

SCHOOL OF PUBLIC HEALTH

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA



**ASSESSMENT OF SATISFACTION WITH QUALITY OF ANTENATAL CARE
AMONG PREGNANT WOMEN IN TECHIMAN-NORTH DISTRICT OF THE BRONG-
AHAFO REGION, GHANA**

BY

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DECLARATION

I, Bayor Vida Eebolawala, declare that this work is the result of my own original research, and that this dissertation, either in whole or in part has not been presented elsewhere for another degree. All references to other works have been duly acknowledged.

.....
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(Student)

.....
Date

.....
Dr. Reuben Esena

(Supervisor)

.....
Date

DEDICATION

This work is dedicated to my children Reuben and Divine Balkono whom I left with their grandmother during the course of my study.

ACKNOWLEDGEMENT

I was able to complete this work by a constant and amazing grace of God Almighty through his protection and blessings.

I also acknowledge my academic supervisor Dr Reuben Esena for his guidance and counselling throughout the course of this study.

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LIST OF ACRONYMS

ANC	Antenatal Care
GDHS	Ghana Demographic Health Survey
GHS	Ghana Health Service
MOH	Ministry Of Health
PNC	Postnatal Care
SDGs	Sustainable Development Goals
UNICEF	United Nations Children Emergency Fund
WHO	World Health Organization
WIFA	Women In Fertility Age

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ABSTRACT

Background: High maternal deaths and morbidities are documented to be about 90% occurring in low and middle income countries. Uptake of antenatal care has been reported as one of the strategies for reducing maternal mortality. It has also be documented that the quality of antenatal care affects early initiation, continuous ANC and skilled delivery. **This study was therefore designed to assess the satisfaction of quality of ANC among pregnant women at Techiman-north district in the Brong Ahafo Region of Ghana.**

Methods: The study was a cross sectional descriptive study with a quantitative method of data collection. A total of 260 ANC women were recruited through an exit interview using a structured questionnaire. Data was analyzed using SPSS version 20.0. Data were entered using excel 2010 and SPSS version. The client's social demographic data were analyzed using simple frequencies. The quality of ANC services were also analyzed using Likert scale the association between dependent and the independent variables were tested using the Pearson's correlation analysis.

Results: the study revealed that the quality of ANC services in the rural clinics and pregnant women satisfaction had a positive Pearson's Correlation coefficient of 0.322 and a P-value of 0.00.

Conclusion: The study shows that about 82% of respondents were satisfied with antenatal services irrespective of the challenges at these health facilities.

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CHAPTER ONE

1.0 BACKGROUND OF STUDY

Numerous women lose their lives as a result of pregnancy related causes and thousands of these deaths occurs in low and middle income countries. A good quality prenatal care can avert many of these deaths (Do, Wang, Hembling, & Ametepi, 2017). Patients often complain about the quality of health services in facilities. In Ghana, sub-standard quality of health services effect morbidity and mortality. It is an undeniable fact that quality of antenatal care reduces maternal and newborn mortalities. Improving the quality of antenatal services is a key objective of the Ghana health service. To achieve this objective, the Ghana health service in collaboration with other non-governmental organizations (NGOs) such as DANIDA and UNICEF facilitated the implementation of the quality assurance guidelines in all sectors of healthcare service provision. Quality of health service is one that should be available, affordable, efficient, effective at all levels (Offei, Bannerman, & Kyeremeh, 2004) The impact of quality on health outcomes has been well documented in high-income countries, however, poor quality is increasingly being linked to failure to attain expected health-care improvements in low- and middle-income countries. Studies from many countries have shown that, poor accessibility to institutional deliveries and antenatal care is associated with increased maternal and newborn mortality due to poor quality of care (United Nations, 2016).

Higher than predicted maternal mortalities has been found in hospitals in lower-income countries.

Various hospitals often do not have challenges with availability of essential medicines, but still reports higher percentages of maternal and newborn mortalities, which suggest that there are inaccuracies in clinical management or treatment delays for women who develop obstetric complications (United Nations, 2016). Good quality ante natal services reduces maternal complications such as preeclampsia, hemorrhage, diabetes, hypertension, anemia premature deliveries among others (United Nations Children Fund (UNICEF), 2016).

High maternal deaths and morbidities are documented to be about 90% occurring in low and middle income countries (Goals, 2016). In Ghana, it occurs among the poorest regions where access to staff, infrastructure, logistics, and distance among others is still a challenge (GHS, (GHS, 2015)

The Techiman-north district is one of the newly created districts in the Brong-Ahafo region where pregnant women need to travel long distances to and from health facilities to access antenatal services. Meanwhile, there are insufficient infrastructure, staffing, logistics, accessibility, efficient and effective service provision, which are the bedrock of quality. Due to its developmental challenges, peace instability, health staff such as medical doctors, nurses, midwives and other categories of health staff often decline postings to these areas. The district do not have a district hospital all clinical management of patients are done by middle level health staff. The four health centres located in the district can be found insufficient developed areas which are also farther away from Techiman municipal where variety of health facilities can be found. This study seeks to find answers to the following questions; what is the strength of the service readiness of rural health Centres, What

processes do staff follow in the provision of ante natal services in rural clinics, what are client's perception about the quality (in terms of satisfaction) of ante natal services in rural health centres.

1.2 Problem statement

The interest of many policy makers is skewed towards the quantity of visits a pregnant women makes to a health facilities. Meanwhile, little or nothing is done constantly to ensure that quality services are delivered to these women. The question is what is the quality of service provided to that woman as she makes the quantity of her visits?

Studies have shown that Ghana's quality of antenatal care is below what is expected. It becomes even worst among the poor and less educated. In lower level health facilities where most of these women can be found, quality of service to these women is below recommended levels(Afulani, 2015).

Several reviews conducted over the last decade have judged the quality of health services in Ghana to be inadequate both by objective measures and in the opinion of health providers and clients (Offei et al., 2004). Studies also revealed that quality of health services at these facilities are not encouraging as it was noted that there were shortage of resources and staff. the few personnel who accepted postings to these areas were also not motivated (Ghana Health Service, 2007).

Moreover, Quality of health services to pregnant women have been one of the objectives of Ghana health service. It has been an established fact that quality of ANC reduces maternal

morbidity and mortalities. In order to ensure that clients are receiving high standard of quality of care, the Ghana health service proposed that an assessment of quality of care should be done periodically in order to get feedbacks from the clients.

Globally In 2015, it has been estimated that, 303,000 pregnancy related deaths occur annually. developing countries account for about 99 %(302 000), of these sub Saharan African account for about 66 %(201 000) and over 830 women die from preventable maternal complications every day. In Ghana , the mortality ratio is 378/100 000live births(World Bank Group, 2015).

In sub Saharan Africa maternal mortality 546per 100 000live births which is the highest so far compared to only 12 per 100 000live births in the develop world (Chan,2017). According to WHO, 2.6 million Babies died during birth and 2.7 million babies died before 28days of life. Only about 64% of pregnant women get four or more ANC visits during pregnancy, and 85% have access to a trained health provider in the African sub region (United Nations, 2016).

Ghana could not achieve the millennium development goal five in 2015 because maternal mortalities was unacceptably high with a maternal mortality of 378 / 100,000 births, only seven out of ten pregnant women had access to a skilled birth attendant , 87%receive four or more visits (GDHS, 2014).

Goal three of the SDGs is targeted at reducing maternal mortality and making sure that people of all ages live quality lifestyles. The SDGs main priority of goal three is to put an

end to preventable maternal mortalities by 2030 which could be achieved if countries begin a holistic approach to ensuring that, pregnant women wherever they are have access to antenatal services, ensuring equitable distribution of resources and ensuring good quality of antenatal services that would provide good outcomes in the lives of pregnant women (World Health Organization, 2015).

During the 2016 annual health review in the Brong Ahafo region, many secondary hospitals who recorded higher maternal mortalities complained that some of those cases became worst at the primary level before they are (pushed) referred to higher facilities and as a result of that delay, it usually becomes too late for any interventions to save their lives. Which means that, primary care givers has a responsibility in the provision of quality ante natal services to prevent some of those deaths.

