

**Factors influencing access and utilisation of antenatal care
services by Lemu community in Niger state, Nigeria**

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Dissertation submitted in fulfilment of the requirements for the Master's
Degree in Health Sciences in Nursing at the Durban University of Technology

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Date : January 2018

DECLARATION

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or for any other purpose.

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DEDICATION

I dedicate this dissertation to my children. They have been my source of inspiration, engine of encouragement, and the secret of my achievement.

Matthew 19 v 26, Mark 10 v 27: All things are possible with God.

ACKNOWLEDGEMENTS

My appreciation goes to my Lord and Saviour Jesus Christ, who by his grace and will has inspired me to start and complete this research project. For the strength, endurance, wisdom and determination and for taking me to the heights that I could never have imagined.

Special thanks to my supervisor, Dr T. S. P. Ngxongo whose intellectual and academic guidance enabled me to organise and make sense of this study. Your experience and expertise has made this dissertation possible.

My sincere thanks to my co-supervisor Ms B.T.E. Kumalo, for her unreserved guidance and suggestions from the proposal stage right through to the end stage.

My brother Dr Emmanuel Tsado, for spurring me on to achieve my dreams and for being a pillar of comfort in times of discouragement.

Thanks to the research sites Rural Health Centre, Yetu and Yeboji private clinics in Lemu, Gbako Local Government Area, for granting me permission to conduct the study without which the research would not have been possible.

Sunday Omoniyi, Mr Angus, Family Prayer Group, Mr. and Mrs Olonade and all other friends who contributed to the success of this research physically, intellectually and spiritually.

ABSTRACT

Introduction: Antenatal care (ANC) is the health care that is given to pregnant women throughout pregnancy. With ANC services, pregnant women are able to access a wide range of interventions which enhance the possibility of procreative health care.

Aim of the study: The aim of the study was to explore and describe the factors that influence the access to and utilisation of ANC services by pregnant women from the Lemu community in Gbako Local Government, Niger state, Nigeria. The study aimed to answer the following research questions: 1) How are the ANC services accessed by pregnant women from the Lemu community? 2) How are the ANC services utilised by pregnant women from the Lemu community? and 3) What are the factors that influence utilisation of ANC services by the pregnant women from the Lemu community?

Methodology: A descriptive qualitative research design was used to collect data using in-depth semi-structured interviews. The study setting was Lemu community area in Gbako Local Government Area of Niger state in Nigeria. Andersen and Newman's (1973) Framework of Health Services Utilisation was used as a theoretical framework that guided the study. A series of interviews were conducted with 10 health care workers and 12 pregnant women between October and November 2017. Thematic data analysis was utilised and data from the two data sets were triangulated.

Findings: There was limited availability of the ANC services in the Lemu community area which accounted for a number of challenges that were faced by the pregnant women with regards to access to and utilisation of ANC services. Limited availability of ANC service accounted for poor utilisation of ANC services for some women. For other women, poor utilisation of services resulted from cultural and traditional beliefs and dissatisfaction with existing services. The factors that were identified as influencing access and utilisation of ANC services included: travelling to the clinic, satisfaction with existing service, financial issues, community awareness and traditional and cultural beliefs.

Conclusion: The Lemu community area, similar to other rural communities, still has challenges regarding access to and utilisation of ANC services. Although making services available could be the key to solving this problem, attention also needs to be

paid to traditional and cultural beliefs of the community in this area because of the influence of these on utilisation of ANC services.

Recommendations: The following recommendations were made: The policy makers and other responsible authorities should periodically review the existing policies related to ANC service delivery and the training of midwives to ensure that these are aligned to the needs of the community. Policies for service delivery should take cognisance of limited resources. There is a need to strengthen access to ANC services by finding ways of increasing the number of local ANC services and bringing the services closer to the people. Strategies to increase satisfaction of the clients with ANC services should be instituted.

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GLOSSARY OF TERMS

Access to antenatal care: Health care access is defined as being able to access a service, a provider, or an institution, whereby there is an opportunity for consumers of health care and communities to be able to use appropriate services with regards to their health needs (Levesque, Harris and Russell 2013: 18). Thus, access to antenatal care refers to the use of available services as a result of the knowledge that those services are available.

Accoucheurs is a man who assists women in childbirth; a male midwife or an obstetrician (The Free Dictionary n.d.). In the context of this study the term is used to refer to male midwives.

Antenatal care (ANC) is an umbrella term used to describe the health care procedures and care rendered during pregnancy (Ekabua, Ekabua and Njoku 2011).

Hausa is a Chadic language with the largest number of speakers in Nigeria, spoken as a first language by more than 70 million people, and as a second language by another 40 to 50 million or more.

Health facility: Any location where health care is provided. It ranges from small clinics and doctor's offices to urgent care centres and large hospitals with elaborate emergency rooms and trauma centres. Health facilities may be owned and operated by the government, non-governmental organisations, profit businesses and in some cases by individuals (Ahmadi-Javid, Seyedi and Syam 2017: 223-263).

Igbo is the principal native language of the Igbo people, an ethnic group of south eastern Nigeria.

Midwife is a person, typically a woman who is trained and registered to assist in childbirth. The International Confederation of Midwives (2017) defines a midwife as being a person who has successfully completed a midwifery education programme that is based on the essential competencies for basic midwifery practice and which is recognised in the country where it is located; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery; and who demonstrates competency in the practice of midwifery.

Nupe is a group of people found in Nigeria speaking a specific language as their mother tongue or their first language also referred to as Nupe. The Nupes call themselves Nupenchi (singular) Nupencihzhi (plural). They are mostly found in Niger and Kwara states of Nigeria.

Traditional Birth Attendant (TBA) also known as traditional midwife, community midwife or lay midwife is a pregnancy and childbirth care provider who provides childbirth services by virtue of experience in the community without any formal training and or qualification.

Trek is a long arduous journey, especially one made by foot (Cambridge Advance Learners Dictionary and Thesaurus 2018). Therefore, to trek is a walk that is long and difficult or makes you feel tired.

Utilisation of antenatal care means using the services provided to pregnant women at healthcare centres. In this study utilisation of ANC means the services render to pregnant women from the time of confirmation of pregnancy until delivery (The Free Dictionary n.d.).

LIST OF ACRONYMS

Acronym	Full term
ANC	Antenatal care
HIV	Human Immunodeficiency Virus
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
NC	North Central
NE	North East
NW	North West
SDGs	Sustainable Development Goals
SE	South East
SS	South South
SW	South West
WHO	World Health Organisation

CHAPTER OUTLINE

CHAPTER	TITLE	CONTENTS
Chapter 1	Overview of the study	Introduction and background, purpose and objectives of the study and the need to describe access to and utilisation of ANC services
Chapter 2	Literature review	Literature review of ANC services, access, and utilisation of ANC globally, Africa, Nigeria and Lemu community.
Chapter 3	The theoretical framework guiding the study	Presentation of the theoretical framework that guided the study and its application in the current study
Chapter 4	Research methodology	The research design and methodology, study setting, orientation of the prospective participants about the study, sample and sampling technique, data collection tools and storage, data analysis, data interpretation and triangulation, research rigor and ethical considerations.
Chapter 5	Presentation of the findings	Presentation and analysis of the findings which are supported by verbatim statements from the participants. The themes and sub-themes that emerged from the analysis are presented.
Chapter 6	Discussion of the findings	The findings of the study are discussed based on the study aims and objectives, guided by the theoretical framework and related literature
Chapter 7	Conclusions, limitations and recommendations of the study	Summary of the findings, and presentation of the conclusions, limitations and recommendations of the study.

CHAPTER 1 OVERVIEW OF THE STUDY

1.1 INTRODUCTION

This chapter focuses on the background around utilisation of antenatal care (ANC) services in Nigeria, the problems experienced by communities in accessing these services and the findings by other researchers regarding contributory factors to these problems. The chapter also gives a description of the research problem, research questions, aim and objectives, and the significance of the study in order to highlight the need and importance of conducting the current study.

1.2 BACKGROUND

The different definitions of ANC by various authors reflect the importance of this health care service for the mother and her unborn child. Harrington (2014) defines ANC as the clinical assessment of mother and foetus during pregnancy for the purpose of obtaining the best possible outcome for the mother and child. The United States Agency for International Development defines ANC as the professional health care a woman receives throughout her pregnancy that is important in helping to ensure that women and new born babies survive pregnancy and childbirth (Villar and Bergsjö 1997: 1-14). Thus, ANC remains a mixture of both art and science, with advantages in medical technology now allowing more focus on the specific requirements of the mother and foetus with an increasing drive towards the re-appraisal of current practices.

Nigeria is one of the most highly populated countries in West Africa, and is ranked as the seventh largest country in the world (United Nations 2015: 23). It has a population of 186,343,551 people based on the latest United Nations estimate (United Nations 2015: 23) out of which 91,668,667 are classified as urban and 94,791,366 as rural. A total of 39,171,087 of the population are women of reproductive age (15-49 years) (Nigeria National Population Commission 2006). While Nigeria's rate of natural growth was 2.5% in 2014, the world's rate was

1.2%. This means that, compared to the global rate, the Nigerian population is growing more rapidly. It is estimated that by 2020 Nigeria will be the third most populous country in the world following India and China (United Nations 2015: 24). While it is estimated that 529,000 women die each year worldwide from complications of pregnancy and childbirth (Zahr and Wardlaw 2004: 13), in Nigeria, it is estimated that 59,000 maternal deaths occur annually as a result of pregnancy, delivery and post-delivery complications (World Health Organisation [WHO] et al. 2015: 8).

Nigeria is a varied country with numerous ethnic collections and diverse religious knowledge. It is stated that approximately 374 recognisable ethnic clusters exist (Nigeria Federal Ministry of Health 2008: xxvi) and the principal religions are Christianity and Islam with a small number of Traditionalist religions. Nigeria is divided into six geopolitical zones: North Central (NC), North East (NE), North West (NW), South East (SE), South South (SS), and South West (SW).

A recent study in Nigeria conducted by Adamu (2011: 3) highlighted that the northern and the southern regions in Nigeria have definite dissimilar socio-economic, cultural and religious practices. This may possibly account for the variances noted in the utilisation of ANC services throughout the country. For example, the proportions of deliveries attended to by trained professionals ranges from a high of 81.8% in the SE to a low of 9.8% in the NW. Similarly, 90.1% of women in the NW, NE, and NC are more likely to give birth at home, compared with 22.5% in the SW (Nigeria Federal Ministry of Health 2008: xxvi).

Great gaps exist in educational attainment among the different states of the country; with the zones in the south showing greater heights of education than people in the north. About 70% of women and 50% of the men have no education in the north compared with 15% of women and 8% of men in the south. The SW has the highest proportion of women (16%) and men (21%) who have completed more than a secondary level of education (Nigeria Federal Ministry of Health 2008: 31). As can be expected, more women in the southern region are profitably employed, and are more likely to be in professional, technical, or managerial occupations. This in turn places them in greater wealth quintiles compared with their northern colleagues.

Cultural and religious norms, such as early marriages and high parity among women and girls in the northern zones contribute to the poorer use of ANC services in that region. Practices which place women in the care of their husbands or male relatives is more common in the northern zones than southern zones. This outcome leads to loss of independence for women and poor decision making which affects the use of ANC services. It has also been shown that the NE zone has the highest maternal mortality rate of 1,549 per 100,000 live births, compared with 165 per 100,000 live births in the SW, tenfold dissimilarity (Nigeria Federal Ministry of Health 2005).

A recent study in Nigeria by Umar and Bawa (2015: 36) shows that Nigeria had the highest maternal mortality rate (MMR) in the world during 2010 and 2012 (WHO 2013). Presently Nigeria has an MMR of 814 per 100,000 live births (WHO et. al. 2015). These statistics show that the country exceeded war torn and/or politically unbalanced countries such as Sierra Leone (890, per 100,000 live births) and Chad (1,100 per 100,000 live births). The poor maternal outcome might not be unconnected with the low utilisation of maternal health care services. For example, approximately half of the predictable eight million yearly number of pregnancies had not received ANC in 2010, and among those that had received ANC, about 45% made less than the minimum four ANC visits as recommended by the WHO (WHO 2013). Women from the north zone are more likely to die due to pregnancy related complications (Nigeria National Population Commission and International Calverton Funding Macro 2009: 75).

Most causes of maternal mortality, such as eclampsia, anaemia, sepsis, hypertension and diabetes in pregnancy can be prevented or controlled with appropriate utilisation of ANC services (WHO 2009: 36). The recommended ANC visits for a woman with a low risk pregnancy in Nigeria are as follows:

- The first visit should occur by the end of 16 weeks
- The second visit between 24-28 weeks
- The third visit at 32 weeks and fourth visit at 36 weeks of gestation

Women with health problems, distinctive needs or ailments need supplementary visits (Harrington 2014). The ANC approach used in Nigeria is as recommended by the WHO which supports safe pregnancy, calling for minimum of four ANC

visits for women with no health problems. The WHO recommends that pregnant women from developing and underdeveloped countries should attend ANC at least four times, starting from the first trimester (Nigeria National Population Commission and Federal Ministry of Health 2003). This restructured method is called focused antenatal care. It accentuates excellence of care through each visit (Nigeria Federal Ministry of Health 2008: xxvii). However, despite these recommendations, utilisation of ANC services is stagnant in certain parts of the country (Babalola and Fatusi 2009: 1). Various factors could be responsible for this. Okoronkwo et al. (2016: 52) discovered that the level of education and the age of the mother have a significant relationship with the use of health facilities and the number of ANC visit.

1.3 PROBLEM STATEMENT

Zanconato et al. (2006: 15) argued that ANC services are disadvantaged in Africa and Asia's less developed countries. Nigeria, which is one of the African continent's less developed countries, faces the problem of low usage of ANC. This is evident from Nigeria's Demographic and Health Survey of 2008 where it is reported that in the period of five years prior to the survey approximately 36% of women in Nigeria did not receive ANC services for their last delivery (Nigeria National Population Commission and International Calverton Funding Macro 2009: 75). Adam et al. (2005: 9) and Babalola and Fatusi (2009: 1) attest to this stating that usage of ANC services remains significantly low in Nigeria especially in rural areas. Fagbamigbe and Idemudia (2017:17) attest that ANC utilization is lower in Nigeria than the African average.

The problem of low utilisation of ANC services and various other difficulties in the maternal and child care services in Nigeria is compounded by the fact that the country does not have well-structured strategies at the national level to decrease maternal mortality (Khan et al. 2006; Graham 2002; Fortney 2005). According to these authors, little political support for maternal health services including safe motherhood initiative is available from the national level in Nigeria, unlike Kenya which through political support for maternal health services including safe

motherhood initiative was able to reduce their maternal mortality rate in 1987. Shiffman and Okonofua (2007: 130) attribute this to insufficient and unsatisfactory supply of financial resources towards safe motherhood in Nigeria.

A number of pregnant women give birth outside the healthcare centers and are attended to by traditional birth attendants who do not have scientific medical knowledge about healthcare systems and procedures. This potentially contributes to poor pregnancy outcomes and persistently increases maternal, perinatal mortality and morbidity rates in the area. It is thus of importance that investigations are made with regard to the utilisation of ANC services, knowledge of the pregnant women regarding the ANC services and the factors that influence the access to and utilisation of these services by pregnant women from the Lemu community.

1.4 RESEARCH QUESTIONS

The study aimed to answer the following research questions:

- How are the ANC services accessed by pregnant women from the Lemu community?
- How are the ANC services utilised by pregnant women from the Lemu community?
- What are the factors that influence utilisation of ANC services by the pregnant women from the Lemu community?

1.5 RESEARCH AIM

The aim of the study was to explore and describe the factors that influence the access to and utilisation of ANC services by pregnant women from the Lemu community in Niger State, Nigeria.

1.6 OBJECTIVES

The objectives of the study were to:

- Describe access of ANC services by the pregnant women from the Lemu community.
- Describe utilisation of ANC services by pregnant women from the Lemu community.
- Determine and describe the factors that influence the utilisation of ANC services by the pregnant women from the Lemu community.

1.7 SIGNIFICANCE OF THE STUDY

This research will help health care professionals to know the factors that influence access to and utilisation of ANC services. The findings and recommendation from the study can be used by policy makers at various government levels of Niger state and Gbako Local Government Area to review existing policies and develop and implement new policies to facilitate access to and utilisation of ANC services in Lemu community. This would ultimately reduce perinatal morbidity and mortality rate in the Lemu community.

1.8 CHAPTER SUMMARY

This chapter presented an overview of the study. The background to the study, problem statement, research questions, aim, objectives and the significance of the study were presented with the aim of creating an understanding of the need to conduct the study. The next chapter will present the literature review.

CHAPTER 2 LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 1 focused on the background to the utilisation of ANC services in Nigeria and highlighted the problems experienced by communities in accessing these services. The first chapter also gave a description of the research problem, research questions, aim, objectives, and the significance of the study as an overview of the study. Chapter 2 presents a literature review covering peer and non-peer reviewed literature on access and utilisation of ANC services globally and in African countries such as Nigeria, South Africa and Ghana to name a few. The idea is to gain a broader perspective regarding access to and utilisation of ANC services and strategies used and or recommended by various authors all of which guided the structure of this research, interpretation of the findings and recommendations arising from the study.

2.2 STRATEGIES USED TO SEARCH THE LITERATURE

The use of libraries is usually an excellent starting point for a literature search as it allows for the gathering of information from a variety of sources. Therefore, the Durban University of Technology (DUT) library was used as a starting point to search for books and journals that related to the research methodology and the topics of access to and utilisation of ANC services. Other alternative information sources included free access to a wide range of online articles (Petre and Rugg 2010: 75). This allowed access to a broad range of books, the majority of which were not available in the DUT library, and a wide range of peer reviewed articles. The researcher ensured that she possessed essential skills to perform a comprehensive search of the available literature (Wentz 2013: 87) by familiarising herself with a range of health-related databases and seeking guidance from the librarians.

A set of keywords was decided upon before engaging in the searches. In order to assemble the group of keywords that would be used in the search, a mind map was drawn so that core elements and arguments could be highlighted (Figure 2.1). The search terms included words and/or terms like ANC, access, utilisation,

pregnancy, Africa, African countries experiences of women etc. Beel and Langer (2011: 465) emphasize that mind maps are well suited to structure document collections because the structure of the mind map is similar to an outline, so mind maps are also used to draft documents. The creation of a mind map to aid in the formulation of keywords helped to identify key search terms. Identifying keywords for the subject before initiating any literature search ensured that the correct results were obtained. The search terms were initially used individually, and then combined using Boolean operators AND, OR and NOT, which are the three most widely used to expand or delimit the search (Polit and Beck 2012: 99). The primary focus was on searching various electronic databases including:

- The Cumulative Index of Nursing & Allied Health Literature (CINAHL)
- Host search engine focusing on nursing journals (EBSCO)
- Medical literature online (MEDLINE)
- PubMed-Public/Publisher Medline databases

There was optimal use of databases utilised for local and international input through the interlibrary loan system in addition to DUT library resources and institutional repository. Interlibrary loans enabled the researcher to obtain documentary and electronic information and data available from other academic institutions and organizations, to which the DUT library is affiliated. The archives, databases and websites of other local and international sources of information, such as reputable research institutions and organizations, were also utilised. Google Scholar was the main search engine used to retrieve documents and publications related to the conceptualisation of access to and utilisation of ANC services.

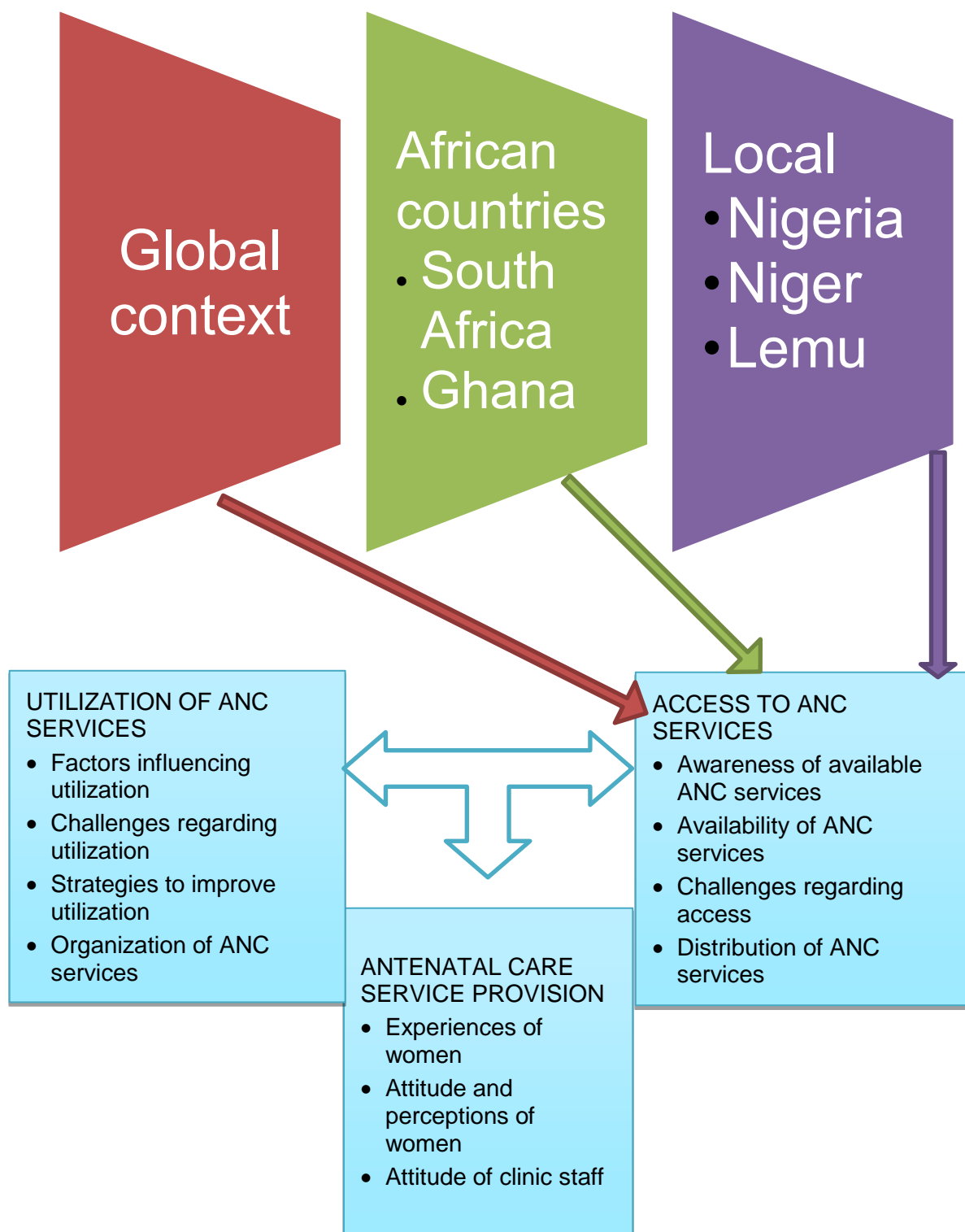


Figure 2.1: Mind map and search terms used for literature search

2.3 PROVISION OF ANTENATAL CARE SERVICES

2.3.1 The global view regarding provision of antenatal care services

Antenatal care, defined as the care provided to a woman during her pregnancy, is an essential component of reproductive health care. ANC can serve as a platform for the delivery of highly effective health interventions that can reduce preventable maternal and new born deaths (United Nations 2014; United States Agency for International Development 2015). ANC services offer pregnant women an entry point to the health care system, providing appropriate screening, intervention and treatment throughout pregnancy and encouraging women to seek a skilled birth attendant for their delivery (Lawn and Kerber 2006: 80-90).

