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SCHOOL OF PUBLIC HEALTH

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

ASSESSMENT OF CLIENTS' SATISFACTION WITH QUALITY OF ANTENATAL CARE AT KORLE – BU TEACHING HOSPITAL

BY

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DECLARATION

I hereby declare that all information produced from this research is as a result of my own work and diligence in obtaining data. With the exception of articles and books which have been cited and duly acknowledged in the references of this research, the entire work is mine. To the best of my knowledge, no part of this work has been obtained from a previous publication or accepted for the award of any degree in any University or institution of higher learning except where due acknowledgement is made in this text.

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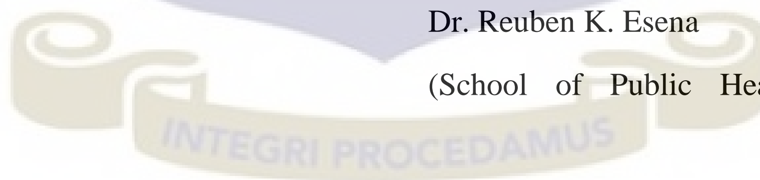

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DEDICATION

This work is dedicated to my wonderful husband and children.

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ACKNOWLEDGEMENT

This work has been accomplished through the contributions of various persons whose support, encouragement and commitment played a vital role in taking me through this programme successfully.

I am grateful to the almighty God for his abundant grace in seeing me through this research.

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ABSTRACT

Background

Quality of service at the antenatal clinic is a key success factor in healthcare delivery in hospitals in Ghana. So, the assessment of clients‟ level of satisfaction with quality antenatal care is crucial upon which improvement of health service delivery can be undertaken periodically. Thus, the aim of this study was to assess the satisfaction of clients with the quality of antenatal care at Korle – Bu teaching hospital.

Method

The study was a cross-sectional survey employing both quantitative and qualitative approaches. Exit interviews were carried out for 156 clients aged 15 years to 44 years who reported to the antenatal clinic at Korle-Bu teaching hospital. Two focused group discussions were carried out with each group having eight participants. Descriptive analysis and logistic regression were done using Stata version 12 and focused group discussion analysed using Nvivo version 7.

Results

Clients portrayed an overall high satisfaction index being 61.54% with clarity of treatment being the main predictor of client satisfaction. Waiting time of clients was found not to be statistically significant with satisfaction in this study.

Conclusions

Clients were dissatisfied with the recommended ANC check – up of four times. It is recommended that the facility creates awareness of ANC check- up of four times and strengthen areas of clarity of treatment to clients.

Keywords: antenatal, quality, saatisfaction

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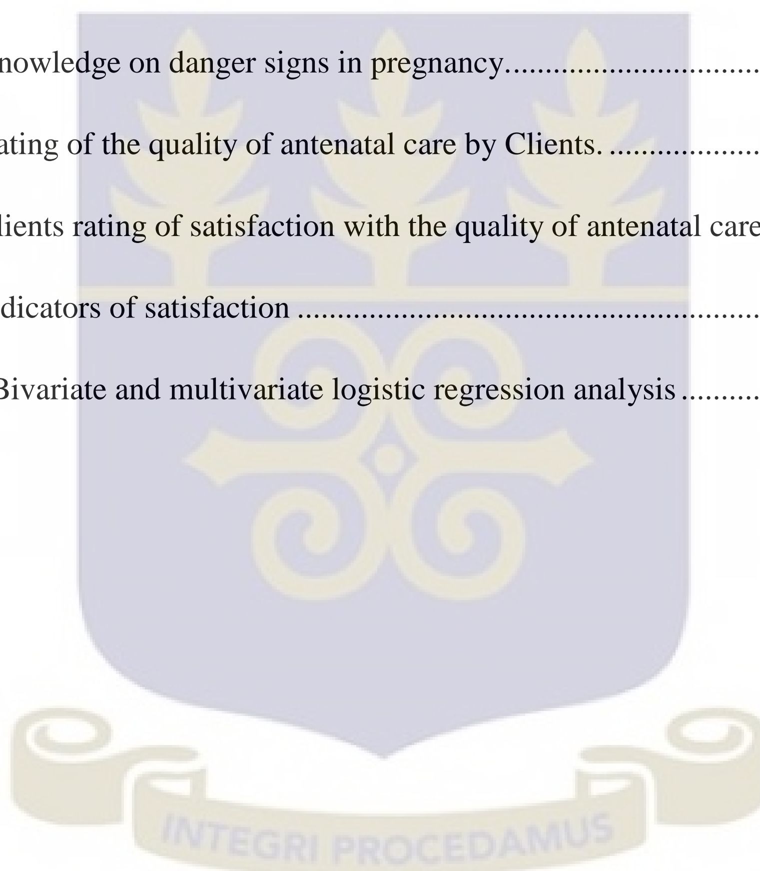

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LIST OF ABBREVIATIONS

ANC – Antenatal Clinic

GHS – Ghana Health Service

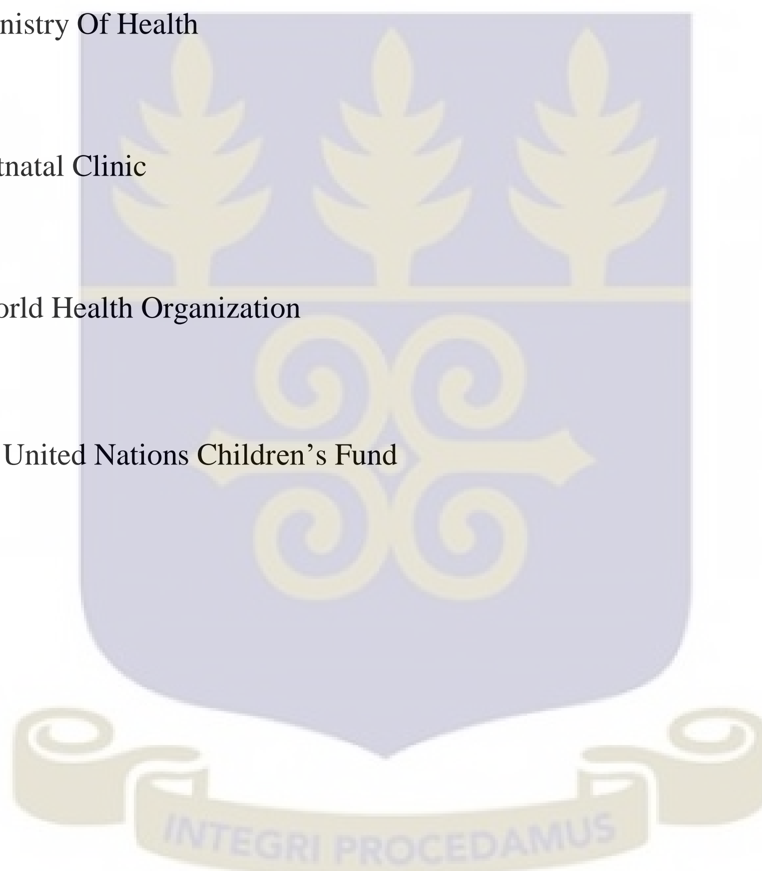
KBTH – Korle – Bu teaching hospital

MOH – Ministry Of Health

PNC – Postnatal Clinic

WHO – World Health Organization

UNICEF – United Nations Children's Fund



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DEFINITION OF TERMS

Client – A patient who accesses care in the health facility.

Health worker – A qualified person in the medical field who provides health services

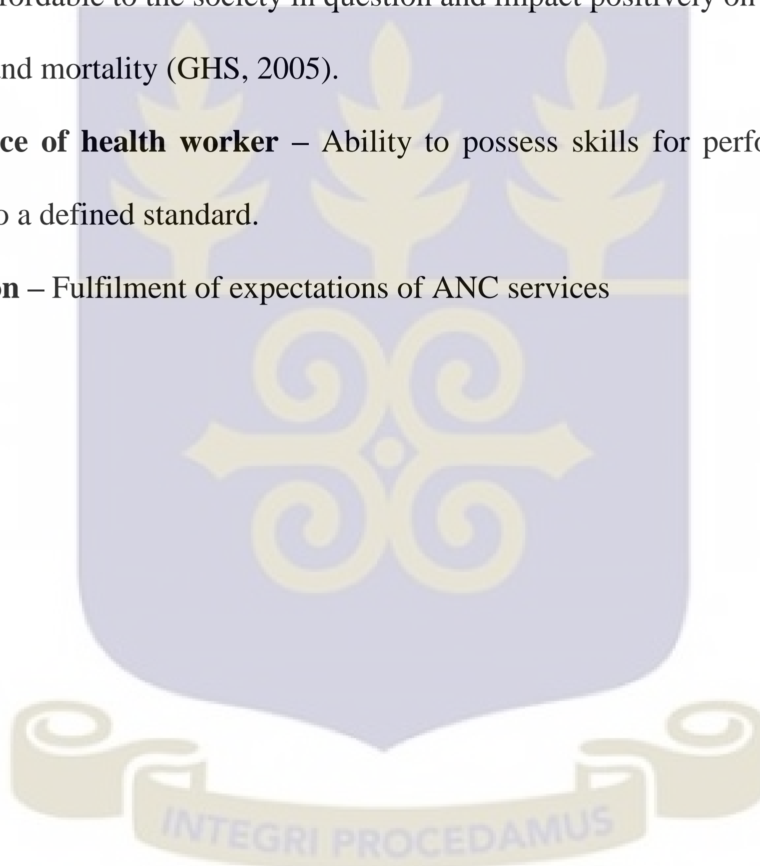
Contact time – The amount of time a patient spends with the doctor during consultation.

Waiting time – The time client sees nurse to the time client sees doctor.

Quality of health care - Proper performance interventions that are known to be safe and affordable to the society in question and impact positively on morbidity, disability and mortality (GHS, 2005).

Competence of health worker – Ability to possess skills for performing necessary activities to a defined standard.

Satisfaction – Fulfilment of expectations of ANC services



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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The Millennium Development Goal 5 aims at improving maternal health. In order to achieve this goal, there is the need to improve services that are critical to the health of pregnant women and one of such service is the antenatal care. In response, there are efforts by the Ghana Health Service to improve the quality of healthcare delivery, however, there are complaints about poor quality of care (Ofosu-Kwarteng, 2012). At the Korle –Bu teaching hospital in particular, there are challenges with the service delivery at the hospital including at the antenatal clinic (GHS, 2012).

Improved antenatal attendance due to free maternal care (and widely available antenatal care facilities) in developing countries, requires high quality of care and increased clients‟ satisfaction. The main aim of antenatal care is to give a healthy baby to a healthy and happy mother through the appropriate utilization of antenatal care process. Quality is both technical and interpersonal and involves more than just outcomes. Three distinct factors of quality proposed are: structure, process and outcomes (Donabedian, 1988).

Structure refers to the facility such as the environment of the hospital or clinic, the patient, safety of the patient in the hospital or clinic and its cleanliness. Process refers to the medical staff's use of the structure. Outcomes refer to the patient getting well or at least getting no sicker than without intervention. Donabedian also gives seven attributes of health care that define quality as efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy and equity (Kiguli1 et al., 2009). The dimensions of quality health care also focuses on interpersonal relationship between provider and client, effectiveness, safety, amenities and others (GHS, 2005). In recent years, developing

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countries influenced heavily by findings in developed countries, have become increasingly interested in assessing the quality of their health care. Quality assessment studies usually measure one of three types of outcomes: client satisfaction, medical outcomes and costs. In measuring client satisfaction, clients are asked not to assess their own health status after receiving care but their satisfaction with the services delivered (Aldana et al., 2001). Patient satisfaction is one of the factors that influence whether a person seeks medical advice, complies with treatments and maintains a relationship with the provider and the health facility. According to Rai (2013), the level of client satisfaction with the services offered determines to a very large extent their willingness to return for services and follow ups and therefore the numbers of clients who access the services. Accordingly, an improvement of service quality leads to client satisfaction and loyalty (Boadu, 2011) as well as portray a good image of the health facility.

This study focused on describing the clients" essential standard of quality taking into consideration that high quality antenatal care is the right of an expectant mother.