The Techiman – north district has no district hospital, and as a result, the over 2,787 (4% of WIFA) who were expected to get pregnant in 2017, would be attended to by primary care givers. There were also complaints of low intermittent preventive treatment coverage (IPT), low 4+ visits, anemia among others. The assumption is that if these women at the periphery are given quality services according to world health organization protocol, problems would be identified early and any possible solutions given in time to prevent complications.

There has been tremendous efforts by NGOs, governments and other stakeholders, aim at improving quality of Ante Natal Care services over the past two decades to bridge the gaps

of in accessibility and improve the quality of ante natal care services to mothers in order to prevent pregnancy related deaths and diseases worldwide (United Nations, 2016).

Evidence from the 2007 maternal health survey showed that high maternal, perinatal, neonatal and child mortality rates are associated with poor quality of health services (Chemir, Alemseged, & Workneh, 2014). Though the frequency of visits does not necessary mean good quality service has been provided, the frequency of the visits is to influence early detection of pregnancy associated complications.

Ghana health service and other stake holders has made tremendous efforts to improve quality of ante natal services, improved accessibility by implementing the CHPS concept, however, the CHPS concept itself has its own implementation challenges. In spite of the CHPS program, there are still complaints of inaccessibility and unsatisfactory services given to pregnant women in the rural areas. Pregnant women still have challenges such as poor quality treatments, bad staff patient relationship, unavailability of routine medicines, basic laboratory investigations, and confidentiality among others (Ofosu Kwateng, 2012).

An Independent Review conducted on the quality of health service by the Ghana health service found out that, health centres has various inadequacies and therefore not able to function properly in providing basic intra-partum care. Areas of concern identified included inadequate treatment of obstetric complications, inadequate first aid procedures for stabilizing women before transportation, poor management of the third stage of labor, lack of skills in newborn resuscitation among others (Ghana Health Service, 2007). This study seeks to assess the satisfaction with quality of ante natal care services among the rural mothers at the Techiman north district of the Brong- Ahafo region of Ghana.

1.3 justification of the study

High standard quality of care has enormous benefits to the client, the community and to the health worker. Clients become happy with the service which will enhance their compliance with treatment and subsequently improve their health outcomes (Offei et al., 2004).

Ghana's healthcare system is largely based on primary health care because majority of populations live in rural and peri-urban centres. In spite of that the few studies that have been conducted on the quality of antenatal services is mostly based on secondary health facilities or referral centres, little is done on the quality of ante natal care on the rural health centres.(Oladapo, Iyaniwura, & Sule-Odu, 2008)

Since the creation of the Techiman-north district in 2012, anecdotal evidence shows that there have not been any study on the assessment of quality on ANC. The study intend to give analysis of the service readiness of rural health centres , the processes that clients go through during ANC clinics and the clients satisfaction level during the provision of these services.

The results of this study would inform managers and policy makers of that district to either improve their quality standards of ANC or maintain their standards of care to their ANC clients.

The study would also assess client satisfaction about the services they received during ANC and the results would inform policy makers on the need to organize frequent in-service training to staff in the Techiman-north district of the Brong-Ahafo region.

1.4 OBJECTIVES OF THE STUDY

1.4.1 General objective

To assess factors influencing the quality of ANC services in rural clinics in the Techiman-north district of the Brong-Ahafo Region.

1.4.2 SPECIFIC OBJECTIVES

1. To assess the structural factors/health system factors readiness for providing ANC services in rural clinics.
2. To determine the process factors/health care provider factors for providing quality ANC services in rural clinics.
3. To assess pregnant women satisfaction with the quality of ANC services in the rural facilities.

1.5 Research questions

1. What are the structural factors/health system factors for providing ANC in rural clinics?
2. What are the process factors/ health care provider factors for providing ANC services in rural clinics?
3. Are pregnant women satisfied with the quality of ANC services in rural clinics?

1.6 Outline of the Dissertation

The study is organized into five (5) chapters, chapter one (1), chapter two (2), chapter three (3), chapter four (4) and chapter five (5). Chapter one (1) presents the introduction of the study outlined; background of the study, problem statement, justification of the study

objectives of the study and research questions. Chapter two (2) presents both conceptual and empirical literature reviews on, the structural factors/ health care factors for rendering antenatal care services, the processes/ health care provider factors for rendering antenatal care service and employees satisfaction with the quality of antenatal care services. Chapter three (3) presents the research methodology including research design, population of study, sample and sampling procedure, research instrument, method collection procedure and data analysis methods for the study. Chapter four (5) presents analysis of findings of the study. Chapter six (6) presents summary, conclusion and recommendation of the study.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

The world health organization envisage a world whereby every pregnant woman receives quality of antenatal care, a safe delivery and good quality postnatal care. Reproductive health care is a continuum and antenatal care is an opportunity for a pregnant woman to be screened, diagnosed and given health education on disease prevention. It is therefore, an undeniable fact that timely and appropriate quality antenatal care services can prevent pregnancy related complications and deaths.(United Nations, 2016)

As part of preventive medicine, effective and good quality ANC service is a predictor of the outcome of a pregnancy. Hitherto, in developing countries high standard quality of care was merely a luxury. Pregnant women did not see the need of assessing ANC services mainly due to the fact that health facilities were inaccessible, resources were not available or they simply could not afford payment for the service. Good quality ANC services helps in detecting complications for prompt management and also reduces the risk associated with pregnancy outcomes.

One target under Sustainable Development Goal 3 is to reduce the global maternal mortality ratio to less than 70 per 100 000 births, with no country having a maternal mortality rate of more than twice the global average.

2.2 Sustainable Development Goals and Maternal Health Care

In 2015, many countries in the world especially in developing countries could not achieve their targets for the millennium development goals which led to the formation of another

millstone of 17 sustainable development goals which are to be achieved by 2030. Goal three of these SDGs is targeted at reducing maternal mortalities and improving the health of all people.

The sustainable development goal 3 proposes that by 2030 the global maternal ratio should not be greater than 70/100 000 live births. It emphasized that no country should have a maternal mortality ratio of more than two times the global percentage.(WHO, 2017).

Stakeholders in the healthcare system has therefore outline global targets and strategies of ending preventable deaths by 2030. Some of the outlined strategies includes ensuring equitable distribution of resources, improving access to health services and ensuring the provision of quality of ante natal services.

The WHO stress that by 2030, all countries should reduce their maternal mortality by two-thirds of their 2010 baseline. It proposes that no country should have a maternal mortality of more than 140 per 100 000 live births. (World Health Organization, 2015).

2.3 Antenatal Care

This is a term that is used to describe the care given to a pregnant women and her unborn baby throughout the period of conception with the aim of reducing complications associated with pregnancies and childbirth and also reducing stillbirths and perinatal deaths. Ante natal care is given by a skill health worker who is knowledgeable in providing care to pregnant women and also give health education on taking her routine medications, rest, diet, danger signs in pregnancy. During ante natal care, the pregnant woman is also assessed on basic laboratory investigations such as full blood count where available, urine for routine

examination, fasting or random blood sugar levels and an ultrasound (United Nations Children Fund (UNICEF), 2016)).

2.3.1 Antenatal Care services

According to the world health organization, every pregnant woman and her unborn baby should receive the best quality of care during pregnancy, childbirth and the puerperium aim at reducing maternal morbidities and mortalities. In view of this, the WHO develop a guideline that every pregnant woman should pass through during pregnancy. The guidelines recommends five interventional areas which includes nutritional counselling, maternal and fetal assessment, preventive measures, interventions for common physiological symptoms, health system interventions to improve the utilization and quality of ANC services (United Nations, 2016). There are four critical times every pregnant woman needs to be seen by a midwife or doctor. These comprises during week 8 to 12, 24 to 26, 32weeks, and from 36 to 38.(Metin, 2014).

During ante natal care, pregnant women are also given health education on personal hygiene, rest, medications. For high quality antenatal care, Pregnant women are expected to be educated on danger signs of pregnancies such as bleeding, edema, losing liquor, profuse vomiting, dizziness among others in order for them to report early for prompt management and or referral to the nearest facility where they can be managed properly. During ante care pregnant women are also prepared for their delivery. A successful delivery is a good

outcome of quality antenatal care, therefore pregnant women are usually prepared physically and psychologically to enable them have a successful delivery.(Drph & Mph, 2013).