The idea of ANC was initiated in Europe in the early decades of the 20th century (Saad-Haddad et al. 2016: 1). The Western ANC model and the recommendations established at that time formed the basis for ANC packages used worldwide. According to this model, the ANC visits were to begin at 16 weeks of gestation, followed by visits at 24 and 28 weeks, then fortnightly (two weekly) visits until 36 weeks, and thereafter weekly visits until delivery (Dowswell et al. 2015: 10). This 'Western model' was designed for developed countries but was also adopted by developing countries without taking into consideration the related factors which were significant in low-resource locations (Villar et al. 2002: 37).

On realisation that the Western models were not working well for developing countries, the WHO established a new model of ANC, consisting of a reduced number of ANC visits and stipulating that evidence-based interventions be provided at each visit. These included: assessment of the pregnant woman's general health; screening for pre-eclampsia, anaemia, syphilis, and human immunodeficiency virus (HIV); provision of preventive measures such as haematinics, tetanus toxoid immunisation, calcium supplements, anti-malaria precautions and advice on labour or danger signs; self-care, nutrition, and substance abuse; and counselling on the importance of family planning (WHO 2015: 184).

The model by the WHO recommends a 'focused' or 'goal-oriented' ANC approach. Several authors discovered that the pregnancy outcomes were alike for the women who accessed the four visits by the new model and those who obtained standard ANC with extra visits as detailed in the Western model (Villar et al. 2001; Villar et al. 2002). These findings encouraged the adoption of the new model by the developing countries.

2.3.2 Provision of antenatal care services in African countries

In 2003, Rwanda approved the WHO model of four ANC visits, to commence in early pregnancy (Rwanda Ministry of Health 2003: 14). ANC is delivered both at public health centres and private clinics by a trained health worker, most frequently a nurse/midwife. The visits comprise tetanus toxoid vaccination, precautionary management of anaemia and pre-eclampsia, providing of health information connected to risk signs through pregnancy and prevention of mother-to-child transmission of HIV (Rwanda National Institute of Statistics 2012).

In South Africa, ANC services for pregnant women are free in public health facilities. Yet, research indicates that most women from rural areas incline to attend ANC late in pregnancy and at times they fail to go back for return visits (Myre and Harrison 2003: 268-272). Matyukira (2014) reported that the South African Department of Health has developed strategies for maternal care (South Africa Department of Health 2007; Matyukira 2014). These strategies emphasize that a woman who suspects that she is pregnant must visit an ANC to check her pregnancy and receive ANC. Early booking is recommended, so that the health staff can recognise any risk factors in pregnancy and deal with them on time before adversely affecting the mother and/or the baby (South Africa Department of Health 2007; Matyukira 2014). The strategies that were established for care guide doctors and midwives who offer obstetric, surgical and anaesthetic services for pregnant women at different clinics within South Africa specifically health centres and hospitals where access to professional facilities remains inadequate (South Africa Department of Health 2007: 8).

The ANC focuses on promotion of health through prevention and education. The primary health care approach is the underlying philosophy for the restructuring of

the health system. It embodies the concept of community development, and is based on full community participation in the planning, provision, control and monitoring of services. It aims to reduce inequality in access to health services, especially in the rural areas and deprived communities" (South Africa Department of Health 2010: 3).

2.3.3 Provision of antenatal care services in Nigeria

Two nationally representative surveys were conducted recently in Nigeria, namely, Nigeria Demographic and Health Survey in 2013 and National Aids and Reproductive Household Survey in 2012 (Nigeria Federal Ministry of Health 2013). The survey showed that the proportion of pregnant women who had not attended any ANC services in Nigeria was 33.9% and 34.9% respectively. According to the survey in 2013 only 60.9% women of child bearing age who had live births in the five years preceding the survey received ANC services from a trained skilled ANC provider; midwives, health care workers and doctors, 51% was reported to have made four or more visit to received ANC services (Nigeria National Population Commission and International Calverton Fund 2014; Nigeria Demographic and Health Survey 2013).

The ANC policy for services in Nigeria follows the latest WHO approach to promote safe pregnancies, recommending four ANC visit for women without complications (Nigeria Federal Ministry of Health 2008: 125). Several health care centres are in a transitioning phase the from traditional approach to the focused ANC approach (Nigeria Federal Ministry of Health 2008: 125). The new schedule is as follows:

- First visit should occur by the end of 16 weeks of pregnancy
- Second visit should be between 24-28 weeks of pregnancy
- Third visit should be at 32 weeks
- Fourth visit should be at 36 weeks

However, women with complications, special needs, or conditions beyond the scope of basic care may require more visits (Nigeria Federal Ministry of Health 2008: 125). According to Duru (2015) services to be rendered at each ANC visit should be as follows:

- **At first visit:** The first visit otherwise known as the booking visit ideally is at first trimester of pregnancy. It includes taking of history, weight and height, screening and treatment for anaemia, screening for risk factors and medical conditions that can be addressed early in pregnancy, to initiate prophylactics haematinics like fersolate, vitamin C, and folic acid, as well as the prescription of Tetanus toxoid 0.5mls start dose, planned individualised antenatal care and delivery. Investigations like PCV, blood group, genotype, fasting blood sugar, urinalysis, screen for HIV and for possible obstetrics scan.
- **During second visit:** Screen for anaemia, obstetrics scan and to give anti-malaria prophylaxis.
- **During third visit:** Screen for pre-eclampsia, multiple pregnancy, anaemia, give anti-malaria prophylaxis and review delivery plan.
- **During fourth visit:** Screen for anaemia, identify foetal lie and presentation, pelvis assessment, and update individual delivery plan.

2.3.4 Provision of antenatal care services for Lemu community

Lemu is the community area where the study was conducted. It is a community area in Gbako Local Government Area of Niger state in Nigeria. The WHO recommendation of four ANC visits as recommended by Niger state Government is used to provide ANC services (Nigeria. Niger State Ministry of Health 2010: 17).

Although free maternal and child healthcare packages have been implemented in various parts of Nigeria to solve the problem of financial constraints in access to healthcare facilities, Niger state and Lemu community in particular are yet to benefit from such packages. There was hardly any literature identified regarding provision of ANC services in the Lemu community area. This finding of a lack of literature made it necessary that this study be conducted in Lemu.

2.4 ACCESS TO ANTENATAL CARE SERVICES

2.4.1 The global context regarding access to antenatal care services

Millennium Development Goal (MDG) No. 5 was to improve maternal health by 2015. The WHO had set the target as achieving universal access to reproductive health by 2015 (United Nations 2012). The progress made by most of the African countries including South Africa and Nigeria projected that they were not going to achieve this target by the set time (Requejo et al. 2015). Indeed, this target was not achieved by the end of 2015. The official ANC indicators for global tracking put strong emphasis on ANC and were as follows: (1) the proportion of women with a recent live birth who report at least one ANC visit with skilled health personnel (ANC1+); and (2) the proportion of women with a recent live birth who report at least four ANC visit with any provider (ANC4+) (United Nations 2012). As of 2014, an average, of only 52% of pregnant women in the developing countries received the suggested numbers of ANC visits during pregnancy. In Southern Asia, only 36% of pregnant women received four or more ANC visits around 2014.

2.4.2 Access to antenatal care services in African countries

In northern Africa, the number of pregnant women who attend four or more ANC visits increased from 50% to 89% between 1990 and 2014 (Nigeria 2015: 6). In Sub-Saharan Africa, coverage levels have stagnated over the past two decades, with a small increase from 47% to 49% of pregnant women receiving the recommended care (Nigeria 2015: 6). Rishworth (2014), discovered in a study on Women's Navigation of Maternal Health services in the context of the National Health Insurance Scheme and health care in the upper west region of Ghana that access and utilisation remain slightly reliant on the part of maternal health care. Nang-Beifua (2010), discovered that although the national Ghana reproductive health policy recommends at least four ANC visit per client which is aligned to WHO recommendation, only 67% of maternal exception policy registrants visited ANC four or more times throughout pregnancy, showing a reduction from 78% in 2008.

ANC services for pregnant women are free in South Africa at public health facilities. Yet, research indicates that most women from rural areas incline to attend ANC late in pregnancy and at times they fail to go back for return visits (Myre and Harrison 2003: 268-272).

Access to ANC service is also a challenge in Rwanda. According to Påfs (2015) paradoxical barriers to ANC continue to exist in Rwanda. A pregnant woman that comes to the clinic without a husband will not be attended to, because the government of Rwanda recommends that husbands go with their wives to clinic to obtain ANC services. Påfs (2015) quoted women as saying: “They would never receive you without a husband”. This might be clarified by the dissimilarity between the ANC rules and definite delivery of care; the accessibility and previous knowledge of ANC; the woman’s and her probable spouse’s socio-economic position, educational level, and marital status; as well as sociocultural factors affect their access and utilisation of ANC services (Simkhada et al. 2008: 244-260; Adjiwanou and LeGrand 2013: 26-34; Finlayson and Downe 2013: 1).

2.4.3 Access to antenatal care services in Nigeria

Access to ANC differs between urban and rural areas in Nigeria (Lawn and Kerber 2010; Doctor et al. 2011; Arthur 2012; Dairo and Owoyokun 2010: 1; World Bank 2013). The inequalities that exist between the number of accessible health care facilities in urban and rural areas account for this (Gage 2007; Omo-Aghoja et al. 2010).

The Nigerian government has limited ability to create an accessible community-based health care system (Omo-Aghoja et al. 2010:55). The public health expenditure in Nigeria favours urban areas, while the rural areas grapple with poor and inadequate funding from government and other agencies, coupled with the challenge on the part of government to train, attract and retain health care workers in the rural areas. This has serious implications regarding access to ANC and other health care services by the people in Nigeria.

2.4.4 Access to antenatal care services for Lemu community

There was paucity of literature on work done in Lemu community area regarding access to health care services including ANC services. Access to antenatal care services in Lemu community has a lot in common with that of Niger state, Nigeria. The Niger State Strategy Health Development Plans (2010: 17) claimed that the main challenges in the health care delivery system in Niger state and Lemu community area was inadequate staff in both quantity and quality where some general hospitals were without a medical officer and most local government health institutions had no midwives (Niger State Strategy Health Development Plans 2010: 17).

2.5 UTILISATION OF ANTENATAL CARE SERVICES

2.5.1 The global context regarding utilisation of antenatal care services

Globally, health issues in pregnant women can be detected, treated and prevented during ANC visits with trained health care workers. The World Health Organisation (WHO) recommends that a minimum of four ANC visits, comprising interventions such as tetanus toxoid vaccination, screening and treatment for infections, and identification of warning signs during pregnancy should be available for all the pregnant women (WHO 2016). According to WHO (2016), although the global percentage of women receiving ANC once during pregnancy was 83% for the period 2007-2014 only 64% of pregnant women attended ANC at least four times during this period. This signifies that more effort is still required to improve utilisation of ANC services (WHO 2016).

The utilisation of ANC services differ from country to country. In Bangladesh, 35% of women do not visit ANC while in Peru no women reported zero ANC visit (United States Agency for International Development 2015; WHO 2003; Requejo et al. 2015).

In view of the fact that countries differ extensively in their ANC-related rules, package, standard, and plans, the recommendations by Saad-Haddad et al. (2016: 1) are that every country should put in place its individual set of fixed

national rules, plans and strategies about health-related matters and ANC precisely and that every country should take a distinctive design of ANC utilisation.

Bangladesh and Peru are the two countries that have made noticeable progress in achieving ANC1+ and ANC4+ utilisation. These countries have ensured inclusive plans and rules related to ANC. Although ANC utilisation is comparatively low in Bangladesh, handling of ANC1+ and ANC4+ has been progressively increasing since the early 1990s (Requejo et al. 2015). The Peruvian government goes beyond the WHO plans of four ANC visits and recommends at least six planned visits.

2.5.2 Utilisation of antenatal care services in African countries

In Senegal, several reproductive health-related rules improved between 2002 and 2005, including moving from a standard three ANC visits to four as recommended by the WHO (Requejo et al. 2015). According to Saad-Haddad et al. (2016: 1) the government of Uganda accepted the four-visit, focused ANC method, and newly presented strategies addressing HIV/AIDs and prevention of mother-to-child transmission that denotes ANC as a policy for care and treatment. However, research indicates that according to the number of visits by gestational age, 66% of Ugandan women start ANC in their second and 13% in their third trimester. In Nepal, the amount of women getting care simply from an untrained worker was most common, followed by Bangladesh. The National Medical Standards for Reproductive Health guidelines, which were accepted by the Nepali government in 2009, stated that in the absence of a trained birth attendant in the facilities serving rural areas, a maternal and child health worker or a health assistant (categorised as an unskilled provider) can provide ANC services (Nepal Ministry of Health and Population 2009).

2.5.3 Utilisation of antenatal care services in Nigeria

The utilisation of ANC among the poor, less educated and recently married rural population is low, especially in Northern Nigeria. An identified barrier to the use of ANC services by these groups is the inability to pay for the services (Lawn and Kerber 2010). Long distances to health facilities, long queues and waiting periods

at ANC centres, as well as inadequate number of ANC providers at various ANC clinics negatively affect ANC utilisation (Dairo and Owoyokun 2010: 1). According to Lawn and Kerber (2010), communication breakdown between health care providers and with health service seekers causes low utilisation of ANC services in certain places, and conduct, attitudes and behaviours of the health service providers that are unprofessional in nature can also affect ANC utilisation.

The findings on a study in one of the Northern states of Nigeria on the assessment of ANC among urban and rural pregnant women in Bauchi-North senatorial district revealed that significant differences between urban and rural pregnant women in their utilisation of ANC services exist (Mohammed and Mbitsa 2015:66). The study conducted by Onasoga et al. (2012: 1313) on the factors influencing utilisation of antenatal care services in one of the Local Government Areas of Osun state, Nigeria showed a significant association between levels of education of respondents and their attendance/utilisation of ANC services. Becker et al. (1993: 77-89) revealed that mothers' education has a positive impact on the utilisation of ANC. Further to this, the authors identified a strong association between distance to the health facility and utilisation of ANC where women residing further to from health care facilities tend to under-utilise ANC services compared to those living close by. Onasoga et al. (2012: 1313-1314) suggested that there is a need for better equipped ANC centres to be located within reachable distance to ensure better ANC utilisation in the community. Other factors that have been identified as influencing utilisation of ANC services include marital status, religion and cultural beliefs and values (Onasoga et al. 2012: 1314).

Poor utilisation of ANC services in Nigeria accounts for the high maternal and infant morbidity and mortality ratios that remain a problem in the country as attested by the United Nations Development Group 2003 that utilisation of maternal health facilities by pregnant women has direct bearing on these ratios. The United Nations Development Group 2003) indicated that the majority of Nigerian women do not have good maternal health care and have strong reliance on traditional birth attendants (TBAs) for maternity services. According to Dahiru and Oche (2015:6) the factors that indicate strong positive influence on the utilisation of ANC services in Nigeria include age of mother, place of residence

(rural/urban), mother's and husband' level of education, working status of the woman, household wealth quintile, health insurance enrollment, religion and woman's decision-making autonomy.

2.5.4 Progress made in Nigeria regarding antenatal care service provision

Nigeria is making very slow but steady progress towards improving ANC service provision. The country over the years has witnessed improved performance on three main indicators: maternal mortality rate, proportion of births attended by skilled health personnel, and antenatal care coverage (Nigeria Millennium Development Goals Report 2013: vii). Nevertheless, Nigeria could not meet up with the target of 250 per 100,000 live births, that was planned to be met by 2015 and presently, the maternal mortality of Nigeria is 814 per 100,000 live births (WHO et al. 2015). In 2013 Nigeria adopted the MDGs Acceleration framework to further improve the prospects of achieving the goal of maternal health. The proportion of birth attended to by skilled health personnel was 53.60% compared to the target of 100% and ANC coverage (at least one visit) was 67.70% (Nigeria Millennium Development Goals 2013: vii).

As the MDGs era came to an end in 2015, the country had another review, tagged as “post 2015 development agenda” (Nigeria 2015 MDGs End-point report: ii). The new framework stated that from 2016 onwards “the sustainable Development goals (SDGs) replaced the MDGs.” The president said in his address to the nation of Nigeria, that the MDGs End-point report will serve as an invaluable resource document as the country transits from the MDGs to the SDGs and assured the nation of the government’s commitment to completing the unfinished MDGs in the new development framework (Nigeria 2015: ii). This report serves as a transitional document linking Nigeria’s MDGs era to the post MDGs development framework now officially known as the Sustainable Development Goals (SDGs) (Nigeria 2015: 1). At this review in 2015, ANC coverage of at least one visit had significantly improved to 68.9% in 2014 and four visits improved to 60.6% in 2014. This shows that there is still a need to scale up the policy interventions (Nigeria 2015: 7).

2.6 CHAPTER SUMMARY

In this chapter, important information was gathered which needs to be considered when examining the factors influencing access to and utilisation of ANC services around the world. The next chapter will focus on the various methods and approaches used to conduct this study.

CHAPTER 3 THE THEORETICAL FRAMEWORK

3.1 INTRODUCTION

The theoretical framework that underpinned this study was Andersen and Newman's (1973) Framework of Health Services Utilisation, which accepts that definite characteristics contribute to, or control, an individual's use of health services. The framework originated from the Andersen's behavioural model of families' use of health services, originally established in 1968. The original framework has gone through various phases. Anderson, Newman and other authors have continued to review the framework and over time the model has gone from focusing on the family as the unit of analysis to focusing on the individual as the unit of analysis (Andersen and Newman 2005; Andersen, Davidson and Baumeister 2015).

Andersen and Newman (1973) propose that people's usage of health services indicates their tendency to use services, the factors which allow or hinder use, as well as their necessity for care. The framework has gained popularity and has been used extensively to evaluate utilisation of health care services (Andersen and Newman 2005; Babalola 2014, Babalola, Adeyoju and Makumi 2013). The Andersen and Newman's framework was developed to explain the factors that determine the use of health services in the United States of America where it assisted in identification of societal and individual determinants of medical care utilisation (Andersen and Newman 1973). In the framework, the authors clarify that while societal and individual factors influence access and utilisation of health care services, factors within the health care services such as availability, organisation and general state also has influence on access to and utilisation of these services.

With the geographical area and circumstances being different between the two settings (Nigeria and United States of America), the researcher was conscious of the fact that adopting this framework, in a different setting from where it was developed, could pose certain challenges to this research and that the factors

influencing access and utilisation of ANC in the United States may not be exactly the same as those in Nigeria. Babalola, Adeyoju, Makumi (2013:17) and Babalola (2014:1265) adapted and used variables from the Andersen's theoretical framework of health service utilization to identify the determinants of urban-rural differentials in antenatal care utilization in Nigeria. Figure 3.1 presents the adapted model by Babalola, Adeyoju and Makumi 2013:17). That the framework was previously used in a similar context convinced the researcher to adopt the framework for the current study.