1.2 Problem statement

The Ghana Health Service (GHS) has in place regulatory documents such as code of ethics for staff, patients" charter and ANC procedures for staff. These are all in an attempt to address the perceived poor client care and satisfaction in public healthcare facilities (Boadu, 2011). However, despite the efforts by the Ghana Health Service and all other stakeholders to improve quality health care delivery in Ghana, there is still perceived unsatisfactory services rendered by the staff of public hospitals including areas of care and treatment, relationship between patients and care givers, patients" consent and confidentiality, sanitation of working environment, access to basic information about their rights, consent and confidentiality of patients, among others (Ofosu-Kwarteng, 2012) and clients often complain about poor quality of services in

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public healthcare facilities (GHS, 2005) of which Korle – Bu teaching hospital is one. These complaints are mostly centered on poor client care, unhealthy hospital environment and apathy of health service providers (Boadu, 2011). Findings from a quality assurance survey done in 2012 at Korle – Bu teaching hospital revealed that clients were not satisfied with the quality of care. Furthermore, there are challenges in the service delivery at the hospital including the antenatal clinic (GHS, 2012). For example, it has been noted that there were thirty – six complaints by ANC clients' about poor quality of care (MOH, 2012) which were hitherto unknown. There have been numerous calls to "improve the quality of services offered "at ANC (Kyei, Chansa, & Gabrysch, 2012) however, efforts to address these concerns have received less attention (van den Broek & Graham, 2009). Clients who are not satisfied with the quality of ANC given and whose complaints are not addressed are likely to seek care in unapproved non – public facilities and these can lead to complications in pregnancy and increase in maternal mortality. The ultimate expectation of the client is to be satisfied with the services rendered to them and to get well. In light of this, the researcher decided to undertake this study to assess the satisfaction of the quality of antenatal care services from the clients" perspective and to identify the key challenges in order to inform policy on the appropriate services given to clients.

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1.3 Conceptual framework

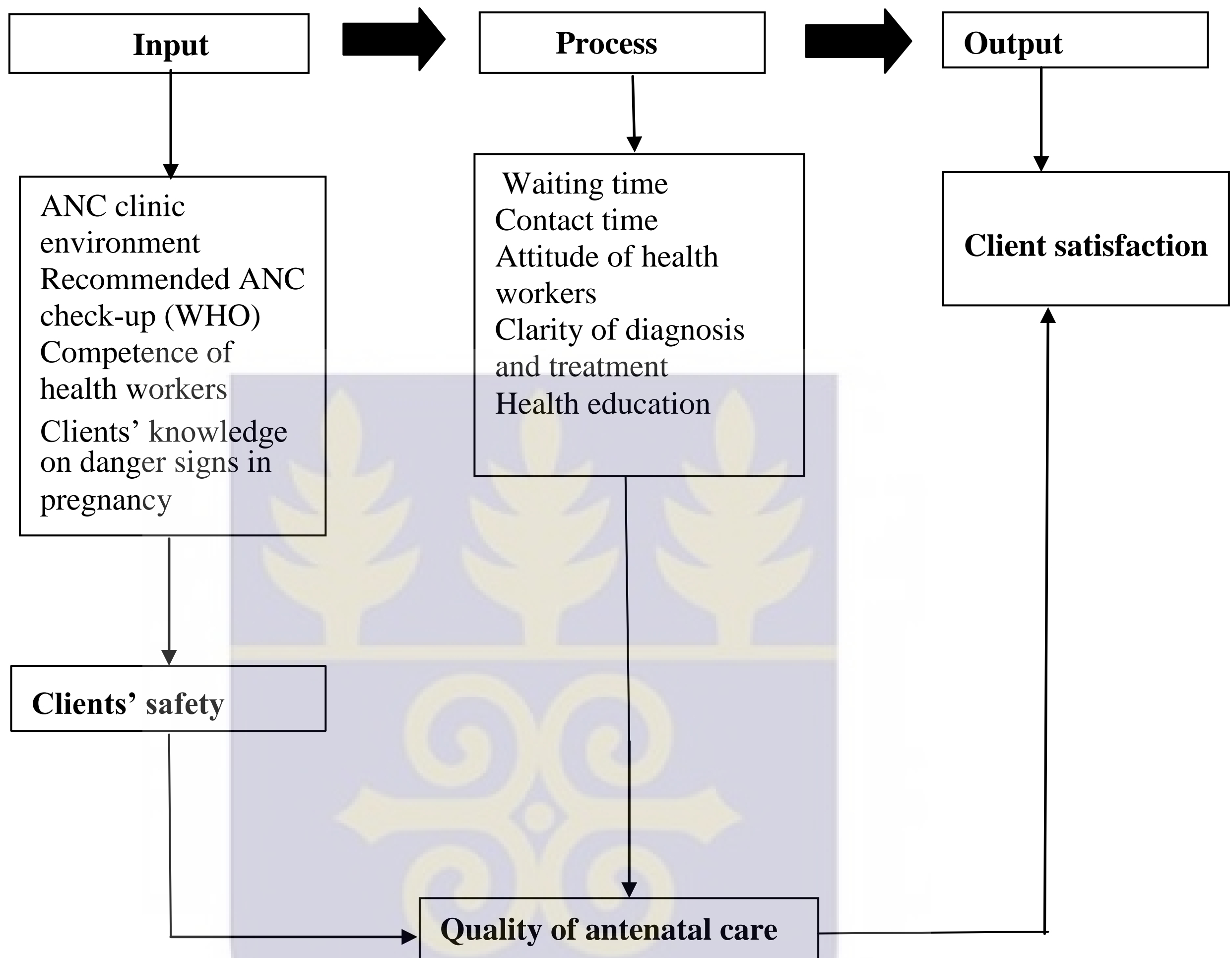

Figure 1: Conceptual framework of clients' satisfaction with quality antenatal care and its attributes (Modified from Donabedian (1988).

As shown in Figure 1, the input which consists of cleanliness of the clinic environment and washrooms, WHO recommendation of four antenatal check-ups, competence of health workers and clients" knowledge on danger signs in pregnancy determine the safety of clients which affects the quality of antenatal care given. The processes, which consists of clients waiting time, contact time, attitude of health workers, clarity of diagnosis and treatment affects the quality of antenatal care given to clients. These

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quality indicators affect the satisfaction of clients with the quality of antenatal care given.

1.4 Justification

According to Ghanaweb (2014) with a maternal mortality rate of 380/100,000 live births in Ghana, there is the need of substantial amount of effort to reach the MDG5 target of 185 deaths per 100,000 live births. Most maternal deaths are preventable, as the health-care solutions to prevent or manage complications are well known and one of such is the antenatal care.

Some of the main challenges at Korle – Bu teaching hospital are quality deficiencies that need to be addressed to ensure holistic work performance. This approach could positively impact on the Millennium Development Goal 5 which aims at improving maternal health.

So, the findings of this research will help policy makers and stakeholders to improve procedures and management of antenatal care and serve as baseline information for future research work.

1.5 Objectives

1.5.1 General Objective

The general objective of this study was to assess clients' satisfaction with the quality of care at the antenatal clinic of Korle – Bu teaching hospital.

1.5.2 The specific objectives of this study are to:

1. Determine the level of clients" satisfaction with the quality of care provided.

2. Analyse the aspects of antenatal care with which clients were satisfied.

3. Analyse the aspects of antenatal care with which clients were dissatisfied.

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4. Ascertain clients' safety concerns pertaining to quality of care.

1.5.3 Research Questions

1. What is the level of clients" satisfaction with the antenatal care services offered at Korle – Bu teaching hospital?

2. What aspects of antenatal care are clients are satisfied with?

3. What aspects of antenatal care are clients" not satisfied with?

4. What are the clients" safety concerns pertaining to quality antenatal care?

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CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

In recent years, developing countries influenced heavily by findings in developed countries (modernisation theory), have become increasingly interested in assessing the quality of their health care. Outcomes have received special emphasis as a measure of quality. Assessing outcomes has merit both as an indicator of the effectiveness of different interventions and as part of a monitoring system directed to improving quality of care as well as detecting its deterioration (Aldana et al., 2001).

Quality assessment studies measure client satisfaction in which clients are asked to assess their satisfaction with the services delivered (Aldana et al., 2001). The Institute of Medicine defined 6 aims on which to reengineer health care delivery systems. It posited that health care should be safe, effective, patient-centered, timely, efficient, and equitable (Heather Farley et al., 2014).

Client satisfaction survey tools are increasingly used by hospitals to measure the value in the health care system (Heather Farley et al., 2014) and has become a momentous objective in strategic developmental process of health institutions.

2.2 Antenatal care

Antenatal care (ANC) is an umbrella term used to describe the medical procedures and care that are carried out during pregnancy. It is the care a woman receives throughout her pregnancy and is important in helping to ensure a healthy pregnancy state and safe childbirth. The objective, therefore, of antenatal care is to ensure that every wanted pregnancy results in the delivery of a healthy baby without impairing the mother's health. The major goals of ANC are to promote and maintain the physical, mental, and

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social health of mother and baby. This is done by providing education on nutrition, personal hygiene, birthing process, detection and management of complications during pregnancy. The complications of pregnancy could be medical, surgical, or obstetric complications. Other goals of ANC are to develop birth preparedness and complication readiness plan, help prepare mother to breastfeed successfully, experience normal puerperium, and take good care of the child physically, psychologically, and socially (Ekabua, Ekabua, & Njoku, 2011).

2.3 Focused antenatal care

Ghana's approach to antenatal care is the WHO focused antenatal care which is a move to improve quality of ANC services to pregnant women. Focused antenatal care is based on the assumption that every pregnancy faces the risk of development of complications; therefore, every pregnant woman should be monitored to avoid development of such complications (Ekabua et al., 2011). Appropriate delivery of ANC services positively impacts on maternal mortality and morbidity. WHO suggested that poor quality of ANC services and lack of communication between health providers and pregnant women are significant reasons why antenatal care may fail to improve maternal health outcome (Give Well Charity International, 2009). According to WHO (2002), most of the antenatal care models around the world have not been subjected to rigorous scientific evaluation to determine their effectiveness. Despite a widespread desire to improve maternal care services, this lack of evidence has impeded the identification of effective interventions. In developing countries, clinical visits can be irregular with long waiting times and poor feedback to the women (WHO, 2002).

2.4 Antenatal Services

The services offered at the antenatal clinic includes the registration of the client, measurement of heights and weights, testing for urine proteins, record of the blood

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pressures, examination of mother and fetus and tetanus immunization. Others include prophylactic treatment of malaria with Sulphadoxine Pyrimethamine, routine prescription of hematinics and screening of infections such as retroviral infections and hepatitis B. The rest are counselling and health education talks on family planning, labour and breast feeding so as to inform the expectant mothers (GHS, 2005). The providers of this service are the obstetricians, medical practitioners, nurses, midwives and traditional birth attendants (GHS, 2005).The pregnant woman and the unborn child are the beneficiaries of this service. Other beneficiaries are the close relations of the client as well as other support persons involved (GHS, 2005).

2.4.1 Benefits of ANC services

According to WHO (2003) antenatal care prevents, identifies and treats conditions that may threaten the health of the mother and helps a pregnant woman approach pregnancy and birth as positive experiences. Furthermore, an effective antenatal care service reduces maternal mortality (Ekabua et al., 2011). Antenatal care services also educates the pregnant woman on good nutrition, the need for taking hematinics, importance of exclusive breastfeeding and proper position of breastfeeding. It also informs them of the danger signs to note during pregnancy such as bleeding, hyperemesis gravidarum, symptoms of malaria among others.

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In light of this, lack of antenatal care denies the pregnant woman of these benefits and results in major risk factors for development of negative pregnancy outcomes.

2.4.2 Health Education

Clients are educated on various pregnancy related health issues in as part of the efforts to improve maternal health and achieve MDG 5. Danger signs during pregnancy: Dangers associated with pregnancy can result in health complications for the clients.

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Knowledge of what these complications can help reduce the risk of experiencing them (Myers, 2011). Heavy bleeding and severe pain in the pelvis, typically within the first two months of pregnancy, may indicate an ectopic pregnancy which occurs when a fertilized egg implants in the fallopian tube rather than make its way to the uterus where it has space to grow and develop. If it is not detected and treated promptly, it could result in death (American pregnancy association, 2013). It could also indicate a miscarriage. Approximately 15-20% of all pregnancies result in miscarriages, and the majority occur during the first 12 weeks (American pregnancy association, 2013).