Preparation of the pregnant woman to plan for her family after given birth is one of the topics been discuss during ante natal care. Expectant mothers are often taking through birth spacing to enable them make an inform decision about spacing of their children after a successful delivery. Therefore the various family planning methods are discuss with the mother before birth, in order to enable them make an inform decision. Again women are usually taking through counselling and testing for the Prevention of Mother to Child Transmission (PMTCT) with the aim of early detection and diagnoses of HIV/AIDS for early treatment in order to prevent their unborn babies from getting the infection.(Escribano-ferrer, Cluzeau, Cutler, & Akufo, 2016).

2.3.2 Focused Antenatal Care

This is a client focused evidenced based individualized care given to a pregnant woman irrespective of where ever she is. A leading concern of clients, health care providers and the public at large is poor customer relations at public sector health facilities (Ghana health Service, 2007).

In focused antenatal care, it is assumed that every pregnant woman is at risk of pregnancy complications, it is therefore necessary that every pregnant woman receives the best of the basic ante natal services for early detection and treatment.(Program, 2004)

The aim of focused antenatal care is geared towards improving and promoting the overall wellbeing of the pregnant woman through the period of pregnancy with emphasis on the

quality of the services provided but not merely the number of routine visits which was traditionally practiced. It was adopted by WHO in 2002 and is being implemented throughout sub-Saharan African countries (Tunçalp et al., 2017).

2.3.3 Benefits of antenatal services

High quality antenatal care is the success story of many countries in reducing maternal mortalities. Quality antenatal care ensure a pregnant woman passes through a normal and healthy pregnancy experience. “When a woman comes for antenatal care early in her pregnancy, there is time for early diagnosis and treatment of infections in the mother, and an opportunity to prevent low birth weight and other conditions in the newborn (Tunçalp et al., 2017).

2.3.4 Quality of Antenatal Care Services

“The Institutional Care Division defines quality of health care as *the proper performance (according to standards) of interventions that are known to be safe, affordable to society and impact positively on morbidity, disability and mortality* (Ghana health Service, 2007)”

In providing quality of care the client should be our focused and the services provided is expected to be safe, affordable, accessible, timely, prompt in such a way as to reduce illness, deaths and disabilities.

To ensure quality of care, patient’s safety is one of the indicators of quality that cannot be under estimated. High patient’s safety will improve upon preventable deaths, injuries, disabilities and preventing legal suits against facilities. A major concern of clients, health

care providers and the public at large is poor customer relations at public sector health facilities (Ghana health Service, 2007).

According to Donabedian 1988, quality of a service has many dimensions. He proposed three components of quality which has been widely used by many. These include; technical quality, interpersonal quality and Amenities. Technical quality comprises to the effectiveness of care in providing the desire outcome, interpersonal quality deals with the extent to which the patient is satisfied with the service, the amenities comprises things like physical surroundings, cleanliness and how services are organized.

Again, he (Donabedian) later proposed a similar concept of quality which deals with the processes, the structures and the outcome. The process has to do with all aspects of service delivery among practitioners and patients, the structures deals with the settings in which care is provided and the outcome deals with the end result or the effect of the care provided.

2.3.5 Safety of Antenatal Care

The act of providing healthcare without causing harm or injury to the patient is often referred to as safety of healthcare. Uche-Abaase (2014) emphasized that due to the alarming rate of maternal deaths, there should be a standard way of providing antenatal care by care givers so as to curb this menace especially in developing countries. He insist that, for a safe antenatal care, pregnant women are supposed to be taking through history taking, physical examination, laboratory investigations and an ultrasonography in order to identify high risk mothers for early interventions.

2.4 Factor Influencing the Quality of Antenatal Care Services

2.4.1 Structural Factors/ Health System Factor for Rendering ANC Services

General Service readiness describe the capability of healthcare facilities to render health services to people. A facility is said to be ready to provide healthcare services when all basic amenities such as electricity, water, laboratory, sphygmomanometer, thermometer, weighing scale, basic essential medicines among others are said to be available for the provision of quality health services (WHO, 2015).

The quality of health services can be affected by the availability of resources and basic amenities at health facilities especially health centres which are mostly under resourced. According to the WHO, the indicators for service readiness include availability of infrastructure, health workforce and service utilization. Every population of about 10,000 density should have a health facility. (Facility, Of, & Availability, n.d.) It is not enough for infrastructure to be available but should have the basic amenities such as electricity, water, washrooms, and laboratories for basic diagnostic investigations to ensure the provision of quality services. Resources such as staff, logistics and time are often a challenged.

Some of the challenges that health facilities are often confronted with include inadequate numbers and types of staff, inequitable distribution of available staff, attrition of health workers, low morale of health workforce, inadequate supportive supervision and weak management systems (WHO, 2017). Most studies that examined the quality of care in areas

such as trauma care, hypertension management, maternal and neonatal care and malaria management in Ghana concluded that there is an ineffective functioning of existing administrative structures, lack of adequate equipment, lack of commodities and registries, non-adherence to laboratory examination, counselling, treatment protocols and unprofessional staff attitude (E F Blanca et al 2016).

Rural pregnant women are often challenged with all poor accessible health centres due to the fact that the distance to the health facility is far, unavailability of a good transport system, availability of the staff when they get there. A study conducted by Afulani Patients (2015), suggest that, improving the quality of antenatal care in rural areas can reduce socioeconomic disparities. This implies that, policy makers (MOH/GHS) should take appropriate measures in providing funding, logistics equitable distribution of staff to these areas. Donor agencies and other NGOs should support the MOH/GHS by providing essential equipment such as sphygmomanometers, glucometers, urine dipsticks, weighing scales, rapid diagnostic kits for anemia, malaria HIV, and other consumables for delivering antenatal services.

Provision of refresher training for health staff in areas such as counselling on danger signs of pregnancies ,health education on the recognition of danger signs in pregnancy, how to respond to pregnancy complications and also urge governing bodies to provide periodic monitoring and supervisory visits to these areas (Afulani Patients, 2015). The Ghana Health service and its partners has made tremendous improvement towards the achievement of the millennium development goals by improving supervision, monitoring and evaluation, in-

service training of staff meanwhile little attention is given to improving processes, structures, systems of quality to the community and users of the health services which impede on the targets of some of the millennium development goals.

A study conducted in Uganda on the quality of ANC service concluded that, there was about 40% inadequate staff, and inadequate resources such as infection control facilities, lack of drugs and supplies. Although there were some facilities observed for the provision of ANC services, there was inadequate information given to clients about preparedness for child birth. Basic laboratory investigations were not also carried out, while counselling for danger signs in pregnancy was poorly done (Tetui Moses, 2012).

Affordability is a key component of accessibility to healthcare services.) Expensive healthcare prices is a major barrier to patients who has no insurance packages. Pregnant women who are not able to pay for their services refused to visit a doctor. (Mosadeghrad, 2012). Mosadeghrad (2012) reported that, clients are mostly concern with the quality of care they are receiving. Clients have their own way of assessing quality. They look for the availability of basic amenities such as electricity, security in and around the facility, clean and comfortable environment, privacy, tasty meals, and availability of the services any time they need it.

A study conducted in Nigeria, found that 5% of ANC users do not received the recommended quality standard of care. About 1/10 of ANC clients received sub- standard

quality of care clients from urban areas has a greater proportion of quality of service than those from rural areas , they also reported that educational status has an influence on the quality of service received, the higher your educational level the best quality of service received. Low quality health care service was also recorded among the poorest clients, (Fagbamigbe and Idemudia, 2015).

2.4.2 Health Care Provider Factor for Rendering ANC Services?

The world health organization has a standard that every pregnant woman is supposed to follow at a health facility. Health workers are therefore to insure that these standard protocols are adhered to in the provision of care to these pregnant women. Every pregnant woman should have the blood pressure weight, height, and body temperature monitored at every health facility.it is also recommended that, pregnant women should be taken through basic laboratory investigations to screen them for their hemoglobin level, urine for routine examination, blood sugar levels, hepatitis B, syphilis, HIV, stool examinations among others. Quality antenatal services also include, examining the abdomen, listening the fetal heart beat, giving tetanus immunizations, education on danger signs of pregnancy, nutrition, rest, drugs and reschedule clients for their next visit(WHO, 2007). Afulani (2015), reveal in her study that though 96%of women attend ANC services, only 25% receive the routine essential services.