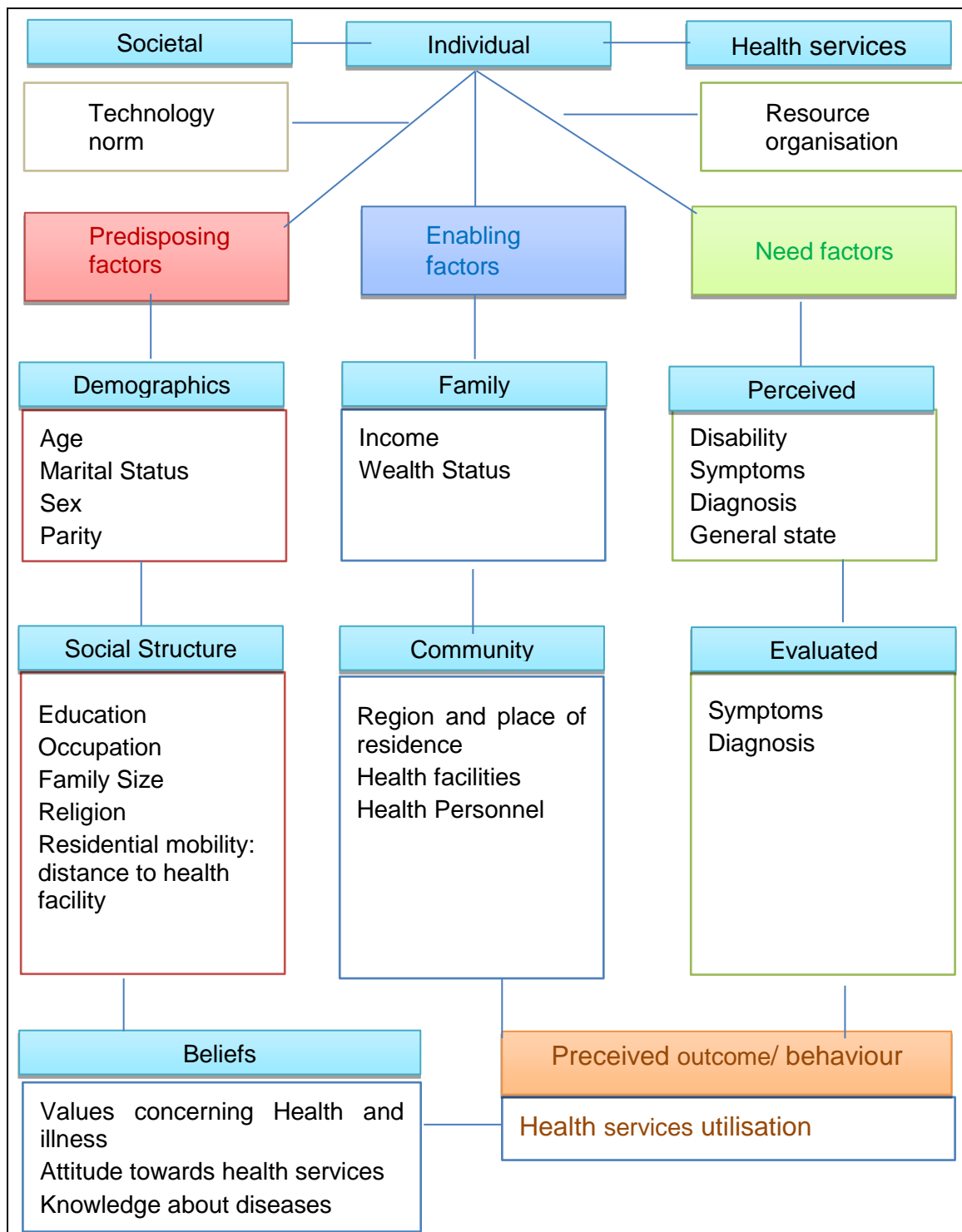


Figure 3.1: Adapted Andersen's Behavioral Model of Health Services Utilisation
 Source: (Babalola, Adeyoju and Makumi 2013:17)

3.1 HOW ANDERSEN AND NEWMAN'S MODEL GUIDED THE STUDY

Andersen and Newman's theoretical framework of health services utilisation was considered the most appropriate framework to achieve the objective for this study

because, similar to the model, the current study sought to discover information about access and utilisation of ANC services. Andersen and Newmans' Framework of Health Services Utilisation offered a useful guide and basis for the current study. It facilitated the determination and a broader understanding of the factors that influenced access to and utilisation of ANC services in the Lemu community area.

The model proposes that an individual's access to and use of health services is dependent on three characteristics: the predisposing, enabling and the need factors (Andersen 1995:1). A description of how each of the three factors of the model was used to guide the current study is detailed below and a schematic presentation is presented in Figure 3.2.

3.1.1 Predisposing factors

The model presumes that certain people are more expected to use services than others and this probability can be foreseen by different characteristics. People with certain characteristics have been found to be more willing to use health services. These characteristics include demographic factors such as age, sex, parity, marital status, family size, race and social structural factors, which are a reflection of a person's community stand or position. Other factors include educational accomplishment, occupation of the head of the family; and attitudinal-belief factors, where persons who have stronger belief in the effectiveness of treatment are more likely to utilise health care services Andersen 1995: 2). The current study aimed to investigate the factors that predisposed pregnant women from the Lemu community from either utilising or not utilising the available ANC services.

3.1.2 Enabling factors

According to Andersen (1995: 3), family resources and income (economic status), health insurance coverage and place of dwelling are the enabling factors for individuals. There is a fee payable for all services and drugs (government owned and private services) in Nigeria. Therefore, individuals require money to be able to to utilise health services, Thus, income and family resources assist in making health services accessible to the individual family and community. Family

income is a significant enabling factor as it determines the ability of an individual to finance health care related costs such as physician consultations, drugs, transportation costs, laboratory investigations, etc. Community level resources related to the zone where individuals live, that is, the area of the country or whether the dwelling is in an urban or rural area (Andersen 1995: 3). Resources on the community level include the number of health facilities and health personnel available to serve the community. The theoretical framework enables identification and description of the factors that either enabled or disabled pregnant women from the Lemu community from utilising or not utilising the available ANC services.

3.1.3 Need based factors

Andersen and Newman (1968) state that of all the functional and health problems that generate the need for health care services, the need factors are the most immediate triggers of health service use. The authors divide the need factors into perceived needs and the evaluated needs. According to Andersen (1995: 3) the perceived needs refer to the manner in which (how) people view their own general health and functional state, as well as how they experience symptoms of illness, pain, and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help. The evaluated needs represent professional judgement about people's health status and their need for medical care (Andersen 1995:3). The author further states that perceived needs better help to understand care-seeking and adherence to a medical regimen, while evaluated need is more closely related to the kind and amount of treatment that should be provided after a patient has presented to a medical care provider. The current study focused on perceived needs.

3.1.4 Desired outcome behavior

Andersen and Newman (1995:6) propose that the three factors (predisposing enabling and need factors) together facilitate the achievement of the desired outcome. The current study assessed which of, and how, these factors facilitated

access to and utilisation of ANC services for the pregnant women of Lemu community.

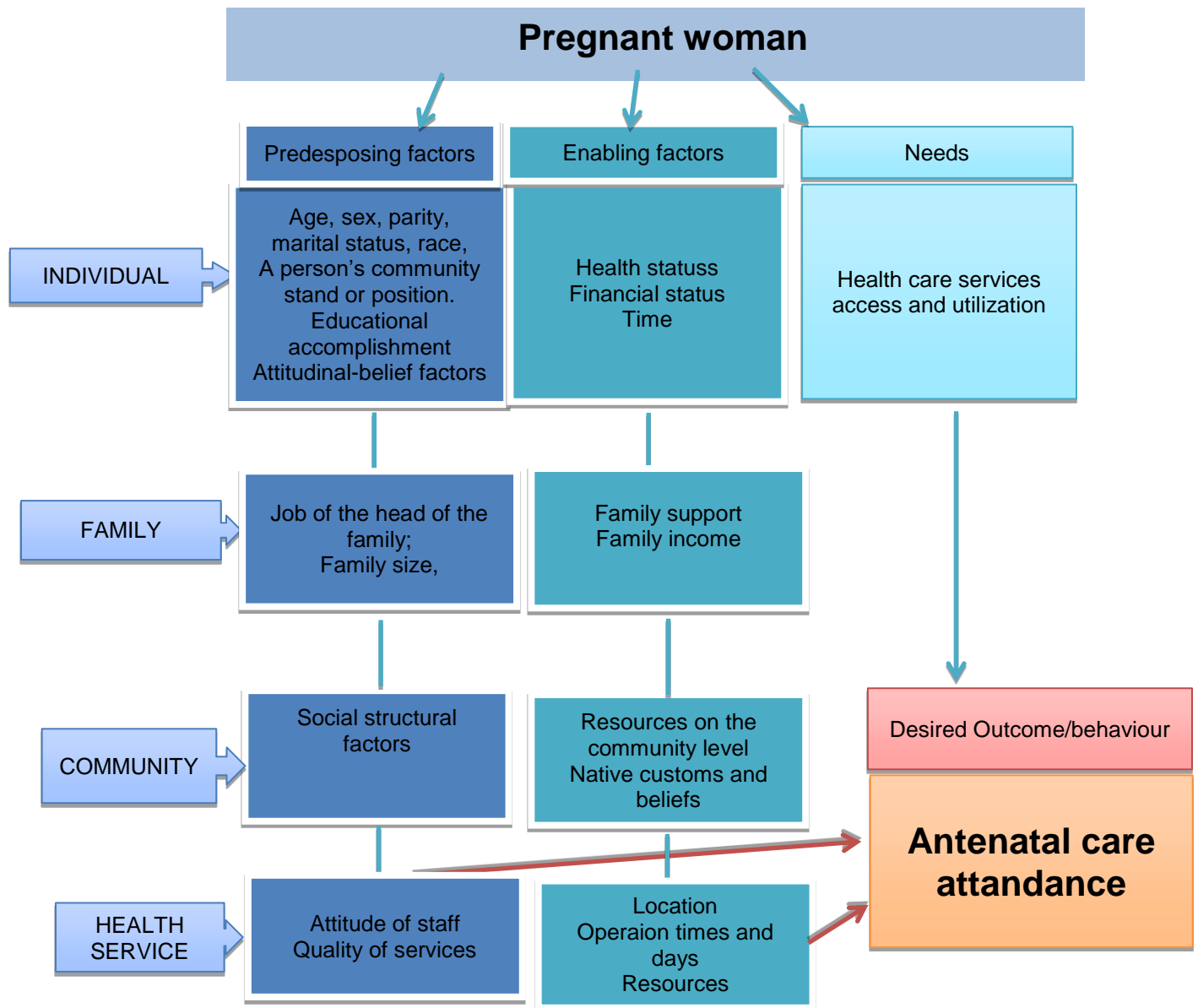


Figure 3.2: Application of Andersen's model in the current study

3.2 CHAPTER SUMMARY

This chapter described the theoretical framework underlying the study and its application in the current study. The next chapter will focus on the various methods and approaches used in this study.

CHAPTER 4 RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter presents the methodology that was used to achieve the objectives of the study. A detailed and sequential explanation of the research design and the entire research process are presented.

4.2 RESEARCH DESIGN AND METHOD

According to Creswell (2014: 142), research designs are types of inquiry within various research designs (qualitative, quantitative and mixed methods) that provide specific direction for procedures in a research study. Qualitative research is a method of research which seeks to explore human experiences in order to understand the reasons behind the behavior and meanings embedded in those experiences (Holland and Rees 2010:43). A qualitative research design was adopted for this study.

4.2.1 Qualitative research design

According to Polit and Beck (2012: 739), a qualitative design is defined as an investigation of occurrences through the collection of rich storyline materials using a flexible research design. This study used an in-depth and holistic method in providing an overview of pregnant women's and health care workers' views regarding access to and utilisation of ANC services by the Lemu community which led to the achievement of the three objective of the study which were to 1) assess and describe access to ANC services by pregnant women from the Lemu community, 2) assess and describe utilisation of ANC services by pregnant women from the Lemu community and 3) determine and describe the factors that influence access to and utilisation of ANC services by pregnant women from the Lemu community.

4.2.2 Research method

Polit and Beck 2012: 763) distinguish between various methods of qualitative design. These include descriptive, phenomenology, grounded theory, contextual, exploratory to name a few. Some of these methods can be combined in one single study. The current study was a descriptive, contextual, cross sectional and exploratory qualitative study.

4.2.2.1 Descriptive research

A descriptive qualitative research design is a non-experimental research design that is used to collect data in the form of in-depth interviews. It provides an in-depth description of participants' experiences based on their narrative description (Grove, Burns and Gray 2013: 233). Furthermore, the descriptive research describes and documents the behavior, events, beliefs, characteristics, attitudes, structures and processes that occur in a phenomenon (Streubert and Carpenter 2011: 341). In the current study a series of interviews were conducted with health care workers and pregnant women regarding access to and utilisation of ANC services. This led to a description of access to and utilisation of ANC services and identification and description of the factors that influence access to and utilisation of ANC services by the Lemu community.

4.2.2.2 Cross sectional research

Orodho (2004) states that cross sectional research design enables one to obtain information about the condition at hand at one specific time and show the current condition of the situation under study in the desired population. The design enabled the researcher to gather information, summarise, present and interpret this information for the purpose of clarification of access to and utilisation of ANC services by the Lemu community.

4.2.2.3 Contextual research

Burns and Grove (2009: 34) state that contextual research is an ideographic method of research in the sense that it is uniquely descriptive within the context of the individual setting and that contextual research focuses on specific events

in naturalistic settings. The current study was contextual in nature as it was conducted in a unique setting, the Lemu community area, and focused on specific events which included access to and utilisation of ANC services.

4.2.2.4 Exploratory research

Polit and Beck (2012: 18) state that an exploratory study investigates the full nature of the phenomenon, the manner in which it manifests, and the other factors to which it is related. Offredy and Vickers (2013: 48) attest to this and further state that the key aim of exploratory research is to discover general information about the research topic. The aim of the current study was to explore access to and utilisation of ANC services and to identify and describe the factors that influence these phenomena. The exploratory qualitative approach led to a better understanding of the phenomena.

4.3 STUDY SETTING

This study was conducted in the Federal Republic of Nigeria which is located in west Africa. The Federal Republic of Nigeria is divided into six geopolitical zones viz North Central (NC), North East (NE), North West (NW), South East (SE), South South (SS), and South West (SW), comprising 36 states and federal capital territory. It has an estimated population of 186,987,565 million people (United Nations 2015: 23). Niger state is one of the states in Nigeria in the North Central zone (Figure 4.1). It is the largest state among the 36 states with the latest population estimation being 4,372,030, and consists of 25 local government areas (National Bureau of Statistics 2013). The Gbako local government is one of the local government areas of Niger state. The Lemu community live in the Gbako local government area and is locally referred to as 'Lemu community area'. It is a rural area with a population of 3,625 people. Health care services are provided mainly from one rural health care centre and two private clinics. About 80% of the inhabitants are subsistence farmers. Other forms of occupation are fishing, hunting, trading and blacksmithing. Gbako local government is predominantly Nupe speaking. Nevertheless, there are other tribes such as Hausas, Fulanis, Yorubas and Ibos represented in the area. Most of these settlers are either traders or local industrialists.

NIGERIA

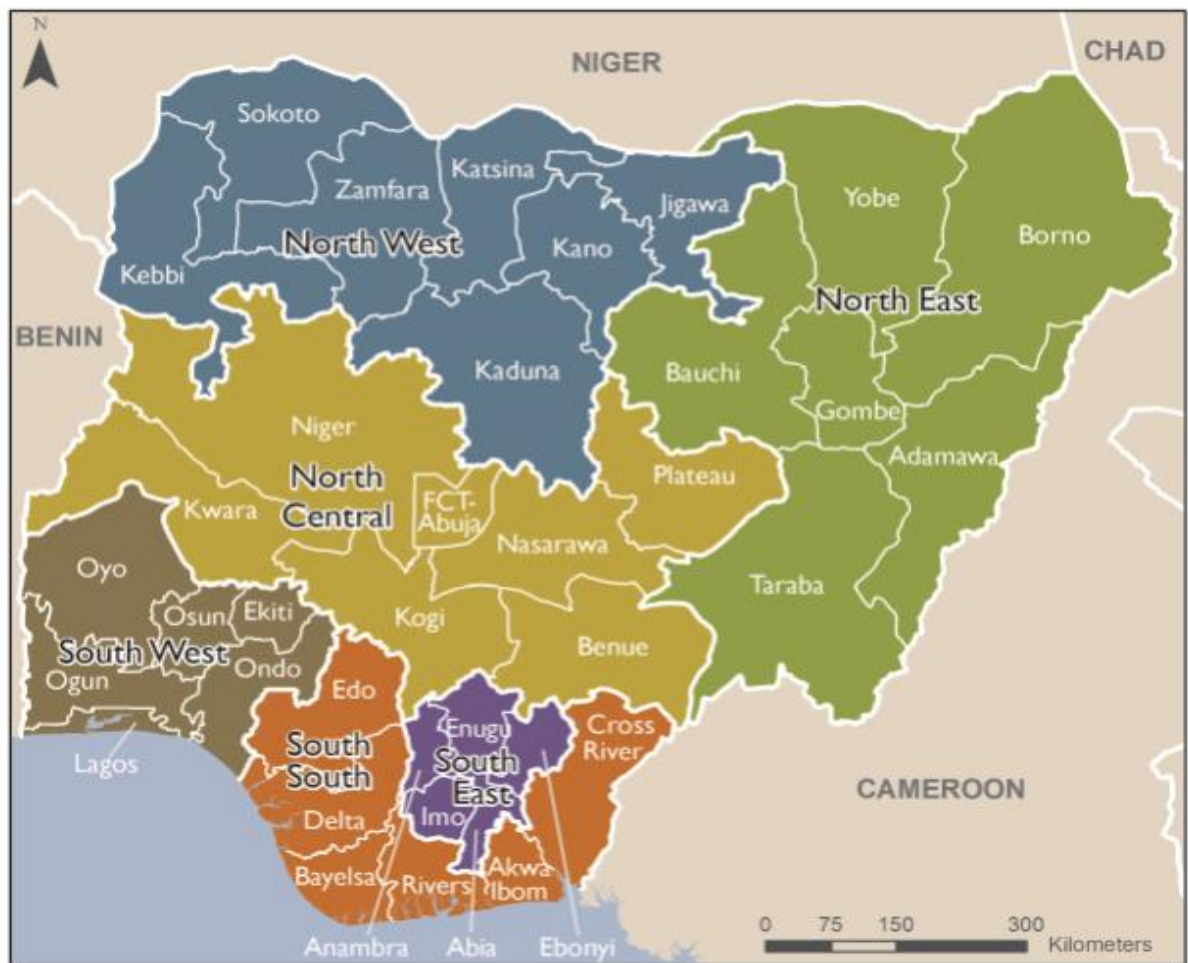


Figure 4.1: Map of Nigeria

Source: Nigeria National Population Commission and International Calverton Funding (2014)

4.3.1 Recruitment setting

The recruitment setting was the health care institutions pregnant women from Lemu community can attend for ANC services, as well as markets and churches. There are three health care institutions providing ANC services for Lemu community. These are the two private clinics and one rural health care centre.

4.3.2 Study population

The target population were the people from the Lemu community who could give information regarding access to and utilisation of ANC services. The accessible population were the pregnant women who were attending ANC in the two private clinics and one rural health care centre as well as those in the market place,

churches, and the health care workers who were actively involved in the provision of ANC services in the local health institutions. The targeted health care workers were midwives and accoucheurs that were actively involved in the provision of ANC services. All health care worker participants (including accoucheurs) for the purpose of this study are referred to as midwives. The two groups were deemed appropriate to provide the information because they either affect or were affected by access to and utilisation of ANC services.

4.4 ORIENTATION OF THE PROSPECTIVE PARTICIPANTS REGARDING THE STUDY

Orientation of the prospective participants regarding the study was done in two phases. The first phase included orientation of the health care workers and the second phase included orientation of the pregnant women.

4.4.1 Phase 1: Orientation of the health care workers

Immediately after the gatekeeper permission was received, verbal permission was obtained from the operational managers to meet with all the health care workers during their weekly staff meetings. Two meetings were scheduled in each of the selected health care institutions. During the first meeting, the researcher addressed all the health workers about the study including those that did not meet the inclusion criteria, introduced herself and the research assistant and invited the health care workers who met the inclusion criteria (as detailed in section 4.5.2) to a more detailed information giving session. At the second meeting, detailed information about the study and all the study processes was given to the health care workers as prospective participants. They were also given information letters to read on their own for more clarity regarding the study (Appendix 7). Those that were willing to take part in the study were requested to sign an informed consent form (Appendix 7). An appointment for a one-on-one interview was scheduled for a date and time that was convenient to each of the participants. Those that still needed to make up their minds regarding participation were allowed time to think about it and advised to inform the researcher or the research assistant once they had made their decision.

4.4.2 Phase 2: Orientation of the pregnant women about the study

The researcher addressed all pregnant women in the market place, churches and the three health care institutions included in the study during ANC clinic day, market days and church worship days to give them information about the study and to request them to take part in the study. Information letters were also handed to the pregnant women so that they could read about the study at their leisure (Appendix 6a and 6b). The participants who agreed to take part in the study signed an informed consent form. The consent forms were available in English and Nupe (Appendix 6a and 6b). A date, time and venue for the interview were negotiated and agreed upon between the researcher and the participants. All the participants agreed to have the interview on the same day that they were given information. The scheduled times for the interview sessions were communicated to the chairperson of the market place, religious leaders and the sister in-charge of the ANC sections of the clinics for their approval in order to safeguard against disruption of the normal functioning of the health care centre.

4.5 SAMPLE AND SAMPLING TECHNIQUE

The target population was the pregnant women who were attending antenatal clinics, pregnant women in the market place, pregnant women in the churches and the health care workers working in the two private clinics and one rural health care centre at the time of the study. Sampling is a process of selecting a portion of the population, which represents the entire population (Polit and Beck 2012: 290). Sampling was done in two phases where phase one included sampling of the pregnant women and phase two included sampling of the health care workers. The study participants were purposively selected using non-probability sampling method. The participants who would provide the most information based on the researcher's personal judgement were selected (Polit and Beck 2012: 739). Pregnant women and all categories of health care workers were included in the study.

According to Polit and Beck (2012: 742) the sample size is the number of people who participate in a study. The sample size in qualitative studies is guided by data saturation, a situation which, according to Grove, Burns and Gray (2013:

371) occurs when additional sampling provides no new information but only redundancy of previously collected data. The sample size in both phases was guided by data saturation.

4.5.1 Phase 1: Sampling of pregnant women

Phase three included sampling of the pregnant women to be included in the interviews. Each day the pregnant women were purposively selected from among the clients that were present in the study sites, guided by the inclusion and exclusion criteria.

