

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

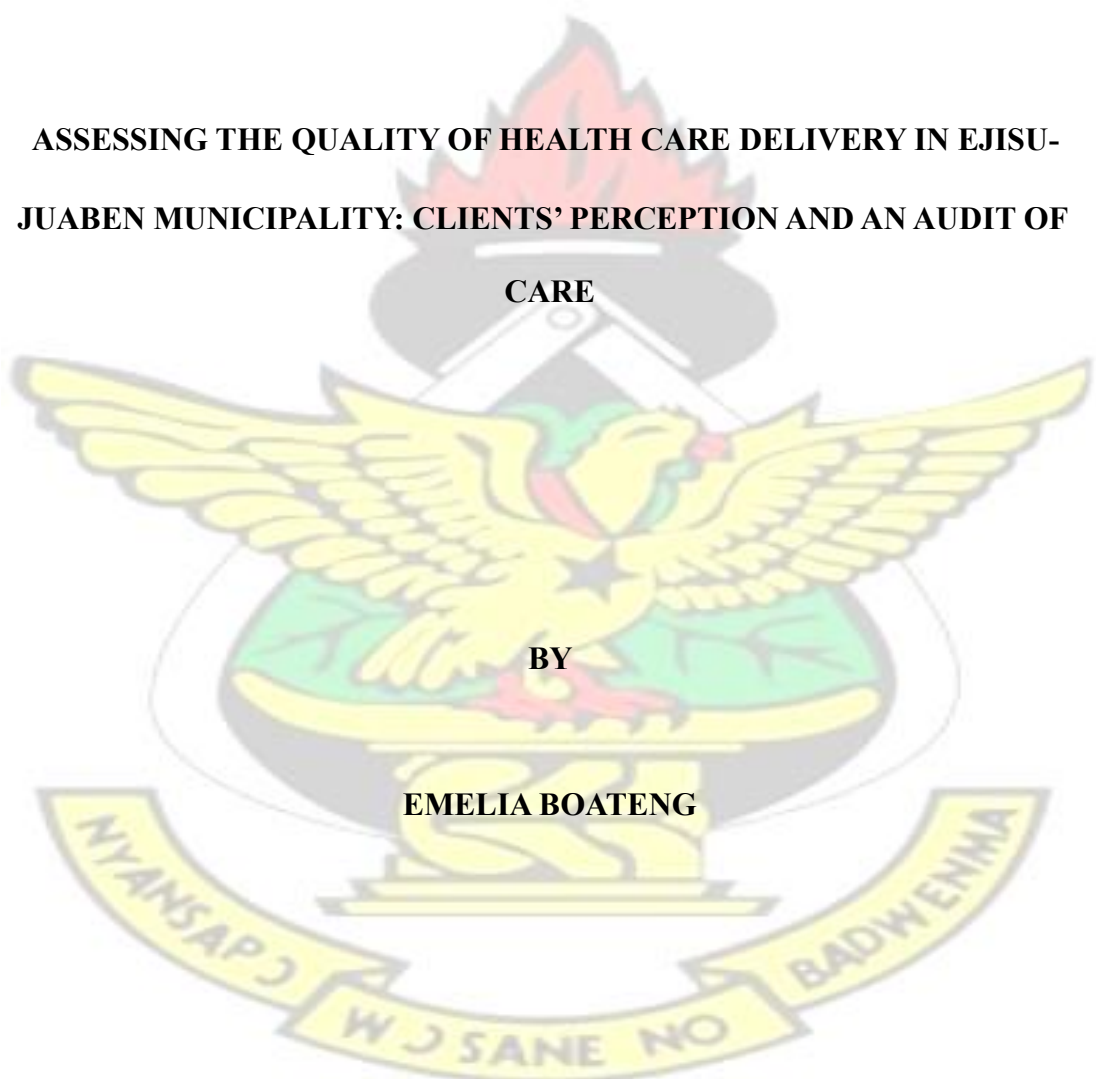
**DEPARTMENT OF HEALTH POLICY, MANAGEMENT AND
ECONOMICS**