2.4.3 How Satisfied are Pregnant Women on Antenatal Care (Quality of ANC Services)

Traditionally, satisfaction of pregnant women about services they received from health workers has been linked to how quality the service is and whether their expectations has been met. Individually, patient's satisfaction is subjective, but when clients are satisfied it influence their decision whether they should come back or not. When clients receive good

services, the possibility of recommending the facility to others is high but a bad services where clients are not satisfied would not usually be recommended. Various studies propound that, clients perceive satisfaction can be influence by the amount of cash they pay for a services, behavior of health workers, how long they waited before they receive the service, the relationship of health workers to clients. It has been identified that good interpersonal client patient relationship is a very important determinant of quality (Nwaeze, Enabor, Oluwasola, & Aimakhu, 2013)

2.5 Conceptual Framework

From figure 1 above, which has been modified framework from Donabaiden1988, quality of ANC can be influence by three dimensions that is through the structure, the process and the outcome (Fund, 2017). Structural factors include the availability of infrastructure, accessibility to the facility which can be influence by the distance to and from the facility, the staff strength of the facility, socioeconomic status of the client whether the client can afford the transport herself to and from the facility. The concept also try to link cultural beliefs with client attitudes in accessing ANC care since frequency of ANC services can help staff detect any abnormality early for good intervention measures to be taken.

Considering the process factors , quality of ANC can be influence at the health facility level, the length of time the client waited before getting the service, the environmental cleanness at the health facility ,did the health staff give enough information to the client about her state of health during the provision of service , keeping client information confidential would satisfy them and improve quality, taking the client through some basic laboratory investigation and ultra-sonography would enable the client be aware of their state of health makes them satisfied. All these link up improves ANC quality and improve maternal health.

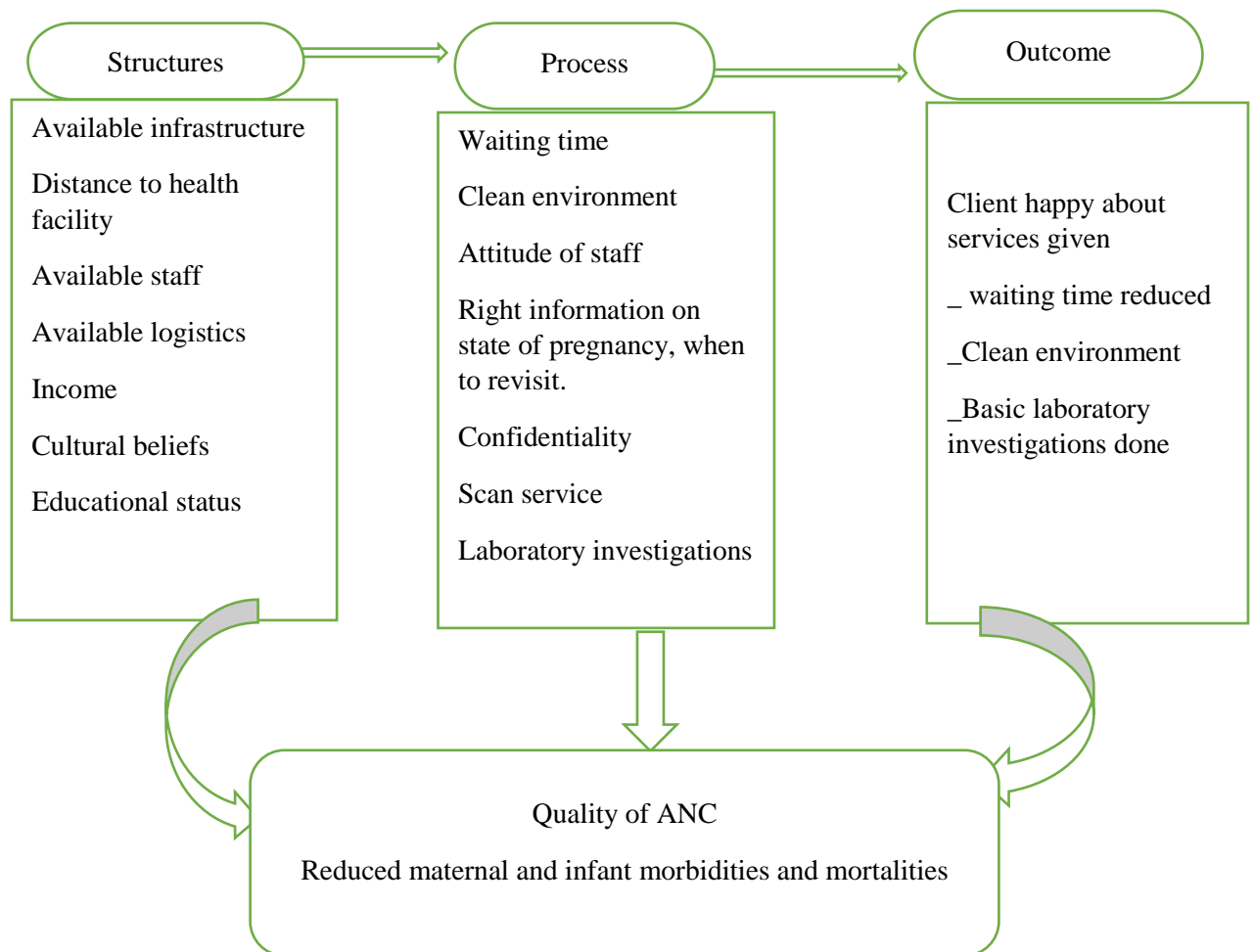


Figure 1: Conceptual framework of quality of care, modified from Donabedian quality of care, Donabedian, (1988)

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology for the current study. In this chapter the study elaborated on study design, study area, population of study, sampling and sampling procedure and variables of study

3.1 Study design

The study is a cross sectional descriptive, employing quantitative method of data collection using a structured questionnaire.

3.2 Study area

The study was conducted in the Techiman-North District of the Brong-Ahafo Region.

3.2.1 Background to the study area

The Techiman North District is one of the twenty-seven (27) Municipalities/Districts in the Brong Ahafo Region of the Republic of Ghana. It was established 2012 by the Legislative Instrument (LI 2095), with Tuobodom being the District Capital. The District comprises sixty-four (64) towns and villages. Which includes includes five (5) major towns, namely; Tuobodom, Offuman, Aworowa, Krobo and Buoyem. Most settlements can be located along two (2) main roads in the District, that is, the Techiman-Wenchi and Techiman-Kintampo routes. (Ghana statistical service, 2014)

3.2.2 Physical Features

The district has varied infrastructural challenges with so many departments compacted as a result of few government allocation of office accommdation. However, there are few private facilities and financial institutions doted within the district with some socio economic activities.

3.2.3 Location and Size

The District is situated in the central part of Brong Ahafo Region and covers an area of 389.4km². The District lies between longitudes 1°49′ East and 2°30′ West and latitude 8°00′ North and 7°35′ South. It shares political and administrative boundaries with the Techiman Municipality in the South, Wenchi Municipality in the North-west, Kintampo South District in the North and Nkoranza North District in the North-east. (Ghana statistical service, 2014)

3.2.4 Climate

The District experiences both semi-equatorial and tropical conventional or savannah climates, marked by moderate to heavy rainfall. Major rains start from April to July and the minor from September to October with mean annual rainfall ranging between 1660mm and 1260mm. The only dry season, which is highly pronounced in the Savannah zone, starts in November and lasts until March. The average highest monthly temperature is about 300C (860F) and occurs mostly between March and April with the lowest of about 200C (680 °F) occurring in August. Relative humidity is generally high throughout the year. (Ghana Statistical Service, 2014).