Inclusion criteria for pregnant women:

- All pregnant women who were residents of Lemu community area and over the age of 18 years

Exclusion criteria for pregnant women:

- The pregnant women who declined to participate in the study
- The pregnant women who were sick and needed immediate medical attention were excluded from the study in order not to disrupt their initiation of emergency treatment and delay referral

4.5.2 Phase 2: Sampling of health care workers

The Fourth phase included sampling of health care workers. The population included all the midwives who were working in the maternity section of the Rural Health Centre and the two private clinics. Very few health care workers were directly involved in ANC services provision. The staff establishment in the Rural Health Centre included only five midwives working in the entire maternity section, which included ANC clinic, labour and postnatal wards per work shift (day and night shift) with a minimum of two midwives working in the ANC clinic (day shift only). Each of the two private health care clinics had 2-4 midwives per work shift working in both the ANC clinic and the maternity wards. Therefore, the midwives and accoucheurs who were involved and those who had been involved in the provision of ANC services within the past 12 months were included.

Inclusion criteria for health workers

- Midwives who were working in the maternity health care unit in the three study sites
- Midwives who were involved in the provision of ANC services
- Midwives who had been involved in the provision of ANC services within the past 12 months

Exclusion criteria for health workers

- All other health care workers
- The midwives who declined to participate in the study and those who were away from work at the time of data collection

4.6 CODE BOOK FOR DATA DEFINITION

All the participants were assigned code numbers to ensure confidentiality and anonymity. The five study sites were assigned codes as follows S1, S2, S3, S4, and S5. The pregnant women were assigned 'P' as a code and numbered in consecutive order per study site. The first pregnant women interviewed was recorded as participant 'P1'. Similar coding was followed for the health care workers. The health care worker participants were all midwives and were assigned 'M' as a code and numbered in consecutive order per study site. Thus, the first health worker participant was recorded as 'M1'. Where there were four midwives in one study site, they were allocated code numbers 1-4.

4.7 DATA COLLECTION

Data collection was done in two phases. Phase one included interviews with the pregnant women and phase two included collection of data from the health care workers using one-on-one semi-structured interviews. The researcher employed one research assistant who was able to speak English and Nupe and could also understand other local languages such as Igbo and Hausa to assist with collection of demographic data from all participants. The research assistant did not have any specific qualification but was a local resident of Lemu who was unemployed and had completed standard 10 (Matriculation) school education.

The researcher orientated the research assistant to ensure that she was clear and fully understood the demographic information required from the participants.

All interviews were conducted by the researcher. Data collection took three months (September to November 2017) to complete. The researcher had no personal relationships with the study participants. Although she had previously worked as a midwife in the Gako Local Government Area she had never worked in the Lemu community area and did not reside in the area. Data collection commenced after receiving ethical clearance/approval from Durban University of Technology Research committee (REC 53/17) (Appendix 1b) and permission from the gate keepers who included the chief executive officers (CEO) of the Rural Health Centre, the two private clinics, the chairperson of the market place and the religious leaders (Appendices 2b, 3b, 4b and 5b). All the study participants were fully informed about the study and had to give written consent to participate in the study and permission for the researcher to use an audio recorder during the interview sessions (Appendices 6a, 6b and 7). The interviews were guided by interview guides that consisted of one grand tour question and a few guided tour questions which were based on the three characteristics of Andersen and Newmans' Framework of Health Services Utilisation (2005). Probing occurred as required during the interviews depending on the need and responses from the participant, which helped to facilitate the interviews.

4.7.1 Data collection tools and storage


Two separate interview guides were prepared by the researcher, one for the midwives written in English (appendix 9) and a separate one for the pregnant women which was prepared in English and Ntshoni (Appendix 8a and 8b). Additional probing during the interviews was also done as required. The questions used in the interview guides and those used for probing were based on the three characteristics of Anderson's behavioral model. The interviews were recorded using an audio tape and additional field notes were also jotted down to capture non-verbal cues and to substantiate the recorded information.

4.7.2 Phase 1 data collection: Interviews with pregnant women

Data was collected from the pregnant women using in-depth semi-structured one-on-one interviews. The interviews with the pregnant women were conducted in Nupe the local language used in the community. This included the participants who spoke other languages (Igbo and Hausa). These participants were able to speak Nupe and agreed that their interviews be conducted in this language. All interviews were conducted by the researcher in a private room, the location depending on the participant's choice. The researcher ensured that all the interviews that occurred outside the health care facilities were conducted in private places to ensure confidentiality. The participants from the market place and the religious centres had to choose between having their interviews in the local community hall, the church or their residences. The researcher moved from one study site to the other for successive interviews in order to ensure that all study sites were included and also to monitor data saturation. It was the responsibility of the researcher to transport the participants to the venue for the interview and back home. The interview with each participant lasted for 30 to 45 minutes. The number of pregnant women interviewed was guided by data saturation which was monitored concurrently for all study sites and was reached after eight interviews. Four additional interviews were conducted after data saturation to confirm data saturation. A minimum of two and a maximum of three interviews were conducted in each study site which amounted to 12 interviews with the pregnant women (Phase 1 participants) for the entire study (Table 4.1).

Table 4.1: Interviews conducted with the pregnant women (Phase 1)

Participant	Participant Age	Language	Duration in minutes	Study site
P1	>25years	Nupe	45	S1
P2	<25years	Nupe	30	S4
P3	>25years	Nupe	45	S2
P4	<25years	Nupe	30	S5
P5	<25years	Nupe	40	S3
P6	<25years	Nupe	45	S4
P7	>25years	Nupe	45	S2
P8	>25years	Nupe	30	S1
P9	<25years	Nupe	35	S3
P10	<25years	Nupe	30	S5
P11	>25years	Nupe	30	S4
P12	>25years	Nupe	30	S2

 *Data saturation point*

4.7.3 Phase 2 data collection: Interviews with the health care workers

Semi-structured one-on-one interviews were conducted with all the health care workers who met the inclusion criteria and agreed to take part in the study. All interviews were conducted in a private room in the three health care institutions included in the study. The interviews were conducted by the researcher in English. The number of interviews was guided by data saturation which was monitored together for all three study sites. Therefore, data had to be collected simultaneously in all three sites, by rotating the days for data collection between the three sites. Data saturation was reached after seven interviews and three more interviews were conducted to confirm saturation of data, amounting to a total of 10 interviews with health workers.

Table 4.2: Interviews with the health care workers (Phase 2)

Health facility	Health care workers	No of interviews
S1	Midwives	3
S2	Midwives	3
S3	Midwives	4
Total midwives interviewed		10

4.8 DATA ANALYSIS

Data analysis is the orderly organisation and processing of the data that has been collected by the researcher. The collected data is further structured and made meaningful for proper clarification (Polit and Beck 2012). Data analysis was run simultaneously with data collection to determine data saturation. This allowed the data from the two data sets to be analysed independently. However, similar processes were followed in the analysis of both data sets. The transcribed data from the two data sets were analysed using Tesch's eight steps of data analysis (Creswell 2014: 186). The researcher listened and re-listened to the tape-recorded information until data was clearly understood and known, thereafter transcribed all data. The transcribed information that was in Nupe was translated into English by the researcher. Back translation from English to Nupe was also done to confirm that no information had lost meaning during translation. All translated data were verified by the professional language editor (Appendix 10). The researcher read and reread the transcribed interviews and the field notes to get the meaning of the information written down. Related topics or codes that emerged were grouped together. Codes were allocated for each segment of text and clustered into categories. This led to identification and creation of major themes and sub-themes. The analysed data and analysis process was verified and approved by the two research supervisors.

4.9 DATA INTERPRETATION AND TRIANGULATION

Triangulation is defined as a process and/or outcome which involves the combination and comparison of multiple data sources, data collection and or analysis procedures, research methods and inferences that occur at the end of

the study (Teddle and Tashakkori 2009: 32-33). According to LoBiondo-Wood and Haber (2014: 125), triangulation includes the use of two pieces of information in order to locate a third unique finding. Triangulation was done between data from the private and public health institutions and between the two data sets (data from the pregnant women and that from the midwives) in order to make sense of it, identify complementary and/or contradicting information, and to draw conclusions about access to and utilisation of ANC services by the Lemu community. The researcher decided to use the process of triangulation based on the idea that drawing data from sources that have different potential threats to validity would possibly reduce the chances of reaching false conclusions (Bergman 2008: 23).

4.10 RESEARCH RIGOUR

Research rigor concerns the extent to which appropriate inferences can be made (Polit and Beck 2012: 537). Rigor, according to Gerrish and Lacey (2010: 51), refers to the strength of the study in terms of its adherence to procedure, accuracy and consistency, that is, truthfulness of scientific findings. Hence, trustworthiness in qualitative research techniques indicates the level of rigor based on credibility, transferability, dependability, confirmability and authenticity. These were maintained in the course of data collection for this study, as outlined below.

Credibility- This refers to the confidence in the truth of the data and the interpretations provided (Polit and Beck 2012:62). The first step to ensure credibility was through openness and transparency to all participants about the study and its processes. Purposive sampling was used to select the interview participants. Furthermore, the researcher presented the information from the participant without manipulating it. This was facilitated by using *in vivo* coding.

Dependability- Dependability or auditability refers to the stability (reliability) of data over time and conditions, i.e. evidence that is consistent and stable (Polit and Beck 2012: 539). In this study dependability was ensured by adhering to the principle of research and documentary evidence, which was done. All the interviews were conducted in the same manner with the use of an interview

guide. This ensured that a scientific project free of flaws was undertaken and similar findings could be achieved if the study was ever repeated.

Confirmability- This refers to objectivity, that is, the potential for similarity between two or more independent people about data accuracy (Polit and Beck 2012: 539). Brink, van der Walt and van Rensburg (2012: 171-173) describe confirmability as accurate reporting of the real meaning of data as provided by the participants. The researcher recorded the interviews and in addition kept field notes, both of which served to confirm accuracy of data reported using verbatim statements by the participants which will assist in confirming the study findings should this be necessary at a later stage. To ensure an audit trail data collected will be stored for a period of five years as evidence.

Transferability- This refers to the generalisation of the data, or the extent to which data can be applied to other settings (Polit and Beck 2012: 539). The researcher ensured that all steps followed to conduct the study were documented so that whoever might want to learn from the study could evaluate the applicability of the data to another context.

Authenticity- Polit and Beck (2012: 540) refer to authenticity as the extent to which the researcher can honestly and authentically show various realities. The researcher ensured this by using the direct narrative voice of the participants, so that the feeling and tone of the participants could be conveyed as their lived experienced.

4.11 ETHICAL CONSIDERATIONS

Ethics according to Polit and Beck (2012: 753) refers to moral values that are concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants.

The research proposal was reviewed and approved by Durban University of Technology (DUT). Ethical clearance was obtained from the ethical committee of DUT (IREC53/17) (Appendices 1a and 1b).

Letters to the Rural Health Centre, the two private clinics (Yetu clinic and Yeboji clinic), the chairperson of the market place and religious leaders were written

requesting permission to conduct the research study at their facilities with their clients (Appendices 2a, 3a, 4a and 5a). This was done to ensure that the study met all ethical standards (Polit and Beck 2012: 184). All gate keepers gave permission for the data to be collected in the selected settings (Appendices 2b, 3b, 4b, and 5b).

The rights of the participants were protected in that fair treatment and privacy were maintained throughout the study. In addition, the participants were informed that their participation was voluntarily and they could drop out at any time if they wished to do so, without being subjected to any form of prejudice.

The participants were given all the details of the study and were asked to sign an informed consent form as a confirmation that they were provided with relevant information and that they were participating voluntarily (Appendices 6a, 6b and 7).

The participants were assured of their anonymity, privacy and confidentiality of the data collected. The information collected will only be accessible by the researcher (Polit and Beck 2012). All data collected will be locked up in a cupboard and will be kept for five years and destroyed thereafter.

Prior to commencement of the interview the researcher confirmed that the participant agreed to have the interview recorded.

The participants were assured of confidentiality and anonymity throughout the data collection process.

4.12 CHAPTER SUMMARY

This chapter discussed the research methodology that guided this study, including, design, setting, details on how the theoretical framework guided the study, sampling process, sample size, inclusion criteria, exclusion criteria, data collection process, data collection instrument and storage, data analysis, research rigor, and ethical considerations.

CHAPTER 5 PRESENTATION OF FINDINGS

5.1 INTRODUCTION

Chapter 4 outlined the methodology adopted for conducting the study. Chapter 5 presents the findings of the study, highlighting the themes and sub-themes that emerged from the interviews with the pregnant women and the health care workers regarding access to and utilisation of ANC services in Lemu community area of Niger state, Nigeria.

5.2 SAMPLE REALISATION

Data was collected in two phases from September to October 2017. A total of five study sites were used which, for the purpose of this study, are referred to as site S1, S2, S3, S4 and S5. The data for Phase 1 was collected from pregnant women in all five study sites and Phase 2 data was obtained from the healthcare workers at S1, S2 and S3. The sample size for both phases was guided by data saturation which was concurrently monitored for all the five study sites. During Phase 1, a total of 12 pregnant women were interviewed. Data saturation was reached after eight interviews were conducted and a further four were conducted in order to confirm data saturation. During Phase 2, a total of 10 health care workers were interviewed. Data saturation was reached after seven interviews and three more interviews were conducted to confirm data saturation. Table 5.1 presents the sample realisation for the current study.

Table 5.1: Sample realisation for the study population

study site	health care workers	pregnant women
S1	3	2
S2	3	3
S3	4	2
S4	N/A	3
S5	N/A	2
Total	10	12

5.3 DEMOGRAPHIC DATA

5.3.1 Phase 1: Pregnant women

All the pregnant women (12) were black Africans between 18 and 36 years old, all were married, and the majority (10) were Nupe speaking women, one spoke Igbo and another spoke Hausa. All 12 women had been pregnant before and had 1-4 children. Four of the participants stated that they were already attending ANC clinic while eight said they were not attending. The majority (10) used trek as the means of transport to the clinic, one used a car and one used a motorcycle. Only one woman was employed and all the rest (11) were unemployed. Five women had primary school education, three had secondary school education and the remaining four had no education at all. There were four women who indicated that they had no access to ANC and all four were not attending ANC. There were three women who stated that they had access to ANC but were not attending ANC. The rest of the women (four) stated that they had access and were attending ANC (Table 5.2).

Table 5.2: Demographic data of pregnant women

Study sites	Participant No.	Age in years	Marital status	No. of pregnancies	Home language	Number of children	Transport to facility	Employment Status	Source of income	Level of education	Accessing ANC services	Attending ANC Services
S1	P1	32	Y	2	Nu	1	Tr	N	F	PS	Y	N
	P2	34	Y	3	Nu	2	Ca	Y	Cs	SS	Y	Y
S2	P1	28	Y	2	Nu	1	Tr	N	F	PS	Y	Y
	P2	27	Y	2	Nu	1	Tr	N	F	NS	N	N
	P3	30	Y	3	Ig	2	Mc	N	T	NS	Y	N
S3	P1	28	Y	3	Nu	2	Tr	N	F	SS	N	N
	P2	28	Y	3	Nu	2	Tr	N	F	PS	Y	N
S4	P1	30	Y	3	Nu	2	Tr	N	F	NS	N	N
	P2	31	Y	3	Nu	2	Tr	N	F	NS	N	N
	P3	36	Y	4	Ha	3	Tr	N	Nil	SS	Y	N
S5	P1	29	Y	2	Nu	1	Tr	N	F	PS	Y	Y
	P2	32	Y	3	Nu	2	Tr	N	F	PS	Y	Y

Key:

Language: Nu = Nupe, Ig = Igbo, H = Hausa, Y = Yes, N = No

Transport: Mc = Motorcycle, Tr = Trek, Ca = Car

Income source: F = Farming, Td = Trading, Cs = Civil Servant

Education: PS = Primary school, SS = Secondary school, NS = No school

5.3.2 Phase 2: Health care workers

The 10 participants included in Phase 2 were all midwives. They were all black. Seven participants were above 18 years old but below 35 years old, while three participants were above 35 years but below 60 years old. Seven participants had been working in ANC services for 5 to 10 years and three have been working for 20 to 31 years. Nine participants were females and one was male. Table 5.3 presents the demographic data for all the health care workers who participated in Phase 2 data collection.

Table 5.3: Demographic data of health care workers

Study site	Participant in code	Gender	Age in years	Years of Service	Race
S1	M1	F	42	20	B
	M2	F	50	25	B
	M3	F	29	10	B
S2	M1	F	28	8	B
	M2	F	33	10	B
	M3	F	30	8	B
S3	M1	M	52	31	B
	M2	F	30	8	B
	M3	F	27	7	B
	M4	F	25	5	B

Key:

Gender: F=female, M=male. **Race:** B=Black

5.4 Overview of major themes and sub-themes

Similar themes and sub-themes emerged from the two data sets. Therefore, data from the two phases are presented concurrently and emphasis is made where the data complement or contradict each other. In order to facilitate presentation and discussion of the study findings, the pregnant women participants are referred to as 'Phase I participants' and the health care workers (midwives/accoucheurs) are referred to as 'Phase 2 participants' throughout this chapter.

5.4.1 Major themes

The six common major themes which emerged from the analysis of both data sets were:

1. Availability of health care services
2. Travelling to the clinic
3. Satisfaction with service
4. Financial issues
5. Community awareness
6. Traditional and cultural issues

5.4.2 Major themes and sub-themes

Several sub-themes corresponding to each of the six major themes emerged. The major themes and corresponding sub-themes are presented in Table 5.4.

Table 5.4: Major themes and sub-themes

MAJOR THEMES	SUB-THEMES
1: Availability of health care services	1.1 Availability of the clinic within reach 1.2 Operation days and times 1.3 Admission policy in clinics
2: Travelling to the clinic	2.1 Availability of transport 2.2 Location of the preferred clinic
3: Satisfaction with service	3.1 Attitude of staff 3.2 Quality of service 3.3 Waiting times
4: Financial issues	4.1 Cost of transport to the clinic 4.2 Service fee 4.3 Employment status
5: Community awareness	5.1 Package of services 5.2 Need and timing of attendance
6: Cultural and social issues	6.1 Family approval and support 6.2 Traditional beliefs and family values 6.3 Reliance on traditional birth attendance

5.5 PRESENTATION OF FINDINGS

5.5.1 Major Theme 1: Availability of health care services

The majority of the participants commented that their access to and utilisation of the ANC services was influenced mainly by availability of the clinic within reach, operation days and times and admission policies in the local clinics.

5.5.1.1 Sub-Theme 1.1: Availability of the clinic within reach

A number of participants commented that the local clinics were located far away from their residential areas and therefore they were unable to reach these clinics easily. The challenges included: walking long distances on foot, transport issues which included unavailability or cost, and arriving at the clinics late when the clinics were full or the clinics were no longer accepting clients. This made it difficult for them to access and utilise these clinics.

The clinic is far away from my home, so I could not trek on every clinic appointment day to access and utilise the services provided (S1:P2).

I stay outside Lemu and the clinic is far away from my village, I have never experienced any complications during my previous pregnancies, so I decided not to attend ANC services since the health post is very far away (S4:P1).

The government hospital is far away from my house, I only attend when my husband is around to transport me to the clinic (S1:P7).

I attend S1 which is far from my home. I am unemployed and, sometimes I do not attend for my appointment if I do not have money for trek. If the clinic was closer to my house, I could walk to and fro (S1:P2).

These concerns were also supported by the Phase 2 participants and were evident in the following excerpts:

Shame at times I feel sorry for the pregnant women, they walk very long distances to arrive here (S1:M3).

The distribution of clinics in this area is very bad, it really does not cater for the entire community, for an example in this whole area there is just one government clinic, the rural health clinic and this poses a lot of problems for the people as the clinic is unable to accommodate all of them (S3:M2).

5.5.1.2 Sub-Theme 1.2: Operation days and times

The Phase 1 participants commented that the operation days and times in the local clinics made it difficult for them to access and use the clinics. The Phase 2 participants also alluded to the fact that the clinic operating days and time were not catering for all members of the community especially the working and schooling group. Discoveries made as a result of the current study showed that information regarding operational hours and service days of health posts was lacking. This was attested to in the following statements made by pregnant women participants:

On days when the midwife will not be around, we are not informed, on public holidays which we are not aware of we come for our appointments only to find the place locked (S1: P7).

I attended clinic S2 just to get there and I was told the doctor and the midwife will not be coming today. I came from a village outside Lemu and I was disappointed. It would be nice if their schedule was made available to us (S2: P2).

Although the clinic is always open, but pregnant women are only attended to on selected ANC days. That is why I use S1. The other problem is that even on market days, the clinic commences late and closes early (S3:P2).

The doctor in S2 come late sometimes in the morning and leave very early most time. That is why I use clinic S1 because they are open at all times even at night and at weekends (S1:P3).

I go to work early and finish work very late, only get off from work during weekends when the clinic is closed so it's not easy for me to go to clinic (S1:P2).

The following statements from Phase 2 participants confirm the issue of inaccessible ANC services due to limited clinic operational days as stated by Phase 1 participants. A participant from Phase 2 stated that it was difficult to communicate their schedule to the health posts because there are set strategies for reporting and the majority of pregnant women do not possess mobile phones.

There are only few midwives working in S1, and run morning, evening and night shifts. When we are off duty, we usually have only the chief matron running the morning shift and this affects the delivery of ANC services making clients to suffer (S1: M2).

The S1 ANC clinic opens only once a week and we close the clinic as soon as we are done with the client. There are no set times to leave (S1:M3).

It may be because the doctor and the midwives reside outside the Lemu community and come for work a bit late and leave as soon as they are done with clients (S2:M2).

