre
- e.) Private Clinic
- f.) General Hospital
- g.) Others (specify)

Which of the following do you consider as problems requiring urgent medical attention?

Signal	Yes	No	I don't know
2.) Bleeding during Pregnancy	✓		
3.) Convulsion during pregnancy	✓		
4.) Vaginal (Vulval) itching during pregnancy			✓
5.) Onset of contractions	✓		
6.) Vaginal loss of fluid that is not urine before term	✓		
7.) Persistent headaches during pregnancy		✓	

8.) Are there any cultural or religious factors, which prohibit your coming to the hospital?

a.)  Yes

b.) No

9.) If yes, what are these factors? (Explain)

.....  
I need permission from my husband or my mother-in-law  
before I can go to hospital.  
.....

10.) How did you overcome these factors?

.....  
My Mother came to plead with my husband and his mother  
because she was afraid that if I don't go to the hospital for  
A/C that my last experience of losing my baby could happen.  
That child died because he was anaemic and we didn't know.  
.....

11.) Did you have to obtain any other person's consent aside from your husband before coming to the hospital?

a.)  Yes

b.) No

12.) If yes, who are these persons? (Please list)

.....  
mother-in-law  
.....  
.....

What other places did you go to before coming to this Hospital? (List in chronological order stating how much time you spent at each place and the reasons for leaving)

Place visited for care	Time spent	Reason(s) for leaving
13) private clinic	14) lack of manpower	15) 3 weeks
16)	17)	18)
19)	20)	21)
22)	23)	24)
25)	26)	27)

28.) What was the problem that brought you to this hospital?

.....  
 ..... Bleeding .....  
 .....  
 .....

29.) How long had the problem persisted before you came to this Hospital?

.....  
 ..... One day .....  
 .....  
 .....

30.) Were you referred to this hospital?

a.) Yes

b.)  No

31.) If yes, from where were you referred?

a.) Traditional Birth Attendant's

b.) Mission house

c.) Private Clinic

d.) Health Centre

e.) General Hospital

f.) Others (Specify).....

g.) Not applicable

32.) Were you reluctant to come to the Hospital?

a.)  Yes

b.) No

If yes, what factors contributed to your reluctance? (Tick all that is appropriate)

33.) Fear of operation

34.) Attitude of staff

35.) Cost of services

36.)  Lack of Husband's consent

37.) I did not want to be attended to by a male attendant

38.) Others (Specify).....

**SECTION D: Barriers to Reaching the Hospital**

1.) What is the name of the community from which you came to this hospital?

.....  
..... Obiaruku .....  
.....



2.) What was your means of transportation between that community and this hospital? (Check all that apply)

- a.) On-foot
- b.) Public Transport
- c.) Private Vehicle
- d.) Ambulance service
- e.) Others (specify).....

3.) How long did it take to travel from that community to this hospital?

..... 1:30 minutes .....

4.) How much did it cost to travel from that community to this hospital?

..... \$250 .....

5.) Did you encounter any difficulties associated with transportation in coming to this hospital?

- a.) Yes
- b.) No

If yes, which one(s) (Tick all that are appropriate)

- 6.) Too far a distance
- 7.) Lack of ready transportation
- 8.) Lack of transport fare
- 9.) Problems of bad road
- 10.) Others (please specify)  
.....

11.) Did you call the hospital to seek medical advice or inform them of your coming?

- a.) Yes
- b.) No

12.) If no, why not?

- a.) I had no access to a telephone
- b.) My phone was not working
- c.) I did not know the hospital's telephone number
- d.) Others (specify)

.....

**SECTION E: Factors within the Health Facility**

1.) Did you have to wait for long before seeing a doctor?

- a.) Yes
- b.) No

2.) If yes, what factors contributed to the long wait?

- a.) The doctor was not on seat
- b.) Long queue of patients waiting to see the doctor
- c.) I had no money for registration
- d.)

Others

(specify).....

3.) How long did you have to wait before seeing a doctor? ..... *3 hours plus*

4.) Did you have to wait for long before obtaining drugs and consumables?

- a.) Yes
- b.) No

5.) If yes, what was responsible for this delay?

- a.) The product were not available
- b.) I had to go a long distance to obtain the product
- c.) I had to go and get money for the products
- d.) Long queue of patients waiting to obtain drugs

e.) Others (specify)

.....

6.) How long after seeing the doctor did you obtain drugs and consumables?

..... may be 1 hour .....

7.) Did you have to do laboratory test(s) before receiving treatment?

a.) Yes

b.)  No

8.) If yes, was there a delay in doing the test(s)?

a.) Yes

b.) No

9.) If yes, what was responsible for this delay?

a.) The test equipment was not available

b.) I had to go a long distance to do the test(s)

c.) I had to go and find money for the test(s)

d.) Long queue of patients waiting to do test(s)

e.) Others (specify).....

10.) How long did it take to have the test(s) done? .....

11.) Did you have any other factors delaying access to treatment?

a.)  Yes

b.) No

12.) If yes, what were these factors?

.....  
Too many patients waiting only one doctor  
.....  
.....

13.) How long after the obstetric problem had started did you finally receive treatment?

..... one day (24 hours) .....