Another cause of bleeding in pregnancy is molar pregnancy. Often referred to as a "mole", molar pregnancy involves the growth of abnormal tissue instead of an embryo. It is also referred to as gestational trophoblastic disease (American pregnancy association, 2013). A study done in Tanzania by Pembe et al. (2010) on quality of antenatal care in rural Tanzania: counseling on pregnancy danger signs revealed that the most common form of pregnancy danger sign informed on was vaginal bleeding. There is a need to ensure that providers inform all antenatal care clients about the pregnancy danger signs (Pembe et al., 2010). Other dangers in pregnancy for clients" to be aware of are, loss of liquor, excessive nausea and vomiting, temperature over 100°F (37.8°C), severe headaches or a headache that lasts for several days, blurred vision, less movement and kicking by the baby, sudden weight gain (3 to 5 pounds within 5 to 7 days) with swelling of feet, ankles, face, or hands and development of seizures.

Birth preparedness and complication readiness: This is a strategy to promote utilization of skilled maternal care based on the theory that preparing for childbirth and being ready for complications reduces delays in obtaining care. Birth preparedness includes making necessary plans in identifying a skilled provider and receiving skilled care. Complication readiness includes having an emergency funds, blood donor, transport

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and designated decision – maker (Hiluf & Fantahun, 2007). A study done by Hiluf & Fantahun (2007) to assess birth preparedness and complication readiness among women in Adigrat town, north Ethiopia, showed that mothers who received advise about where to give birth and arrangements for money and transport during ANC follow up were more likely to prepare for birth and its complications than their counterparts (Hiluf & Fantahun, 2007).

Breast feeding and breast care: Every facility providing ANC and services should have a written breast feeding policy routinely communicated to health care staff, train all health care staff in skills necessary to implement this policy and inform all pregnant women about the benefits and management of breastfeeding. Furthermore, it helps mothers initiate breastfeeding within an half an hour of birth, show mothers how to breastfeed and maintain lactation, give newborns breast milk unless medically indicated, practice rooming in (allow mothers and infants to remain together 24 hours a day). It also encourages breastfeeding on demand, avoid artificial teats or pacifiers to breastfeeding infants and to foster the establishment of breast – feeding support groups and refer mothers to them upon discharge from the hospital. These are the ten steps to successful breastfeeding (WHO/UNICEF, 2003). A study by Okolo (1999) on breastfeeding knowledge, attitude, and practices of mothers in five rural communities in the Savannah region of Nigeria showed that though breastfeeding was widely practiced, none of the babies were exclusively breastfed, and pre-lacteal feeds ranging from water, formula were given by all the mothers. Education of mothers during ANC on the practice of discarding colostrums and replacing it with a wide range of pre-lacteal feeds and late initiation of breastfeeding has positive implications for health education programmes and strategies.

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Family planning motivation: Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility. A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy (WHO, 2014).

Other topics for clients' education at the ANC includes nutrition, hygiene, STI prevention, voluntary counselling and testing, labour and delivery, promote use of insecticide and impregnated materials.

2.5 Quality health care

One of the most important contributions of research in quality has been its attempt to define what is meant by quality of care (Brooke, McGlynne, & Shekelle, 2000). GHS (2005) defined quality health care as the proper performance interventions that are known to be safe and affordable to the society in question and impact positively on morbidity, disability and mortality. It is also defined as the degree to which health services meet the expectations of an individual or group and that the expectation of a client is to be satisfied with services rendered and to get well (GHS, 2005).

Øvretveit (2009) also defines quality care as the provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the available resources.

All these definitions contain two components that are important. For example, the first is the provision of high technical quality care which means that the clients" receives procedures and services for which the desired health outcomes exceeds the health risks by a sufficiently wide margin with the procedures and services being performed in a technically excellent manner. The second component is that all clients" wish to

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participate fully in deciding about their treatment and care and to be treated in a humane and culturally appropriate manner (Brooke et al., 2000). WHO (2006) has given a six point working definition of quality of care and suggests that health systems should seek to make improvements in six areas or dimensions of quality care. The dimensions of quality health care focuses on efficiency, effectiveness, safety, amenities, technical competence, continuity of services, interpersonal relationships and accessibility (GHS, 2005). An efficient service is how well available resources are utilized to achieve desired results. Reduction of death, disability, disease, discomfort and dissatisfaction indicates the effectiveness of a service or procedure. Clients" safety measures should always be ensured in the health system to reduce to the barest minimum injuries, infections and harmful effects. It also includes security for the belongings of clients (GHS, 2005).

Therefore, clients' satisfaction is based on considerations such as promptness of attention, good staff attitude, providing adequate information, clean environment and safety of clients'. Excellent quality antenatal care communicates to expectant mothers that providers have their interest at heart and seeks to improve their health outcome (Atinga & Baku, 2013). When this happens, women can willingly deliver in health facilities once the reassurance of quality care is given.

Quality antenatal care from the clients' perspective for the purposes of this study is defined as antenatal care that has good interpersonal relationships between provider and patient and promptness of attention (GHS, 2005) in terms of adequate waiting time and time spent by doctor with patient, is safe and has health education at the facility.

Absence of these characteristics indicate that quality antenatal care is poor.

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2.6 Clients' satisfaction with quality antenatal care (ANC)

Clients' satisfaction for the purposes of this study is defined as the extent to which clients are content with antenatal care received. Clients satisfied with the quality of antenatal care are willing to recommend the facility, willing to return for follow ups and willing to take medications. Feedback from clients during a satisfaction survey is a yardstick to improve upon the quality of care at the facility.

Patients 'charter of the Ghana Health Service is person- centered, where the dignity and value of each person is respected (Essiam, 2013). It is essential to obtain the assessments of patients on their experiences and expectations of health care. This has called the attention of most hospitals to modify their services to achieve patient satisfaction, become more service-oriented and to understand that clients" do not flock to a hospital because the services are low-priced, but because of its good quality healthcare services and delivery (Essiam, 2013).

Interestingly, today's clients are tougher, more informed and also sensitive to poor services (Essiam, 2013) which makes them unwilling to return for services when they perceive quality to be poor. Therefore, the quality of service will remain a key success factor in the component of the healthcare delivery in hospitals especially in Ghana. Ekabua, Ekabua, & Njoku (2011) assessed the practice of antenatal care in five teaching hospitals between 2006 and 2008 to propose a framework for making antenatal care an effective strategy in reducing the high maternal mortality ratio in Nigeria. Though women attended antenatal care, they do not receive the full care as prescribed in national reproductive and child health programme (RCH/MCH) guidelines of Nigeria: 37% never had their blood pressure checked, 41% never had their blood tested, 45% never had their urine tested, 25% never had their abdomen examined, and 63% were never informed of any danger signs.

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Research has shown that factors determining patient satisfaction and quality of care includes attitude of staff, time spent at the hospital, availability of doctors and doctor patient communication (Ige & Nwachukwu, 2010).

The perceptions of women on antenatal visits significantly influence their assessment of quality of services that are provided (Nwaeze, Enabor, Oluwasola, & Aimakhu, 2013). A study by Jallow, Yiing-Jenq, Li, & Nicol (2012) in Gambia, on patient's perception of antenatal services in various facilities, measured three aspects of perception namely, willingness to come back, willingness to recommend to others and level of satisfaction. The satisfaction rate with antenatal services was 79.9% for public facilities. Pregnant women's poor perception of public facilities (after adjustment) included their unhappiness, with inadequate privacy, inadequate space and neatness and inadequate communication with care providers. It also showed that though women were satisfied with a number of ANC facilities, those attending public ANC facilities were significantly less satisfied. The main complaints were related to the physical environment, technical process and provision of information or reassurance. Because public facilities constitute the main care providers for the general population and particularly for disadvantaged women, better management of public clinics and better training in communication skills for public care providers may help to retain patients and improve the quality of ANC in the public sector.

2.7 Safety

Patient safety is the cornerstone of high-quality health care (Hughes, 2008). Health care interventions are intended to benefit patients, but they can also cause harm (WHO, 2002). According to (Hughes, 2008), the National Quality Forum defined patient harm as the impact and severity of a process of care failure: "temporary or permanent impairment of physical or psychological body functions or structure."

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Institute of medicine (IOM), according to (Clancy, Farquhar, & Collins, 2005) defined patient safety as “freedom from accidental injury; ensuring patient safety involves the establishment of operational systems and processes that minimize the likelihood of errors and maximize the likelihood of intercepting them when they occur.

One of the serious issues detected in the healthcare industry is the long hours demanded of healthcare providers. Long hours pose a threat to patient safety because health caregivers display slower reaction time, decreased energy, and reduced attention to detail (Clancy et al., 2005). One AHRQ-funded research study showed that the odds of a nurse making an error were twice as high among nurses who rotated shifts as that among nurses working straight days or evenings. Research has shown that higher rates of poor patient outcomes are more likely in hospitals that have lower staffing levels (Clancy et al., 2005) of health workers. The root causes of harm are latent failure (removed from the practitioner and involving decisions that affect the organizational policies, procedures, allocation of resources), active failure (direct contact with the patient), organizational system failure (indirect failures involving management, organizational culture, protocols/processes, transfer of knowledge, and external factors) and technical failure (indirect failure of facilities or external resources) (Clancy et al., 2005). Institute of medicine (IOM) defined safety as one that depends upon health care systems and organizations, and patients being safe from injury caused by interactions within systems and organizations of care (Hughes, 2008). Safety of clients should be ensured by reducing to the barest minimum infections and injuries (GHS, 2005). A qualitative study conducted in England on women’s views about safety (Magee & Askham, 2008) showed that antenatal women viewed competence of health workers and cleanliness of environment and washrooms as safety measures at the ANC. As a measure of safety of clients, it is important for clients to attend the recommended

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number of visits, in order to avoid pregnancy complications and maternal mortality. A study conducted in Equatorial Guinea (Jimo, 2015) on utilisation of ANC services showed that women who visit ANC less than the standard recommended visits are likely to develop pregnancy complications leading to an increase in maternal mortality.

Safety of clients at the antenatal care for the purposes of this study is defined as having a clean environment and washrooms, competence of health workers, knowledge of clients on the danger signs in pregnancy and adhering to the WHO standard of four antenatal visits.

2.8 Maternal Mortality

The aim of MDG5 is to improve maternal health by reducing maternal mortality by 75% globally between 1990 and 2015 (United Nations, 2010). Maternal Mortality is defined by WHO (2014) as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. Direct causes of maternal mortality globally, are pregnancy – induced hypertension, obstructed labour, infection, unsafe abortion and haemorrhage. Indirect causes are the existing medical conditions made worse by pregnancy. Antenatal care was implemented to predict and prevent these obstetric complications from occurring. According to Ghanaweb (2014) with a maternal mortality rate of 380/100,000 live births in Ghana, there is the need of substantial amount of effort to reach the MDG5 target of 185 deaths per 100,000 live births. Most maternal deaths are preventable, as the health-care solutions to prevent or manage complications are well known and one of such is the antenatal care. Levels of maternal mortality from its causes are responsive to improvements (Carroli, Rooney, & Villar, 2001) in the quality of antenatal care. Studies have shown that prolonged waiting time

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and unprofessional conduct of service providers are among the barriers of effective antenatal care resulting in maternal mortality. The recommended number of visits of WHO being four for uncomplicated pregnancies is important for the focused ANC being practiced in most health facilities in Ghana.

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CHAPTER THREE

3.0 METHODOLOGY

3.1 Type of study

A cross sectional descriptive study was used in this research adopting a mixed method. The study was conducted in Korle-Bu Teaching Hospital, Accra, from May to July 2015. Quantitative research methods were employed in this study using questionnaires and qualitative research methods using focus group discussions (FGDs).

3.2 Study Area

Figure 2: Map of Ghana showing Accra.

Figure 3: Map of Accra showing the location of Korle – Bu teaching hospital.

Source: Ghanaweb.com and Google maps.

Figure 4: Map of Korle – Bu teaching hospital showing the study location, maternity block.

Source: Survey and Mapping Division of Lands Commission, Ghana.

The study area, maternity block in Fig. 4 is located in Korle – Bu teaching hospital shown in Fig 3. Korle – Bu teaching hospital is a national referral centre in Ghana which is under the Ablekuma South sub-metro in the Greater – Accra Region (Fig. 2). The hospital has a capacity of over 2,000 beds. It has an average daily attendance of 1,500 patients, about 250 of whom are admitted. The antenatal clinic is under obstetrics unit which has a capacity of 261 beds and a staff strength of 648. The daily antenatal attendance as at 2014 was 90.