5.5.1.3 Sub-Theme 1.3: Admission policy in clinics

The Phase 2 participants stated that they were guided by the clinic's policies and guidelines as to which clients to accept to the clinics. This confirmed the comments by the Phase 1 participants that they were only allowed access in clinics that were closer to their homes and yet sometimes it was not possible for them to use these clinics for various reasons such as employment, school and preference. This was evident in the following statements:

Unfortunately, we are guided by policies as to how to operate, there are policies regarding operation days and time and which clients to admit so we need to follow just that (S2:M2).

The health care workers always chase us stating that they are unable to take us because the clinic is full, or we came late or that day is not ANC day which is very unfair because you have a main reason for attending clinic (S5:P2).

What I do not understand is why the law will allow the health care workers to close the clinic when there are still clients to be seen, it means the laws of the clinics are not made to protect the welfare of us as clients (S3:P7).

The operation hours almost for all clinics around here are not suitable for most people. There are a number of people who are working and only get time off on weekends and holidays and all these people have nowhere to go because the clinics are closed (S1:P3).

Some of participants highlighted that the private clinic only admitted clients that had cash on hand or medical aid. The following statements were verbalised in this regard:

We in the private clinic are not operating like the government hospital, we attend to all pregnant women that present to our clinic ANC services (S2:M1 and S3:M2).

5.5.2 Major Theme 2: Travelling to the clinic

Travelling to the clinic from home was highlighted by pregnant women as one of the challenges they faced as they tried to access and utilise ANC services. The challenges with travelling to the clinic were with regards to location of the local clinic and availability of transport.

5.5.2.1 Sub-Theme 2.1: Location of local clinic

The participants stated that the Rural Health Centre is located at the outskirts of the community while the two private clinics are located within the community. This caused challenges as not all clients could afford to pay for the private clinics. On the other hand, reaching the rural health clinic had its own challenges. The excerpts below were some of the concerns raised by the participants:

I always come late for ANC because I stay far away from the clinic, and I'm always given another appointment day so I decided not to go again (S4: P1).

I stay outside Lemu and the clinic is far, far away from my home. I don't experience any complications during my pregnancies, so I see no need for travelling so far to get to the clinic (S4: P2).

The Phase 2 participants confirmed the assertions of the Phase 1 participants concerning the location of the clinic in the following statements. Phase 2 participants confirmed that location of the closest clinic influenced access and utilisation of ANC services by pregnant women.

Some of the pregnant women come from neighbouring village which is far away from the clinic, they find it difficult to reach our clinic for ANC services yet they do not have a clinic in the village (S1:M4).

The clinic is situated at the outskirts of the village far away from the town and market place (S1:M5).

The location of the clinic makes pregnant women to be discouraged (S3:M2).

5.5.2.2 Sub-Theme 2.2: Availability of transport

Phase 1 participants voiced out that they had challenges with transport which interfered with them accessing the ANC service. They stated that there was not enough transport and means of transportation were mostly available on market days when there are more passengers. This was noted in the following statements:

The clinic is far with no available local transport. This is a challenge because most times I have to trek because my husband has no means of transport (S1:P5 & S2: P3).

Getting transport to the clinic is a challenge because one has to struggle for space in the bus with people going to the market; which is not safe for us pregnant women (S1: P3).

You have to get up very early or risk getting no means of transport because there is hardly any during the day especially on market days. If one finishes early at the clinic one has to wait until late afternoon or evening when the market closes before a means of transport is available for you to get home; this is very frustrating (S1:P5 & S1:P3).

The midwives agreed to the statements made by the Phase 1 participants. The following quotes confirm this.

Transportation is a major challenge for the pregnant women, many of them trek to the clinic so they always come late due to lack of transport (S1:M4, S2:M1 & S3:M1).

Transport is a big challenge in this area. Some of the clients miss their very important appointments. For an example, the Doctor is only around in the

clinic to see clients at specific times and patients who arrive late miss their doctor's appointment (S3:M2).

5.5.3 Major Theme 3: Satisfaction with service

Satisfaction with service offered in the clinic was highlighted by pregnant women as a factor influencing their utilisation of ANC services. Most participants related their satisfaction/dissatisfaction with service in terms of the attitude of staff, quality of service and waiting times at the clinics.

5.5.3.1 Sub-Theme 3.1: Attitude of staff

Participants from Phase 1 mentioned that some of the staff in the local clinic were ill-mannered and rude towards the clients. There were reports of clients being scolded. The statements below support the claims made by the pregnant women:

Different midwives attend to clients every week, some have attitude and complain about how long it takes to attend to pregnant women especially if it's their first visit. The midwives keep complaining throughout the period when they are attending to you (S3: P1).

I attended clinic S2 during my previous pregnancy, there was a particular midwife who was always harsh towards clients, she would insist on you not asking too many questions because she didn't have time for them and from the look on her face you could tell she didn't have time. Because of this I don't attend ANC in any clinic (S4: P2).

The way some midwives look at you, you would think they hated attending to pregnant women. Some of them complained about the burden of having to work alone (S1: P2).

The Phase 2 participants acknowledged that at times they were not very friendly to the clients. They highlighted being overworked and burned out which sometimes triggered them to lose patience and become irritable.

I think shortage of staff is what kills us, working alone sometimes without tea or lunch break ... (a pause and a sigh) ... Sometimes a sight of that long queue makes you lose it (S1:M5).

5.5.3.2 Sub-Theme 3.2: Quality of service

According to statements made by Phase 1 participants, there was a lack of integration of health care services in the health care facilities. The health care facilities did not offer comprehensive health care services as well. The following quotes by some Phase 1 participants confirm this:

I wanted to do a scan so as to confirm my pregnancy but I was told by the midwives that they do not do scanning here, and that I had to go somewhere else to do it because their scanning machine in S1 was faulty (S1:P2).

In my observations, I noted that in S3, they only treat common cold and flu, palpation, immunise babies and provide treatment for other minor ailments like malaria. If you come for treatment for anything other than these you are then referred to S1, S2 or Federal Medical Centre, Bida (S3: P1).

The midwives only listen to few of your problems and they say they can't attend to all your issues because of the long queue, lack of time and space, health education are not given to clients (S2: P1).

The Phase 2 participants acknowledged that although they try to attend to pregnant women it was not in their power to provide comprehensive care. Some factors in the health posts such as time, resources and facilities did not permit for practice of some health care procedures. This was communicated in the following statements:

We have to refer ANC clients that are high risk (pre-eclampsia, malpresentation) to a bigger hospital like Federal Medical Centre, Bida due to limited resources (S1:M5).

We advise selected clients to go and start ANC in bigger health facilities where they will get a complete and comprehensive health care because we don't want to take a risk with them (S1:M5).

The government needs to do something about this, there are two issues, the number of clinics and the staff in the clinics. Really quality is compromised (S1:M3).

Even though you want to do everything possible to attend to clients' every need, lack of space, resources and time eventually prevents you from doing so (S2: M3).

We cannot operate to the full capacity of a standard clinic because of the limitations we have in the aspect of manpower and material resources (S3: M1).

5.5.3.3 Sub-Theme 3.3: Waiting times

The current study revealed that long patient waiting time posed a challenge in the ANC clinic since they had other things to do besides being at the clinic.

I am a trader in the market, so it is frustrating for me to wait on the queue in order to be attended to because the queue moves very slowly and during that time I could be making sales in the market (S1: P5).

The long waiting period makes me feel uncomfortable and I do get hungry and tired in course of waiting. This causes me to be in distress (S2: P2).

The Phase 2 participants confirmed that the long period of waiting discouraged pregnant women from coming to access ANC services:

In our clinic the queue is usually long and it takes a long time before we are through with the pregnant women so we can start attending to other health problems e.g. in between we get women coming in labour. Having to attend to a labour case during an ANC service day when there are pregnant women waiting also takes a lot of time, by the time you finished the ANC clients are very angry and irritable (S2: M2).

The long waiting times are as a result of ANC clients and clients with other health issues joining a single queue. Preference is not given to ANC clients so this makes some of them to ignore utilisation of ANC services in our clinic (S3: M2).

5.5.4 Major Theme 4: Financial issues

Financial issues were highlighted by pregnant women as one of the challenges they faced as they tried to access and utilise ANC services. Financial issues include transport cost, service fees and employment status for the pregnant women. The financial issues were compounded for most women by their financial status where the majority were unemployed, and others had very low paying jobs

5.5.4.1 Sub-Theme 4.1: Cost of transport

Both Phase 1 and Phase 2 participants concurred that the financial status of the pregnant women influenced whether they attended the clinic or not. The Phase 1 participants, especially those who were unemployed and those who had low paying jobs, commented about the transport costs stating that most often they did not have money to pay for transport to the clinic. Some of the Phase 1 participants stated that the transport fare is very expensive as can be seen in the following statements:

The clinic is far and the transport fare is expensive, because I am unemployed I cannot afford the transport fare (S4:P2).

It is costly to go to clinics S2 and S3 because of the cost of the trip and the cost for consultation, drugs and services generally, so I do not use ANC services (S4:P2).

The midwives in the three clinics confirmed the cost of transportation with the following statement:

Many of the participants are not employed so they find it difficult to transport themselves to access and utilise the ANC services (S1:M3, S2:M1 & S3:M2).

5.5.4.2 Sub-Theme 4.2: Service fees

Participants from Phase 1 voiced that they had financial challenges that interfered with them accessing the ANC services.

I don't utilise the ANC services in S2 and S3 because the cost of services there is very expensive yet these are the only clinics that are closer to my home (S1:P5).

The cost of the tests we pregnant women have to carry out and the drugs we have to buy is not affordable, so I don't utilise any ANC services, what is the point if I am not going to afford the tests and not going to get my drugs (S4:P2).

I have to go to the market to sell things so as to get money to pay for the ANC services and I end up going late and always given another appointment, so I decided to stop utilising ANC services (S4:P1).

Participants from Phase 2 attested that the pregnant women always found it difficult to access ANC services as a result of the cost of the service fees.

Because of lack of finance, most of the pregnant women in the community do not come for ANC services and most of them give birth at home (S2:M1).

I think why some of the pregnant women do not come to our clinic is because they lack the means to pay for the services being provided since our ANC services are not free (S3: M1).

5.5.4.3 Sub-Theme 4.3: Employment status

The majority of the pregnant women stated that they were unemployed as a result of them being uneducated. They depended only on the income of their husbands whose occupation was mainly farming with very low unreliable income.

Unemployment problem is a barrier to us pregnant women accessing and utilising ANC services, because of we need to pay for ANC services especially the two accessible private clinics are very expensive (S1:P7).

Being unemployed and dependent on someone else's money is a challenge. You could have a working husband but if he does not believe in you going to the clinic, he will not give you money (S5:P7).

Participants from Phase 2 attested that the pregnant women always found it difficult to access ANC services as a result of financial difficulties due to unemployment.

The majority of families in this region have financial difficulties because the husband who is the head of the family (and the whole family is dependent on him) is unemployed and only has his farm crops to depend on to cater for the family. Most pregnant women don't have the means to pay for ANC services and therefore don't come at all (S1:M3).

Because of lack of employment either by government or self, most of the pregnant women in the community don't come for ANC services (S2: M1).

I think why some of the pregnant women don't come to our clinic is because they only get little money on market days after sales to pay for the services being provided since our ANC services are not free, so they delay or don't access ANC services at all (S3: M2).

5.5.5 Major Theme 5: Community awareness

The information gathered showed that Phase 1 participants were not properly informed on the service days and operational hours, services provided in the health care facilities, or the significance of attending ANC clinic. The participants stated that there was a lack of awareness, poor communication and a lack of transparency in regards to service delivery in the local clinics. This caused delays in receiving ANC services. Often clients would go on wrong clinic days and times or they would not carry enough money to pay for ANC services and drugs (to name a few) thus they would be refused services. The two

aspects of communication that came out strongly were the package of services available at the clinics and the need and timing of attendance.

5.5.5.1 Sub-Theme 5.1: Package of services

It was clear from the information presented by the Phase 1 participants that information with regards to the services provided by the clinics were not made available. The following assertions were made by Phase 1 participants:

In this clinic S2, we are not given proper health education which is supposed to inform us about the services been provided by the midwives. This makes us unaware of these services and causes a lot of inconvenience because you come only to find that what you need is not being provided (S2: P1).

This clinic does not have clear labels for each service being delivered like in other clinics you will find that there is either a big board detailing services provided or each area is properly labelled on the doors, here we just sit and follow one queue while we await for our turn to be seen by the midwife not even being sure whether you will get what you need or not (S3: P2).

The Phase 2 participants attested that the health posts do not provide certain services to clients but unfortunately the clinics do not have means and time to provide clients with enough information in this regard. They claimed that the non-provision of services was due to staff shortages and other challenges that are beyond their control. Sometimes they will withhold the information about the services as the strategy to reduce workload. They also stated that organisation of the clinics was not convenient to offer specific health information.

You cannot give health education about what all the services that are offered because of workload e.g. educate about HIV screening, if all the clients want to do HIV screening, this whole workload will be yours alone and the clients may have to wait longer (S1: M4).

Due to mixture of all the clients, there is no time to separate the ANC clients for health education, so it's not done in this clinic (S3: M1).

5.5.5.2 Sub-Theme 5.2: Need and timing of attendance

The Phase 1 participants stated that they were not aware of the need and the right time to start ANC. No one had provided this information to them. They would rely on the elders from their families or use their gut feeling to decide whether or not to go to the clinic and when to go.

The private clinics have ANC classes where a midwife informs clients about pregnancy and the importance of attending the ANC clinic during pregnancy but here in our rural health clinic, there are no classes (S3:P2).

I am not sure of the right time to start the clinic, my grandmother advised me that I should wait for a few months there is no need to start early. For now I occasionally go to the private doctor when I go to the market (S1: P5

With all my pregnancies I did not attend the clinic and nothing went wrong. I have seen other people in the area do attend, but I for one I feel it is waste of money and energy worst when the clinic is so far away and costly (S1: P6).

Phase 2 participants agreed with the views of the pregnant women relating to the lack of information given to pregnant women concerning the importance of ANC and clinic attendance by making this claim:

Majority of the pregnant women do not come for ANC during the early phase of their pregnancy because they are unaware of the importance of attending ANC clinics and the importance of the timing of attendance (S1: P6).

5.5.6 Major theme 6: Cultural and social issues

The Phase 2 participants presented some cultural and social issues that influenced their access and utilisation of ANC services. The three sub-themes that emerged from this major theme included i) Family approval and support ii) Traditional beliefs and family values and iii) Reliance on traditional birth attendants.

5.5.6.1 Sub-Theme 6.1: Family approval and support

The Phase 1 participants discussed that the older women in their households discouraged them from attending ANC clinics because they did not approve of this service. They alluded that these older women believed that they did not need ANC services because during their own pregnancies these services did not exist but they had no problems. Participants and their husbands did not have as strong an influence and control over the family life, as did their elders (the grannies, mothers and mother in-laws). The following statements made by some of the pregnant women confirm this:

My mother in-law is not in support of me attending ANC services in the community because of what she believes (S5:P1).

According to the older women in the house we believe in this community that pregnancy come from God, so there will be no problem or any complication (S4:P2).

Phase two participants confirmed the statements made by the Phase 1 participants. Although, they said most of the pregnant women did not adhere to these beliefs but some did.

Pregnant women in this Lemu community have problem with their mother, mother in-law and their own husband to get approval to access ANC services in the community as regards when and where to attend ANC (S1:M3).

Some of the pregnant women in the community are aware of the ANC services rendered in our clinic but few do access and utilise it because of fear of older women (S3:M2).

5.5.6.2 Sub-Theme 6.2: Traditional beliefs and family values

The participants verbalised that cultural beliefs that were in existence and their family values regarding pregnancy and pregnancy management necessitated that they follow certain rituals, attend traditional healers and be attended to by traditional birth attendants. It was observed that most of these cultural beliefs

influenced both access to and the utilisation of ANC services. The elders were not keen for their family members to attend clinics stating that some of the proceedings and the teachings in the clinics were against culture and family values and could adversely affect the pregnancy outcome. The example is a belief that eating nutritious foods such as egg, maas and meat during pregnancy could cause a child to be a thief when the child grows up.

There is a general belief in the community that pregnant women should not take eggs and meat because the child may become a thief when born and the midwives advise us to eat these things during the health talks. This discourages me from accessing and utilising ANC services since they contradict our beliefs, my family will also not approve that I attend the clinic (S4:P1).

Our culture dissuades us from planning for a baby who is not yet born. Early planning is believed to bring bad luck. Some women are deterred by relatives not to mention their pregnancy early as it would bring ill fate (S2:P3).

The midwives confirmed what the Phase 1 participants mentioned in the following statements:

I think that some of the beliefs held by the community discourage some of the pregnant women from accessing and utilising ANC services (S2:M3).

5.5.6.3 Sub-Theme 6.3: Reliance on traditional birth attendance

This study shows that a few pregnant women employed the services of traditional birth attendants, previous experiences in the clinics where women and babies have died during birth. Some Phase 1 participants voiced that they utilised the services of a traditional birth attendant (TBA) in their previous pregnancies due to the proximity of the TBAs to their houses.

I am comfortable with using the traditional birth attendance, I feel it is safer especially because she also understands our culture and tradition and will know how to intervene if things go wrong (S1:P5).

I used a traditional birth attendant during my last pregnancy because it was closer to my house than the clinic and there was no time to take me to the clinic so I was rushed to the traditional birth attendant (S2:P2).

According to statements made by participants from Phase 2, the traditional birth attendants in Lemu community are skilled and are trained by the Niger State Ministry of Health.

Some pregnant women only utilise the TBAs when the clinic is closed. The TBAs are quite skilled and are trained by the State's Ministry of Health, but when they experience a difficulty beyond their skill level they refer the pregnant women to a clinic (S1:M5).

5.6 SUMMARY OF THE CHAPTER

In Chapter 5 presentation of the study findings obtained from the analysis of data from the Phase 1 and Phase 2 participants was presented. The themes and sub-themes that emerged during the analysis were presented and supported with verbatim statements. The next chapter consists of a discussion of the study findings.

CHAPTER 6 DISCUSSION OF FINDINGS

6.1 INTRODUCTION

Several themes and sub-themes emerged from the interviews with the study participants and these have been presented in the previous chapter. Chapter 6 presents the discussion of the findings on analysis of data that was presented in the previous chapter. To facilitate the discussion and make understanding of the study findings much clearer, the discussion was guided by the three objectives of the study and Anderson and Newman's Framework of Health Services Utilisation as the theoretical framework that guided the current study. The findings on triangulation are also discussed in this chapter.

6.2 OVERVIEW OF THE RESEARCH DISCUSSION

Discussion of results is presented in two sections. Section A includes discussion of the study findings in relation to the objectives of the study highlighting how ANC services were accessed and utilised by pregnant women from the Lemu community, and presenting the factors that were identified as influencing the access and utilisation of ANC services by pregnant women from this community. Section B links the factors identified in the form of major themes and sub-themes, to the three factors of the Framework of Health Services Utilisation model which are the predisposing, enabling and need factors, highlighting how each of these factors are responsible for access to and utilisation of ANC services by the Lemu community as the desired outcome.

6.3 DEMOGRAPHIC INFORMATION

Selected demographic characteristics for the pregnant women such as age, level of education, and employment status, are typical of a rural community and give rise to certain expectations regarding health care access and utilisation. According to Schoevers and Jenkins (2015: 2), rural communities often have typical demographic characteristics, including age, education, and family structure that distinguishes them from other communities. The National

Advisory Committee on Rural Health and Human Services (United States, 2011: 12) concurs that communities from rural areas often have lower levels of education. Similarly, the United States Department of Agriculture (2017) attests that median household income is substantially lower in rural areas than in urban areas and that lower incomes equate to higher poverty rates, especially in the areas where residents live in families with below-poverty incomes.

The pregnant women that were included in the study were mostly middle aged (between 28-36 years old), all married and had been pregnant before. These characteristics provide an expectation that they had some information regarding pregnancy and ANC attendance. However, about 50% of the women (6 out of 12) were not attending ANC; these included the women who stated they had access to ANC. These findings suggest that their not utilising ANC services could also be attributed to other factors rather than lack of information. Van der Hoeven et al. (2012: 2) state that the urban and rural communities differ in terms of health care seeking behavior in terms of their socio-economic characteristics, health status, health beliefs, prevalence of non-communicable and infectious diseases, and utilisation of health care and preference of health care provider. Furthermore, these authors discovered that, most often even where participants consider their access to health care sufficient, they still experience difficulties with accessing the required care.

All women except one were unemployed and none of the women had tertiary education. This is a typical issue in rural communities. The majority of women in rural communities have low levels of education and are unemployed (Abideen, Adewale and Adeola, 2013; National Bureau of Statistics, 2017). Almost all the pregnant women in the current study walk to the clinic (locally referred to as trek) except the two who used a motorcycle and a car. Transport in rural areas is usually a challenge. The rural communities usually walk long distances to access services such as school, shops, health services and employment (Matyukira, 2014).

The health care workers were all midwives, all of them except one were females, they were all black, were all mature adults between 25 and 50 years old and had an experience of five years or more working in ANC services.

These demographic characteristics of the health care worker participants all appear to have strong points for provision of quality service. Nevertheless, the pregnant women still presented dissatisfaction with ANC service and highlighted quality of services as one of their concerns. There were issues regarding either poor communication or information provided contravening cultural and traditional beliefs for the community. Rural communities often have strong cultural beliefs and traditional values (Addai 2000; Umar and Bawa 2015). In most African countries and some Asian countries, cultural values, beliefs and traditions are observed by the community regardless of the level of education and are passed on from generation to generation (Okechukwu, 2013; Bonono and Ongolozogo, 2012; Adeniyi and Erhabor 2015). These authors further attest that these communities have a tendency to refrain from any services that contravene their cultural beliefs and values.

