**CHAPTER ONE**

**INTRODUCTION**

This chapter presents the introduction of the project titled Assessment of service, quality of antenatal care delivery in Madonna Hospital Makurdi Benue State under the following; background of the study, statement of the problem, objectives of the study, research questions, hypothesis, scope of the study, significance of the study and operational definition of terms.

**1.1 Background of the Study**

Antenatal care (ANC) is a critical component of maternal health services, providing essential healthcare to pregnant women to ensure safe pregnancy and delivery outcomes. Quality ANC services are vital for the early detection and management of pregnancy-related complications, health education, and the promotion of healthy behaviors (World Health Organization, 2016). The World Health Organization (WHO) recommends a minimum of four antenatal visits to monitor and improve the well-being of both mother and child during pregnancy (WHO, 2016).

Antenatal care is a care directed towards the maintenance of healthy pregnancy outcomes through the accurate and consistent observation of the principles which are important in maternal and child health (T. Tayebi et al.,2014).

The essence of antenatal care (ANC) is to prepare women for birth and parenthood and prevent problems for pregnant women, mothers and babies through early detection, alleviation and or management of health problems that affect mothers and babies during pregnancy. It also focuses on identifying and justifying preexisting medical conditions, risk factors, and negative health behaviors through a range of medical, educational, and nutritional interventions (M. A. Majrooh et al.,2014).

In Nigeria, the maternal mortality rate remains high despite various interventions aimed at improving maternal health services. The antenatal period presents critical opportunities for reducing mortality and morbidity of pregnant women in Nigeria. This is more so when one considers the unacceptably high maternal mortality rate (MMR) of 704 - 1,549 maternal deaths/ 100,000 total births, depending on the area of the country (Nigerian Health Review Health Reform Foundation of Nigeria, 2017). This has become even more imperative because about half of maternal deaths occur in Sub Saharan Africa (Ishaku et al.,2017). ANC has a number of interventions that have the potential to improve both maternal and newborn health. This underscores the need to assess the quality of ANC services to identify gaps and areas for improvement (Federal Ministry of Health, 2017). Madonna Hospital in Makurdi, Benue State, serves as a significant healthcare provider for expectant mothers in the region. Understanding the quality of ANC services provided at this hospital is essential for enhancing maternal and child health outcomes.

Maternal health services are important indicators of the quality of health care in any country and utilization of these services correspond with maternal and child health outcomes (Maternal and Child Health. 2015). According to World Health Organization (WHO), maternal health services include care that women receive during pregnancy, childbirth, and the postpartum period in order to reduce maternal morbidity and mortality (Ishaku et al.,2017).

**1.2 Statement of the Problem**

Despite the importance of antenatal care, many healthcare facilities, including Madonna Hospital, face challenges in delivering high-quality services. Issues such as inadequate infrastructure, limited healthcare personnel, and insufficient training can impact the quality of care provided to pregnant women (Adepoju et al., 2018). Additionally, there may be gaps in service delivery, patient satisfaction, and overall outcomes that need to be addressed to ensure effective ANC (Oladapo et al., 2015).

Moreover, the level of satisfaction among pregnant women attending ANC clinics has been questioned, raising concerns about the overall effectiveness of the services offered. This dissatisfaction can lead to poor attendance at ANC appointments, which is detrimental to both maternal and fetal health (Johnson, 2019). The persistent gaps in service delivery underscore the need for a thorough assessment to identify specific areas for improvement and to enhance the quality of care provided to pregnant women in this region.

Assessing the service quality of antenatal care delivery at Madonna Hospital is therefore essential to understand the existing challenges and to develop strategies for improving maternal health outcomes. This assessment will provide valuable insights into the factors affecting service quality and inform policy recommendations aimed at enhancing the delivery of antenatal care services.

**1.3 Objectives of the Study**

The primary objective of this study is to assess the quality of antenatal care delivery at Madonna Hospital, Makurdi, Benue State. Specifically, the study aims to:

1. To evaluate the availability and adequacy of ANC services provided at Madonna Hospital.
2. To assess the level of patient satisfaction with ANC services.
3. To identify factors influencing the quality of ANC delivery.
4. To make recommendations for improving ANC services at the hospital.

**1.4 Research Questions**

To achieve the study objectives, the following research questions was addressed:

1. What is the availability and adequacy of ANC services at Madonna Hospital?
2. How satisfied are patients with the ANC services provided?
3. What factors influence the quality of ANC delivery at the hospital?
4. What measures can be implemented to improve ANC services at Madonna Hospital?

**1.5 Hypothesis**

Based on existing literature and theoretical frameworks, the following hypotheses will be tested:

Null Hypothesis (H₀): There is no significant relationship between the availability of antenatal care services and the overall quality of antenatal care delivery at Madonna Hospital

Alternative Hypothesis (H₁): There is a significant relationship between the availability of antenatal care services and the overall quality of antenatal care delivery at Madonna Hospital.

Alternative Hypothesis (H₁): Patient satisfaction with antenatal care services at Madonna Hospital significantly affects the quality of antenatal care delivery

**1.6 Scope of the Study**

The study will focus on assessing the quality of antenatal care services provided at Madonna Hospital in Makurdi, Benue State. It will cover various aspects of ANC, including service availability, patient satisfaction, and influencing factors. The study will be limited to pregnant women receiving ANC services at the hospital.

**1.7 Significance of the Study**

This study is significant as it aims to provide insights into the quality of antenatal care services at Madonna Hospital. The findings will be valuable to healthcare providers, policymakers, and stakeholders in improving ANC services, ultimately contributing to better maternal and child health outcomes in the region (Federal Ministry of Health, 2017). Additionally, the study will add to the existing body of knowledge on maternal health services in Nigeria.

The stakeholders will benefit from this research in the following ways:

**1. Health care Providers:** They will get an insight into the prevailing quality of antenatal care (ANC) services which is expected to give them a clear picture and guide them in working towards better health interventions among pregnant women.

**2. Policymakers:** The conclusions will help policymakers to frame policies that lead towards the better maternal and child health outcome; so that ANC services would become more effective as well available.

**3.Stakeholders**: By identifying gaps in the current ANC services, the study will help stakeholders to make informed decisions that enhance service delivery and maternal health outcomes in the region.

**4. Pregnant Women:** Pregnant women will benefit from improved ANC services, leading to better health for both mothers and their babies. Since better ANC services ensure health of the mother and the infant.

**5.Academicians**: The results from this study will provide further information to enrich the existing knowledge of maternal health services in Nigeria as well as stimulate and create a platform for future research among academicians.