KNUST

**ASSESSING THE QUALITY OF HEALTH CARE DELIVERY IN EJISU-
JUABEN MUNICIPALITY: CLIENTS' PERCEPTION AND AN AUDIT OF
CARE**

BY

EMELIA BOATENG



JUNE, 2015

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

**DEPARTMENT OF HEALTH POLICY, MANAGEMENT AND
ECONOMICS**

**ASSESSING THE QUALITY OF HEALTH CARE DELIVERY IN EJISU-
JUABEN MUNICIPALITY: CLIENTS' PERCEPTION AND AN AUDIT OF
CARE**

**A THESIS SUBMITTED TO THE DEPARTMENT OF HEALTH POLICY,
MANAGEMENT AND ECONOMICS, SCHOOL OF PUBLIC HEALTH,
COLLEGE OF HEALTH SCIENCES IN PARTIAL FULFILLMENT AS A
REQUIREMENT FOR THE DEGREE OF
MASTER'S IN PUBLIC HEALTH, HEALTH SERVICES PLANNING AND
MANAGEMENT**

BY

EMELIA BOATENG

JUNE, 2015

KNUST



DECLARATION

I hereby declare that this submission is my own work towards the MSc and that, to the best of my knowledge, it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Boateng Emelia
PG9633913
(Student)

Signature

Date

Certified by
Dr. Edward T. Dassah
(Supervisor)

Signature

Date

Certified by
Dr. Kofi Akohene
(Head of Department)

Signature

Date

ACKNOWLEDGEMENT

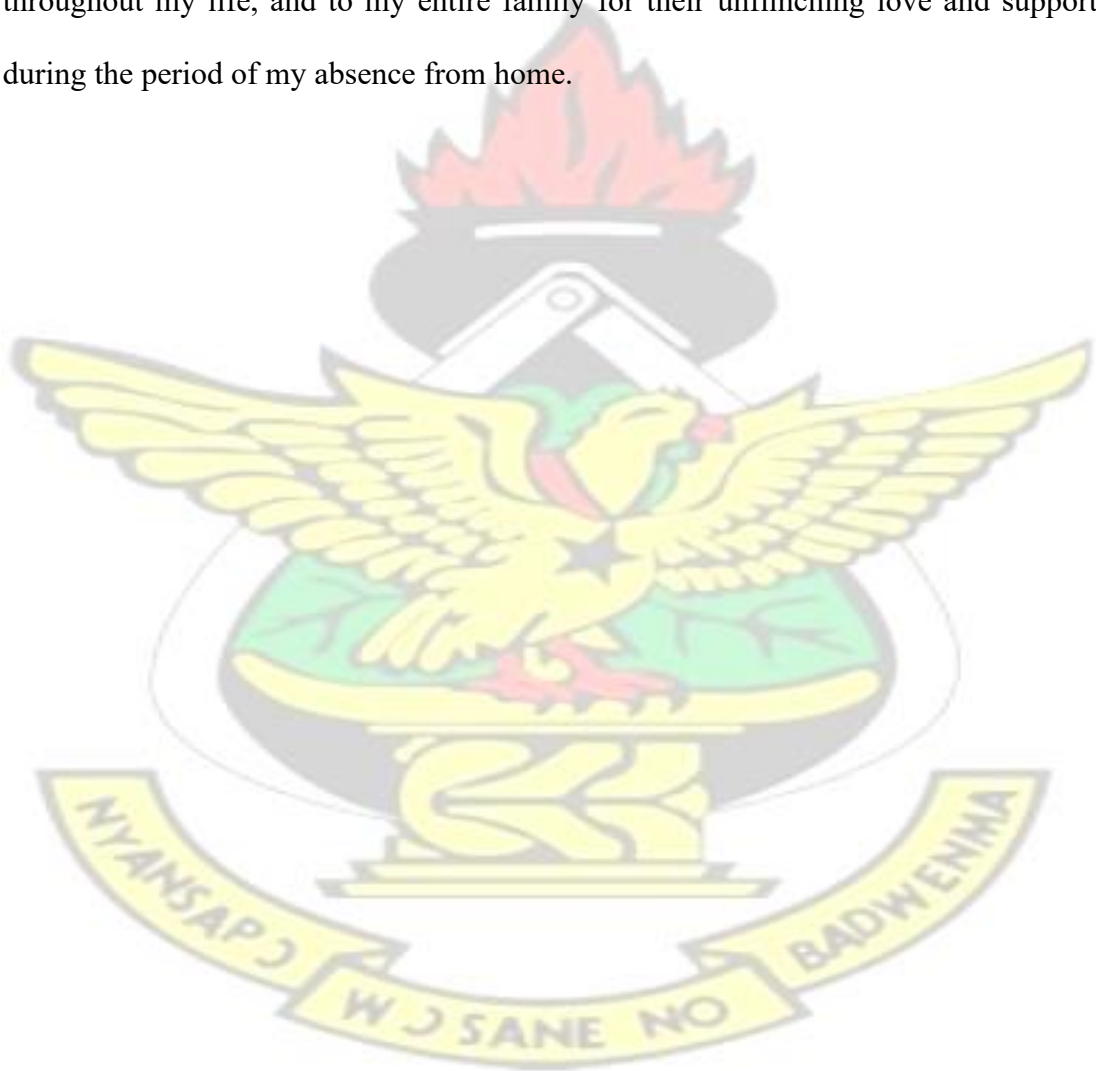
I would like to acknowledge all those who helped and supported me throughout this research. Firstly, I would like to express my profound gratitude and appreciation to my supervisor, Dr. Edward T. Dassah, for his time and patience in providing me with all the necessary guidance and support throughout the period of the study. Many thanks also go to the Acting Municipal Health Director Mrs. Mary Koduah for the permission given to me to conduct the research in the Municipality, also to the administrator, Mr. Isaac Owusu, and staff of the Church of God Health Services for their support.