6.4 SECTION A: DISCUSSION OF RESULTS IN RELATION TO THE OBJECTIVES OF THE STUDY

The discussion in this section was aimed at portraying achievability of the study aim and objectives. The aim of the study was to analyse and describe the factors that influence the access and utilisation of ANC services by pregnant women from Lemu community in Niger state, Nigeria. The objectives that were used to realise this aim were: assessing and describing how ANC services were accessed by pregnant women from the Lemu community; how ANC services were utilised by pregnant women from the Lemu community and analysing the factors that were influencing the access and utilisation of ANC services by pregnant women from the Lemu community.

6.4.1 How ANC services were accessed by pregnant women from the Lemu community.

Both Phase 1 and Phase 2 participants concurred that there was limited availability of health care services for the Lemu community in Niger state. The problem of limited availability of ANC services was compounded by the fact that only one out of the three available health care clinics was Government owned. Abubakar, Sambo and Idris (2011: 44) attest that there is limited availability of

Government owned and virtually no health care services in most rural areas in Nigeria. Even where accessibility is limited by times and days of provision of ANC services as mostly ANC services are provided once in a week.

The location of the local clinic also posed problems where women were unable to access the clinic because of its distance from the residential areas. According to Onasoga et al. (2012: 1313-1314), pregnant women residing far away from healthcare services usually find it distressing to walk long distances or take more than two taxis to health facilities on appointment days and thus tend to under-utilise ANC services regularly than those living close to the health facilities. The demographic data show that the majority of the Phase 1 participants (pregnant women) were either unemployed or receiving low income. This possibly accounts for the study finding where the most common means of transport to the clinic was trek, although other factors such as availability of transport could account for this.

6.4.2 How ANC services were utilised by pregnant women from the Lemu community.

Poor utilisation of ANC services became evident from the discussion with the pregnant women. The Phase 2 participants (health care workers) also attested to this. A number of pregnant women were not attending ANC some because of poor access and others were not attending despite having access. The women who were not attending despite having access stated that it was because of cultural and social issues which included, family approval and support, traditional behaviors and family values and reliance on traditional birth attendance. Umar and Bawa (2015) and Centenary (2010) agree that cultural and social issues could deter women from utilising ANC services especially when the practices in the healthcare service do not take cognisance or respect these issues.

6.4.3 Factors influencing the access and utilisation of ANC services by pregnant women from the Lemu community.

Several factors influencing access and utilisation of ANC services were identified. These were presented in the previous chapter as themes and sub-

themes that emerged from the analysis of data. The six themes which included availability of health care services, cultural and social issues, travelling to the clinic, satisfaction with service, financial issues and community awareness were all identified as the factors that together with several sub-themes influenced the access and utilisation of ANC services by pregnant women from the Lemu community. Similar findings were obtained by Adekanle and Isawumi (2008) in their study in South West Nigeria. Similarly, Van der Hoeven et al. (2012: 5) discovered that the reasons for not having sufficient access to health care included transport/ distance to health care facilities, financial constraints, and problems with the service. Problems with the service included provision and availability of medication, number and quality of the staff, facilities (including equipment), service hours and capacity (ability to accommodate all the patients within a reasonable time). The factors identified could be categorised into the three broad factors as described by Anderson and Newman in the Framework of Health Services Utilisation. A detailed discussion of the factors identified is provided in Section B where these factors are aligned to the three factors (the predisposing factors, enabling factors and need factors) according to Framework of Health Services Utilisation.

6.5 SECTION B: DISCUSSION BASED ON ANDERSON AND NEWMAN'S MODEL

The six major themes and the sub-themes that emerged during the data analysis together with the corresponding sub-themes were identified as the principal factors influencing access to and utilisation of ANC services in the Lemu community. The discussion in this section is based on Anderson and Newman's Framework of Health Services Utilisation model as the theoretical framework that was used as a guide for this study. The current study ascertained that the three factors as described by Andersen (1968) which are: predisposing factors, enabling factors and need factors potentially influence access and utilisation of ANC services. Table 6.1 below presents how the themes and sub-themes fitted into the three factors that according to the Framework of Health Services Utilisation influenced utilisation of health care services.

Table 6.1: Major themes and factors of the Framework of Health Services Utilisation model

BEHAVIOUR FACTORS	MAJOR THEMES	SUB-THEMES
The Predisposing Factor	<ul style="list-style-type: none"> • Availability of health care services 	<ul style="list-style-type: none"> • Availability of the clinic within reach • Operation days and times • Admission policy in clinics
	<ul style="list-style-type: none"> • Cultural and social issues 	<ul style="list-style-type: none"> • Family approval and support • Traditional behaviors and family values • Reliance on traditional birth attendance
	<ul style="list-style-type: none"> • Travelling to the clinic 	<ul style="list-style-type: none"> • Availability of transport • Location of the preferred clinic
The Enabling Factor	<ul style="list-style-type: none"> • Satisfaction with service 	<ul style="list-style-type: none"> • Attitude of staff • Quality of service • Waiting times
	<ul style="list-style-type: none"> • Financial issues 	<ul style="list-style-type: none"> • Cost of transport to the clinic • Service fee • Employment status
The Need Factor	<ul style="list-style-type: none"> • Community awareness 	<ul style="list-style-type: none"> • Package of services • Need and timing of attendance

6.5.1 The predisposing factors

The factors that were identified as the predisposing factors to access and utilisation of ANC services by the Lemu community included availability of health care services, cultural and social issues, and travelling to the clinic.

6.5.1.1 Cultural and social issues

Certain cultural issues and traditional behaviors hindered the pregnant women from utilising ANC services. These included family approval and support, traditional behaviors and family values and reliance on traditional birth attendance. Purnell (2014:1) defines culture as socially accepted behaviors and ways of life of a population which guide their decision making and cultural competency. Understanding the barrier is necessary to recognise the “seeking care” behavior of the population. Antenatal taboos generally exist and are still practiced by some pregnant women. Diversity must be observed by health care professionals when dealing with these populations. Some participants in the

current study stated that they believed that pregnancy is from God, so God would take care of them so they did not need to attend ANC. Some participants were not keen to attend ANC services because either they or their families were concerned that the teaching in the clinics contravened their cultural and traditional behaviors. The one example was with regards to nutritional information, where in the clinics they were encouraged to eat eggs and maas as part of a nutritional diet yet according to their cultures young pregnant women were forbidden to eat these foods. The behavior was that eggs predispose the baby to be a thief. Many other such myths were shared by the pregnant women and the health care workers attested to them. Similarly, Umar and Bawa (2015) discovered that the majority of women in rural areas were still very reliant on traditional medicine and traditional birth attendance and felt that they were safer with traditional birth attendance than with health care workers

6.5.1.2 Availability of health care services

Participants from both phases concurred that there was limited access to health care in Lemu. The health workers attributed this to the limited number of health care services in the area where there were only three health care facilities. Availability of health care services with regards to the clinics being present and the location of the clinics have been discussed in section above. However, the participants also highlighted the issue of operation days and times and admission policy in clinics as the factors that interfered with availability of ANC services. The operation days and times were not convenient for some participants especially the working class and the school going children. Onasoga et al. (2012) agreed that where operation days and times are not convenient to the community, access and utilisation of such services could be interfered with.

6.5.1.3 Travelling to the clinic

Travelling to the clinic was one of the challenges pregnant women faced as they tried to access and utilise ANC services. The challenges that were experienced by the participants with regards to travelling to the clinic included: availability of transport, cost of transport and location of clinic. Some pregnant

women were unable to access and utilise ANC services due to the distance of the clinics to their houses which either required them to walk long distances or required finances to pay for transport. Selected women also stated that even if they had money the challenge was unavailability of transport. Transport would be available during peak hours for people going to and from work and no transport was available during off-peak hours. This necessitated getting up very early in the morning and arriving back home late in the afternoon. This seemed to be a common problem all over Nigeria as similar findings were discovered by Onasoga et al. (2012) and Centenary (2010) in other parts of Nigeria. According to Rural Health Information Hub (2002-2018), distance and available of transportation go hand in hand when it comes to preventing people from receiving the healthcare that they need. Transportation is an important social determinant of health in rural communities and the availability of reliable transportation impacts a person's ability to access appropriate and well-coordinated healthcare services (Rural Health Information Hub 2002-2018). Accessible transportation options can make the difference between healthcare access and no access for many people in rural areas. It is an unfortunate feature of the rural transport sector that for many rural communities both the means of transport and the infrastructure are poorly developed.

6.5.2 Enabling factors

The two enabling factors identified were satisfaction with services and financial issues

6.5.2.1 Satisfaction with services

Satisfaction with services was shared by both the pregnant women and the healthcare workers as one important factor that influenced utilisation of health care services. Client satisfaction is considered one of the desired outcomes of healthcare and is directly related to the utilisation of healthcare services (Ouma et al. 2010). Thus, people who are dissatisfied with the service either do not attend at all or they miss appointments. Satisfaction with the services was measured with regards to attitude of staff, quality of service and waiting times. Previous experiences in the clinics with regards to these three factors

contributed to the women nor returning to the clinic for their subsequent appointments or deciding not to initiate ANC in their subsequent pregnancies. The attitude of staff was not pleasing to the majority of women. Even the health care workers themselves attested to this that when they were inundated with work due to staff shortages and highly demanding programme, they tended to lose patience and became irritable. In a study by Onasoga et al. (2012), 83% of the respondents expressed their dissatisfaction with attitude of the health care service providers. Where the clients as customers for the health service are not satisfied with the quality of the service there is a tendency to boycott the services. Some of the pregnant women reported they were not keen to attend the clinics because of the substandard care in the local clinics. Onasoga et al. (2012) found that the waiting times at the clinics were too long. When the waiting times are too long this can deter the pregnant women from honouring their appointments (Matyukira 2014:15). A similar situation was observed in the public health service in South Africa where because the services are overburdened and under-staffed, waiting times became excessive and consultation times too short to be effective (Hirschowitz et al. 1995). According to Sokhela (2011), the shorter the time that the clients wait at the clinic, the more satisfied they are with the services received.

6.5.2.2 Financial issues

Financial issues were a major challenge pregnant women encountered in a bid to access and utilise ANC services. Financial issues included transport cost, service fees and employment status. The study revealed that most of the pregnant women had no sustainable means of income and so could not afford the service fees. ANC services in Nigeria are not free even in the government institutions. The service fees are even higher in the private institutions. Sometimes drugs became so expensive that the clients could not afford them. Faced by these challenges, the clients opted to not attend clinics especially institutions where they could not afford the drugs. Matyukira (2014: 14) and Centenary (2010) agree that some pregnant women choose not to attend ANC clinics due to costs of services and drugs.

Transport fees were another issue with regards to financial issues. Some clients needed to take more than one transport to get to the clinic. Most of the pregnant women were unemployed and their spouses either were also unemployed or earning a low income. Therefore, they could not afford the cost of ANC services and drugs (Onasoga et al. 2012; Matyukira 2014).

6.5.3 The need factors

Community awareness was the only factor categorised as a need factor.

6.5.3.1 Community awareness

The majority of the pregnant women lacked knowledge and information about ANC services. The Phase 1 participants indicated that they were unable to access and utilise ANC services because they either were not aware of the package of services that were available in the local clinics or simply because they were not aware of the need and importance of attending ANC. Others were not aware of the timing of attendance. An understanding of the obstacles within the local culture is vital in order to improve women's awareness about their pregnancy (Agus, Horiuchi and Porter 2012: 1).

6.6 DATA TRIANGULATION

Selected elements of data were triangulated in order to gain a better understanding of the phenomena being investigated. The triangulated information included the following

- Findings from the government owned with those from the private owned clinics
- Information from pregnant women with information from the health care workers
- Demographic information regarding utilisation of ANC
- ANC access with ANC utilisation
- ANC utilisation with financial, transport issues and location of the clinic

6.6.1 Findings from the government owned clinic with those from the private owned clinics

The study sites for the current study included one government owned clinic (the Rural Health Centre), two private clinics, the market place and the churches. The information shared was mainly concerning the health care centres (the Rural Health Centre and the two private clinics) because these were the three health care centres that were offering ANC services in the area. Therefore, the phenomenon in question was access and utilisation of ANC services in these centres. In Nigeria, most pregnant women prefer to attend ANC services in government owned healthcare centres rather than the private clinics (Babalola 2014: 15). This could be as a result of cost implications of private hospitals. The information gathered and analysis of findings from the Rural Health Centre which was a government owned ANC clinic was triangulated with those from the two private clinics. Although the pregnant women shared challenges regarding access and utilisation to both these health care centres, the factors that influenced access and utilisation to each were different.

With regards to availability of services the issue in the private clinics were related to their admission policy which restricted admission into these clinics. With the Rural Health Centre the issue was distance to the clinic and the operation days and times.

The concerns regarding travelling to the clinic were similar for both the government owned and private clinics. It appeared some pregnant women preferred to use the government clinic and others were in favour of using the private clinics.

Satisfaction with service was based on attitude of staff, quality of service and the waiting times and were raised by participants from the two health care centres but in different connotations. There were positive comments regarding these issues in relation to the two private clinics. The participants commented about the good quality of service, friendly attitude of staff and shorter waiting times. Sadly, most clients were unable to access and utilise the private clinics because of costs and admission policies. On the other hand, these issues were raised with negative connotations regarding the government owned clinics. The

participants commented about poor quality of service, bad attitude of staff and long waiting times.

There were issues concerning finances in both health care centres. However, the major issue in the government owned clinics was with regards to transport costs, while with the private clinics the issues pertained to the cost of services and drugs

The issue of community awareness and traditional and cultural issues were shared mainly by the participants who were sampled in the churches and the market place and were not directly concerning a specific health care centre.

6.6.2 Information from pregnant women with information from the health care workers

During data analysis similar themes and sub-themes emerged from the Phase 1 and Phase 2 participants. Therefore, because the information from both phases concurred, presentation and triangulation findings were presented together in the previous sections. The point to note is that both parties agreed that there were challenges regarding access and utilisation of services by the pregnant women in the Lemu community. The health care worker participants agreed with the pregnant women that availability of health care services, travelling to the clinic, satisfaction with service, financial issues, community awareness and the traditional and cultural issues were all factors influencing access and utilisation of ANC service for this community. The health care worker participants concurred with the pregnant women that often their attitudes towards the clients were not pleasing and that they were not giving information to the clients. All these were attributed to work overload and shortage of staff. Lack of facilities and shortage of staff often discourage pregnant women from attending ANC services, as they spend longer times waiting to be attended to (Onasoga et al. 2012).

6.6.3 Demographic information regarding utilisation of ANC services

The findings on selected demographic characteristics such as age, parity, level of education, employment status, and source of income were compared with

utilisation of ANC. There were no obvious relationships between demographic characteristics and ANC services utilisation. However, it is worth noting that one participant had access to ANC but was not attending (utilising) ANC because she did not have any source of income.

6.6.4 ANC access with ANC utilisation

All the pregnant women who stated that they did not have access to ANC were not attending ANC. Half of the pregnant women (four out of eight) who indicated that they had access to ANC were attending and the other four were not attending ANC. This concurs with some of the factors that were highlighted by the pregnant women which impact on utilisation but not on access. These include cultural and traditional issues, and satisfaction with services. Umar and Bawa (2015) agree that even in the presence of health care services certain factors continue to interfere with utilisation of services.

6.6.5 ANC utilisation, financial issues, transport issues, employment and location of the clinic

Financial issues, transport issues, employment status and location of the clinic led to ANC services utilisation. Khun and Manderson (2007) attest that small available budgets restrict the choice of health care providers, and may also compel people to delay seeking health care. Furthermore, all these factors potentially influenced and were influenced by each other and could be linked to each other regarding influencing utilisation of ANC services. A pregnant woman who lives far away from the clinic (*location of the clinic*) requires transport to get to the clinic (*transport issues*), she requires money to pay for clinic services and transport (*financial issues*) and needs to be employed (*employment*) in order to have money to pay for these services. Several studies concur that that financial considerations, perceived quality of a health care provider and the geographic location of the provider are important criteria influencing an individual's choice, access to and utilisation of a health service (Ahmed et al. 2010; Tanser, Gijssbertsen and Herbst 2006).

6.7 SUMMARY OF THE CHAPTER

Chapter 6 presented the discussion of the findings of the study. The discussion was guided by the theoretical framework and supported by relevant literature. The next chapter depicts the summary of study findings, limitations and recommendations from the study.

CHAPTER 7 SUMMARY OF FINDINGS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS OF THE STUDY

7.1 INTRODUCTION

The discussion of the study findings based on the analysis and interpretation of the information that was gathered from the participants was presented in the previous chapter. The discussion was guided by the Andersen and Newman's Framework of Health Services Utilisation (2005) and supported by relevant literature. Chapter 6 presents the summary of the findings, and conclusion drawn from the current study. Furthermore, limitations of the current study are highlighted and recommendations are presented.

7.2 SUMMARY OF FINDINGS

The three objectives of the study were to assess and describe access to ANC services by the pregnant women from the Lemu community, assess and describe utilisation of ANC services by pregnant women from the Lemu community, and determine and describe the factors that influence the utilisation of ANC services by the pregnant women from the Lemu community. The realisation of these objectives enabled identification of the factors that influence the access to and utilisation of ANC services by pregnant women from the Lemu community in Niger State, Nigeria which was the aim of the study.

7.2.1 Access of ANC services

The study identified that there was poor access to ANC services for the pregnant women from the Lemu community because of the limited number of ANC services available in this community area. Only one of the three health care services was government owned and easily accessible to the community. The other two were private owned and had numerous restrictions such as the high cost of admission for clients. The one government owned health care

service also posed numerous challenges such as distance from residential area, and operation days and times that were not suitable for some members of the community.

7.2.2 Utilisation of ANC services

The majority of pregnant women from the Lemu community were not utilising ANC services for various reasons. Similar reasons were shared by the pregnant women and health care workers thus confirming the reality of the situation regarding access and utilisation of ANC services in this community area. Thus, these were all identified as factors that influence the utilisation of ANC services by the pregnant women from the Lemu community.

7.2.3 Factors that influence the utilisation

The factors that were identified as influencing the utilisation of ANC services by the pregnant women from the Lemu community were all in relation to availability of health care services, travelling to the clinic, satisfaction with service, financial issues, community awareness and traditional and cultural issues. These were all categorised based on the theoretical framework that guided the study as predisposing factors, enabling factors and need factors. As proposed by Andersen and Newman (2005: 4) in their model, individuals' access to and use of health services (the two expected outcomes/behaviors in the current study) are dependent on three characteristics: the predisposing factors, the enabling factors, and the need factors.

7.3 LIMITATIONS

The study was conducted in one small community area and therefore the findings cannot be generalised to the entire Niger state.

7.4 RECOMMENDATIONS

Recommendations are presented with special reference to policy development and implementation, institutional management and practice, nursing education and further research.

Policy development and implementation

- Several comments by the participants hinted at policies that did not take into consideration the needs of the community. The operation days and times, admission policies and costs of services were of concern. It is recommended that community needs be considered when policies guiding service delivery are made and or reviewed.
- It is recommended that distribution of health services be revisited and strategies to bring services closer to be people be instituted such as introduction of mobile clinics.

Institutional management and practice

- The pregnant women commented about quality of services and poor communication, operation times and days and attitude of staff. It is recommended that managers ensure that staff at the clinics are supervised in order to monitor that services are rendered as expected.
- Community involvement and engagement should be implemented in the clinics in order to gain input from the community. This will promote client focused services and improves client satisfaction.
- Health education programmes should be linked to community values, beliefs and tradition so as to avoid rejection by the community who feel their tradition is being violated.
- Strategies to improve access and utilisation of ANC services should include intersectoral collaboration and involve all relevant stakeholders such as the transport department.

Nursing education

- The pregnant women commented about quality of services and poor communication. Recommendations are made for nursing education institutions to ensure that midwives with skills and required competencies are produced. Education and training should be aligned to the needs of the community.

- In-service education programmes and workshops should be used to ensure that the healthcare workers are kept updated so as to be able to constantly provide quality care.

Further research

- A broader study involving a wider area is recommended in order to gain a wider perspective regarding access and utilisation in the entire Niger state.

7.5 CONCLUSION

Maternal and child care mortality and morbidity remain a major challenge of most developing countries including Nigeria. Most authors agree that ANC is one of the key strategies to improve maternal and child care, mortality and morbidity. Therefore, access to and utilisation of ANC services should be a priority for any country so as to ensure that every pregnant woman attends and receives ANC.

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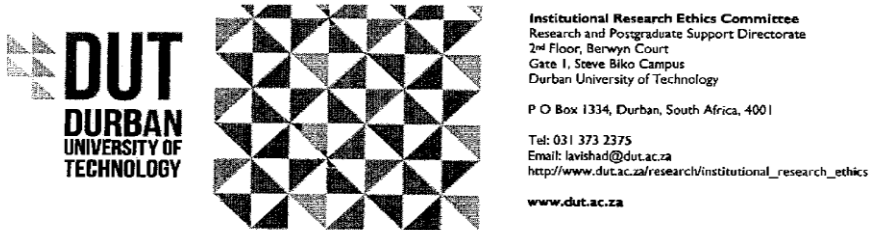
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APPENDICES

Appendix 1a: DUT ethics clearance: full approval (53/17)



18 September 2017

IREC Reference Number: **REC 53/17**

Mrs M K Paul
18 Heswall Road
Corlo Court Residence
Durban
4001

Dear Mrs Paul

Factors influencing access and utilisation of antenatal care services by Lemu community in Niger state of Nigeria

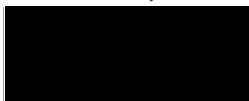
The Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

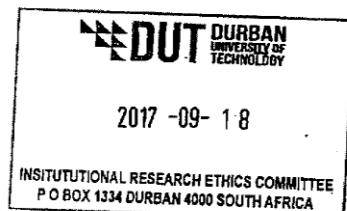
In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that **FULL APPROVAL** is granted to your research proposal. You may proceed with data collection.