3.3 Study population

The study was conducted among all pregnant women who accessed ANC services within the period of the study.

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3.3.1 Inclusion Criteria

All pregnant women who have attended ANC two or more times with gestational age of twenty weeks or more and were either referred or decided to start ANC at KBTH by choice were recruited to participate in the study.

3.3.2 Exclusion Criteria

Pregnant women with gestational age of at least 20 weeks but were on admission were excluded from the study.

3.4 Study Variables

Dependent variable in this study is client's satisfaction.

Independent variables are educational status, socio-economic status, waiting time, contact time, attitude of health workers, cleanliness of environment, clarity of diagnosis and treatment, health educational talks, safety of clients", willingness to recommend facility, willingness to comply with treatment and return for follow ups.

3.5 Operational definitions

Quality of ANC

Quality of ANC for the purposes of this study refers to good staff attitude, acceptable waiting time, acceptable time spent by doctor with client, safety of clients at ANC, communication skills of doctor, and adequate health education at the facility. Absence of these components indicate that quality of antenatal care is poor.

Satisfaction of ANC

For the purposes of this study, satisfaction means clients who are happy with the attitude of staff, acceptable waiting time, acceptable contact time, their safety at the ANC, happy with the communication skills of doctor, happy with the health education given at the ANC and willing to recommend the facility, willing to take medications

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and willing to return for follow – ups. Clients who are dissatisfied means those who are not happy with the components of quality of ANC. Clients who are okay are those who are neither satisfied nor dissatisfied.

Safety of clients at the ANC

Safety of clients refers to having competent health workers at the facility, clean environment, clean washrooms, Knowledge of clients on danger signs in pregnancy and attending the recommended ANC visits of WHO.

3.6 Sample Size

A minimum sample size of approximately, 156 pregnant women were interviewed with a structured questionnaire. A 10% non- response rate was factored into it.

3.7 Sample Size Calculation

According to Cochran (1967), the sample size was calculated using the formula: Sample size, $n = \frac{z^2pq}{d^2}$

z is the Confidence limits

p is the assumed prevalence of the dependent variable

q is given by 1-p d is the acceptable deviation from

the true value For this study:

z= 1.96 for CI at 95% p= 89.7% = 0.897 (Emelumadu et al., 2014) found that 89.7% of ANC clients were satisfied with the quality of ANC in public hospitals.

q=1-0.897= 0.103

d=5%= 0.05

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$$n = \frac{1.96^2 \times 0.897 \times 0.103}{0.05^2}$$

n= 141.97

Adjustment for a 10% rate of non-responses of 14.197 yielded a final sample size of 155.97 ~ 156.

3.8 Sampling

Systematic random sampling was employed in this study to recruit pregnant women for the study.

3.9 Sampling procedure

The daily Ante-natal Care attendance register was used as a sampling frame. The daily attendance at the ANC is approximately 90 pregnant women. The ANC is run from Mondays to Fridays. Data was collected over a 2 week period in which it was estimated that 900 patients will attend the clinic during the data collection period. To determine the sampling interval at which the pregnant women were recruited was calculated as follows;

Daily attendance = 90

Data collection period over 2 weeks = 10 days excluding weekends since the ANC does not run during the weekends.

Number of pregnant women attending ANC during data collection period (N) = 90 x 10 =900.

To determine the sampling interval $(K) = \frac{N}{n}$

where n = Sample size of 156 pregnant women.

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K = Sampling interval

N = Population

$$K = \frac{900}{156}$$

K = 5.7 approximately 6.

The first pregnant woman was selected from the ANC register and every 6th pregnant woman after the first pregnant woman was selected. This procedure was repeated throughout the data collection period until the estimated sample size (156) was achieved. Only those who consented were recruited to participate in this study.

3.10 Training of Research Assistants

Two days training was organized for the data collection team which was made up of data collectors, supervisors and a data manager.

3.11 Data collection methods and tools

Quantitative and qualitative methods were used to collect data for the study. The quantitative data was collected through a structured pre- tested questionnaire (Appendix 5). The questionnaire was translated into Twi and Ga which are the common languages spoken at the study area to facilitate communication. The variables in the study are the clients" background characteristics which includes the educational status, economic status, parity and age.

The questionnaire sought information on the background characteristics of clients", clients" expectations, level of satisfaction of care received by the clients", whether they would recommend the facility to their friends who become pregnant and whether they would take the medications prescribed and return for follow ups.

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The questionnaire contained questions which required a "yes" or "no" answer, rating of services and satisfaction of services provided at the ANC by the client on a 5-point Likert scale. Level of satisfaction was scored using a five point likert scale from very dissatisfied, dissatisfied, okay, satisfied and very satisfied. Very dissatisfied and dissatisfied were then merged into dissatisfied. Very satisfied and satisfied were merged into satisfied. The responses of each component of quality ANC were scale ranked using the five point Likert scale from strongly disagree to strongly agree. Strongly disagree and disagree were merged into disagree and strongly agree and agree were merged into agree. The overall quality of services was rated from excellent to poor and not satisfied to very satisfied for the level of satisfaction. The interview was a face – to – face exit interview using a structured questionnaire and took place after the clients" received the ANC services and were ready to leave the health facility. An observation guide from GHS (Appendix 7) was used to assess antenatal care given to clients. It covered areas on sanitation, safety of clients, health education and the interpersonal relationships between the client and health worker. Qualitative data was collected through focused group discussions. Two (2) focus group discussions (Appendix 6) were held which covered the issues on participants" understanding of quality ANC, the expectations and perceptions about care providers" attitude, importance of ANC attendance, factors that made them feel satisfied or dissatisfied and perception of quality ANC services. Each focus group discussion comprised of eight homogenous groups of women who had attended two or more ANC visits. The discussion was aided by focus group discussion guide (Appendix 6) which was translated into Twi and Ga. The focus group discussion was facilitated by a trained moderator fluent in Twi and Ga and two recorders and a note-taker was used. A voice recorder was used to record the

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proceedings of the discussion to ensure accurate data was obtained and to facilitate analysis. They were transcribed and data described by themes.

3.12 Quality Control

The whole process of data collection was standardized to obtain a uniform data which was of high quality. The research assistants were trained thoroughly for two days and made sure they knew the objectives and methodology of the study. They were trained to use consistent and correct techniques through demonstration and role playing. The supervisors followed the teams to the field to supervise all the data collection sessions to ensure that data was collected from the participants. Questionnaires were checked for completeness on a daily basis before they were accepted and were numbered during data entry to ensure that the questionnaires were not entered twice. Data was entered by two data entry persons separately to make sure data was correctly entered.

3.13 Data processing and analysis

Data entry, processing and analysis were done using Microsoft Excel 2007 and Stata version 12. The data were described using descriptive statistics. Fisher' Exact test was used to assess the association between dependent and categorical variables for a more accurate value since some of the expected values were less than five. A p-value of less than 0.05 was considered statistically significant. Univariate and Bivariate analysis were done to identify the association between the dependent and independent variables. The variables that showed statistical significance were incorporated into a logistic regression model for further analysis. The adjusted and unadjusted odds ratios at 95% confidence interval were determined using Stata version 12. The raw data from focus group discussions were analysed using Nvivo version 7 software. The audiotape from the focus group discussions were transcribed verbatim and compared with written notes

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for completeness, accuracy and as a data quality assurance method. The audio tapes were transcribed in order to verify the quality of translation.

3.14 Ethical considerations

Ethical clearance was obtained from the Ghana Health Service Ethical Review Committee, permission was sought from School of Public Health University of Ghana, Legon, and authorities of Korle – Bu Teaching Hospital, before the research was started.

The clients" gave their consent before they were recruited into the research. No client was forced or coerced to take part in the study. They were made to know that participation is voluntary and there was no penalty for refusing to participate.

I sought consent from parents or guardians for clients" below the age of 18years before taking the data. An informed written consent was used for both parents or guardians and the study participants. All those who gave their consent were assured of confidentiality and anonymity.

No information pertaining to the participants" identity was recorded. Participants were made to know that there were no incentives and they could withdraw at any time during the study. There was no emotional or mental harm caused to the participants" in this study. Privacy was ensured by not asking sensitive questions. The participants were made to understand that there were no risks involved. The participants of the focus group discussion were refreshed.

Apart from the academic and public health importance, I have no other personal interest in the study. The data obtained was analyzed exclusively for the objective of the study and secured under lock and key. A durbar will be held to disseminate the findings of the study and a copy of the study will be kept at the hospital as reference.

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3.15 Pretest or pilot study

Pre testing of the questionnaires was carried out at Ridge Hospital. The hospital has similar characteristics as the hospital in the study area. This enabled me clarify the adequacy of the questions, estimate the approximate time for each questionnaire and help make the necessary corrections for the questionnaire for the actual study.

3.16 Limitations

Adequate funding would have helped to increase the coverage of this research and the results of the overall research would not have been affected.

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CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

The total number of participants were 156 pregnant women meeting the inclusion criteria at the antenatal clinic of Korle – Bu teaching hospital. Data obtained was analysed using Stata version 12. Additional information was obtained from the clients through two focused group discussions which were audiotaped, transcribed and analysed using NVivo version 7.

4.2 Demographic characteristics of Clients

The ages of the participants ranged between 17 years and 44 years with a mean age of 31.39 years (standard deviation of ± 5.56) as seen in Table 1. Most of the clients‟ (61.5%) were between the ages of 25 and 34 years. Majority (82.7%) of the respondents were married, with 10.26% of the women co- habiting with their spouses. Most of the clients‟ were well-educated with the largest proportion, representing 31.4% of the participants, being educated up to Junior high school. The overwhelming majority of the participants, representing 94.2% of the respondents, were employed while only 5.8% were unemployed. Parity is defined as the number of pregnancies delivered after viability, i.e., the number of live births (Kipronoh, 2009). As shown in Table 4.1, most of the clients‟ (57.1%) had one or no child while about 5.13% had more than 5 children (Table 1).

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Table 1: Socio-demographic characteristics of clients.

Variable	Frequency (n)	Percentage (%)
Age (years)		
15 – 24	16	10. 3
25 - 34	96	61.5
35 - 44	44	28.2
Marital status		
Married	145	93.0
Single	8	5.1
Divorced/Separated	3	1.9
Educational level		
No formal education	15	9.6
Primary education	62	39.7
Senior high education	34	21.8
Tertiary education	45	28.9
Employment status		
Unemployed	9	5.8
Employed	147	94.2
Parity		
0-1	89	57.1
2-4	59	37.8
5 or more	8	5.1
Number of antenatal visits		
3 or less	85	54.5
4 or more	71	45.5

4.3 Demographic characteristics of clients satisfied and dissatisfied with quality ANC

From Table 2, most of the clients that were satisfied with the quality of ANC were between the ages of 25 and 34 years (60.4%), either had no child or had only one child (50%) and majority (79.2%) were married. About 32.3% of the clients satisfied with the quality of ANC had achieved basic education up to the Junior high level with majority (92.7%) of the clients being employed. Most (55.2%) of them had up to 3 visits of

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antenatal clinic at the time of carrying out the study. There was no significant association between clients" demographic characteristics and their level of satisfaction.

Table 2: Demographic characteristics of clients' satisfied and dissatisfied with quality of ANC

Demographic characteristics	Satisfied with quality ANC N = 96	Dissatisfied with quality ANC N = 7	Okay N = 53	P-value
Age (years)				
15 – 24	9(56.3)	1 (6.2)	6 (37.5)	0.856^
25 - 34	58(60.4)	5 (5.2)	33 (34.4)	
35 - 44	29(65.9)	1 (2.3)	14 (31.8)	
Parity				
0 to 1	48(54)	5 (5.6)	36 (40.4)	0.086^
2 to 4	42(71.2)	1 (1.7)	16 (27.1)	
5 to 6	6(75)	1 (12.5)	1 (12.5)	
Marital status				
Married	89(61.4)	6 (4.1)	50 (34.5)	0.283^
Single	6(75)	1 (12.5)	1 (12.5)	
Divorced/Separated	1(33.3)		2 (66.7)	
Educational status				
No formal education	10(66.7)		5 (33.3)	0.759^
Primary	42(67.7)	3 (4.8)	17 (27.4)	
Senior high	20(58.8)	1 (2.9)	13 (38.2)	
Tertiary	24(53.3)	3 (6.7)	18 (40)	
Employment status				
Employed	89(60.5)	7 (4.8)	51 (34.7)	0.668^
Unemployed	7(77.8)	0 (0)	2 (22.2)	
Number of ANC visits				
3 or less	53(62.4)	3 (3.5)	29 (34.1)	0.817
4 or more	43(60.6)	4 (5.6)	24 (33.8)	

^=Fisher's exact P - value

4.4 Clients level of satisfaction with quality of ANC

4.4.1 Recommended ANC check - up

From Table 3, it can be inferred that most (50.7%) clients were generally dissatisfied with the WHO recommendation of four antenatal checkups whiles 48.7% were satisfied

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with the number of antenatal check-ups. There was a significant association with the level of satisfaction (P-value 0.002).