Given these benefits, this study aims to provide healthcare providers and professionals with the necessary insights to develop and implement policies that enhance the quality of ANC services. By identifying areas for improvement and addressing the specific needs of expectant mothers, healthcare providers can ensure that ANC services are both effective and satisfactory. This focus on quality improvement in ANC delivery aligns with global health goals to reduce maternal and neonatal mortality and improve overall reproductive health (UNFPA, 2014).

**1.8 Operational Definition of Terms**

**Antenatal Care (ANC):** Healthcare services provided to pregnant women to ensure the health of both mother and baby during pregnancy (World Health Organization (WHO), 2020).

**Service Quality:** The overall assessment of healthcare services based on factors such as availability, adequacy, and patient satisfaction (Parasuraman, Zeithaml, & Berry, 1988).

**Patient Satisfaction:** The level of contentment expressed by patients regarding the healthcare services they receive

**Maternal Clinic:** A healthcare facility that provides specialized medical services and care for women during pregnancy, childbirth, and the postpartum.

**Maternal Health:** The health of women during pregnancy, childbirth, and the postnatal period.

**Fetus:** An unborn offspring that develops and grows inside the uterus (womb) of humans.

**Fetal Health:** The well-being of the fetus during pregnancy, encompassing physical and physiological development from conception until birth.

**CHAPTER TWO**

**LITERATURE REVIEW**

**2.1 Introduction**

This chapter provide scholarly reviews of existing literature on the quality of ANC services, focusing on service availability, patient satisfaction, and the factors influencing the delivery of care. It also identifies gaps in current knowledge and practice, setting the stage for the study's assessment of ANC services at Madonna Hospital, Makurdi, Benue State.

**2.2 Conceptual Framework**

**2.2.1 Concepts of ANC**

Antenatal care (ANC) is considered important in preventing adverse outcomes in pregnancy, childbirth and puerperium (Morón-Duarte, et al., 2019). The World Health Organization (WHO) established that ANC provides a platform for various health functions, including health promotion and disease prevention, screening and diagnosis according to appropriate evidence-based practices. The World Health Organization (WHO) envisions a world where “every pregnant woman and newborn receives quality care throughout the pregnancy, childbirth, and the postnatal period,” which highlights a holistic approach to maternal and newborn health (World Health Organization, 2016). This vision emphasizes that all women, regardless of geographic, social, or economic circumstances, should have access to skilled healthcare professionals and essential services during these critical stages. Quality care, according to WHO, is not only about preventing and managing complications but also includes emotional support, health education, and the provision of respectful and dignified care that is culturally sensitive and responsive to individual needs (Tuncalp et al., 2015).

Antenatal care (ANC), provided by the healthcare system, is the initial set of interventions pregnant women receive to promote a positive pregnancy experience and ensure a healthy start for their newborns. It is a crucial part of the continuum of care as it allows for early detection of obstetric conditions, education on the intricacies of pregnancy, initiation of immediate breastfeeding, and the importance of family planning (Wang & Hong, 2015; Tunçalp, Lawrie & Portela 2017). Studies have found that failure to use antenatal care and inadequate receipt of the components of ANC pose a significant risk to the pregnant woman and the newborn Nagdev, Ogbo, Dhami and Agho (2023)

A comprehensive model of care for pregnant women and newborns is essential to achieving Sustainable Development Goals (SDGs), particularly SDG 3, which aims to “ensure healthy lives and promote well-being for all at all ages” (United Nations, 2015). The WHO framework calls for accessible and equitable healthcare to reduce maternal and neonatal mortality, preventable health issues, and morbidity. According to UNICEF (2019), such care has a direct impact on reducing deaths and complications that arise from conditions like preeclampsia, postpartum hemorrhage, and neonatal infections. Evidence indicates that timely and regular antenatal care (ANC) visits, skilled attendance during delivery, and postnatal care are pivotal in improving outcomes for both mothers and babies, particularly in low-resource settings where access to healthcare can be challenging (Vogel et al., 2019).

Antenatal care is the care provided by skilled health care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy (WHO, 2016). The care and supervision given to the women could be recovered in the community either in the hospital, health center or maternity home through a medical doctor and qualified midwife (Fraser and Cooper, 2015). Antennal care is qualitative care given to a pregnant woman by skilled or trained health providers to promote the health and survival of mother and child to it is refers to minimum number of four (4) antenatal visit each which has a specific items of client assessment, education and care to ensure the prevention of or early detection and prompt management of any complication (Adesokan, 2014). Antenatal care (ANC) is an umbrella term used to describe the medical procedures and care that are carried out during pregnancy (Rooney, 2015). Hodgkinson et al., (2017) opined that antenatal care (ANC) is the care a pregnant woman receives during her pregnancy through a series of consultations with trained health care workers such as midwives, nurses, and sometimes a doctor who specializes in pregnancy and birth.

Antenatal care is a vital component of maternal and child health, aimed at ensuring the well-being of both the mother and the developing fetus. It involves a range of healthcare services provided by skilled health professionals, designed to monitor the pregnancy, prevent potential complications, and promote healthy behaviors throughout the gestation period. According to the World Health Organization (2016), "antenatal care can be defined as the care provided by skilled health-care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy." This definition emphasizes the importance of regular and comprehensive medical care during pregnancy, which is essential for detecting and managing health issues that could affect the mother or the baby. It also highlights the role of health education and support in fostering positive pregnancy outcomes, thereby reducing maternal and neonatal mortality rates (WHO, 2016). The provision of quality antenatal care is, therefore, a critical element in achieving global health goals related to maternal and child health (Moller et al., 2017).

ANC is a fundamental element of maternal health services, providing essential care to pregnant women to ensure safe pregnancy and delivery outcomes. High-quality ANC services are critical for the early detection and management of pregnancy-related complications, offering health education and promoting healthy behaviors among expectant mothers (Tuncalp et al., 2017).

**2.2.2 Goals of Antenatal Care**

According to Rooney, (2015) the major goals of Antenatal Careare:

1. Promote and maintain the physical, mental and social health of mother and baby by providing education on nutrition, personal hygiene and birthing process.
2. Detect and manage complications during pregnancy whether medical, surgical or obstetrical.
3. Develop birth preparedness and complication readiness plan. iv. Help prepare mother to breastfeed successfully, experience normal pueperium and take good care of the child physically, psychologically and socially.

**2.2.3 Components of Antenatal Care (ANC)**

**2.2.3.1. Clinical Assessments:**

1. Monitoring maternal health: Regular checks of maternal weight, blood pressure, and urine for protein and glucose levels help detect conditions like preeclampsia and gestational diabetes. These are critical for timely interventions (WHO, 2020).
2. Fetal well-being: Tracking fetal growth through fundal height measurements and monitoring the fetal heartbeat ensures normal development and detects potential growth restrictions or anomalies (UNICEF, 2021).
3. Screening for infections: Testing for HIV, syphilis, hepatitis B, and malaria is vital to prevent mother-to-child transmission and manage maternal health effectively (CDC, 2022).