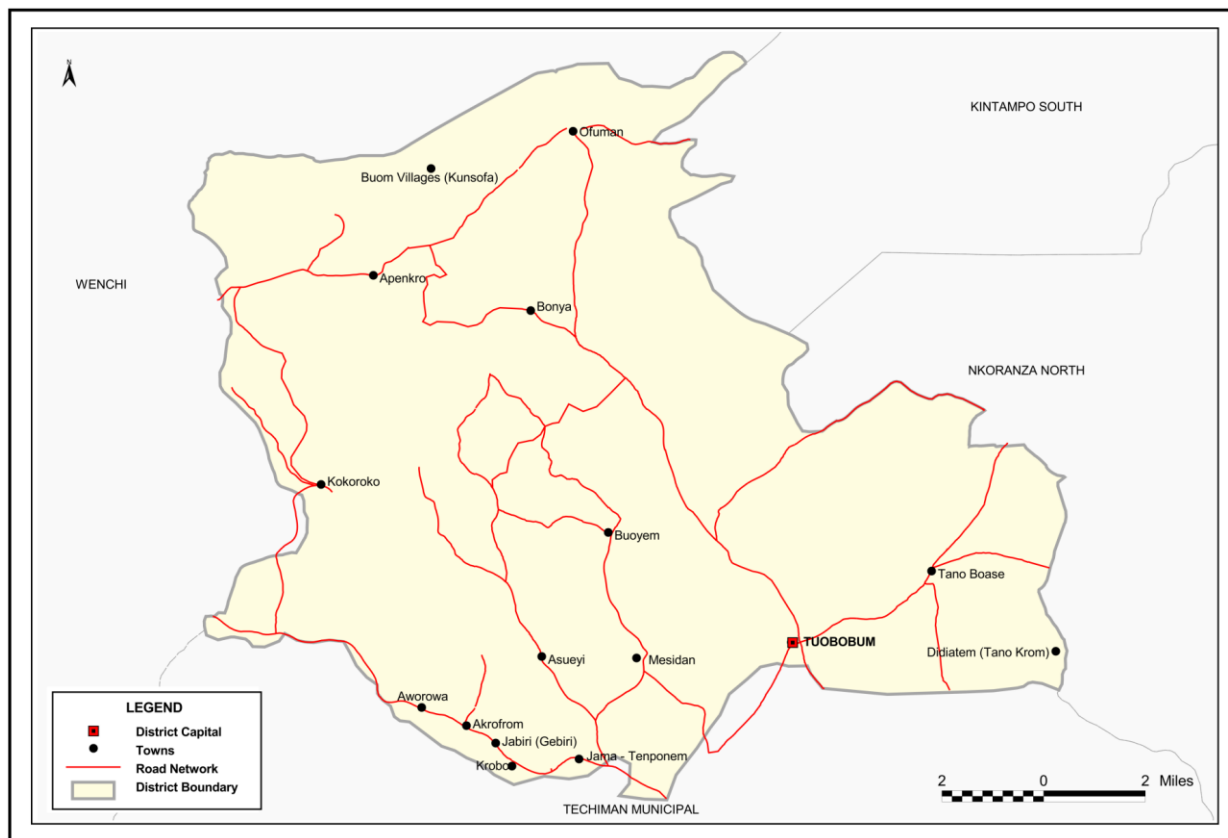


Figure 2: District map of Techiman-north *Source: Ghana Statistical Service, GIS 3*

3.2.5 Political administration and Structure

The Techiman North District Assembly is governed by the district chief executive under the central government of the republic of Ghana. Under the Local Government Act, 1993 (Act 462) the Assembly has deliberative, legislative and executive functions and it is the highest political administrative and planning authority at the District level.

It is composed as follows: the District Chief Executive who is the political and administrative head, 25 Assembly Members elected by universal adult suffrage in the electoral areas into which the Assembly is divided, 11 other members appointed by Government and one Member of Parliament in the District.

The District Chief Executive as the representative of the Central Government in the District also chairs the Executive Committee of the Assembly which is responsible for the performance of the executive and administrative functions of the District Assembly. The work of the Executive Committee is supported by other sub-committees which deliberate on issues in great detail and its recommendations are submitted to the Executive committee, which in turn submits them to the General Assembly for ratification.

Under Act 462, the Techiman North District Assembly is expected to operate with eleven departments. Inputs of these departments for the running of the Assembly are visible at the sub- committee level where the various heads, as ex-officio members of the relevant sub-committees and Assembly, help fine tune decisions. The District Co-coordinating Director coordinates all activities of the departments to ensure harmony and avoid duplication of efforts. (Ghana Statistical Service, 2014).

3.2.6 District Sub-structures

The District Assembly is divided into Town and Area Councils, depending on the population and land area of the district. A compact settlement or town with a population of 5,000 or more qualifies to have a Town Council status. An Area Council is made up of 2 or more towns which when pulled together have a population of 5,000 or more. Based on this the District has one Town Council and four Area Councils. They include; Tuobodom Town Council, Krobo, Offuman, Aworowa and Buoyem Area Councils. There are twenty-five electoral areas which constitute the District.

Also, there are 36 Unit Committees comprising 5 members each with a total membership of 180. However, not all the committees have full complement of members nor are functional. These gaps in the democratic structures imply that the District Assembly members must play a key role in ensuring effective information flow between the Assembly and the grassroots. The District has only one constituency. (Ghana Statistical Service, 2014).

3.2.7 Health Care Related Factors

There district has five health centres in Tuobodom, Offuman Krobo, Buoyem and Aworowa. There are 24 outreach and Community-based Health Planning Services (CHPS) compounds to serve residents in areas where accessibility to health facilities is poor. The Total Fertility Rate (TFR) for the District is 3.5. Majority of migrants (59.7%) living in the District were born in another region. For migrants born in another region, those born in other regions constitute 59.7% while the remaining 41.5% were born in the three northern regions (GSS, 2014).

3.3 study population

The study was conducted among pregnant women who came for ante natal services during the course of the study.

3.3.1 Inclusion criteria

The study included pregnant women who came for ANC service irrespective of their gestational age and are willing to participate in the study.

3.3.2 Exclusion criteria

This study excluded pregnant women who are death and dumb because of my inability to interpret sign language.

3.4.Sampling

A simple random sampling method was used in selecting pregnant women for this study throughout all health centres, whilst purposive sampling technique was used in selecting the sub districts.

3.4.1 Sampling procedure

All pregnant women attending daily ANC in each health centre were grouped, balloting done, that is by writing yes and no pieces of papers and participants made to pick these pieces of papers. All those who picked yes were included in the study but those who picked no did not participate in the study. This was done in all centres until the sample size was arrived. This is to ensure that every pregnant woman attending the ANC have a fair chance of being part of the study.

3.4.2 sample size

A total number of 260 participants were recruited.

Sample size calculation

The sample size was calculated using Cochran (1977) formula $n = z^2pq / d^2$

Where n = sample size

Z = is the abscissa corresponding to the confidence interval for the study. In this research 95% CI will be used, hence $z=1.96$.

P = assumed prevalence of dependent variable

$$q = 1-p$$

d = the standard error of this study

Taking

Z to be 1.96

P at 0.81 (81%) of Nwaeze et al, 2013 found that ANC services provided are of good quality

$$q = 1 - 0.81 = 0.19$$

$$d = 5\% = 0.05$$

This implies $\frac{1.96^2 \times 0.81 \times 0.19}{0.05^2}$

$$= 236$$

$$= 236$$

$$236 + 10\% \text{ non-response rate} = 236 + 23.6 = 259.6 \sim 260.$$

3.5 Study variables

Quality of Ante natal care, Satisfaction, Age, Marital status, parity, Educational status, Waiting time, Attitude of staff, Cleanliness of environment, availability of toilet facility,

availability of urinal, willingness to recommend facility to others, availability of routine drugs, willingness to come back to facility.

3.6 Data collection method

A quantitative data collection method was used. A pretested questionnaire at Krobo a nearby health facility in the district with similar characteristics was used in testing the data collection instrument before the main data was collected. Twenty (20) ANC women were recruited for the pretest. This was to enable me identify any challenges for onward correction before the main data collection was done. All questionnaires were interpreted according to the local language of the people which is mainly Twi or Bono. The questionnaire sought information from the background characteristics of clients, the processes they were taken through during service provision, a checklist from GHS reproductive health quality standards was used to assess the general service readiness score which include assessment of basic amenities, drugs, staff, laboratory services and cleanliness, the client satisfaction (outcome) of the service was measured using a four point Likert scale which comprises whether clients were very satisfied, satisfied somehow satisfied or not satisfied , the dependent variable (quality of ANC) was measured using a four point Likert scale which would contain answers like Strongly agree, agree, disagree and strongly disagree. (Likert scale is a data collection instrument developed by Rensis Likert in 1932 using a four to seven point scale) The questionnaire would also contain close ended questions such as yes or no answers. The reliability index for the Likert scale questionnaire as computed using Cronbach Alpha. This was found to be above 0.78 indicating the questionnaire was reliable (Bowling, 2014).