4.4.2 Antenatal clinic environment

About 90.4% were satisfied with the cleanliness of the environment and 54.5% were satisfied with the cleanliness of the washroom. From Table 5, it can be deduced that there was a significant association between cleanliness of environment and cleanliness of washroom with level of satisfaction.

4.4.3 Contact time

About 80.8% of the clients were satisfied with the time spent with the doctor. From Table 3, most of the clients‟ (55.8%) spent between 10 minutes to 15 minutes with the doctor. There was no significant association between time spent with doctor and level of satisfaction (P-value 0.814).

4.4.4 Waiting time

Clients were asked how long they waited before a nurse attended to them. The mean waiting time before being seen to by a nurse was 112.15 minutes (S.D ±67.83). Most of the clients from Table 3 (56.4%) waited between 61 minutes and 180 minutes (1 to 3 hours) before being seen by a nurse to check their vitals. The average waiting time before being seen by a doctor was found to be 91.33 minutes (S.D ±67.83). Majority of the clients (60.9%) waited up to 60 minutes (1 hour) or less before being seen to by a doctor (Table 3). There was no significant association between waiting time of clients and level of satisfaction (P-value 0.231). Generally, from Table 5, about 57.1% of clients were satisfied with the waiting time whiles 43.0% were not satisfied with the long waiting time. A 38 year old hairdresser said:

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"……you wait for a long long time. Especially nurses, they don't come to work early some come at 8:30am others 9am so we don't start early."

A 28 year old accounts officer also agreed and added that:

"……so because of that it delays us and they don't start the health talk early too so by the time they take our pressure, it's 11am."

Though most clients had no preferred waiting and contact times (Table 4), about 41.7% preferred to wait in general less than 30 minutes and about 10.3% preferred to spend more than 15 minutes with the doctor.

Table 3: Estimation of clients waiting time and contact time with health workers

Responses of clients on waiting time and contact time	Frequency (n)	Percentage (%)
Estimated waiting time before being attended to by nurse		
Client waited for less than or equal to 60 minutes	57	36.5
Client waited between 61 minutes to 180 minutes	88	56.4
Client waited for more than 180 minutes	11	7.1
Total	**156**	**100**
Estimated waiting time before being attended to by doctor		
Client waited for less than or equal to 60 minutes	95	60.9
Client waited between 61 minutes to 180 minutes	44	28.2
Client waited for more than 180 minutes	17	10.9
Total	**156**	**100**
Time spent by client with doctor (Contact time)		
Client spent less than 15 minutes with doctor	38	24.4
Client spent between 10 minutes to 15 minutes with doctor	87	55.8
Client spent more than 15 minutes with doctor	31	19.9
Total	**156**	**100**

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Table 4: Preferred waiting time and contact time of clients

Variable	Frequency (n)	Percentage (%)
Preferred waiting time (min)		
None	88	56.4
Less than 30	65	41.7
Above 120	3	1.9
Preferred contact time (min)		
None	126	80.8
Less than 10	9	5.8
10 - 15	5	3.2
Above 15	16	10.2

4.4.5 Attitude of health workers

In exploring clients' satisfaction with the attitude of nurses on respect, majority of the clients (73.7%) were satisfied with the respect given to them (Table 5). About 21.2% of the respondents were not satisfied with the respect shown to them by the nurses and this agrees with a response from a 39 year old trader who said:

"They shout at us as if we are children. They are very rude. The other day I saw the way they treated some woman, oh it was very bad. The woman even cried." A 20 year old trader gave a reason for the attitude saying that:

".....I think we too we are very troublesome. When a nurse says sit you don't and when you don't they don't like it. If they are rude, it is because of us."

Majority of the clients (96.2%) were satisfied with the respect shown to them by the doctors (Table 5).

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4.4.6 Communication skills

Communication skills was measured by the clarity of diagnosis and clarity of treatment. From Table 5, the P-value showed a significant association of satisfaction with the clarity of treatment. Most of the clients" (73.7%) were satisfied with the clarity of diagnosis communicated to them by the doctor in a language clearly understood by them. This is supported by a response of a participant in a FGD, a 33 year old hairdresser who said that:

"……..they tell you what is wrong with you and your baby."

Approximately 25% were not satisfied and this is supported by the response of a 29 year old housewife who said:

"………some of them don't tell us anything unless we ask."

About 70.5% were satisfied with the clarity of the treatment communicated to them by the doctor in a language clearly understood by them.

4.4.7 Health education

In general, majority of the clients were satisfied with the information received on labour (84.0%), family planning (80.7%) and breast feeding (84.0%) (Table 5). This agrees with the response of a 30 year old hairdresser who said:

"…….to me the most important service I like is the health talks that they give here because the other clinic I was going to, it was not like this."

4.4.8 Competence of health workers

About 93.0% of the clients were satisfied with the competence of health workers whiles 4.5% were not satisfied with their competence (Table 5). A 32 year old account officer said:

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> *"Safety of patients at antenatal clinic means you have competent doctors here and you are able to ask all the questions you want."*

Also, a 39 year old trader said:

> *"If antenatal care is safe, then it is because doctors are here so you are in safe hands if something happens."*

Table 5: Clients' level of satisfaction with indicators of quality antenatal care.

Indicators of quality ANC	Satisfied	Dissatisfied	Okay	P-value
WHO recommendation of four antenatal check ups	77 (49.4)	79 (50.6)		0.001
Antenatal clinic environment				
Cleanliness of environment	141 (90.4)	12 (7.7)	3 (1.92)	0.046^
Cleanliness of washroom	85 (54.5)	40 (25.6)	7 (4.5)	0.003
Time				
Waiting time of clients	89 (57.1)	67 (43.0)		0.231
Time spent with doctors (Contact time)	126 (80.8)	30 (19.2)		0.814
Attitude of health workers				
Attitude of doctors on respect to clients	150 (96.2)	5 (3.2)	1 (0.6)	0.008^
Attitude of nurses on respect to clients	115 (73.7)	33 (21.2)	8 (5.1)	0.001
	145 (93.0)	7 (4.5)	4 (2.5)	0.015^
Competence of health workers				
Communication to client				
Clarity of diagnosis to clients	115 (73.7)	39 (25)	2 (1.3)	0.007^
Clarity of treatment to clients	110 (70.5)	40 (25.6)	6 (3.9)	0.001
Health education				
Information on labour	131 (84.0)	17 (11.0)	8 (5.1)	0.164
Information on breastfeeding	131 (84.0)	18 (11.5)	7 (4.5)	0.101
Information on family planning	125 (80.7)	18 (11.6)	12(7.7)	0.890

***N=156 was used in calculating level of satisfaction with indicators of quality ANC**
*** Disagree = dissatisfied, agree = satisfied and okay = neutral**
***Fisher's exact P-value**
*** For cleanliness of washrooms, 15.4% have never used the washrooms before therefore they cannot tell if they are satisfied with it or not.**

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4.5 Knowledge on danger signs in pregnancy

Knowledge of respondents on danger signs in pregnancy is an indication of patient safety and the actions to take. Clients illustrated good knowledge overall, more than 60%, on recognising the danger signs in pregnancy and how to proceed with the danger signs. Preterm rupture of membranes (85.3%), bleeding in pregnancy (85.9%), pre-term contractions (78.9%), seizures (66.0%), fainting and dizziness (77.0%) and fever (75%) (Table 6).

Table 6: Knowledge on danger signs in pregnancy.

Danger signs	Recognise		Proceed	
	Frequency (n)	**Percentage (%)**	**Frequency (n)**	**Percentage (n)**
Preterm rupture of membranes				
Not told	23	14.7	23	14.7
Told	133	85.3	133	85.3
Bleeding in pregnancy				
Not told	22	14.1	22	14.1
Told	134	85.9	134	86.0
Preterm contractions				
Not told	33	21.2	33	21.2
Told	123	78.9	123	78.9
Seizures				
Not told	53	34.0	53	34.0
Told	103	66.0	103	66.0
Fainting and dizziness				
Not told	36	23.1	36	23.1
Told	120	77.0	120	77.0
Fever				
Not told	39	25	39	25
Told	117	75	117	75

4.6 Rating of quality of antenatal care

About 42.9% of clients rated the quality of the antenatal care as good whiles 28.21% rated it as very good and 21.79% rated it as excellent (Table 7).

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Table 7: Rating of the quality of antenatal care by Clients.

Rating of quality of ANC	Frequency (n)	Percentage (%)
Excellent quality of ANC	34	21.8
Very good quality of ANC	44	28.2
Good quality of ANC	67	43.0
Fair quality of ANC	9	5.8
Poor quality of ANC	2	1.3

4.7 Clients' overall satisfaction with quality antenatal care

Clients" opinion on overall satisfaction with quality antenatal care was mostly positive. 61.54% of the respondents were satisfied with the quality of antenatal care (Table 8). This agrees with the focus group discussion in which a 28 year old accounts officer said:

"Yes, am satisfied with care that was given to me".

All the other women agreed with her.

4.49% of the respondents were not satisfied with the quality of antenatal care given to them (Table 8).

Table 8: Clients rating of satisfaction with the quality of antenatal care

Satisfaction	Frequency (n)	Percentage (%)
Not satisfied with quality of ANC	7	4.5
Okay with quality of ANC	53	34.0
Satisfied with quality of ANC	96	61.5

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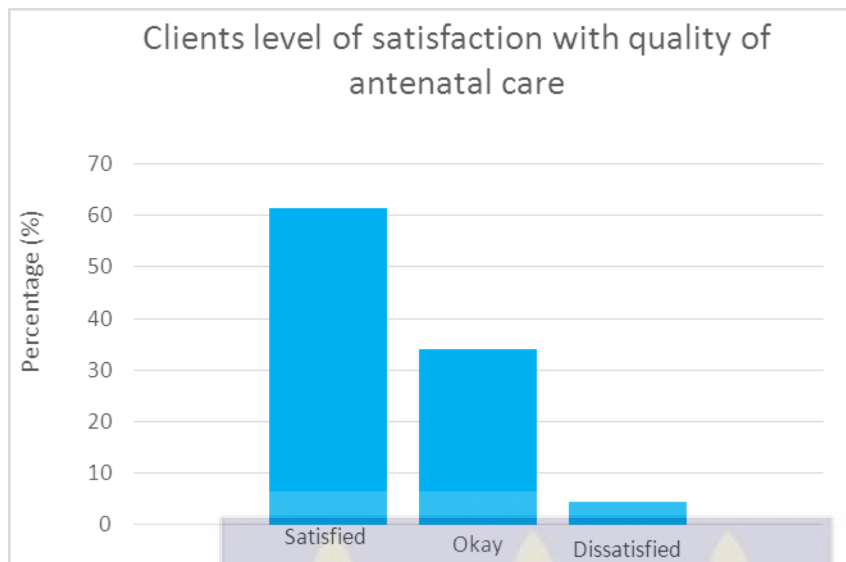

Figure 5: Bar chart showing the level of client satisfaction with quality of ANC

4.8 Indicators of satisfaction

About 63.16% of clients were willing to take their medications because they were satisfied with the quality of antenatal care. About 66.2% of clients were willing to recommend the facility because they were satisfied with the quality of antenatal care. This agrees with the responses of the participants in the focus group discussion in which all the women said *"yes"* in unison after being asked if they would willingly recommend the facility to another pregnant friend.

Approximately 67.61% will willingly use the facility again because they were satisfied with the quality of antenatal care. This agrees with the responses of the participants in the focus group discussion in which all the women said *"yes"* in unison after being asked if they would willingly return for follow ups or use the facility again (Table 9).