**2.2.3. 2. Health Education:**

1. Nutrition guidance: Promoting a balanced diet rich in essential nutrients and recommending iron and folic acid supplementation help prevent anemia and support fetal growth (WHO, 2020).
2. Recognizing danger signs: Educating women about warning signs such as severe headaches, persistent vomiting, vaginal bleeding, or reduced fetal movements empowers them to seek timely medical attention (Save the Children, 2020).
3. Postnatal planning: Providing information on breastfeeding, family planning, and newborn care helps mothers prepare for the postpartum period (UNICEF, 2021).

**2.2.3. 3. Preventive Measures:**

1. Immunizations: Administering tetanus toxoid vaccinations protects both the mother and the baby from neonatal tetanus, a leading cause of infant mortality in low-resource settings (WHO, 2020).
2. Malaria prophylaxis: Providing intermittent preventive treatment (IPTp) and insecticide-treated nets in malaria-endemic areas reduces the risk of maternal anemia and low birth weight (CDC, 2022).
3. Addressing risk factors: Early detection and management of conditions like multiple pregnancies, hypertension, or advanced maternal age minimize risks of preterm births and stillbirths (Save the Children, 2020).

**2.2.3.4. Specialized Care**

1. High-risk pregnancy management: Pregnancies complicated by conditions like diabetes, cardiovascular diseases, or infections require more frequent monitoring and tailored interventions to ensure maternal and fetal safety (UNICEF, 2021).
2. Specialist referrals: Cases requiring advanced care, such as cesarean sections or neonatal intensive care, are referred to appropriate specialists or higher-level facilities to manage complications effectively (WHO, 2020).

**2.2.3 Service Quality in Healthcare**

Service quality in healthcare refers to the evaluation of healthcare services based on key dimensions such as reliability, responsiveness, empathy, assurance, and tangibles. It involves assessing both the technical and interpersonal aspects of care delivery, including the competence of healthcare providers, the availability of resources, and the communication skills demonstrated during patient interactions (Parasuraman, Zeithaml, & Berry, 1988). Ensuring high-quality service is vital for improving patient satisfaction, fostering trust in the healthcare system, and achieving better health outcomes.

Stakeholders in healthcare have different views, interests and meanings, and according to Joss and Kogan (1995), McLaughlin and Kaluzny (2006) and Naveh and Stern (2005) healthcare service quality, as a result of its intangibility, relies upon the healthcare service process, patients and healthcare provider interactions. Quality of healthcare, therefore, needs a multidimensional definition that incorporates the different views of healthcare stakeholders.

In the context of antenatal care (ANC), service quality plays a critical role in maternal and fetal health. Antenatal care involves routine check-ups, screening, and education aimed at monitoring and promoting the health of pregnant women and their unborn babies. High-quality ANC services are essential for timely identification and management of complications such as anemia, gestational diabetes, and preeclampsia. Furthermore, effective service delivery ensures that expectant mothers are adequately supported and informed throughout their pregnancy journey.

Relating this to the project topic, "Assessment of Service Quality of Antenatal Care Delivery in Madonna Hospital, Makurdi, Benue State," the evaluation of service quality involves measuring how well the hospital delivers ANC services based on patient perceptions and established healthcare standards. Key areas of focus may include:

1. **Availability of Services:** Are the required ANC services, such as laboratory tests, medications, and consultations, consistently available?
2. **Provider Competence:** Do healthcare providers demonstrate adequate knowledge, skills, and professionalism in delivering care?
3. **Patient-Centered Care:** Are patients treated with respect, empathy, and dignity?
4. **Infrastructure and Environment:** Is the hospital equipped with adequate facilities and a clean, safe environment for delivering ANC?
5. **Patient Satisfaction:** How satisfied are the patients with the care they receive, including waiting times, communication, and follow-up services?

Assessing these dimensions can help identify gaps in service delivery and provide actionable insights for improving ANC quality. A high standard of service quality in antenatal care is not only pivotal for reducing maternal and fetal morbidity and mortality but also for enhancing the overall patient experience in Madonna Hospital, Makurdi.

**2.2.5 Schedule of Antenatal Care Visits**

The World Health Organization (WHO, 2016) recommends a minimum of eight ANC contacts: five contacts in the third trimester, one contact in the first trimester, and two contacts in the second trimester as shown in the below table:

|  |
| --- |
| FIRST TRIMESTER  Contact 1: up to 12 weeks |
| SECOND TRIMESTER  Contact 2: 20 weeks  Contact 3: 26 weeks |
| THIRD TRIMESTER  Contact 4: 30 weeks  Contact 5: 34 weeks  Contact 6: 36 weeks  Contact 7: 38 weeks  Contact 8: 40 weeks |
| Return for delivery at 41 weeks if not given birth.  Note: Intermittent preventive treatment of malaria in pregnancy should be started at ≥ 13 weeks. |

WHO has issued a new series of recommendations to improve quality of antenatal care in order to reduce the risk of stillbirths and pregnancy complications and give women a positive pregnancy experience.

Last year, an estimated 303 000 women died from pregnancy-related causes, 2.7 million babies died during the first 28 days of life and 2.6 million babies were stillborn. Quality health care during pregnancy and childbirth can prevent many of these deaths, yet globally only 64% of women receive antenatal (prenatal) care four or more times throughout their pregnancy.

Antenatal care is a critical opportunity for health providers to deliver care, support and information to pregnant women. This includes promoting a healthy lifestyle, including good nutrition; detecting and preventing diseases; providing family planning counselling and supporting women who may be experiencing intimate partner violence (WHO, 2016).

"If women are to use antenatal care services and come back when it is time to have their baby, they must receive good quality care throughout their pregnancy," says Dr Ian Askew, Director of Reproductive Health and Research, WHO. "Pregnancy should be a positive experience for all women and they should receive care that respects their dignity."

**2.2.5.1 World Health Organization (WHO)** **Recommendations on Activities Of Antenatal Care Visit**

The World Health Organization (WHO) recommends a minimum of eight ANC visits to ensure a positive pregnancy experience. Each visit has specific objectives and activities aimed at monitoring and improving maternal and fetal health (WHO, 2016).

The visit should start as pregnancy is diagnosed until delivery, pregnant woman should register for antenatal care which helps to prevent early fetal loss or information.