3.6.1 Training of research assistants

A one day training exercise was organized for my team members who included data collectors and data managers.

3.6.2 Quality control

To ensure data is of high quality standards, all questionnaires were pretested among pregnant women at Krobo, a similar population with similar characteristics. Questions were translated into the local dialect that respondents understood. The principal investigator (PI) trained research assistants for the data collection. During data collection, 5% of people interviewed by research assistant were resampled and the interviews conducted by the PI and compared with what was done by the research assistants. Answered questionnaires were checked for completeness before leaving the facility. Data were entered twice by two separate data entry trainees to ensure that the data is completely entered without errors.

3.7 Data processing and analysis

Data were entered using excel 2010 and SPSS Version 20.0. The data were cleaned, prepped and managed to reflect the various variables with respect to the study objectives. The study explored descriptive statistics and inferential statistical tools to analyze the data to address the research objective. The descriptive statistically tools including mean, minimum, maximum, standard deviation percentages and frequencies were estimated. Descriptive statistical tool were used to provide descriptive information on the general services readiness for providing ANC services in the rural clinics and on processes of providing ANC services

in the rural clinics. The study also explored Pearson's correlation analysis to determine the relationship between the quality of ANC services and the satisfaction of pregnant women.

3.8 Ethical consideration

Ethical clearance would be sought from the GHS ethical review committee before any information would be collected from any GHS facility. Authorization would be collected from the regional director, Brong-Ahafo Region and the district director of Techiman-North.

Informed consent was sought from clients. Any client who objected involvement in the study was excluded with been coerced. Those who accepted to participate willingly were allowed to do so. All data collected from clients are kept confidential and were used only for this academic work and public health purposes.

Participants would NOT be required to state their personal details such as their names, telephone numbers, and place of residence or postal address among others on the questionnaire. Only variables such as age, sex, marital status, parity, religious background would be required of them which would not portray their identity directly or indirectly.

Apart from the principal student investigator, research assistants at the point of data collection and my supervisor, who may go through the records, all data collected from the participants would be filed and locked up where no one will have access to any information from the participants in order to protect them. All data collected will be used for academic purposes only and as such, ethical principles of privacy and confidentiality will be ensured.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussions of the current study “*Assessing the factors influencing the quality of Antenatal Care (ANC) services in rural clinics in the Techiman-north district of the Brong-Ahafo Region*”. In this chapter, the study first explored the socio-demographic profile of the two hundred and sixty (260) sampled pregnant women using percentages and frequencies. In addition, the study assessed the structural factors/health system for providing ANC services in the rural clinics using percentages and frequencies. The study further determined the process factors/ health care provider factors for providing quality ANC services in the rural clinics using percentages and frequencies. Finally the study assessed pregnant women satisfaction with quality of ANC services in the rural clinics using Pearson’s Correlation analysis.

4.2 Socio-demographic Characteristics of Respondents.

This section presents results on the demographic profile of the sampled two hundred and sixty pregnant women using descriptive statistics. The Table 4.1 presents estimated percentages and frequencies on the level of education, occupation and marital status of the respondents.

Table 4.1 Estimated Percentages and Frequencies on the Demographic Profile of Respondents

	Frequency (n=260)	Percentages (%)
Educational Level		
Primary	170	65.4
Secondary	32	12.3
Tertiary	5	1.9
None	53	20.4
Occupation		
Government Employed	5	1.9
Trading	49	18.8
Farming	127	48.8
Others	79	30.4
Marital Status		
Married	196	75
Single	62	23.8
Divorced	1	0.4
Separated	1	0.4

Source: Field Data (2019)

As shown in Table 4.1, most 170(65.4%) of the respondents attained primary education whilst 32(12.3%) whilst 53(20.4%) were illiterates, 32(12.3%) attained secondary school education and 5(1.9%) attained tertiary level education. In addition, 127(48.8%) of the

respondents were farmers whilst 79(30.4%) were unemployed, 49(18.8%) were traders and 5(1.9%) were employed by the government. Furthermore, most 196(75%) of the respondents were married whilst 62(23.8%) were singles and 1(0.4%) had divorced and 1(0.4%) had also divorced.

4.3 Assessing Structural factors/health care factors for Rendering Antenatal Care (ANC) Services in the Rural Clinics

This section presents the results on the health care factors for rendering ANC services in the rural clinics. Table 4.2 presents estimated percentages and frequencies on the cleanliness of health facilities, availability of toilets in the health facilities, availability of urinal in the health facilities, availability of laboratories in the health facilities, the availability of electricity facilities among others

Table 4.2 Estimated Percentages and Frequencies on the health care factors for rendering ANC Services

	Frequency (n=260)	Percentages (%)
Cleanliness of Health Facility		
Strongly agree	24	9.2
Agree	224	86.2
Disagree	6	2.3
Strongly Disagree	6	2.3

Availability of Toilet		
Yes	248	95.4
No	12	4.6
Availability of Urinal		
Yes	247	95.0
No	13	5.0
Availability of Laboratory		
Yes	33	12.7
No	227	87.3
Availability of Electricity		
Yes	258	99.2
No	2	0.8

Source: Field Data (2019)

As shown in Table 4.2, most 224 (86.2%) of the respondents agreed that the health facilities were cleaned whilst 24 (9.2%) strongly agreed, 6 (2.3%) disagreed and the same number strongly disagreed. In addition, most 248 (95.4%) of the respondent agreed that the health centers had toilet facilities whilst only 12 (4.6%) disagreed. Also, most 247 (95.0%) of the respondents agreed that the health centers had urinals whilst 13 (247%) disagreed. Furthermore, most 227(87.3%) of the respondents disagreed that the health centers had laboratory facilities whilst 13(5.0%) agreed. Finally, most 258 (99.2%) of the respondents agreed that the health centers had electricity whilst 2 (0.8%) disagreed.

4.4 Determining the Process Factors/ Health Care Provider Factors for Providing Quality Antenatal Care (ANC) Services in Rural Clinics

This section presents results on the health care provider factors for rendering quality ANC services in the rural clinics. The Table 4.3 presents estimated descriptive statistics of the responses on the health care provider's factors for rendering ANC services in the rural clinics.

Table 4.3 Estimated Percentages and Frequencies on Process Factors of Rendering ANC Services

	Frequency (n=260)	Percentages (%)
Nurse/Doctor checked Vital		
Yes	260	100
Examined by Nurse/Doctor		
Strongly agree	134	51.5
Agree	111	42.7
Disagree	6	2.3
Strongly disagree	9	3.5
Information on the State of Pregnancy		
Strongly agree	20	7.7
Agree	94	36.2
Disagree	100	38.5

Strongly disagree	46	17.7
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Assured with

Confidentiality

Strongly agree	7	2.7
Agree	43	16.5
Disagree	122	46.9
Strongly disagree	88	33.8

Treated with Respect

Strongly agree	125	48.1
Agree	116	44.6
Disagree	14	5.4
Strongly disagree	5	1.9

Type of Food to Eat

Yes	49	18.8
No	211	81.2

Importance of Drugs

Yes	80	30.8
No	180	69.2

Source: Field Data (2019)

As shown in Table 4.3, all 260 (100%) of the respondents indicated that the nurse/doctor checked their vital signs. In addition, a little more than half 134 (51.5%) of the respondents strongly agreed that they were examined by a nurse/doctor whilst 111(42.7%) agreed, 6

(2.3%) disagreed and 9 (3.5%) strongly disagreed. Furthermore, 100 (38.5%) of the respondents disagreed that the nurse/doctor gave them information on the state of the pregnancy whilst 94 (36.2%) agreed, 46 (17.7%) strongly disagreed and 20 (7.7%) strongly agreed. Finally, 122 (46.9%) of the respondents disagreed that they were assured of confidentiality whilst 88(33.8%) strongly disagreed, 43 (16.5%) agreed and only 7 (2.7%) strongly agreed.