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Table 9: Indicators of satisfaction

Variable	Willingness to take medications	
Satisfaction	Willing (%)	Not willing (%)
Satisfied with quality of ANC	63.2	0
Okay with quality of ANC	33.6	50
Not satisfied with quality of ANC	3.3	50
	Willingness to recommend facility	
Satisfied with quality of ANC	66.2	14.3
Okay with quality of ANC	32.4	50
Not satisfied with quality of ANC	1.4	35.7
	Willingness to return for follow -ups	
Satisfied with quality of ANC	67.6	0
Okay with quality of ANC	31.0	64.6
Not satisfied with quality of ANC	1.4	35.7

4.9 Bivariate and multivariate logistic regression analysis

Table 10 shows the crude and adjusted OR to determine the strength of association between client satisfaction and indicators of quality antenatal care. Clients who agreed that four antenatal visits was enough were 2.3 times likely to be satisfied with the quality of antenatal care. Interestingly, clients who agreed that the doctor explained the need of medications prescribed and their importance were 8.92 times likely to be satisfied with quality of antenatal care than those who disagreed.

Furthermore, clients who neither agreed nor disagreed to the statement that the doctor explained their health state and that of their unborn baby, were 0.31 times less likely to be satisfied with the quality of antenatal care than those who disagreed with the statement. Interestingly, there was no significant association between cleanliness of environment, washrooms, waiting time and contact time, attitude of health workers and information given on labour, family planning and breastfeeding.

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Table 10: Bivariate and multivariate logistic regression analysis

	Crude			Adjusted		
	OR	95% CI	P-value	OR	95% CI	P-value
Antenatal check up						
Agree	3.39	1.72 - 6.66	**0.0003**	2.3	1.24 - 6.94	**0.014**
Clean environment			0.0514			0.349
Disagree	Ref					
Neither	4.41	0.31- 62.36		24.18	0.31 – 1857	
Agree	3.65	1.06 - 12.63		1.92	0.23 - 16.12	
Clean washrooms			0.0217			0.076
Never used before	Ref					
Disagree	0.42	0.15 - 1.15		0.4	0.11 - 1.46	
Neither	4.04	0.42 -38.6		2.75	0.17 - 45.1	
Agree	1.54	0.62 - 3.85		1.29	0.40 - 4.18	
Competence of health workers			0.0027			0.128
Disagree	Ref					
Neither	7.03	0.62 - 79.12		2.03	0.05 - 79.8	
Agree	11.29	2.32 - 54.99		1.63	0.12 - 22.9	
Clients waiting time for nurses (min)			0.2067			0.354
Client waited less than 60	Ref					
Client waited between 60 -180	0.65	0.33 - 1.29		0.44	0.18 - 1.05	
Client waited more than 180	0.65	0.16 - 2.59		0.8	0.14 -4.44	
Clients waiting time for doctors (min)			0.4615			0.544
Client waited less than 60	Ref					
Client waited between 60 -180	0.85	0.41 - 1.74		0.56	0.23 - 1.4	
Client waited for more than 180	1.8	0.54 - 5.97		2.81	0.64 - 12.4	
Attitude of nurses on respect to clients			0.0001			0.092
Disagree	Ref					
Neither	1.18	0.28 - 5.05		0.52	0.07 - 4.03	
Agree	3.55	1.6 - 7.86		2.54	0.93 - 6.94	
Attitude of doctors on respect to clients			0.0002			0.302
Disagree	Ref					
Neither	1.99	0.04 -99.5		21.4	0.01– 38876	
Agree	13.82	2.04 - 93.8		3.6	0.19 - 68.9	
Clarity of diagnosis to client			0.0115			0.447
Disagree	Ref					
Neither	0.31	0.03 -3.84		0.02	0.00 - 2.2	

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Agree	2.57	1.18 - 5.17		0.32	0.08 - 1.32	
Clarity of treatment to client			**0.0019**			**0.008**
Disagree	Ref					
Neither	1.77	0.34 - 9.19		5.66	0.44 - 72.5	
Agree	3.64	1.72 - 7.67		8.92	2.29-34.74	
Information on labour			0.0323			0.513
Disagree	Ref					
Neither	0.92	0.19 - 4.5		0.68	0.06 -7.66	
Agree	2.27	0.83 - 6.19		1.62	0.33 - 7.95	
Information on breastfeeding			0.0138			0.223
Disagree	Ref					
Neither	0.68	0.14 - 3.41		0.9	0.09 - 9.51	
Agree	2.23	0.86 - 5.8		2.7	0.61 - 11.9	
Information on family planning			0.3006			0.212
Disagree	Ref					
Neither	1.21	0.29 - 5.1		0.48	0.06 - 4.2	
Agree	1.32	0.49 - 3.5		0.41	0.08 -2.13	
Time spent with doctor			0.7822			0.453
Less than or equal to 5	Ref					
10 – 15	1.86	0.87 – 4.01				
Above 15	1.06	0.42 – 2.69				

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CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

This chapter discusses the results of the study as related to the objectives. The objectives aimed to determine how satisfied clients were with the quality of the antenatal care, the areas with which they were satisfied and dissatisfied and their perception of safety issues at the antenatal clinic. This was to make information available for policy makers to make informed decisions. The study is limited to the views of the clients' satisfaction with the quality of care at the antenatal clinic.

5.2 Level of client satisfaction with the quality of care provided.

This study revealed that more than half of the respondents were overall satisfied with the quality of antenatal care at Korle – Bu teaching hospital. More than 60% of clients were satisfied with the quality of antenatal care at Korle – Bu teaching hospital which is similar to a study conducted in Pakistan in which the overall satisfaction level was found to be 61% (Ashraf, Ashraf, Atif, & Khan, 2012). However, it is contrary to other studies such as Sholeye, OA & OA (2013) done in Nigeria in which the overall satisfaction was found to be 98.5% It also showed that about one – third of the clients were okay with the quality of ANC, neither showing satisfaction nor dissatisfaction. It may be explained that the clients often tend to be okay with responses especially in clinical settings. Arguably, KBTH being a tertiary (referral) hospital tend to offer more specialized care with specialized professionals and consultants. Clients would usually feel more comfortable and relieved, therefore this could also be the reason for the high clients" satisfaction level.

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5.3 Areas of satisfaction

Clients showed high satisfaction levels on areas of clean environment, clean washrooms, attitude of health workers, waiting time, contact time, competence of health workers, clarity of diagnosis and treatment and information on labour, breastfeeding and family planning.

Satisfaction with cleanliness of the environment was found to be more than half. This was found to be higher compared to a similar study done in Nigeria (Sholeye et al., 2013) in which it was found to be 48.5%.However, the findings were contrary to a study done in Egypt by Montasser et al. (2012) in which the satisfaction with the environmental cleanliness at the ANC was found to be 88.7%.

Satisfaction with cleanliness of the washrooms was higher than a study conducted in Lagos (Sholeye et al., 2013) and another study conducted in Egypt (Soliman, 2015) in which satisfaction were found to be 31.4% and 32.9% respectively. This indicates that there is a need to maintain clean washrooms at all times.

Satisfaction with the clarity of diagnosis communicated to clients by the doctor was high but contrary to a study done by (Montasser et al., 2012) which revealed that only 16.3% were satisfied with the clarity of the diagnosis. However, the findings of this study is similar to a study done in Pakistan(Ashraf et al., 2012) in which 79% of clients were satisfied with the way the doctors explained their problem to them.

Clients were satisfied with the competence of the health workers. This agreed with a study conducted in Nigerian in which the satisfaction of clients with the competence of health workers was found to be high (Sholeye et al., 2013). This could be explained by the fact that most clients view Korle – Bu teaching hospital as a health facility with

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highly advanced medical equipment and health workers with high competence as compared to other facilities.

Clients expressed very high satisfaction rate with the attitude of doctors and nurses towards respect to them. This is similar to studies conducted in Pakistan (Ashraf et al., 2012) and Egypt (Soliman, 2015). Good provider-patient relationships are therapeutic and have been described as the single most important component of good medical practice, not only because it identifies problems quickly and clearly, but it also defines expectation and help establish trust between the clinician and patient (Nwaeze et al., 2013).

Clients in general showed high satisfaction with contact time which was higher compared to a study done in Pakistan (Ashraf et al., 2012) which found that about 64% were satisfied with the time spent between client and doctor. Though more than half spent between 10 to 15 minutes, about 19.87% spent more than 15 minutes with the doctor meanwhile, according to (Oladapo, Iyaniwura, & Sule-odu, 2008) the recommended consultation time by WHO for focused antenatal care is 30 minutes aiming to provide adequate information on antenatal care. Clients spending half of the recommended time with doctor could be explained by the numerous clients at the antenatal clinic at Korle – Bu teaching hospital to be attended to by the doctors. However, the contact time is higher than that found in the study conducted by (Oladapo et al., 2008) which was found to be 5 minutes, a far cry from the recommended time. Though most majority of the clients had no preference to contact time, about 10.26% preferred to spend more than 15 minutes with the doctor.

Almost 60% of clients were satisfied generally with the waiting time. The waiting time in this study was from two aspects; waiting time for nurses and waiting time for

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doctors. This study showed that most of the respondents waited between 1 hour and 3 hours before being seen by the nurses and most clients waited for an hour or less before being seen by the doctors. This could be explained by the fact that the clients usually come in very early hours of the morning to be seen to early and also to avoid long ques whiles others get there very early hours in the morning because they come from very far distances. Surprisingly, most of the clients did not wait for more than an hour before being seen by the doctor. This agrees with a study done in Nigeria where the clients waited for less than 3 hours before being seen by the doctor (Nwaeze et al., 2013). The reason for clients waiting less than an hour could be due to the fact that because the doctors spend 15 minutes with their clients during consultation, most of the clients waiting to be seen by the doctor do not spend more than 15 minutes waiting. However, high satisfaction with overall waiting time of clients spent at the ANC in this study was found to be contrary to the various studies done including one at Nigeria where it was found that a major cause of dissatisfaction was waiting time of clients (Sholeye et al., 2013). Another study done in Nigeria revealed that clients were satisfied with the waiting time as this study (Nwaeze et al., 2013). Waiting time was found to statistically significant but after multivariate analysis, it was found not to be significant.

Clients were satisfied with the attitude of nurses and doctors which is similar to a study conducted by (Nwaeze et al., 2013) and a bivariate analysis showed that it was statistically significant with satisfaction. This could be explained with the fact that clients depend a lot on the respect shown to them by healthcare providers and it influences their expectation of antenatal care. However, after multivariate analysis it was not significant with satisfaction which indicates that there were other factors that seem to be more significant than the attitude of health care workers.

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From this study, clients were satisfied with the information given on labour, breast feeding and family planning. This agrees with a study conducted in Nigeria in which the clients expressed high satisfaction with the information given on labour, breast feeding and family planning (Oladapo et al., 2008).

From this study, there was no significant association between demographic characteristics and overall satisfaction level of quality antenatal care which agrees with a statement by (Nwaeze et al., 2013) who said that socio-demographic characteristics were not associated with the overall satisfaction with antenatal care quality. From the ordinal logistic regression, it revealed that the most predictor value of satisfaction was clarity of treatment and the WHO recommendation of four antenatal check – ups. Though clients showed satisfaction, they were not significant. The regression showed that the area of greatest satisfaction which was significant is the clarity of treatment communicated to the patient by the doctor.

5.4 Areas of dissatisfaction

Most of the clients had received ANC check – ups of less than three visits which is contrary to the WHO recommendation of four or more antenatal check – ups. However, from table 2, it shows that most of the clients were not satisfied with the antenatal check – ups of four times meaning that some clients may want more ANC check-ups others less than the recommended. Clients who neither agreed nor disagreed with the clarity of diagnosis were less likely to be satisfied with the quality of ANC.

5.5 Safety

According to WHO (2002), competence of health workers, cleanliness of environment as well as clean washrooms are measures of safety. Antenatal check- up of four times and knowledge of danger signs in pregnancy were also used as measures of safety in the ANC clinic. Incompetent health workers results in errors in the treatment or

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management of clients. Unclean environments can increase the risk of infection and falls at the ANC. Not meeting the required ANC check- up of four times can lead to missed signs by the doctor and lack of knowledge of danger signs in pregnancy can lead to maternal mortality. Clients expressed satisfaction with all areas except ANC of four visits. Thus, there is a need to create awareness of the importance of ANC check – up of four times. No safety concerns were expressed during the FGDs.