**Activities of the First Eight Visits of Antenatal Care (ANC) According to WHO include:**

**First Visit (up to 12 weeks)**

***Objective:*** Establish baseline maternal and fetal health.

***Activities:***

1. Conduct a detailed medical and obstetric history.
2. Perform initial clinical examinations, including weight, height, blood pressure, and abdominal examination.
3. Screen for infections (e.g., HIV, syphilis, hepatitis B, and malaria).
4. Offer nutritional counseling and start iron and folic acid supplementation.
5. Administer tetanus toxoid vaccination if not previously given.
6. Provide education on danger signs of pregnancy (WHO, 2016).

**Second Visit (13–16 weeks)**

***Objective:*** Follow up and address emerging needs.

***Activities:***

1. Review test results and address abnormalities (e.g., anemia, infections).
2. Monitor maternal weight and blood pressure.
3. Provide malaria prophylaxis in endemic areas.
4. Reinforce counseling on nutrition and health behavior.

**Third Visit (17–22 weeks)**

***Objective:*** Assess fetal growth and maternal health.

***Activities:***

1. Measure fundal height to monitor fetal growth.
2. Screen for gestational diabetes (as indicated).
3. Reinforce health education and danger signs awareness**.**

**Fourth Visit (23–26 weeks)**

***Objective:*** Mid-pregnancy monitoring.

***Activities:***

1. Monitor maternal blood pressure and urine for protein (to detect preeclampsia).
2. Assess fetal movement and provide guidance on fetal monitoring.
3. Reinforce malaria prophylaxis and nutritional supplements.

**Fifth Visit (27–30 weeks)**

***Objective:*** Monitor fetal well-being and maternal conditions.

***Activities:***

1. Conduct ultrasound (if available) to check fetal growth and position.
2. Address symptoms of common conditions like back pain or swelling.
3. Plan for the place of delivery and transportation.

**Sixth Visit (31–34 weeks)**

***Objective:*** Prepare for delivery and detect complications.

***Activities:***

1. Monitor maternal blood pressure, weight, and fetal heart rate.
2. Check for signs of preterm labor or complications like bleeding.
3. Discuss birth preparedness, including emergency plans and newborn care.

**Seventh Visit (35–37 weeks)**

***Objective:*** Finalize birth preparedness and ensure readiness.

***Activities:***

1. Confirm fetal presentation and position.
2. Monitor maternal health and any signs of complications.
3. Provide counseling on breastfeeding and postpartum care.

**Eighth Visit (38–40 weeks)**

***Objective:* Ensure readiness for labor and delivery.**

***Activities:***

1. Monitor for labor onset and provide guidance on when to report to the facility.
2. Check fetal well-being and amniotic fluid levels (if ultrasound is available).
3. Ensure all essential supplies for delivery are available.

**2.2.6 Importance of Antenatal Care in maternal and child health**

The importance of ANC services in the outcomes for pregnant women has been well documented (Khan et al., 2018). ANC enhances early identification and management of conditions that could be threatening to the mother and her unborn child.

1. Reduced Maternal Mortality: ANC plays a pivotal role in early detection and management of complications like preeclampsia and eclampsia (Say et al., 2014)
2. Improved Fetal Outcomes: Monitoring growth and addressing issues like intrauterine growth restriction. ANC helps detect fetal growth abnormalities, ensuring interventions are implemented to prevent preterm births or low birth weight, which are significant contributors to neonatal mortality (Blencowe et al., 2013).
3. Enhanced Birth Preparedness: Ensuring safe delivery through hospital care or skilled birth attendants. ANC educates women on the importance of choosing skilled birth attendants and planning deliveries in well-equipped facilities, thereby minimizing risks associated with home births (Campbell & Graham, 2006).
4. Promotion of Healthy Behaviors: Encouraging healthy lifestyle choices and adherence to medical advice.

Antenatal Care (ANC) by trained skilled providers screens for infections, treats malaria, reduces the incidence of perinatal illness and death, provides birth preparedness, identifies signs of danger in pregnancy, to promote the safe motherhood initiative, to reduce maternal and infant mortality and morbidity rate, to prepare the woman for labor, lactation and subsequent care of the baby , Immunize mother against tetanus in order to pass immunity to her baby and plans to handle possible delivery complications through timely treatment and referrals (Bauserman et al., 2020).

It also reduces medical problems in pregnancy such as anaemia, hypertension, ectopic pregnancy, obstructed labour, eclampsia, excessive bleeding, and premature labour and delivery (Owais et al., 2021).

The health of future generations is to a great extent determined by the baby’s growth and development within the womb. The success of fetal life determines not only the health of the newborn, but also has a major impact on adult health and disease risk. Good perinatal health is therefore important to individuals, to society and to future generations (Barker et al., 2013).

Large disparities exist in perinatal health, not only between countries, but also within cities and population groups (de Graaf et al., 2013). Most problems at birth are caused by prematurity, fetal growth restriction, congenital abnormalities or asphyxia. With access to antenatal care, especially in early pregnancy, many of these can be prevented or anticipated. Particularly relevant in this respect are modifiable life-style risks such as smoking, alcohol consumption, drug abuse, obesity, malnutrition, inadequate folic acid intake and occupational exposures. Perinatal mortality and morbidity can be up to three times higher in some socially deprived districts, while the effects of poverty on perinatal health are not limited to immigrant groups. The accumulation of non-medical risks, particularly social and mental problems, as well as inadequate access to appropriate care, are all contributory (Fraser, 2013).

The public health responsibility of obstetricians, together with midwives, nurses and general practitioners, to organize appropriate care for vulnerable groups. This can only become effective when antenatal care is linked with local public health initiatives, including social services and youth care, which address lifestyle and social issues. This approach is challenging, but the benefits are considerable (Denktas et al., 2014). because the initial phases of pregnancy have a large impact on perinatal and subsequent adult health, optimal care needs to be initiated before pregnancy. The promotion of preconception health will not only improve women’s general health but has a favourable effect on the health of the next generation. Preconception care may require a change of mind set both for healthcare professionals and also for women, their partners and their families, but again the benefits to society could be great (Temel et al., 2014).

(Denktas et al., 2014). The recognition of the public health importance of pregnancy-related care is essential to improve the health of current and future generations, and that this care will also diminish the adverse effects of poverty in vulnerable communities. Local and national governments have a responsibility to recognize this public health need and to consider the costs and benefits of free access to both antenatal and preconception care.

**2.2.7 Common Challenges In Antenatal Care (ANC)**

Antenatal Care is crucial for ensuring maternal and fetal well-being, but various challenges hinder its effectiveness. These challenges are particularly prominent in resource-limited settings and directly impact the quality and accessibility of care (Antenatal Care, WHO, 2020).