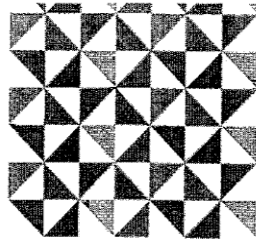
Yours Sincerely,



Professor J K Adam
Chairperson: IREC



Appendix 1b: DUT ethics clearance: partial approval (rec 53/17



Institutional Research Ethics Committee
Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court
Gate 1, Steve Biko Campus
Durban University of Technology

P.O. Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375

Email: lavishad@dut.ac.za

http://www.dut.ac.za/research/institutional_research_ethics

www.dut.ac.za

23 August 2017

IREC Reference Number: **REC 53/17**

Mrs M K Paul
18 Heswall Road
Corlo Court Residence
Durban
4001

Dear Mrs Paul

Factors influencing access and utilisation of antenatal care services by Lemu community in Niger state of Nigeria

I am pleased to inform you that Provisional Approval has been granted to your proposal REC 53/17 subject to:

- > Piloting of the data collection tools and
- > Obtaining and submitting the necessary gatekeeper permission/s to the IREC.

Full approval is subject to meeting the above conditions.

The Proposal has been allocated the following Ethical Clearance number **IREC 065/17**. Please use this number in all communication with this office.

Approval has been granted for a period of two years, before the expiry of which you are required to apply for safety monitoring and annual recertification. Please use the Safety Monitoring and Annual Recertification Report form which can be found in the Standard Operating Procedures [SOP's] of the IREC. This form must be submitted to the IREC at least 3 months before the ethics approval for the study expires.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC SOP's.

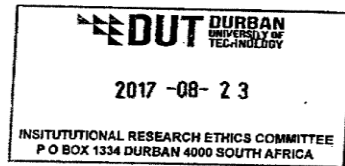
Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Please note that you may continue with validity testing and piloting of the data collection tools. Research on the proposed project may not proceed until IREC reviews and approves the final documents. If there are no changes to the data collection tools, kindly notify the IREC in writing.

Yours Sincerely



Professor C E Napier
Chairperson: IREC (Acting)



Appendix 2a: Permission letter to lemu health care centre



Dept. of Nursing Studies
Durban University of Technology
Durban
13 November 2016

The Head Matron in Charge
Rural Health Centre
Lemu.

RE: REQUEST FOR PERMISSION TO CONDUCT A STUDY

I am presently registered as a student at the Durban University of Technology in the Department of Nursing doing masters in Nursing Sciences. The proposed title of my research project is: Factors Influencing access and utilisation of Antenatal care services by Lemu Community Niger State Nigeria.

The aim of the study is to explore and describe the factors that influence the access and utilisation of ANC services by pregnant women from the Lemu community in Niger State, Nigeria. The objective of the study are to:

- Determine and describe access of ANC services by pregnant women from the Lemu community.
- Determine and describe utilisation of ANC services by pregnant women from the Lemu community.
- Identify the factors that influence the utilisation of ANC services by pregnant women from the Lemu community.

Data will be collected in Lemu community Health Care centre. The participants will be the pregnant women attending ANC with whom focused group discussions will be conducted and the health care workers with whom one on one semi-structured interviews will be conducted.

I hereby request your permission to conduct a research project at Rural Health Centre Lemu. My research proposal and ethical clearance certificate have been attached.

Your support and permission to conduct the study at your facility will be appreciated.

.....
Ms. M.K Paul M.Tech Student

Contact Number: +27810285270/+2348065367395
0833761747

Email: Kakamision@yahoo.com

.....
Dr T.S.P Ngxongo Supervisor

Contact Number:

Email: thembelihlen@dut.ac.za

.....
Ms. Babusisiwe Kumalo Co-supervisor
Contact Number: 0824630804Email: babusisiwek@dut.ac.za

Appendix 2b: Approval letter from Lemu health care centre

RURAL HOSPITAL

**PRIMARY HEALTH CARE DEPARTMENT
GBAKO LOCAL GOVERNMENT LEMU**

Our Ref:..... Your Ref:..... Date:.....

Mrs Mary K. Paul,
Nursing Department,
Durban University of Technology,
Durban 4001.

Dear Madam,

RE: PERMISSION TO CONDUCT RESEARCH AT RURAL HOSPITAL LEMU.

I have the pleasure of informing you that permission has been granted to you by the facility to conduct research on Factors Influencing Access and Utilisation of ANC Services in Lemu Community, Gbako Local Government of Niger State, Nigeria.

Yours sincerely,

Moses Yisa.
Head of Rural Hospital, Lemu.



Appendix 3a: Permission letter to private clinic in Lemu



Department of Nursing
Durban University of Technology
Durban.
13th March, 2017

The Head Matron,
Lemu Private Clinic
Niger Estate

REQUEST FOR PERMISSION TO CONDUCT A STUDY

I am presently registered as a student at the Durban University of Technology in the Department of Nursing doing masters in Nursing Sciences. The proposed title of my research project is: Factors Influencing access and utilisation of Antenatal care services by Lemu Community Niger State Nigeria. The aim of the study is to explore and describe the factors that influence access to and utilisation of antenatal care services by Lemu Community in Niger State, Nigeria. The objectives of the study are to assess and describe access of ANC services by pregnant women from the Lemu community and utilisation of ANC services by pregnant women from the Lemu community and to determine the factors that influence the utilisation of ANC services by pregnant women from the Lemu community.

I hereby request your permission to conduct a research project at the Private Clinic. Data will be collected from the pregnant women and the health care workers using one on one semi-structured interviews.

My research proposal and ethical clearance certificate have been attached. Your support and permission to conduct the study at your facility will be appreciated.

.....
M.K Paul
M.Tech Student
Contact Number
+27810285270
+2348065367395
Kakamision@yahoo.com

.....
T.S.P Ngxongo (Dr)
Supervisor
Contact Number
0833761747
thembelihlen@dut.ac.za

.....
Babusisiwe Kumalo (Mrs)
Co-supervisor
0824630804
babusisiwek@dut.ac.za

Appendix 3b: Approval letter from private clinics Lemu (1)


Yebojin Private Clinic,
Lemu.
31st January, 2017.

Mrs Mary K. Paul,
Nursing Department,
Durban University of Technology,
Durban 4001.

Dear Madam,

RE: PERMISSION TO CONDUCT RESEARCH AT YEBOJIN LEMU.

I have the pleasure of informing you that permission has been granted to you by the facility to conduct research on Factors Influencing Access and Utilisation of ANC Services in Lemu Community, Gbako Local Government of Niger State, Nigeria.


Alhaji Kuso.
Director.



Appendix 3c: Approval letter from private clinics Lemu (2)

YETU HOSPITAL, LEMU. ₦

Niger State, Nigeria.

Tel: +2349055921393, EMAIL: mail2abaya@gmail.com

Date: 31th January, 2017.

Mrs. Mary K. Paul,
Nursing Department,
Durban University of Technology,
Durban 4001.

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT RESEARCH AT YETU HOSPITAL; A PRIVATE HOSPITAL IN LEMU, NIGER STATE, NIGERIA.

I, Dr Vincent Abaya, The Medical Director of Yetu Hospital Lemu, Hereby grants you the permission to use the Facility to conduct your research on the Factors Influencing Access and Utilization of ANC Services in Lemu Community, Gbako Local Government of Niger State, Nigeria.

Yours Faithfully


Dr VINCENT ABAYA

Medical Director

Appendix 4a: Permission letter to the religious leader



Department of Nursing
Durban University of Technology
Durban.
13th March 2017
The Pastor of the Church
Lemu Community Area
Niger Estate.

REQUEST FOR PERMISSION TO CONDUCT A STUDY

I am presently registered as a student at the Durban University of Technology in the Department of Nursing doing masters in Nursing Sciences. The proposed title of my research project is: Factors Influencing access and utilisation of Antenatal care services by Lemu Community Niger State Nigeria. The objectives of the study are to assess and describe access of ANC services by pregnant women from the Lemu community and utilisation of ANC services by pregnant women from the Lemu community and to determine the factors that influence the utilisation of ANC services by pregnant women from the Lemu community.

I hereby request your permission to conduct a research project at your church. Data will be collected from the pregnant women using one on one interviews. My research proposal and ethical clearance certificate have been attached. Your support and permission to conduct the study at your facility will be appreciated.

.....
M.K Paul
M.Tech Student
Contact Number
+27810285270

.....
T.S.P Ngxongo (Dr)
Supervisor
Contact Number
0833761747

+2348065367395
Kakamision@yahoo.com

thembelihlen@dut.ac.za

.....
Babusisiwe Kumalo (Mrs)
Co-supervisor
0824630804
babusisiwek@dut.ac.za

Appendix 4b: Approval letter from the religious leader

St. Emmanuel Anglican Church,
Lemu.

2nd July, 2017.


Mrs. Mary K. Paul,
Nursing Department,
Durban University of Technology,
Durban 4001.


Dear Madam,

**RE: PERMISSION TO CONDUCT RESEARCH AT ST. EMMANUEL ANGLICAN
CHURCH, LEMU.**

I am pleased to inform you that you have been granted permission to conduct a research on Factors Influencing Access and Utilisation of ANC Services at St. Emmanuel Anglican Church in Lemu Community, Gbako Local Government of Niger State, Nigeria.

Yours sincerely,


Rev. David Audu
Resident Pastor

Rev. David M. Audu
Vicker In charge Emman.
Anglican Church Lemu

1st September, 2017

Appendix 5a: Permission letter to the chairperson of the market place



Department of Nursing
Durban University of Technology,
Durban.
13th March 2017

The Chairman
Lemu Market Place
Lemu Community Area
Niger State.

RE: REQUEST FOR PERMISSION TO CONDUCT A STUDY

I am presently registered as a student at the Durban University of Technology in the Department of Nursing doing masters in Nursing Sciences. The proposed title of my research project is: Factors Influencing access and utilisation of Antenatal care services by Lemu Community Niger State Nigeria. The objectives of the study are to assess and describe access of ANC services by pregnant women from the Lemu community and utilisation of ANC services by pregnant women from the Lemu community and to determine the factors that influence the utilisation of ANC services by pregnant women from the Lemu community.

I hereby request your permission to conduct a research project at the Market Place. Data will be collected from the pregnant women using one on one interview. My research proposal and ethical clearance certificate have been attached.

Your support and permission to conduct the study at your facility will be appreciated.

.....
M.K Paul
M.Tech Student
Contact Number
+27810285270
+2348065367395
Kakamision@yahoo.com

.....
T.S.P Ngxongo (Dr)
Supervisor
Contact Number
0833761747
thembelihlen@dut.ac.za

.....
Babusisiwe Kumalo (Mrs)
Co-supervisor
0824630804
babusisiwek@dut.ac.za

Appendix 5b: Approval letter from the chairman market place

Local Marketplace,
Lemu.
2nd July, 2017.

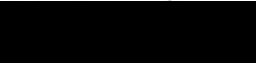
Mrs. Mary K. Paul,
Nursing Department,
Durban University of Technology,
Durban 4001.

Dear Madam,

**RE: PERMISSION TO CONDUCT RESEARCH AT LOCAL
MARKETPLACE, LEMU.**

It is my pleasure to inform you that you have been granted permission to conduct a research on Factors Influencing Access and Utilisation of ANC Services at the local marketplace in Lemu Community, Gbako Local Government of Niger State, Nigeria.

Yours sincerely,



Mohammed Sariki Kasuwa
Market Head.

Appendix 6a: Letter of information and consent for pregnant woman in English



LETTER OF INFORMATION

Dear Participant,

Thank you for voluntarily agreeing to participate in this study.

Title of the Research Study: Factors influencing access and utilisation of Antenatal care services by Lemu community Niger state, Nigeria.

Principal Investigator/s/researcher: Mrs Mary Kakamison Paul (BNsc, Nursing)

Co-Investigator/s/supervisor/s: Dr. Thembelihle Ngxongo (PhD, Nursing),
Ms Thandi Kumalo (MTech,Nursing)

Brief Introduction and Purpose of the Study: Antenatal care (ANC) is a professional health care a woman receive throughout her pregnancy, and is important in helping to ensure that women and newborn babies survive pregnancy and child birth. Most causes of deaths and illnesses during pregnancy, such as: hypertension and diabetes and many others can be prevented or stabilized during antenatal care. The aim of the study is to explore and describe the factors that influence the access and utilisation of ANC services by pregnant women from the Lemu community in Niger state, Nigeria.

Outline of the Procedures: The researcher will conduct a brief focus group discussion lasting for 25-45 minutes with a group of 5-6 pregnant women who agree to participate in this study to discuss access to and utilisation of ANC services by Lemu community in Niger state, Nigeria.

Risks or Discomforts to the Participant: There are no potential risks associated with this study.

Benefits: The researcher will make recommendations based on the factors identified to assist with access and utilisation of ANC services. Improved access and appropriate utilisation of ANC services will benefit both the community and the department of health by improving pregnancy outcomes

Reason/s why the Participant May Be Withdrawn from the Study: The participants can choose to withdraw at any time without any consequences.

Remuneration: The participants will not receive any monetary or any other form of remuneration for taking part in the study

Costs of the Study: There is no monetary cost that will be incurred on the participants for participating in the study.

Confidentiality: Confidentiality and anonymity will be assured throughout the study and distribution of results . Code numbers instead of name will be used for the questionnaires. The consent forms with participant details will be kept in a locked cabinet only accessible to the researcher.

Research-related Injury: The nature of the study does not pose any potential risk of injury to the participants.

Persons to Contact in the Event of Any Problems or Queries:

Researcher: Mary k Paul Tel: +2348065367395/27810285270

Supervisor: Dr TSP Ngxongo Tel: 0313732609

Co-Supervisor: Ms Thandi Kumalo Tel: 0313732036

Departmental HOD: Prof M N Sibiya Tel: 031 373 2606

Institutional Research Ethics administrator: Tel: 031 373 2900

Complaints can be reported to: Research and Postgraduate Support, Prof S Moyo on 0313732577or moyos@dut.ac.za

CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher **Mary K Paul** about the nature, conduct, benefits and risk of this study- Researcher Ethics clearance number.....
- I have also received, read and understood the above written information (Participant Letter of information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available me.

.....

Full Name of Participant Date Time Signature / Right

Thumbprint

I, Mary k Paul herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

.....

Full Name of Researcher Date Signature

.....

Full Name of Witness (If applicable) Date Signature

.....

Full Name of Legal Guardian(If applicable) Date Signature

Appendix 6b: Letter of information and consent for pregnant women in Nupe



WOSIKA NYA LABARI

NYIZAGI NA YI BE EWON NYI NA E

Lo ba eza na a lotun nana na,

Yi dajin ya we na we a yedajin ke we a de jin be dudugi wa nana e na.

EGA 'TI NYA DUDUGIWA NANA: Enya nazhi e de jin be egwade dan ,to anfanijin be bibajinrezhi to eyeladan nya lafiyatswa nya ewondecizhi nimi eka nya Lemu o,kin Niger State nya Naijeria o.

EZA NAE WA DUDUGI NANA NA: Mrs. Mary Kakamision Paul (BNsc. Nursing)

EZA BACIKPOKI TO ETUNCINLECI NYA DUDUGIWA NANA:

Dr. Thembelihle Ngxongo (PhD. Nursing)

Ms. Thandi Kumalo (MTech. Nursing)

Egwadinke tetengi to sarati nya dudugiwa nana:

Eyeladan nya ewondecizhi yi etun nya lafiyatswa kanyi na nyizagi e de go kami kpata nya ewonde u na, u ma yi kpataki ya ebodan nya nna kami nya ewondeo, to ya egi kami na a ga u ma na. Batan nazhi e be la egwa tso rayi nya nyizagi nayi be ewon e na, ke batan egiagun, batan suga,ko kike nya egia nakan o, to batan ndocizhi, be de egwakan wow un a yike nyizagi ewondecizhi ga lo asibiti ci jin anfani be kaya tunzhi, to wuwuzhi eti lafiyatswa nya ewondecizhi na a la ya a na o.

Aninya nya dudugiwa to katunjin nana u yin a yi a wa dudugizhi za yi ci cin enya nazhi fe shiariafu,ko ekanzhi ya gigandan to anfanijin be shirijin nya wuwuzhi nya lafiyatswa ya ewondecizhi daga eka nya Lemu na dan kin Niger o, Naigeria o na.

Ke mi na yi ajin enyazhi jin na: Yi a wa dudugizhi za eba ewondecizhi o asibiti tetengi na ci Lemu o na. Eza nazhi a de jin be dudugiwa nana e na ga fomu (takada) nya yedajin she, kanga, yi ga takada nya egangbinzhi la ya za wuncinzhi na a a she na,tsakani miti 30 lo 40. Egangbinzhi nya eza nazhi a ga tsa na , a ga a ku fi tepu o to ezhe nazhi a gay a na.

Kpankana ko esungan na tsun eza na de egwa dan dudugiwa nana o na: Kpankana ndondo dan boy a eza na de egwa dan dudugiwa nana o na a.

Anfanizhi: Dudugiwa nana a ba etunlocizhi nya lafiyatswa nazhi dan eka nana o na jinre na a a kpe enya nazhi de a jin be wuwa to anfanijin be shirijin nya lafiyatswa ya ewondecizhi nimi eka nana o na, a ci a kpe bicikinkpe na a a la ebo a ba nyizagi nazhi yi be ewon e na jinre a ci a be ba shirijin nana, aci a jin anfani be u nyi. Be wuncin nyi u ga tsutsu nya ewondecizhi, to egi bobongizhi kan nimi eka nya Lemu o.

Sarati na ala eza ci ga nimi u wa tin ya dudugi wa nana o na: Wo tsa na wo a lo ye be egwa de dan dudugiwa nana o be a na, kami ndondo na ga ba we na, enya ndondo ma a jin we a, ko gba zunma wun a.

Gbatawozhi: Eza na ga de egwa dan dudugiwa nana o a,yi a ya u enyangici to enyafinci tetengi gi (enya emilo degi)

Ewota ebo dudugiwa nana o: Eza ndondo nag a de egwa dan dudugiwana nana o na, a a ta ewo ndondo ebo etun nana bo a.

Asiriso: Yi ga asiri nya eza ndondo na egwa dan dudugiwa nana o na so, watoyi a tun sunna o ye dan fili bo a, ebon a yi a gag a u ka sunna u ba takada nya eganbginzhi bo a. Ama to na de sunnanya eza ndondo a dan takada nya yedajin o na, tun acin yi a la u tin ya dan fili bo a, ama komputa ga lamba ndoci la ji sunna ndondo na ezazhi a kpe ye a na.

Ebanyi na de a jin gani be dudugiwa nana e na: A a de ebanyi ndondo na a be tsun eza wo ebo dudugiwa nana o na a.

Eza nazhi wo waza wo , wo ga wa eyekpe lo ye na:

Dudugiwaci: Mary K. Paul Tel. +2348065367395, 27810285370

Eyeladanci nya Dudugiwa Dr. TSP Ngxongo Tel. 0313732609

Zabaci nya Eyeladanci nye dudugiwa : Ms Thandi Kumalo Tel.0313732036

Nusa nya ekpo katunjinba nana: Prof. MN Sibiya Tel. 0313732606

Nusa nya jinjinzhi nya etun nya dudugiwazhi: Tel. 0313732900

Wo ga de kara ajin wo la u lo ba DVC wo: Research and Post graduate Support,
Prof S Moyo on 0313732577 or moyos@dut.ac.za

Appendix 7: Letter of information and consent for health care workers



LETTER OF INFORMATION

Dear Participant,

Thank you for voluntarily agreeing to participate in this study.

Title of the Research Study: Factors influencing access and utilisation of Antenatal care services by Lemu community Niger state, Nigeria.

Principal Investigator/s/researcher: Mrs Mary Kakamission Paul (BNsc, Nursing)

Co-Investigator/s/supervisor/s:

Dr. Thembelihle Ngxongo (Doctor of Nursing),
Ms Thandi Kumalo (MTech, Nursing)

Brief Introduction and Purpose of the Study: Antenatal care (ANC) is a professional health care that a woman receive throughout her pregnancy. The care is important in helping to ensure that women and newborn babies survive pregnancy and child birth. Most causes of maternal mortality, such as: Eclampsia, anaemia, sepsis, hypertension and diabetes in pregnancy can be prevented, diagnosed and managed during ANC.

The aim of the study is to explore and describe the factors that influence the access to and utilisation of ANC services by pregnant women from the Lemu community in Niger state, Nigeria.

Outline of the Procedures: The researcher will conduct a short one on one interview lasting for about 20-30 minutes with each of the health care workers

who agrees to participate in this study to find out about the factors that influence access and utilisation of Antenatal care services by the pregnant women from Lemu community in Niger state, Nigeria.

Risks or Discomforts to the Participant: There are no risks whatsoever involved in this study.

Benefits: The research will help the health care professionals in the community to know the factors that influence access and utilisation of ANC in the community, and be able to take appropriate action to help the pregnant women to access and utilise the available ANC services thereby preventing improve pregnancy outcomes. Recommendation from study could assist policy makers to decide on strategies to promote access to and facilitate utilisation of ANC services.

Reason/s why the Participant May Be Withdrawn from the Study: Participation in the study is voluntary and you may choose to withdraw at any time without any consequences.

Remuneration: There will not be any form of remuneration for the participants for taking part in the study

Costs of the Study: There will be no monetary cost incurred by the participants for participating.

Confidentiality: Confidentiality and anonymity will be maintained throughout the study by not using personal details that could link the participants to the information provided such as names or identity numbers in any of the research documents except in the consent forms. All consent forms will be kept away in a locked cupboard.

Research-related Injury: There will be no research related injury.