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CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This study revealed high satisfaction of clients with quality of ANC. The main predictor of client satisfaction from this study is how clear the treatment and management of clients is made to them by the health providers. It also showed that client safety at the ANC is high, however, there would be a need to inform clients on the importance of ANC check - up according to WHO recommendation. Clients also revealed high satisfaction with how clear their diagnosis was made to them and the delivery and understanding of health educational topics provided at the ANC. The study showed that clients were satisfied with the attitude of the nurses and doctors as well as the waiting time and contact time of clients'.

6.2 Recommendations

1. Awareness should be created by ANC service providers at Korle – Bu teaching hospital on the importance of the WHO recommended ANC check – up of four times.
2. Management of Korle – Bu teaching hospital should organise training for health providers to encourage them to communicate client information to them during the provider – client interaction.
3. Though the attitude of the health workers was found to be generally satisfactory, it can be improved upon by organising training of health workers on customer care by the management of Korle – Bu teaching hospital.
4. Though the waiting time and contact time were found to be satisfactory by clients, management of Korle – Bu teaching hospital could improve upon it by providing more health workers in the ANC.

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5. Management of Korle – Bu teaching hospital should carry out client satisfaction surveys routinely to improve on the quality of ANC.

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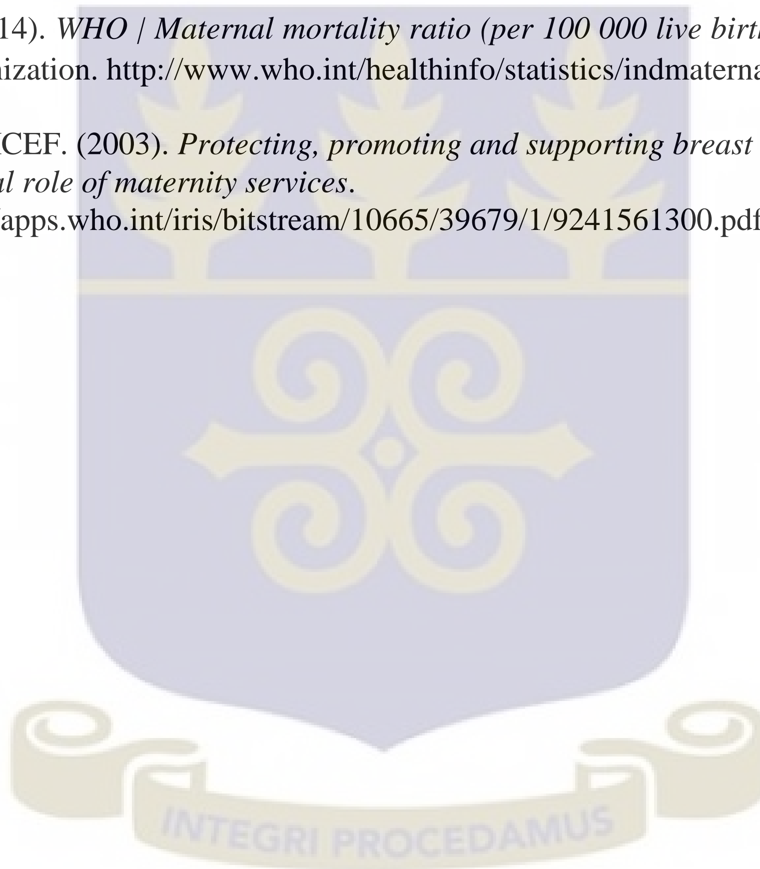

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APPENDICES

Appendix 1: Consent form for study participants

Project Title: Assessment of clients‟ satisfaction with quality of antenatal care at Korle – Bu teaching hospital.

Institution of affiliation: School of Public Health, University of Ghana, Legon.

Background of interviewer: My name is ……………………………………………… from ……………………………………………… (I am a student who is here) or (I am helping a student) to collect data purely for academic work for a degree in Masters in Public Health

Procedure: Information required from you for this study includes background characteristics and rating of your level of satisfaction with antenatal care services provided at this facility. Data collection is through the administration of a structured questionnaire and focused group discussions.

Risks and benefits: There are minimum or no risks if you take part in this study. There are also no incentives but the information you provide will help improve on your health and that of the community.

Right to refuse: Your consent to participate in this study is voluntary and you can withdraw from this study at any time.

Anonymity and Confidentiality: You are assured of strict anonymity and confidentiality on any information you give.

If you have further information or questions about the study, you may contact the principal investigator, **Felicia Birch Freeman**, on phone number: **0273217646** or email:

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birchfil@yahoo.com or the Ghana Health Service Ethical Review Committee administrator **Ms. Hannah Frimpong** on **phone number 0507041223.**

Name of Participant:

Signature or Thumb print of Participant:

Date:

Thank you for agreeing to participate:

Name of witness:

Signature or Thumb print of witness:

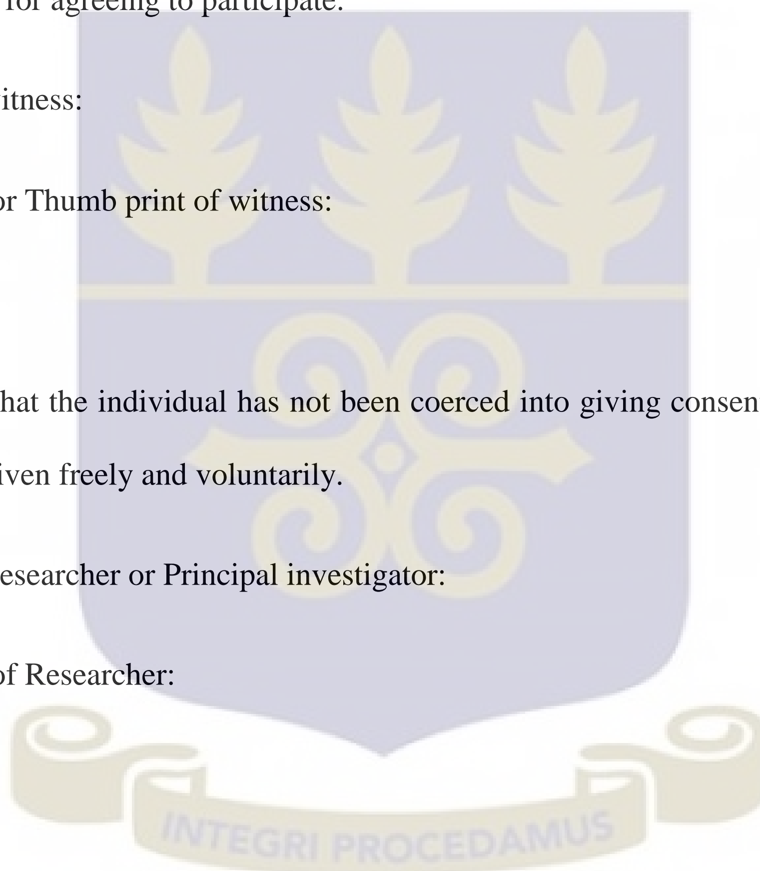
Date:

I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Researcher or Principal investigator:

Signature of Researcher:

Date:



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Appendix 2: Consent form for parent or guardian

Project Title: Client satisfaction of quality antenatal care

Institution of affiliation: School of Public Health, University of Ghana, Legon.

Procedure: Information required from you for this study includes background characteristics and the rating of the level of client satisfaction with services provided at the antenatal care facility. Data collection is through the administration of a structured questionnaire and focus group discussions.

Risks and benefits: There are no risks if you take part in this study. There are also no incentives but the information you provide will help improve your health and that of the community.

Right to refuse: You have a right to refuse to participate in this study.

Anonymity and Confidentiality: You are assured of strict anonymity and confidentiality on any information that is given.

If you have further information or questions about the study, you may contact the principal investigator, **Felicia Birch Freeman** (Tel: **0273217646** or email: birchfil@yahoo.com) or the Ghana Health Service Ethical Review Committee administrator **Ms. Hannah Frimpong** on **0507041223.**

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Appendix 3: Child Assent Form

(This is to be filled by clients' below the age of eighteen (18) years).

My name is Felicia Birch Freeman. I am a student of the School of Public Health, University of Ghana. I am conducting a study on Assessment of Clients" satisfaction with quality of antenatal care at Korle – Bu teaching hospital. I would be grateful if you participate in this research.

General Information

If you agree to participate in the study, you will be asked to provide information regarding to your satisfaction of the care you received.

Possible Benefits

Your participation in this study will help in policy formulation which will improve the quality of care clients" receive at the facility.

Possible Risks and Discomforts

This study is not associated with any physical or psychological risk to you or the unborn child.

Voluntary Participation and Right to Leave the Research

Participation in this study is voluntary. You are allowed to answer any individual question or all the questions. You can withdraw from the study at any time however, you are encouraged to fully participate in the study. You will not be denied any health care service if you refuse to participate.

Confidentiality

The information obtained in this study will be kept confidential and will not be accessed by an unauthorised person.

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Contacts for Additional Information

If you have any questions please, contact **Felicia Birch Freeman (Tel: 0273217646 or birchfil@yahoo.com) or** the Ghana Health Service Ethical Review Committee administrator **Ms. Hannah Frimpong** on **0507041223.**

Please discuss this study with your parents before you decide whether or not to participate. I will also ask permission from your parents before enrolling you into the study. Even if your parents say "yes" you can still decide not to participate.

Before taking the Consent

Do you have any concerns about the study that you wish to be addressed?

Yes ☐ No ☐

If yes, please indicate your concerns below.

....

....

....

If you have any questions please contact Felicia Birch Freeman (Tel: **0273217646** or **birchfil@yahoo.com**) or the Ghana Health Service Ethical Review Committee administrator **Ms. Hannah Frimpong** on **0507041223.**

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Appendix 4: Voluntary Consent

This is an adapted modified Noguchi IRB assent form.

I have read the information given or the given information has been read and duly explained to me. My concerns about this study have been duly addressed. By thumb printing it indicates that I now voluntarily agree to participate in this study knowing that I have the right to withdraw from the study at any time without it affecting my ability to access healthcare. (Parents and Clients‟ will be given a copy of the form after it has been signed.). This assent form describes the benefits, risks and procedures for the study. I have been given an opportunity to have my questions about the study answered to my satisfaction. I agree to participate.

Child‟s name:………………… Researcher‟s name:…………………………

Child‟s thumbprint………….. Researcher‟s signature:………………………

Date: ………………………. Date:……………………………

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Appendix 5: QUESTIONNAIRE ON THE ASSESSMENT OF CLIENTS' SATISFACTION WITH QUALITY OF ANTENATAL CARE AT KORLE – BU TEACHING HOSPITAL.

Interview date: ____/____/______

Name of Interviewer: ________________________________

Respondent"s Number: [ ]

Modified long - form patient satisfaction questionnaire (PSQ-III) (Marshall & Hays, 1994).