4.5 Assessing pregnant women Satisfaction with the Quality of Antenatal Care (ANC) Services in the Rural Clinics

This section presents the results on pregnant women satisfaction with the quality of ANC services in the rural clinics by determining the relationship between pregnant women satisfaction and the quality of ANC service in the rural clinics. The Table 4.4 presents estimated responses on satisfaction of pregnant women. The Table 4.5 presents estimated descriptive statistics on satisfaction and quality of ANC services in the health centers. The Table 4.6 presents estimated Pearson correlation estimated for the relationship between pregnant women satisfaction and the quality of ANC services.

Table 4.4 Estimated Percentages and Frequencies on Pregnant Women Satisfaction

	Frequency (n=260)	Percentages (%)
Return to Health Center		
Again		
Yes	249	95.8
No	11	4.2

Satisfied		
Yes	235	90.4
No	25	9.6
Recommend facility to others		
Yes	240	92.3
No	20	7.7
Take Drug because of Satisfaction		
Yes	242	93.1
No	18	6.9

Source: Field Data (2019)

As shown in Table 4.4 most 249(95.8%) of the pregnant women indicated that they would return to the health centers next time whilst only 11(4.2%) indicated otherwise. In addition, most 235(90.4%) of the pregnant women indicated that they were satisfied with the service rendered to them whilst 25(9.6%) indicated otherwise. Furthermore, most 240(92.3%) of the pregnant women indicated that they recommend the health facilities to others whilst only 20(7.7%) indicated otherwise. Finally, most 242(93.1%) of the pregnant women indicated that they would take their drugs because they are satisfied with the condition of services whilst 18(6.9%) indicated otherwise.

Table 4.5 Estimated Descriptive Statistics on Satisfaction and Quality of ANC Services

	N	Minimum	Maximum	Mean	Std. Deviation
Satisfaction	260	.00	4.00	3.7154	.86756
Quality of ANC Service	260	1.00	6.00	4.1654	.88725

Response category

Satisfaction: Not Satisfied: (<1), Neutral: (1-2), Satisfied (3-4)

Quality of ANC Service: Poor Quality: (< 2), Normal :(2-3), Quality: (4-6)

As shown in Table 4.5 the pregnant women indicated that they were satisfied with a mean response of ($X=3.72$), since the mean response is within the very satisfied response category it indicates that pregnant women were satisfied at the health centers.

In addition, the quality of ANC service had a mean response of ($X=4.17$), since the mean response is within the excellence response category, it indicates that there was quality of ANC services at the rural clinics.

Table 4.6 Estimated Pearson’s Correlation Estimates for the Relationship between Quality of ANC Services and Pregnant Women Satisfaction.

		Satisfaction
Quality of ANC Service	Pearson’s Correlation	0.322
	P-value	0.00

N

260

Source: Field Data (2019)

As shown in Table 4.6, the Pearson's Correlation Coefficient for the relationship between quality of ANC Services and pregnant women satisfaction is 0.322 with a P-value of 0.000. This implies that there is a positive relationship between quality of ANC services and pregnant women satisfaction. Thus as the quality of ANC services increases the satisfaction of pregnant women increases. This relationship is significant at 5% significant level since the P-value 0.000 is less than the 5% significance level.

4.6 Summary

The study estimated descriptive statistics and Pearson's Correlation estimates in analyzing the data obtained to address the various research objectives.

The following are the main finding of the study; the study revealed that, most 224(86.2%) of the pregnant women indicated the health facilities were cleaned, also most of the pregnant women indicated that the health centers had toilet facilities 248(95.4%), urinal 247(95.0%) and electricity 258(99.2%). However most 227(87.3%) indicated that the health center did not have laboratory facilities. Secondly, the study revealed that pregnant women vital signs were checked 260(100%), pregnant women were examined 245(94.2%), treated with respect 241(92.7%) however, on average pregnant women indicated that they were not informed about the state of their pregnancies 146(56.2%) and also that they were not assured with confidentiality 210(80.7%). Finally the study revealed that the quality of ANC services in the rural clinics and pregnant women satisfaction had a Pearson's Correlation coefficient of 0.322 and a P-value of 0.00.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents the discussions of the findings obtained. Discussions on the health systems factors were first presented followed by discussion on health care provider factors and finally discussion on pregnant women satisfaction with quality antenatal care services in the rural clinics.

5.2 Health System Factors for Providing Antenatal Care (ANC) Services in the Rural Clinics.

The current study assessed the factors influencing the quality of ANC services in rural clinics by first of all assessing the health system factors for providing ANC services in the rural clinics. Based on this objective, the study revealed that the health centers were cleaned (86.2%), had toilet facilities (95.5%) had urinal (95.0%), laboratory (12.7%) and electricity (99.2%).

General Service readiness describe the capability of healthcare facilities to render health services to people. A facility is said to be ready to provide healthcare services when basic amenities such as electricity, water, basic essential drugs, laboratory and other facilities. According to the WHO, the indicators for service readiness include availability of infrastructure, health workforce and service utilization .It is not enough for infrastructure to be available but should have the basic amenities such as electricity, water, washrooms, and

laboratories for basic diagnostic investigations to ensure the provision of quality services. Facilities like toilet facility, urinal, electricity among others would general ensure that health center would be able to contain pregnant women and render ANC services to them any time they visit the health centers requesting ANC services. These basic amenities would ensure the convenience of pregnant women while they are seeking ANC services. This would consequently ensure their satisfaction with the condition of ANC service. For health centers to be able to render quality ANC services they should be generally ready by having available basic amenities which would aid in rendering these services. Mosadeghrad (2012) reported that, clients are mostly concern with the quality of care they are receiving. The study however revealed the health center had inadequate laboratory facilities, this would to some extent reduce the quality of ANC service in the health centers. As Tetui et al., (2012) revealed in a similar study conducted, basic laboratory investigating were lacking in providing ANC services in rural health centers in Uganda.

5.3 Health Care Provider Factors for Rendering ANC services in Rural Clinics

The current study further determined the health care provider factors for providing quality ANC services in rural clinics and revealed the following; pregnant women vitals were checked (100%), most pregnant women were examined (94.2%) and treated with respect (92.7%). However a little more than half of the pregnant women were not informed about the state of their pregnancies (56.2%) and finally most of the pregnant women were not assured with confidentiality (80.7%). Also, most of the pregnant women indicated that they were not educated on the type of food to eat (81.2%) and the importance of taking their drugs (69.2%).

The world health organization has a standard that every pregnant woman is supposed to follow at a health facility. Health workers are therefore to insure that these standard protocols are adhered to in the provision of care to these pregnant women. Every pregnant woman should have the blood pressure weight, height, and body temperature monitored at every health facility. Quality antenatal services also include, examining the abdomen, listening the fetal heart beat, giving tetanus immunizations, education on danger signs of pregnancy, nutrition, rest, drugs and reschedule clients for their next visit(WHO, 2007). From the findings it is clear that the rural clinics adhered to some required antenatal care services like taking patient vitals, examining pregnant women and treating them with respect and were lacking on some required antenatal care services like education on nutrition and the importance of taking their drugs. Afulani (2015), reveal in her study that though 96% of women attend ANC services, only 25% receive the routine essential services.

5.4 Pregnant Women Satisfaction with the Quality of Antenatal Care (ANC) care services in the Rural Clinics.

The current study finally examined pregnant women satisfaction with the quality of ANC services by determining the relationship between pregnant women satisfaction and the quality of ANC services in the rural clinics. The study revealed that pregnant were satisfied with the Antenatal Care (ANC) services the received from the health center even though the rural clinic did not perform other required ANC service. The study showed that there is a positive relationship between quality of ANC services at the health centers and the satisfaction of pregnant women. The availability of the basic ANC services at the health

centers to pregnant women provide comfort, convenience and relieve them from their challenges and pregnancies worries. Thus making pregnant women satisfied the ANC services.

Traditionally, satisfaction of pregnant women with services they received from health workers has been linked to how quality the service is and whether their expectations has been met. Individually, patient's satisfaction is subjective, but when clients are satisfied it influence their decision whether they should come back or not. It has been identified that good interpersonal client patient relationship is a very important determinant of quality (Nwaeze et al., 2013). The aim of focused antenatal care is geared towards improving and promoting the overall wellbeing of the pregnant woman through the period of pregnancy with emphasis on the quality of the services provided but not merely the number of routine visits which was traditionally practiced. It was adopted by WHO in 2002 and is being implemented throughout sub-Saharan African countries (Tunçalp et al., 2017). "When a woman comes for antenatal care early in her pregnancy, there is time for early diagnosis and treatment of infections in the mother, and an opportunity to prevent low birth weight and other conditions in the newborn (Tunçalp et al., 2017).