**1. Limited Access to Healthcare Services**

1. Geographical Barriers: In rural and underserved areas, many women face long distances to the nearest healthcare facilities, limiting access to regular ANC visits. Poor road infrastructure and lack of transportation exacerbate this issue (WHO, 2020).
2. Inadequate Healthcare Facilities: Many regions lack well-equipped health centers or skilled personnel, resulting in substandard care and delayed diagnosis of complications (UNICEF, 2021).
3. Impact: This challenge leads to missed opportunities for early detection and management of conditions such as anemia, gestational diabetes, and infections, increasing maternal and fetal morbidity.

**2. Financial Constraints**

1. High Costs of Care: The expenses associated with ANC, including laboratory tests, medications, and transportation, deter low-income families from seeking care (Save the Children, 2020).
2. Limited Insurance Coverage: In many countries, health insurance schemes do not adequately cover ANC, forcing families to bear out-of-pocket expenses (WHO, 2016).
3. Impact: Financial barriers contribute to poor attendance and inadequate monitoring during pregnancy, particularly in low-income households.

**3. Cultural and Societal Barriers**

1. Gender Inequality: In some societies, women lack decision-making power regarding their health, relying on their spouses or family members to approve healthcare visits (WHO, 2020).
2. Traditional Beliefs: Cultural practices or misconceptions about pregnancy can lead to delays in seeking care or refusal of interventions like tetanus vaccinations (UNICEF, 2021).
3. Impact: These barriers reduce ANC utilization, leaving conditions like preeclampsia and infections undiagnosed and untreated.

**4. Lack of Skilled Personnel**

1. Shortage of Healthcare Workers: Many health facilities are understaffed, with overburdened healthcare providers unable to give individualized attention to patients (CDC, 2022).
2. Inadequate Training: Some healthcare workers lack the necessary skills to detect and manage complications, reducing the quality of care (WHO, 2020).
3. Impact: Poor-quality services discourage women from attending regular ANC and undermine the effectiveness of preventive and diagnostic measures.

**5. Poor Data Management and Documentation**

1. Inconsistent Records: Inefficient systems for maintaining patient records lead to loss of critical information, making follow-up care challenging (WHO, 2016).
2. Limited Integration: Lack of integration between ANC and other healthcare services, such as immunization and family planning, results in fragmented care (Save the Children, 2020).
3. Impact: Delayed interventions and reduced coordination across services compromise maternal and fetal outcomes.

**6. Power Supply and Internet Issues**

1. Reliance on Digital Systems: Many healthcare facilities use electronic health record (EHR) systems that require reliable electricity and internet. Inconsistent power supply disrupts service delivery and data recording (UNICEF, 2021).
2. Offline Access Challenges: Facilities without backup systems struggle to provide uninterrupted care during power outages (CDC, 2022).
3. Impact: This challenge disproportionately affects rural health centers, delaying documentation and reducing the effectiveness of ANC.
   1. **Limited Awareness Among Pregnant Women**

Limited awareness among pregnant women remains a significant barrier to achieving optimal maternal and neonatal health. Pregnancy is a critical period requiring adequate knowledge and awareness about maternal health, nutrition, prenatal care, and potential complications. However, studies show that many pregnant women worldwide have limited awareness of essential maternal health issues. This lack of awareness poses risks to both maternal and fetal outcomes.

1. Lack of Knowledge: Many women are unaware of the importance of ANC or the danger signs during pregnancy, leading to delays in seeking care (Save the Children, 2020).
2. Impact of Illiteracy: Low literacy rates hinder understanding of health education provided during ANC visits (WHO, 2020).
3. Impact: Women miss out on essential preventive measures like malaria prophylaxis and nutritional supplements, increasing pregnancy-related risks.

**2.2.7.1. Global standards and guidelines for ANC (WHO recommendations)**

The WHO ANC guidelines represent a critical effort to standardize and improve maternal healthcare globally. WHO's recommendations for antenatal care provide a comprehensive framework designed to improve maternal and neonatal health outcomes. Antenatal care (ANC) is a cornerstone of maternal and neonatal health, designed to optimize outcomes for pregnant women and their babies. The World Health Organization (WHO) has established evidence-based guidelines to standardize ANC practices globally, with a focus on reducing maternal and perinatal mortality and ensuring equitable access to high-quality care By emphasizing early and regular engagement with skilled healthcare providers, these guidelines ensure that pregnant women receive timely interventions, education, and support (WHO, 2016).

However, achieving these global standards remains a challenge, particularly in low-resource settings where access to care is limited, and the quality of services may not meet international benchmarks. Addressing these barriers is essential to reducing maternal and neonatal mortality and achieving the goals of universal health coverage and sustainable development.

Antenatal care (ANC) is a cornerstone of maternal healthcare and is recognized as essential for reducing maternal and neonatal morbidity and mortality. Over the years, various global bodies, most notably the World Health Organization (WHO,2016), have developed comprehensive guidelines to ensure the best possible outcomes for both the mother and child. These guidelines form the backbone of ANC services globally and are frequently updated to reflect evolving scientific evidence and best practices.

The World Health Organization (WHO,20016) has played a pivotal role in defining global standards for ANC. In its 2016 recommendations on antenatal care for a positive pregnancy experience, the WHO outlined a framework aimed at reducing perinatal mortality and improving the overall well-being of mothers and newborns. One of the key updates from the WHO's 2016 guidelines was an increase in the recommended number of ANC contacts from four to eight visits throughout pregnancy, with the intention of promoting more frequent and meaningful engagements between pregnant women and healthcare providers (World Health Organization, 2016). This shift from a minimum of four visits, as previously suggested, to eight visits reflects growing evidence that more frequent contacts lead to improved maternal and neonatal outcomes, especially in low-resource settings.

ANC guidelines emphasize not only the clinical aspects of care but also the importance of providing psychological and emotional support to pregnant women. According to WHO, ANC should be a platform for comprehensive healthcare interventions, including health promotion, disease prevention, and detection and treatment of complications (World Health Organization, 2016). Health education, for instance, is a critical component of ANC, equipping women with the knowledge to recognize danger signs in pregnancy and encouraging them to adopt healthy behaviors such as improved nutrition, regular physical activity, and avoidance of harmful substances like tobacco and alcohol (Vogel et al., 2019).