A. **Demographic characteristics of client**.

Demographic characteristics	Response (Please tick the appropriate answer)
Q1 Age	[ ]
Q2 Parity	[ ]
Q3 Educational level None Primary Secondary Tertiary	 [ ] [ ] [ ] [ ]
Q4 Employment status Employed Unemployed	 [ ] [ ]
Q5 Marital status Married Single Widowed Divorced Separated Co-habiting	 [ ] [ ] [ ] [ ] [ ] [ ]

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Q5a Reason for attending ANC at Korle-Bu Walked – in	☐
Referred	☐
Q5b If referred, from which facility? Private Public If Public, please specify the type of facility.	 ☐ ☐ ………………………………………………
Q6 Number of ANC visits so far	

B. **Indicators of quality care**

Structure / input	Response (Please tick the appropriate answer)
Q8 Attending antenatal check - up of four times is enough to address all my problems. 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐ ☐ ☐
Q9 The environment is clean 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐ ☐ ☐

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Q10 The toilets are clean 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree	☐ ☐ ☐ ☐
5 = Strongly agree	☐
Q11 There are competent and professional health workers. 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐ ☐

Processes

Waiting time	Response (Please write the answer)
Q12. How long do you usually have to wait before being seen by the nurse?	☐☐☐☐ Hours Minutes
Q13.How long do you usually have to wait before being seen by the doctor?	☐☐☐☐ Hours Minutes
Q14. Are you happy with the time you normally have to wait? 1 = No 2 = Yes **If yes, please skip Q14**.	☐ ☐
Q15. If no, how long would you prefer to wait before being seen by the doctor?	☐☐☐☐ Hours Minutes

Contact time	Response (Please write the answer)

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Q16. . How much time do you usually spend with the doctor?	☐☐☐☐ Hours Minutes
Q17. Is the time spent with the doctor enough to answer all your questions? 1 = No 2 = Yes **If yes, please skip Q17.**	☐ ☐
Q18.If no, how much time would you prefer to spend with the doctor?	☐☐☐☐ Hours Minutes

Attitude of health workers	Response (Please tick the appropriate answer)
Q19. The nurse was professional and treated me with respect. 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐ ☐ ☐
Q20. The doctor was professional and treated me with respect. 1= Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐ ☐ ☐

Clarity of diagnosis and treatment	Response (Please tick the appropriate answer)

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Q21. The doctor explained my health state and that of my unborn baby to me. 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐
Q22. The doctor made it clear the type of medication prescribed and its importance. 1= Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree	☐ ☐ ☐

Health education

Health Education	Response (Please tick the appropriate answer)
Q23. I am happy with the information I received about labour. 1= Strongly disagree 2= Disagree 3=Neither 4= Agree 5 = Strongly agree If you strongly disagree or disagree, please briefly state why?	☐ ☐ ☐ ☐ ☐ …………………………………………………
Q24. I am happy with the information I received about breastfeeding. 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree If you strongly disagree or disagree, please briefly state why?	☐ ☐ ☐ ☐ ☐ …………………………………………………

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Q25 I am happy with the information I received about family planning. 1 = Strongly disagree 2 = Disagree 3 = Neither 4 = Agree 5 = Strongly agree If you strongly disagree or disagree, please briefly state why?	☐ ☐ ☐ ☐ ☐ ………………………………………………
Q26 Were you told how to recognise and proceed about some serious problems in pregnancy? 1 = No 2= Yes a) Premature rupture of membranes b) Bleeding in pregnancy c) Premature contractions d) Seizures e) Fainting and dizziness	Told how to recognise Told how to proceed ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐
f) Fever	

Output

Willingness	Response (Please tick the appropriate answer)
Q27 I will willingly return for follow ups because I am happy with the care given to me. 1 = No 2 = Yes	☐ ☐
Q28 I will willingly take my medications because I am happy with the care given to me. 1 = No 2 = Yes	☐ ☐

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Q29 I will willingly recommend the facility to a pregnant friend. 1 = No 2 = Yes	☐ ☐

Outcome

Outcome	Response (Please tick the appropriate answer)
Q30 I am well informed on the importance of taking my medications and the danger signs in pregnancy. 1 = No 2 = Yes	☐ ☐
Q31 My health and that of my unborn baby has improved because of the quality of care given. 1 = No 2= Yes	☐ ☐

Q32. Overall, how would you rate the quality of antenatal care?

Rating of quality antenatal care	Response (Please tick the appropriate answer)
1 = Excellent 2 = Very good	☐ ☐ ☐
3 = Good 4 = Fair 5 = Poor	

Q33. Do you feel the quality of antenatal care given to you was because of the following?

Reasons influencing quality of antenatal care given.	Response (Please tick the appropriate answer)
a) Age 1 = No 2 = Yes	☐ ☐

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b) Parity 1= No 2 = Yes	 ☐ ☐
c) Educational level 1 = No 2 = Yes	 ☐ ☐
d) Employment status 1 = No 2 = Yes	 ☐ ☐
e) Marital status 1 = No 2 = Yes	 ☐ ☐

Q34. Overall, how would you rate the level of satisfaction with the quality antenatal care?

Rating of satisfaction	Response (Please tick the appropriate answer)
1 = Very dissatisfied 2 = Dissatisfied 3 = Okay 4 = Satisfied 5 = Very satisfied	☐ ☐ ☐

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Appendix 6: Focus group discussion guide

Focus group discussion for post – natal clients at Korle – Bu teaching hospital.

My name is ______________________________ and I am here with Felicia Birch Freeman, a student of School of Public Health, University of Ghana, Legon.

First of all we want to welcome you ladies to this gathering. We are here to find out your view about the quality of health care you received during your antenatal care visit especially about the things you observed and experienced. We want you to feel relaxed and feel free to say all that you want. What you say here today will help us understand on the quality of antenatal care being provided and to improve upon it. The information you provide or the issues we discuss here will be treated as confidential.

The ground rules:

Participants shall introduce themselves. There are no right or wrong answers in this discussion.

All that will be discussed here is important. Our discussions will be recorded on tape and also written down in notes so that we can refer to it later.

Rules for the discussion:

One person will talk at a time so that we can all hear clearly and give our comments

Questions can be asked for clarification.

I will be willing to stop for comments or contributions as the discussion goes on.

Kindly note that we have to try and finish within an hour.

1. Please describe to us your understanding of quality of antenatal care.

2. Please describe in your own words what satisfaction means to you.

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3. Kindly describe to us what you consider most important in your visit to the antenatal clinic.

4. Please describe to us what you would like to be improved in the antenatal care.

5. Are you satisfied with the quality of antenatal care given here? If not what are the reasons for your dissatisfaction?

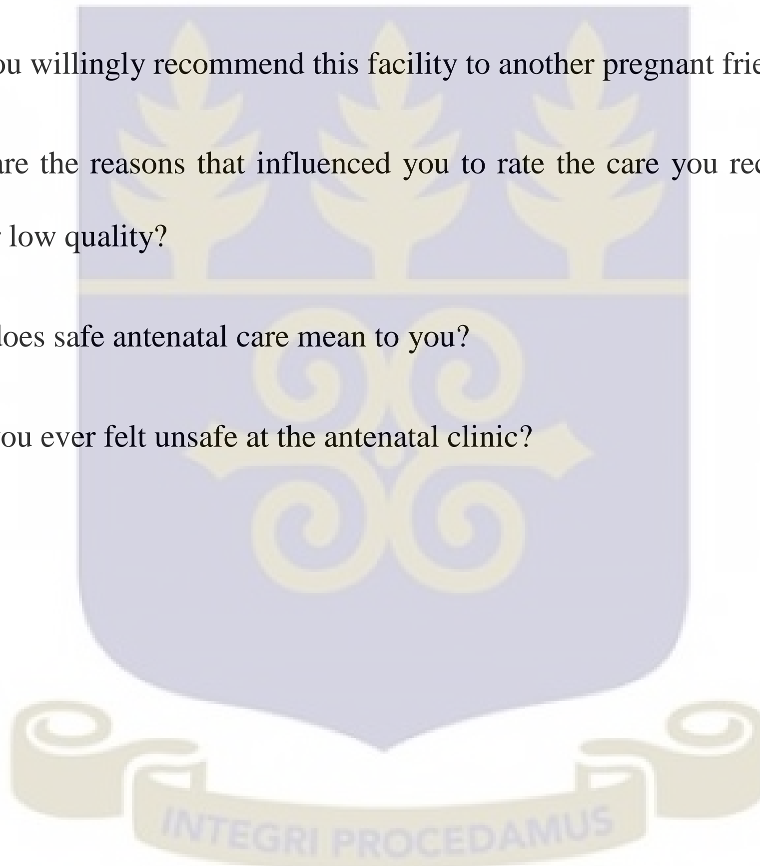
6. Will you willingly walk – in or be happy if you are referred here to deliver again?

7. Will you willingly recommend this facility to another pregnant friend?

8. What are the reasons that influenced you to rate the care you received at ANC as high or low quality?

9. What does safe antenatal care mean to you?

10. Have you ever felt unsafe at the antenatal clinic?



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Appendix 7: Observation guide with rating scale modified from Ghana Health Service.

Rating key:

0 - The step was omitted

1 - The step was improperly carried out

2 - The step was well carried out

Component	Rating
1. Doctor welcomes client.	
2. Encourages client to talk about complaints.	
3. Listens attentively to client and maintains eye contact.	
4. Explains diagnosis and further management to client in a language understood by the client.	
5. Gives review date to client.	
6. Thanks client for using the facility.	

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GHANA HEALTH SERVICE ETHICAL REVIEW COMMITTEE

In case of reply the
number and date of this
Letter should be quoted.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: Hannah.Frimpong@ghsmail.org

My Ref. :GHS-ERC: 3
Your Ref. No.

8th April, 2015

Felicia Birch Freeman
School of Public Health
University of Ghana
Legon, Accra

ETHICAL APPROVAL - ID NO: GHS-ERC: 51/02/15

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

"Assessment of Client's Satisfaction with Quality Antenatal Care at Korle-Bu Teaching Hospital"

This approval requires that you inform the Ethical Review Committee (ERC) when the study begins and provide Mid-term reports of the study to the Ethical Review Committee (ERC) for continuous review. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Please note that any modification without ERC approval is rendered invalid.

You are also required to report all serious adverse events related to this study to the ERC within seven days verbally and fourteen days in writing.

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.

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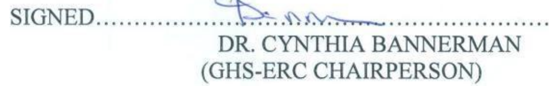
Please note that this approval is given for a period of 12 months, beginning April 8th 2015 to April 7th 2016.

However, you are required to request for renewal of your study if it lasts for more than 12 months.

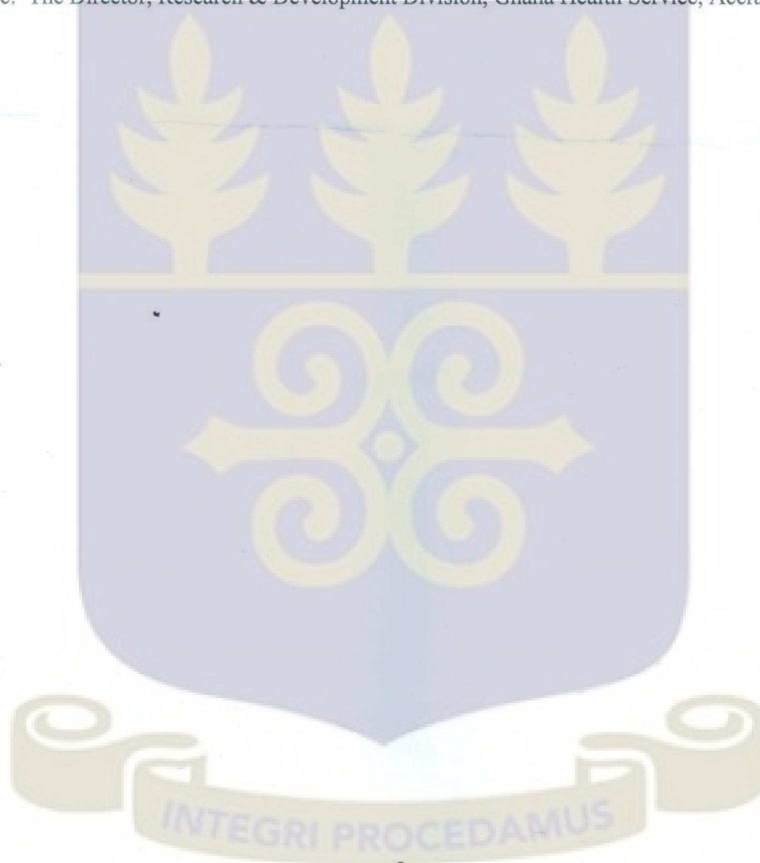
Please always quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED...



DR. CYNTHIA BANNERMAN
(GHS-ERC CHAIRPERSON)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra



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P O Box LG13
Legon-Accra
GHANA

My Ref. No. HPPM/11/014
Your Ref. No.

December 24, 2014

The Chief Executive Officer
Korle-Bu Teaching Hospital
Korle-Bu
Accra

Dear Sir,

LETTER OF INTRODUCTION

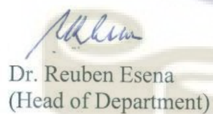
I wish to introduce to you **Dr. Felicia Birch Freeman,** Master of Public Health student (MPH) of the Department of Health Policy, Planning and Management, School of Public Health, University of Ghana, Legon. As part of the requirement for the award of her MPH degree, she is expected to undertake a piece of research at the Korle-Bu Teaching Hospital to enable her write her dissertation.

Her research topic is **"Assessment of Clients' Satisfaction with Quality of Antenatal Care at Korle-Bu Teaching Hospital".**

I shall be grateful if your outfit could assist her with any needed information in your facility.

Thank you for your cooperation.

Yours sincerely,



Dr. Reuben Esena
(Head of Department)

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