**SECTION F: Outcomes**

1.) Indication for emergency obstetric care  
..... (bleeding) .....

2.) Maternal outcomes

- a.) Alive and well
- b.) Clinically apparent long term disability
- c.) Clinically apparent short disability

3.) Fetal outcome

- a.) Alive and well
- b.) Clinically apparent long term complication
- c.) Fetal deaths

## APPENDIX XVI: COMPLETED CONSENT FORM


### Consent Form

To Investigate Factors Influencing Access to Emergency Obstetric (EmoC) Care Amongst Women Seen at ~~the health facility~~ Asaba, Delta State, Nigeria

Name of researcher: Mandu Ekpenyong

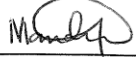
Please tick boxes and sign below.

1. I confirm that I have read and understood the information sheet  
Provided for the above study.
2. I have had the opportunity to ask questions and any questions  
have been answered to my satisfaction.
3. I understand that my participation is completely voluntary and  
i am free to withdraw at any time.
4. I understand that the researcher may wish to publish this study  
and any results found, for which I give my permission.
5. I agree for the interview to be tape recorded and for the data to  
be used for the purpose of this study.

Signed:  Date: 12 / 03 / 2015

Print Name: ~~Participant~~

I have explained the nature of the study to the participant and have answered any questions that the volunteer had relating to the study.

Researcher:  Date: 12 / 03 / 2015

Print Name: Mandu Ekpenyong

**Appendix XVII: SUMMARY OF SOME REVIEWED STUDIES ON  
FACTORS AFFECTING MATERNAL HEALTHCARE SERVICES  
UTILISATION**

<b>S/ N O</b>	<b>Author/ye ar/ Study area</b>	<b>Aim of study</b>	<b>Type of study/ Design</b>	<b>Sample size</b>	<b>Data collection method</b>	<b>Findings</b>
1.	Elo (1992)  Peru  (Africa)  Rural	To test the hypothesis that formal education of women, place of residence, household social economic status & access to healthcare services influence the use of maternal services	Quantitative	Not mentioned	Questionnaire	There was lack of access to health services in the rural areas. There was a positive effect on maternal schooling on the use of maternal services
2.	Chakraborty et al. (2002)  Bangladesh	To examine Factors associated with utilisation of maternal health care services (MHCS)	Quantitative Survey	1020 married pregnant women	Questionnaire	-Family size, Education, Husband's, occupation, Employment, Parity, Economic status, Access to health care facilities
3.	Simkhada, Porter and Van Teijlingen (2010)  Nepal	The role of mothers-in-law in antenatal care decision-making in Nepal	A qualitative Study	50 participants (30 antenatal mothers, 10 husbands, 10 mother in-laws.	interviews	Mother in-laws and illiteracy negatively affect utilization of FANC,

4.	Byamugisha et al. (2011) Uganda	Male partner antenatal attendance and HIV testing in eastern Uganda: a randomized facility-based intervention trial	Randomized clinical trial	1060 new antenatal attendees (530 intervention and 530 control)	Eligible pregnant women were randomly assigned to the intervention or non-intervention groups using a randomization sequence, which was computer generated utilizing a random sequence generator that employed a simple randomization procedure	male involvement positively affects utilization of antenatal care
5.	Lee et al (2009) Taiwan	Prenatal examination utilization and its determinants for immigrant women in Taiwan: an exploratory study	Cross-sectional exploratory study	101 pregnant Vietnamese women living in Taiwan	Interviews and Questionnaire	Spouses and mothers-in-law influenced decision about where and whether to go for antenatal care, loneliness as well travel distance to health facility also affects utilization

						of ANC
6.	Mwaniki et al.(2002) Kenya	To determine the utilisation of antenatal and maternity services in four rural health centres in Mbeere district, Kenya.	cross sectional descriptive study	sample of 200 mothers' maternity services in four rural health centres	Questionnaire	The study revealed that utilisation of health facilities was significantly influenced by the number of children a woman had and the distance to the health facilities.
7.	Adamu (2011) Nigeria	To determine which socio-demographic factors predict utilisation of maternal healthcare services in the different regions of Nigeria.	analytical ecological study design	33385 women	Questionnaire	Education, family wealth index and place of residence are strong predictors of service utilisation in all the regions.
8.	Mathole et al. (2004) Zimbabwe	A qualitative study of women's Perspectives of antenatal care in a rural area of Zimbabwe.	Qualitative methods	44 women and 24 men participated in the study.	Focus group discussion and Interview	Long distance and cultural beliefs had great negative influence on FANC utilization
9.	Mullick et al. (2005) South Africa	Involving men in maternity care: health service delivery issues	Prospective cohort study	2 082 women and 584 male	2082 participants were interviewed with a structured Questionnaire	Found that male involvement in antenatal care was acceptable and feasible
10.	Chiwaula (2011) Malawi	Factors Associated with Late Initiation of Antenatal Care (ANC) among Women of Lilongwe	Cross-sectional study, using both Qualitative and	384 respondents	Questionnaire and focus group discussion	Lack of knowledge of proper timing to initiate ANC, cultural beliefs and unplanned pregnancies were the major



			quantitative methods			factors
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