Persons to Contact in the Event of Any Problems or Queries:

Researcher: Mary K Paul	Tel: +2348065367395/27810285270
Supervisor: Dr TSP Ngxongo	Tel: 0313732609
Co-Supervisor: Ms B. E.T. Kumalo	Tel: 0313732036

Departmental HOD: Prof M N Sibiya Tel: 031 373 2606

Institutional Research Ethics administrator: Tel: 031 373 2900

Complaints can be reported to the Research and Postgraduate Support, Prof
S. Moyo on 0313732577or moyos@dut.ac.za

CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher.....(name of researcher), about the nature, conduct, benefits and risk of this study- Researcher Ethics clearance number.....
- I have also received, read and understood the above written information (Participant Letter of information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available me.

.....

Full Name of Participant Date Time Signature / Right

Thumbprint

I, (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

.....

Full Name of Researcher Date Signature

.....

Full Name of Witness (If applicable) Date Signature

.....

Full Name of Legal Guardian (If applicable) Date Signature



Confidential Declaration by Interpreter (only complete if applicable)

I (name)..... declare that:

- I assisted the investigator (name of participant) to interpret the questionnaire using the language medium of Nupe.
- I conveyed a factually corrected version of what was related to me.
- I am satisfied that the participant fully understood the interview questions and has had all her questions satisfactorily answered.
- The information I have received from the participant will be kept confidential.

Signed at (place).....on (date).....

Appendix 8a: Interview guide for pregnant women in English



INTERVIEW GUIDE FOR THE PREGNANT WOMEN

Interview no: Date:

Venue: Leader:

Number of Participants: Participant no:

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Mark the participant's details with an X in each of the tables below

Please complete for each participant in the interview

Age in years

19 -25years	
26-35 years	
Above 35 years	
Don't know	

Marital status

1.Single	
2.Married	
3.Widowed	
4.Divorced or Separated	

Home language

1.Nupe	
2.Yoruba	
3.Igbo	
4.Hausa/Fulani	

Transport to Health facility

Walk	
Taxi	
Bus	
Private transport	

Number of pregnancies

1	
2-3	
4-5	
More than 5	

Employment status

1.Unemployed	
2.Employed: farmer	
3.Employed: farmer	
4.Employed: Government	

Number of children

None	
1-2	
3-4	
5 and above	

Source of income

1 None	
2 Husband working as	
3 Family member	
4 Personally employed as	

SECTION B: INTERVIEW GUIDE

1. Access to ANC services

1.1 Grand tour statement

Please share your opinion about access to ANC services for the Lemu Community

1.2 Probing questions

1.2.1 Which ANC services are accessible to the Lemu community?

1.2.2 What are the factors that influence access to ANC services?

1.2.3 What are the challenges if any that influence access to ANC services

2. Utilisation of ANC services

2.1 Grand tour statement

Please share your opinion about utilisation of ANC services for the Lemu Community

2.2 Probing questions

1.2.1 Which ANC services are utilised by the Lemu community?

1.2.2 What are the factors that influence utilisation ANC services by the Lemu community?

1.2.3 What are the challenges if any that influence utilisation of ANC services by the Lemu community?

Further probing questions for both 1 and 2 will be done based on participant responses

Appendix 8b: Interview guide for pregnant women in Nupe

EBAWUZHI NYA EGANGBINZHI YA EZA NAZHI ETUN NANA DE A JIN BE NYI NA

Namba nya ekpo nana

Etswafo.....

Dana

Edzoshici.....

Namba nya eza nazhi lotun nana na

Namba nya eza nana

KASAN A: ERIZHI NA DE A JIN BE ENYAZHI NYA JAMAZHI NA.

A eri nya X la ci eba kpati ba na we e ya ezhe na o.

She takada nana ya eza ndondo na lotun dan ekpo nana o na.

EYA NYA WE

Eya 19 lo 25	
Eya 26 lo 35	
Eya nag an 36 na	
Mi tso kpe a	

EKPO NYA YAWOJIN

1.Mi la lo yawo a	
2.Mi da yawo a ni	
3.Mi yi ekpo (Eba mi a tsu)	
4.Mia yawo la (Mid an be eba mi nyi a)	

EZHI MISUN NYA WE

1.Nupe	
2.Eyagi	
3.Egbo	
4.Kenchi ko bororo	

LISAFI NYA EWON NAZHI WO DE A NI NA

1
2 lo 3
4 lo 5
U gan 5

LISAFI NYA EGI WEZHI

Mi de egi ndondo a	
1 lo 2	
3 lo 4	
5 ko na g a na	

EKPO NYA ETUNLO NYA WE

1. Mi de etun ndondo a	
2. Etun lati	
3. Etun lati	
4. Etun Gominanti	

**ENYA 'ZAN NA WE A LA BE
ASIBITI NA**

1. Ezan bici	
2. Kabu ko Tasin	
3. Mato bosu	
4. Enya zany a yisto	

YEKO NAZHI AZIKI WE E FE BE NA

1 Mi de yeko ndondo a	
2 Daga eba etunlo nya eba mi bo ke	
3 Daga eba dangi mizhi	
4 Daga etun nazhi mitso e lo na o ke	

KASAN B: EBAWUZHI NYA EGANGBINZHI YA EZA NAZHI ETUN NANA DE A JIN BE NYI NA

1. Kafa de ya anfanijin be shirijin nya etunzhi nya lafiyatswa ya ewoncizhi

1.1 Egan kpataki nya enya cinle ndocizhi

Jin hankuri ta ya yi enya na yi yekpa we eti nya kafa de lo ba shirijin nya lafiyatswa ya ezazhi eny eka nya Lemu bo o?

1.2 Egangbin nya dudugiwazhi

1.2.1 Shirijin nya etunzhi nya lafiyatswa kiczhi tsoba ezazhi nya kin Lemuna ajin anfani wo be nyi na o?

1.2.2 Ke zhi yi enya nazhi e de egwa dan eba anfanijin be shirijin nya lafiyatswa na a jin ya ewoncizhi na bo o?

1.2.3 Ke zhi yi ekopawuzhi nazhi dan eba anfanijin be shirijin nya lafiyatswa na a jin ya ewoncizhi na bo o?

2. ANFANIJIN BE SHIRIJIN YA LAFIYATSWA NYA EWONCIZHI O

2.1 Egan kpataki nya enya cinle ndocizhi

Jin hankuri ta ya yi enya na yi yekpa we eti nya anfanijin be shirijin nya lafiya tswa na a jin ya ezazhi eny eka nya Lemu bo o?

2.2 Egangbin nya dudugiwazhi

2.2.1 Shirijin nya etunzhi nya lafiyatswa kiczhi ezazhi nya kin Lemu ejin anfani be nyi o?

2.2.2 Ke zhi yi enya nazhi e de egwa dan eba anfanijin be shirijin nya lafiyatswa na a jin ya ewoncizhi nakin nya Lemu bo o?

2.2.3 Ke zhi yi ekopawuzhi nazhi dan eba anfanijin be shirijin nya lafiyatswa na a jin ya ewoncizhi na kin nya Lemu bo o?

Wo gbin Ega ndocizhi nazhi a la ezhe nya egagbin **1** to **2** nanazhi tin ye wo na, wun a yi ke ezhe na eza nana ga ya na tin ye wangi nyi a na.

Appendix 9: Interview guide for health care workers

Enter code
Study site:

Enter code
Participant No:

Date:

SECTION A: DEMOGRAPHIC CHARACTERISTICS

Please mark your response with an X in all the tables below

Rank	
Professional nurse	
Midwife	
Enrolled nurse	
Enrolled nursing assistant	
Other	

Years of experience as a health care worker	
<2years	
2 years to 5years	
>5years to 10 years	
>10years	

Years working in Lemu	
<2years	
2 years to 5years	
>5years to 10 years	
>10years	

Age	
<30years	
30- 40years	
>40-50years	
>50years	

Race		
Black		
White		
Indian		
Coloured		

Gender	
Male	
Female	
Other	

SECTION B: INTERVIEW GUIDE

B1- Accessibility to antenatal care services and social support

Grand tour question

What is your view regarding accessibility of ANC services to the Lemu community

What are the factors that influence access to ANC services?

B2- UTILISATION

Grand tour question

Which ANC services are utilised by the Lemu community?

What are the factors that influence utilisation of ANC services by the Lemu community?

Probing questions for each section will be done based on participant responses

Appendix 10: Support letter from the language translator

SUPPORT LETTER FROM THE LANGUAGE TRANSLATOR

St. Matthew's Anglican,
Church, G.R.A. Bida,
Niger State.
Nigeria.

To whom it may concern,

This is to confirm that I Theophilus S. Audu, Bsc. Mathematics, assisted Mrs Mary Kakamission Paul in translating the consent, information letter and interview guide for participants from English to Nupe and back to English.

My assistance included verifying that no messages were lost or altered during the translation and back translation.

Regards,



Theophilus S. Audu
Audutheophilus@gmail.com
+2348060196637

Appendix 11: Confidential declaration by the interpreter

Confidential Declaration by Interpreter (only complete if applicable)



I (name) THEOPHILUS AUNU declare that:

- I assisted the investigator (name)..... to interpret the questionnaire to (name of participant)..... using the language medium of Nupe.
- I conveyed a factually corrected version of what was related to me.
- I am satisfied that the participant fully understood the interview questions and has had all her questions satisfactorily answered.
- The information I have received from the participant will be kept confidential.

Signed at (place)..... on (date) 10-12-2016

Signature of interpreter

Appendix 12: Professional editor's certificate

DR RICHARD STEELE

BA, HDE, MTech(Hom)

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Email: rsteele@telkomsa.net

EDITING CERTIFICATE

Re: Mary Kakamission Paul

Master's dissertation: Factors influencing access and utilisation of Antenatal care services by Lemu community in Niger state, Nigeria

I confirm that I have edited this dissertation and the references for clarity, language and layout. I am a freelance editor specialising in proofreading and editing academic documents. I returned the document to the author with track changes so correct implementation of the changes in the text and references is the responsibility of the author. My original tertiary degree which I obtained at the University of Cape Town was a B.A. with English as a major and I went on to complete an H.D.E. (P.G.) Sec. with English as my teaching subject. I obtained a distinction for my M.Tech. dissertation in the Department of Homeopathy at Technikon Natal in 1999 (now the Durban University of Technology). During my 13 years as a part-time lecturer in the Department of Homoeopathy at the Durban University of Technology I supervised numerous Master's degree dissertations.

Dr Richard Steele

06 February 2018

per email

Appendix 13a: Transcription of an interview with the pregnant woman in English translation

Study site	Participant No.	Age	Number of Children	Marital Status	Transport to Health Facilities	Home Language	Employment Status	Number of Pregnancies	Source of Income	Recorded Information	Themes and sub-themes
S1	S1:1	32	2	M	Trek	Nupe	Unemployed	3	Farming	<p>Main research questions:</p> <p>What is your opinion concerning access to ANC service in Lemu community? <i>It is accessible.</i></p> <p>Which health post's ANC services do you attend, S1, S2 or S3? <i>I attend S1 and sometimes S2.</i></p> <p>What are the factors that influence your access to ANC services? <i>Time, finance and long queues at the health posts.</i></p> <p>What are the challenges if any that you face when accessing ANC services? <i>Lack of transportation.</i> <i>Firstly I do attend site S1 because it is close to my house but whenever I need services and my appointment day with S1 is not due, I have to go to S2 or S3 if it's an emergency.</i> <i>The problem I have with attending S3 is that they only receive clients for Antenatal Care Services on market days.</i> <i>It is unfair; sometimes you wake up early to travel a long distance only to be told by the midwives that they wouldn't be able to attend to you because they had taken enough numbers for the day.</i> <i>Another thing is that when staying away from the community, I must have money to hire a car because</i></p>	<p>Availability of health care services.</p> <p>Availability of health care services.</p> <p>Availability of transport Admission policy in clinic.</p> <p>Operational days and time.</p> <p>Financial issues.</p>

									<p><i>ambulance services are not available so because I am unemployed it's difficult to get services or urgent help. One major issue I face while trying to register for ANC is finance, my husband is also unemployed so it is quite difficult for us.</i></p> <p><i>I decided to visit a nearby clinic for ANC services and waited for 3-4 hours only to be informed that the midwives will not be coming, I was disappointed because no prior information.</i></p> <p><i>Another issue is that the clinic does not have designated areas for different services and the available service areas are not well labelled e.g. in other clinics there is a TB unit area, ANC area and it is written on the door post of the rooms. It is not like that in this clinic. We are also attended to by only one midwife.</i></p> <p><i>As much as I like health post S1, the only problem is that whenever there will be no Antenatal Care Services probably due to public holiday, we are not informed and no provisions are made and we have to decide to go to S2 or S3 or come the next following week's clinic day.</i></p> <p><i>I wanted to do scanning so as to confirm my pregnancy but I was told by the midwives that they do not do scanning here, and that I had to go somewhere else to do it because the scanning machine in S1 was faulty.</i></p> <p><i>My mother in-law is not in support of me accessing and utilisation of ANC services in the community because of what she beliefs</i></p>	<p>Financial issues.</p> <p>Community awareness.</p> <p>Community awareness.</p> <p>Community awareness.</p> <p>Quality of ANC services Organisation of health care services.</p> <p>Family approval and support.</p>
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Appendix 13b: Transcription of an interview with the pregnant woman in Nupe

Cintaragi 13b: Kika nya eganbginzhi to ezhezhi nya nyizagi ewondecu dan ezhi ‘mi nya Nupe o na

Dana nya dudugi wa	Namba nya eza na a wa dudugi eti u bo na	Egi eya gukin we yi o?	Egi gukin we de o?	Wo da yawo a ni kasha wo la lo a?	Enya zan kici we a la lo dana lafiyatswa o?	Ezhimisun nya we	Etun yiri kici we e lo o?	Ewonde nya we da zun gukin o?	Babo we ede aziki, ko, yeko nya asiriso we o?.	Egagbinzhi to ezhezhi kikacizhi	Egan ‘tizhi to Egangwalagizhi
S 1	S 1:1	Gbanwo be guba e (32)	Guba (2)	Mi da yawo a ni	Ezan bici	Nupe	Mi de etun a	Guta (3)	Etun lati o	<p>Egangbin Kpatakizhi nya dudugi wa: Ke yi yekpa we eti nya anfanijin be shirijin nya tsuwondan ya ewondecizhi eka nya Lemu bo o? Ezazhi de kafa na a be eba shirijin nana wo na.</p> <p>Asibiti na e cin lafiya tswa nya ewondecizhi le na kici we e lo o S1, S2, KASHI S3? Mi e lo S1, kandocizhi ma mi e lo S2.</p> <p>Enya kicizhi e fu we shiaria eba anfanijin be shirijin nya lafiyatswa wa ya ewondecizhi nyi o? Lokaci,Ewo, to esun duru na e dan bo nimi asibiti o na.</p>	<p>Ebodan nya dana Lafiyaazhi.</p> <p>Ebodan nya dana Lafiyaazhi.</p> <p>Ebodan nya enya zadazhi.</p>

									<p>Ezo kiczhi we e de wo eba anfanijin be shirijin nya asibiti ba na a e ma ewondecizhi cinle na o? Cincinbo nya enya 'zan.</p> <p>Mafari mi fe lo S1, ebo na u tsoba emi mi na, ama mi ga be de wuwa nya giriku, efo na a ma da mi na la tun a, mi a da S2, ko S3.</p> <p>Ezo na mi de be lulo nya S3 nyi na u yi ga, dzukofo kawonyi ga a e cin ewondecizhi le o.</p> <p>U yi enya na ge na a, ebona efo ndoci eza ga Anakin dagaba kpako o da be asibiti, kanga a ci a be a gan ya we gan a a cin we lewoefo ga be a ebona a lisafi nya eza nazhi a a cinle 'fo ga de a ni.</p> <p>Enya ndoci na dan bo be na, u yi gan wo ga atin ya ezhi o, we a da wa mato wa na a la we be asibiti na be ewo e, ebon a mato nya asibiti dan bo a. Dagan na mi ma de etun kpoki e lo lo a na wun e la zo na mi a be asibiti.</p> <p>Ekan woncinko nini na mi de kami na mi wa n ka sunna ya tsunwon dan na, yi aziki, eba mi de etun kpoki ndondo dan 'gwa bo a, ebo wuncin o wun a zo ya yi saranyi.</p>	<p>Gami nya kikata asibiti o.</p> <p>Efozhi nya etunloya to kami.</p> <p>Ebodan nya enya zadazhi.</p> <p>Ezozhi nya ewo.</p> <p>Ezozhi nya ewo</p>
--	--	--	--	--	--	--	--	--	--	---

									<p>Mi be lo asibiti nya ewoncizhi ndoci na tsoba mi na, mi dan sun hari lokaci awa guta lo gunni. Zunma wuncin o ga abe gan ya yi ga, etunloci na a cin yi le na a a be etun ba 'fo ga a nyi o. Egan wuncin a tan mi saranyi ebona mi de kpe shishi a.</p> <p>Enya ndoci na keze dan bo be na yi ke a la danazhi kperi be dozhi kakanyi ya etun yiriyiri nya lafiya wa a. Ke kotonkoci na asibiti ndocizhi o a ga jin a e la dana nya ekpafianiagi kperi be nya ewoncizhi, ama e la takada eri nya bata nanazhi la ba yakunmisun nya ofisi ndondo o. U yi acinga asibiti nana bo a. Etunloci nini kete ga e cin eza kpata le o.</p> <p>Ade enya 'tun kpata na gonyi a la a cin ewoncizhi a le na a. Na mi be sati nya batsozhi le na a ga a de kadi a, ebo wuncin o a gan mi n yen zhin sati na e be na. A mi cinle nyina, ama, injini na gonyi a la jin mamincinle ndoci a ya mi na lotun a. Ebo wuncin o mi a kezhe ye ye zhin sati na e be na ebo mimacinle wuncin o. Ban a mi yebo asibiti S1 da tu na, ezo nini na yi e de be u nyi na u yi gan, yi e de kpeshishiefo nazhi etun a dan bo a na a. Ke efo nya efa na. A ma e jin efo ndoci shiri go 'gwa wun a. Wun e la zhe tinle</p>	<p>Na eza efuzhi a de kpe na.</p> <p>Gbagban nya esanda nya ewoncizhi lilashishi nya etun lafiya.</p> <p>Gbagban nya esandan nya ewoncizhi lilashishi nya etun Lafiya.</p>
--	--	--	--	--	--	--	--	--	--	--

										<p>na yi a da asibiti S2, ko S3 na, ko ma yi ga ka sati nya yegboro.</p> <p>Kandoci nna nya eba mi a jin yeda na mi alo ya dwuwonzhi asibiti o na a.</p>	<p>Ye da jin nya lyalizhi.</p>
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Appendix 14: Transcription of an interview with a midwife

Study Site	Participant No.	Age	Gender	Years of Services	Recorded information	Themes and sub-themes
S1	S1:M2	40	Female	14	<p>I would like to know more about how pregnant women from Lemu community access and utilise ANC services in your health facility?</p> <p><i>Pregnant women do utilise the services but they come mostly for the first visit only and only few of them do come. In the last few months that I have been here very few pregnant women have come for visits and that was the first visit only.</i></p> <p><i>They come and carry out pregnancy test and start ANC depending on the result. Some out of the few that came already knew their pregnancy status. They came between a 4-6 months period.</i></p> <p>Questions asked due to health care workers response</p> <p>What do you think is responsible for the low numbers you experience at your health facility?</p> <p><i>One thing that might be a challenge for the pregnant women is the clinic's operational days and times which are limited. This clinic opens once a week and once in S2 and S3 but opens for emergency complains at any time, but because of financial constraint, clients don't patronise S2 and S3. We also leave very early once we are done with clients for the day.</i></p> <p><i>I think since we don't give health education regarding services been provided and about ANC and the relevance of attending ANC clinics this results in low number of pregnant women attending ANC. Because you can't give health education about the services been provided due to the amount of workload.</i></p> <p><i>I think the pregnant women been seen by a designated midwife because they don't want to wait long with other health clients on the queue. I heard a pregnant woman in the waiting area saying that the reason she doesn't come to this health post was due to the fact that pregnant women were made to join the same queue as other clients and this takes time since there is only one midwife to attend to them</i></p> <p>What provisions are made for the pregnant women on days when the facility is not operational?</p> <p><i>I think it's on the part of the management to make this provision and not the staff because this has caused our ANC clients number to be really low. The clients just use the bigger</i></p>	<p>Availability of health care services.</p> <p>Quality of ANC services.</p> <p>Operational days and times</p> <p>Community awareness</p> <p>Waiting time.</p> <p>Operation days and times.</p>

				<p><i>hospitals because they are open at all times. Maybe increasing the number of midwives and health care workers would help solve this problem as there would always be a midwife available to attend to clients.</i></p> <p>What happens if a pregnant woman comes to your clinic when you are not providing ANC services?</p> <p><i>We don't experience such. We provide ANC services most of the time but the pregnant women do not come much to our disappointment. Like I mentioned earlier the numbers are very low, very few came between 4-6 months.</i></p> <p><i>It's quite shocking that few of them come for first visits and even those few don't follow up on subsequent visits meaning that they find our services inaccessible and yes our operational days and times are very limited.</i></p> <p>What measures can be taken to improve accessibility and utilisation in your health post</p> <p><i>...If we were to have more staff, health education about all available services will be given in the morning for free and there won't be any pressure as the workload will be distributed among all the staff. This will make all ANC clients attending outside Lemu community to come back to us.</i></p> <p><i>The operational days of the clinic can also be increased so as to make daily accessibility for all health services possible for the community as a whole.</i></p>	<p>Availability of health care services.</p> <p>Operational days and time.</p> <p>Designated midwives to attend to pregnant women</p> <p>Operational days and times.</p>
--	--	--	--	--	--