The eight-contact model is structured to provide timely interventions and individualized care throughout the gestation period. These contacts are ideally spaced at critical points in pregnancy to allow healthcare providers to monitor fetal growth and maternal health, screen for infections, provide immunizations, and offer guidance on birth preparedness. WHO's guidelines recommend that the first ANC contact should occur within the first 12 weeks of pregnancy, followed by subsequent contacts at 20, 26, 30, 34, 36, 38, and 40 weeks (World Health Organization, 2016). These contacts provide an opportunity for screening, prevention, and management of common pregnancy-related conditions such as anemia, preeclampsia, and gestational diabetes.

Furthermore, WHO emphasizes the importance of preventive interventions during ANC visits, including nutritional supplements like iron and folic acid, which are critical for reducing maternal anemia and ensuring proper fetal development. The guidelines also highlight vaccinations, such as tetanus toxoid immunization, to protect both the mother and the baby from neonatal tetanus (Tunçalp et al., 2017). In areas with high malaria transmission, intermittent preventive treatment of malaria in pregnancy (IPTp) is recommended to reduce the incidence of malaria-associated maternal anemia, stillbirths, and low birth weight (Dellicour et al., 2017). Additionally, WHO encourages routine HIV testing and counseling as part of ANC in regions where HIV prevalence is high, to ensure early detection and treatment, which significantly reduces mother-to-child transmission (World Health Organization, 2016).

Despite the comprehensiveness of the WHO guidelines, challenges remain, particularly in low-resource settings. Access to ANC services is often limited due to a range of factors, including geographic barriers, financial constraints, and inadequate healthcare infrastructure. In many developing countries, pregnant women may not receive the recommended eight contacts, either because they live in remote areas with limited access to healthcare facilities or due to shortages of trained healthcare providers. Nigeria, for example, has struggled with these issues, which has resulted in lower ANC coverage, particularly in rural areas. According to a report by the Nigeria Demographic and Health Survey (NDHS), although there has been progress in ANC attendance, only 57% of pregnant women in rural Nigeria had four or more ANC visits in 2018 (National Population Commission, 2019). This indicates that many women may not receive the comprehensive care outlined in the WHO recommendations.

The quality of care during ANC is just as important as access. Even when women are able to attend ANC appointments, the services provided may not be up to the recommended standards. In many low-income countries, healthcare providers face significant challenges, including inadequate medical supplies, poor infrastructure, and overwhelming patient loads (Gulmezoglu et al., 2016). In such settings, it is difficult for providers to adhere strictly to the WHO guidelines. For instance, blood pressure monitoring, urine testing, and fetal growth assessments—routine procedures in well-resourced settings—may not be consistently performed, leading to missed opportunities to detect and manage complications.

Additionally, sociocultural factors influence ANC utilization and adherence to WHO guidelines. In some regions, traditional beliefs and practices may discourage women from seeking formal medical care during pregnancy. For instance, research from East Africa shows that some women prefer to deliver at home with traditional birth attendants rather than at healthcare facilities due to trust in traditional methods or fear of medical interventions (Finlayson & Downe, 2017). Educational campaigns and community-based interventions that promote the benefits of ANC have been successful in increasing attendance rates in some settings, but much work remains to be done.

Ultimately, adherence to global ANC standards, such as those outlined by the WHO, has a profound impact on maternal and neonatal health outcomes. Studies have consistently shown that women who attend the recommended ANC visits are more likely to receive timely interventions, experience fewer complications, and have better pregnancy outcomes (Titaley et al., 2017). Moreover, regular ANC visits provide a vital opportunity to educate women about family planning, nutrition, and postpartum care, further contributing to improved health outcomes for both mother and child (Carroli et al., 2016).

**2.3 Theoretical framework**

This theoretical framework establishes the foundation for assessing ANC service quality by linking structural, procedural, and outcome-related factors with patient perceptions and health outcomes. By employing the SERVQUAL framework, Donabedian’s Model, the study evaluates both objective measures (infrastructure, protocols, health outcomes) and subjective measures (patient satisfaction, perception gaps), providing a holistic view of antenatal care delivery at Madonna Hospital**.**

**2.3.1 SERVQUAL Model**

The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1988), is a widely recognized framework for evaluating service quality by identifying and measuring the gaps between customers' expectations and their actual perceptions of service delivery. This model provides a structured approach to understanding and improving the quality of services by highlighting areas where expectations exceed perceptions, or vice versa.

In healthcare, particularly in antenatal care (ANC) services, the SERVQUAL model is especially valuable because it combines subjective factors like patient satisfaction with more objective aspects of service delivery. This dual focus makes it possible to assess not only how well healthcare facilities meet technical standards but also how patients perceive their interactions with service providers. The model’s insights can guide targeted improvements in service delivery, ensuring better patient experiences and outcomes.

The SERVQUAL model evaluates service quality across five key dimensions:

1. **Tangibles dimensions**

The physical facilities, equipment, and appearance of personnel. This includes the cleanliness of the healthcare environment, availability of modern equipment, and professionalism of staff in an ANC clinic.

Physical facilities, equipment, appearance of personnel, and other physical elements of service delivery. This includes evaluating the physical environment of Madonna Hospital’s ANC unit, such as cleanliness, comfort, and availability of modern medical tools. At Madonna Hospital, tangible factors directly impact patients' perceptions of quality care. For example, a poorly maintained facility might create a negative impression, even if clinical care is adequate.

* + - 1. **Reliability**

The ability to deliver consistent and dependable services. In healthcare, this includes providing accurate diagnoses, timely care, and dependable follow-up services. For ANC, reliability might involve ensuring that routine screenings and appointments occur without delays or errors.

The ability to perform the promised service dependably and accurately. Reliability is assessed by examining the consistency and dependability of ANC services at Madonna Hospital, such as whether patients receive timely and accurate diagnoses and care. Reliability is a cornerstone of patient trust. If patients at Madonna Hospital frequently experience delays or errors, their confidence in the quality of ANC will diminish

* + - 1. **Responsiveness**

The willingness to help patients and provide prompt services. In an ANC setting, responsiveness includes promptly addressing patients' concerns, providing timely medical attention, and reducing waiting times for consultations and tests.

This dimension focuses on how promptly and effectively ANC services are delivered, including healthcare providers' responsiveness to patient needs and emergencies. Responsiveness at Madonna Hospital is critical to ensuring that patients feel cared for and supported, especially during emergencies or high-risk pregnancies.

* + - 1. **Assurance**

The competence of healthcare provider’s, including their knowledge, skills, and ability to inspire trust and confidence. In ANC, assurance reflects the confidence patients have in their healthcare providers’ expertise, as well as the trust that their health and privacy are safeguarded.

Assurance is assessed by analyzing the qualifications and professionalism of ANC providers at Madonna Hospital, including their ability to communicate effectively and instill confidence in patients. Assurance at Madonna Hospital ensures that pregnant women trust the care they are receiving, which is vital for adherence to medical advice and follow-ups.