5.4 Summary

The study indicated that there are available health system structures present in the rural clinic for supporting ANC service even though there are some few challenges. Finally the chapter indicated that pregnant women were satisfied with the quality of ANC service they received in the health centers.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Introduction

This section presents the summary, conclusion and recommendation. The summary is first presented, followed by the conclusion and then the recommendation.

6.2 Summary

The main objective of the current study is to assess the factors influencing the quality of Antenatal care (ANC) services in rural clinics. To achieve this objective, the study first assessed the general service readiness for rendering ANC services in the rural clinics. Secondly, the study determined the processes for rendering ANC services in the rural clinics. Finally, the study assessed pregnant women with satisfaction on the quality of ANC services in the rural clinics.

The study explored descriptive research design to obtain data from two hundred and sixty (260) sampled pregnant women in rural clinics in Techniman-north District in the Brong Ahafo Region using questionnaire as the main data collection instrument. The study used multi-stage sampling procedure by first of all using purposive sampling techniques to determine the sub-districts within which the clinics are located and then used simple random sampling to sample the two hundred and sixty (260) pregnant women. The estimated

descriptive statistics and Pearson's Correlation estimates in analyzing the data obtained to address the various research objectives.

The following are the main finding of the study; the study revealed that, most 224(86.2%) of the pregnant women indicated the health facilities were cleaned, also most of the pregnant women indicated that the health centers had toilet facilities 248(95.4%), urinal 247(95.0%) and electricity 258(99.2%). However most 227(87.3%) indicated that the health center did not have laboratory facilities. Secondly, the study revealed that pregnant women vital signs were checked 260(100%), pregnant women were examined 245(94.2%), treated with respect 241(92.7%) however, on average pregnant women indicated that they were not informed about the state of their pregnancies 146(56.2%) and also that they were not assured with confidentiality 210(80.7%). Finally the study revealed that the quality of ANC services in the rural clinics and pregnant women satisfaction had a Pearson's Correlation coefficient of 0.322 and a P-value of 0.00.

6.3 Conclusion of the Study

The current study assessed the factors influencing the quality of ANC services in rural clinics. The study revealed findings which addressed the research objectives and were consistent with literature. On the first objective, the study concludes that health centers in the rural clinics had the basic health facilities, which would aid pregnant women in acquiring quality ANC services when they visit the clinics. On the second objective, the study concludes that pregnant women vitals were checked and as well they were examined by a qualified health personnel, however they were not provided with information on the state of their pregnancies. On the third objective, the study concludes that the quality of ANC

services positively influence the satisfaction of pregnant women significantly in the rural clinics.

6.4 Contribution to Knowledge

The current study assessed the factors influencing the quality of ANC services in rural clinics, relevant findings were obtained which addressed the research objectives and were in line with literature as shown in section 6.3. Finding of the study would contribute to literature on the quality of ANC services in rural clinics and how pregnant women are satisfied with them. Findings would also inform Ghana Health Service/Ministry of Health (MoH/GHS) and relevant Health sector NGOs on the best policy framework for enhancing the quality of rural clinics and as well the quality of ANC services in rural clinics.

6.5 Recommendation

- I. Based on the finding that rural clinics had inadequate laboratory facilities, the study recommend that Ghana Health Service should build more laboratory facilities in the rural clinics to ensure quality of Antenatal care (ANC) services in the clinics.
- II. Also, based on the findings that pregnant women in the rural clinics were not given adequate information on the state of their pregnancies and assurance of confidentiality, the study recommends doctors/nurse in the rural clinics should provide information on the state of pregnancies to pregnant women and also should assure pregnant women of confidentiality.
- III. Based on the finding that there exist positive relationship between quality of Antenatal care (ANC) services and the satisfaction of pregnant women. The study recommends that Ministry of Health (MOH/GHS) and related Health Non-

Governmental Organizations (NGOs) should invest intensively in enhancing the standards of rural clinics in Techniman-north Brong Ahafo region by building more infrastructure, making available essential equipment such as sphygmomanometers, glucometers, urine dipsticks, weighing scales, rapid diagnostic kits among others for enhancing the quality of Antenatal care (ANC) services and pregnant women satisfaction.

- IV. The study finally recommends that subsequent study on this same topic should also assess the knowledge and right of pregnant women on the package of Antenatal care (ANC) services.

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APPENDIX

Appendix 2

Questionnaire

Interview date.....

Name of interviewer.....

Respondent's number.....

These questionnaire are modified from Freeman .F.Birch (2015)

Demographic characteristics	Please tick the option that is applicable to you
Q 1 Age	<input type="checkbox"/>
Q2 parity	<input type="checkbox"/>
Q3 educational level Primary Secondary Tertiary None	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Q4 Occupation Government employed Trader Farming	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Q5 Marital status	

Married	<input type="checkbox"/>
Single	<input type="checkbox"/>
MMDivorce	<input type="checkbox"/>
Separated	<input type="checkbox"/>
Widowed	<input type="checkbox"/>

Basic amenities	Please respond appropriately
Q6 The environment was clean	
Strongly agree	<input type="checkbox"/>
Agree	<input type="checkbox"/>
Disagree	<input type="checkbox"/>
Strongly disagree	<input type="checkbox"/>
Q7 There is toilet in this facility	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q8 There is urinal in this facility	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q9 there is laboratory in this facility	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q10 there is electricity in this facility	

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q10 Inputs	
Who attended to you	
Doctor	<input type="checkbox"/>
nurse	<input type="checkbox"/>
Q11 how long did it take you to see the doctor/nurse	
10-30mins	<input type="checkbox"/>
30-60mins	<input type="checkbox"/>
2hrs	<input type="checkbox"/>
3hrs	<input type="checkbox"/>
Q12 the nurse/doctor gave me information of the state of my pregnancy	
Strongly agree	<input type="checkbox"/>
Agree	<input type="checkbox"/>
Disagree	<input type="checkbox"/>
Strongly disagree	<input type="checkbox"/>
Q13 the nurse/doctor examined me	
Strongly agree	<input type="checkbox"/>
Agree	<input type="checkbox"/>
Disagree	<input type="checkbox"/>
Strongly disagree	<input type="checkbox"/>

<p>Q14 the nurse/doctor assured me with confidentiality</p> <p>Strongly agree</p> <p>Agree</p> <p>Disagree</p> <p>Strongly disagree</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q15 The nurse/doctor checked my vital signs</p> <p>Yes</p> <p>No</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q16 the nurse/doctor treated me with respect</p> <p>Strongly agree</p> <p>Agree</p> <p>Disagree</p> <p>Strongly disagree</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q17 the doctor/nurse gave me all my routine drugs</p> <p>Yes</p> <p>No</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q 18 the doctor/nurse explained the importance of taking my routine drugs</p> <p>Yes</p>	<p><input type="checkbox"/></p>

no	<input type="checkbox"/>
Q19 the doctor/nurse told me when I should return to the facility	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q20 the doctor/nurse educated me the type of I should eat	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q21 the doctor/nurse told me when I see any of the following symptoms I should report immediately; severe headache, severe vomiting, severe lower abdominal pains, bleeding, edema, loosing liquor, fever	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Q22 The doctor/nurse educated me on family planning if I wish to do it after delivery	
Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

Outcome indicators	Response(please tick)
<p>Q23 would you return to this facility again the next time</p> <p>Yes</p> <p>no</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q24 Were you satisfied with the services that you were provided</p> <p>Yes</p> <p>no</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q25 would you recommend this facility to another person</p> <p>Yes</p> <p>No</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Q26 Would you take your routine drugs as prescribed because you were happy with the services given you</p> <p>Yes</p> <p>No</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Client satisfaction indicators</p> <p>Q27 what is your overall rating of the services you were provided with</p> <p>Excellent</p>	<p><input type="checkbox"/></p>

Good	<input type="checkbox"/>
Poor	<input type="checkbox"/>
Q28 how satisfied are you for accessing health care at this facility	
very satisfied	<input type="checkbox"/>
satisfied	<input type="checkbox"/>
dissatisfied	<input type="checkbox"/>