* + - 1. **Empathy**

The degree of care and attention given to patients on a personal level. Empathy in ANC involves understanding the unique needs of pregnant women, offering emotional support, and creating an environment where they feel cared for and respected.

Empathy is examined by evaluating whether healthcare providers at Madonna Hospital offer personalized care, respect cultural sensitivities, and address the specific needs of pregnant women. Empathy at Madonna Hospital is a key determinant of patient satisfaction, especially for pregnant women who may require extra emotional and psychological support.

**Application in Healthcare and ANC Delivery**

The SERVQUAL model's adaptability makes it an excellent tool for healthcare service evaluations. In the context of this project, *"Assessment of Service Quality of Antenatal Care Delivery in Madonna Hospital, Makurdi, Benue State,"* the model can be used to systematically measure patients' expectations versus their experiences across these five dimensions. For instance:

1. Are patients satisfied with the reliability and responsiveness of the ANC services offered?
2. Do they feel their concerns are met with empathy and assurance from the healthcare providers?
3. Are the physical facilities and resources adequate to support high-quality ANC delivery?

By analyzing these gaps, the hospital can identify specific areas for improvement, such as enhancing patient-provider communication, upgrading facilities, or reducing waiting times. Ultimately, implementing insights from the SERVQUAL model can help ensure better patient satisfaction, improved ANC service quality, and positive maternal health outcomes.

**2.3.2 Donabedian’s Model of Quality of Care**

The Donabedian Model, developed by Avedis Donabedian in 1966, is a foundational framework for assessing healthcare quality. It provides a systematic approach to evaluating the quality of health services by examining three interrelated components**:** Structure, Process, and Outcome.

**Structure**

Structurerefers to the attributes of the healthcare setting, including the physical, organizational, and human Components of structure includes:

resources.

* 1. Availability and adequacy of facilities, equipment, and supplies.
  2. Staffing levels, qualifications, and training of healthcare providers.
  3. Organizational policies and accessibility of care services.

In the context of Madonna Hospital, this involves evaluating the hospital’s infrastructure, such as the availability of antenatal care (ANC) units, medical equipment, and the competence of healthcare staff. The study assesses whether structural deficiencies impact the quality of ANC services and patient outcomes.

**Process**

ProcessRefers to the interactions between healthcare providers and patients, and the methods through which healthcare is delivered.

**The Components of process includes the following:**

* 1. Adherence to clinical guidelines and protocols for ANC.
  2. Quality of communication and patient education during antenatal visits.
  3. Efficiency in service delivery, such as timely care and minimal wait times.

The study evaluates how ANC services are delivered at Madonna Hospital, including the extent to which healthcare providers follow standard ANC protocols, their communication effectiveness, and the overall patient experience during ANC visits.

**Outcome**

Outcome refers to the effects of healthcare on the health status of patients, including changes in knowledge, behavior, and overall health outcomes.

The Components of outcome includes the following:

* 1. Maternal and neonatal health outcomes, such as reduced morbidity and mortality.
  2. Patient satisfaction and their perception of the quality of care received.
  3. Behavioral outcomes, such as adherence to health advice.

This involves assessing the outcomes of ANC services at Madonna Hospital, such as maternal and neonatal health improvements, patient satisfaction levels, and any gaps between expected and achieved outcomes.

**Integration of the Theories to the study**

The Donabedian’s Model and the SERVQUAL framework, this study provides a comprehensive evaluation of the service quality of antenatal care delivery at Madonna Hospital. The theories are integrated as follows:

1. Structure and Tangibles: Assessing the physical infrastructure and resource availability at Madonna Hospital, including the adequacy of ANC facilities and medical equipment.
2. Process and Responsiveness/Assurance: Evaluating the delivery of ANC services, focusing on healthcare provider competence, adherence to protocols, and the responsiveness of services to patient needs.
3. Outcome and Reliability/Empathy: Measuring maternal and neonatal health outcomes, as well as patient satisfaction and the reliability of services.
   1. **Empirical Review**

Farah, Inayat, Faisal, and Adil (2017) carried out a research on quality assessment of focused antenatal care service delivery in tertiary care health facility, Regardless of high maternal deaths in Pakistan, only 37% of pregnant women make four or more antenatal care visits during pregnancy. This proportion has further been diverged between urban and rural. About 62% of women visit clinics for WHO recommended sets of antenatal care (ANC) check-ups in urban as compared to 26% women in rural areas. This study was conducted with the aim to assess quality of Focused ANC service delivery in terms of examination, screening, treatment, counselling and to determine variation in service delivery with provider’s clinical qualification and expertise. Methods: Cross sectional study design was used. Data was collected from pregnant women when they were visiting hospital for their antenatal visits. Direct observation was also made regarding provision of services. Out of 278, 55% of study women were in 28–33 years age group and 21.2% made at least one visit. While 42.8% reported more than one visit, 98.9% received tetanus toxoid, 82% received proper screening. Counselling was done mostly regarding nutrition and self-care (42.8%), and significant association (p-value).

Okeke and Ezeh (2021) Okeke and Ezeh (2021) conducted an in-depth study to understand the financial constraints affecting antenatal care (ANC) uptake in Benue State. By analyzing survey data collected from 350 respondents, the study highlighted the significant impact of economic challenges on maternal healthcare. One of the primary findings was that the lack of health insurance coverage among expectant mothers created a financial burden, making ANC services less accessible to low-income households, the study revealed that high direct costs, such as consultation fees, laboratory tests, medications, and transportation expenses, served as a major deterrent for many women. These financial barriers were exacerbated by indirect costs, including time away from work and caregiving responsibilities, which further discouraged timely ANC attendance.

Okeke and Ezeh also identified a disparity in access based on socio-economic status, with wealthier respondents more likely to afford regular ANC visits compared to those in poorer communities. The findings underscored the importance of policy interventions, such as subsidizing ANC services, expanding health insurance coverage, and improving the affordability of care, to ensure equitable access to maternal healthcare services.

The study concluded that addressing these financial constraints is critical to improving maternal and neonatal outcomes in Benue State and achieving broader health equity.

Obembe et al. (2018) evaluated patient satisfaction as a determinant of ANC outcomes in urban Nigeria. The study concluded that satisfied patients were more likely to complete ANC schedules and achieve better health outcomes.

Agbo, Umeh, and Nwachukwu (2019) conducted a comprehensive evaluation of the impact of continuous professional development (CPD) programs on the competence of antenatal care (ANC) providers. The study focused on both clinical skills and interpersonal aspects of care delivery. Findings revealed significant enhancements in providers' abilities to perform essential ANC procedures, such as proper fetal assessment, management of pregnancy complications, and effective documentation. Additionally, the CPD programs improved patient communication skills, fostering better relationships between providers and expectant mothers. These improvements collectively contributed to higher service quality, increased patient satisfaction, and better health outcomes in ANC delivery. The study emphasized the importance of regular training and capacity building for healthcare providers to sustain quality ANC services.

Chukwu, Onwe and Nwogu (2020) assessed the impact of medical equipment and facility infrastructure on ANC quality in rural healthcare centers in Northern Nigeria. Findings indicated that inadequate infrastructure and shortages of essential equipment hindered effective service delivery.

Odetola (2015) conducted an in-depth assessment of maternal satisfaction with antenatal care (ANC) services in Southwestern Nigeria, utilizing survey data from 500 pregnant women. The study highlighted several key factors influencing satisfaction levels, emphasizing the critical role of the quality of interaction between pregnant women and healthcare providers. Specifically, respectful treatment, clear communication, and the provision of emotional support were identified as pivotal determinants of positive experiences. Women who felt heard, valued, and adequately informed about their care were significantly more likely to express satisfaction. The findings underscore the importance of fostering a patient-centered approach in ANC service delivery to improve maternal satisfaction and, by extension, healthcare outcomes.

Adeoye et al. (2020) analyzed the efficiency of service delivery processes in antenatal clinics across Nigerian hospitals. Streamlined processes, such as efficient patient flow and shorter wait times, were linked to improved patient satisfaction and higher service utilization rates.

Adeniyi and Erhabor (2015) focused Antenatal Care (ANC) is not only to achieve a minimum number of 4 visits, but also the timeliness of the commencement of the visits as well as the quality and relevance of services offered during the visits. This study is therefore designed to assess the quality of ANC services in Nigeria. Methods: We used information supplied by the 13410 respondents who claimed to have used the ANC facilities at least once within five year preceding the 2013 Nigeria Demographic and Household Survey (NDHS). Ten components of ANC including: offer of HIV test, Tetanus Toxoid injection, receiving iron supplementation, intermittent preventive treatment (IPT), intestinal preventive drug (IPD), timely ANC enrollment and number of visits were assessed. Receipts of all the ten components were classified as desirable (good) quality of ANC services while receipt of eight critical components among the ten were assumed to be the minimum acceptable quality. Data was weighted and analyzed using descriptive statistics and logistic regression models at 5 % significance level. Results: Measurement of blood pressure and receiving iron supplementation were the most commonly offered ANC component in Nigeria with 91.0 % each while IPD and IPT were given to only 20.7 % and 37.6 % respectively. Less than two thirds were taught on PMTCT while 41.7 % had HIV test and obtained results. Only 4.6 % (95 % CI: 4.2–5.1) of women received good quality of ANC while nearly 1.0 % did not receive any of the components. About 11.3 % (95 % CI: 10.6–11.9 %) of the attendees had minimum acceptable quality of ANC. Receipt of good quality ANC services was higher among users who initiated ANC early, had at least 4 ANC visits, attended to by skilled health workers, attended government and private hospitals and clinics. Higher odds of receiving good quality of ANC were found among users who lives in urban areas, having higher educational attainment, belonging to households in upper wealth quintiles and attended to by skilled ANC provider. Conclusions: The levels of desirable and minimum acceptable quality of ANC services were poor in Nigeria thereby jeopardizing efforts to achieve the MDGs. There is need for intensified commitment by national and state governments in Nigeria as well as other stakeholders to ensure that main components of ANC are received by the users.

This study is related to the current work as they both Assess service delivery of Antenatal care but carried out in different location.

Abimbola, Okoli, Abdullahi and Pate (2016) conducted a qualitative study to explore barriers to antenatal care access in rural areas of Nigeria. The study identified factors such as transportation challenges, high costs of services, and inadequate healthcare infrastructure as significant barriers. Their recommendations included improving road networks and subsidizing healthcare costs to enhance access to ANC services.

Yahya and Adebayo (2018) conducted a study examining the relationship between healthcare provider competence and antenatal care (ANC) outcomes in public hospitals in Lagos. The research highlighted the critical role of healthcare workers' skills and knowledge in ensuring positive maternal health outcomes. It was found that regular training programs for healthcare providers not only enhanced their clinical competence but also led to more efficient service delivery. This improvement was reflected in better patient satisfaction and a noticeable reduction in maternal complications during pregnancy. The study emphasized the importance of continuous professional development and capacity-building initiatives for healthcare workers to improve the overall quality of antenatal care services.

Iloh, Agu and Ezeobi (2017) evaluated the effect of patient-provider communication on ANC service quality in Southeast Nigeria. The study showed that women who received clear explanations and felt included in decision-making were more likely to adhere to antenatal visit schedules

Balogun and Adeniran (2019) investigated the significance of cultural sensitivity in enhancing antenatal care (ANC) uptake in Southern Nigeria. Their findings emphasized the critical role of healthcare providers in fostering trust and rapport with pregnant women by showing empathy and respecting cultural practices. Providers who were attentive to patients' cultural beliefs and incorporated culturally acceptable approaches into their care were more likely to build positive relationships, which led to increased patient satisfaction. This, in turn, resulted in higher rates of repeat visits and improved adherence to ANC schedules. The study underscored the importance of training healthcare workers in cultural competence to address diverse patient needs effectively and improve maternal health outcomes.

**2.5 Summary of Review**

The review addresses the various issues and solutions related to Nigerian prenatal care (ANC) services. According to Okeke and Ezeh (2021), financial limitations are a major obstacle. They found that the high expense of ANC treatments and the lack of health insurance were important factors deterring pregnant mothers in Benue State from attending on time and consistently.

This finding suggests that financial hardship remains a critical issue in ensuring equitable access to essential maternal healthcare.

Furthermore, Yahya and Adebayo (2018) emphasized the importance of healthcare provider competence in shaping ANC outcomes. Their study, focused on public hospitals in Lagos, highlighted that regular training programs and skill development for healthcare workers played a crucial role in enhancing service delivery. Improved competence among healthcare providers not only increased patient satisfaction but also significantly reduced maternal complications, demonstrating the critical need for capacity-building initiatives.

When taken as a whole, these studies shed light on the institutional and budgetary obstacles that Nigeria has in providing effective ANC. A comprehensive strategy is needed to address these problems, one that involves instituting ongoing professional development programs for healthcare professionals and putting in place health insurance plans to reduce financial strains. These actions could help Nigeria move closer to accomplishing maternal health-related sustainable development goals by improving maternal health outcomes, increasing ANC uptake, and lowering maternal mortality.