My acknowledgement and appreciation also go to my husband, Mr Isaac Ofori-koree and the kids for their encouragement and commitment towards the course of my carrier development. I am also thankful to all the lecturers of the School of Public Health of KNUST for their assistance during the study of the MPH degree.

And to my family, I owe you great thanks for everything and being there for me all the time. I say thank you all. God richly bless you.

KNUST DEDICATION

This thesis is dedicated to the Almighty God for His numerous blessings and guidance throughout my life, and to my entire family for their unflinching love and support during the period of my absence from home.



ABSTRACT

Background: Client satisfaction is an important indicator of the quality of health care and ascertaining their views remain essential to assessing the quality of health care provided. The objective of this study was to determine clients' perceptions of the quality of health care delivery, and to conduct an audit of selected health facilities in Ejisu – Juaben Municipality.

Methodology: This was an analytical cross sectional study conducted in six purposively-selected private and public health facilities in the Ejisu Juaben Municipality, over a period of three months using structured pre-tested questionnaire and a check list. Categorical variables were compared using the chi-squared test and continuous variables compared using percentages frequencies. Factors associated with clients' choice of orthodox health facilities as the first point of call were examined using regression analysis with robust error variance to estimate crude and adjusted relative risks (RRs) with 95% confidence intervals (CIs). $P < 0.05$ was considered statistically significant

Result: Overall, 400 clients seeking care were recruited from the selected health facilities together with 12 unit and facility heads. Majority (80%) of respondents in both public and private facilities were satisfied with the quality of healthcare they received, and perceived the quality of care in the municipality to be generally good. Clients who were younger than 20 years old (adjusted RR 1.14; 95% CI, 1.10-1.52), Christians (adjusted RR 1.19; 95% CI 1.04-1.36) and those who had registered with the National Health Insurance Scheme (adjusted RR 1.12; 95% CI 1.02-1.36) were more likely to visit orthodox health facilities as the first point of call. Using service quality attributes, most respondents (range 71- 83%) assessed the quality of care to be good. The audit revealed that most of the facilities had the basic infrastructure and

equipment, and provided the required basic clinical care and services. Although the public health facilities had relatively more trained health care providers, monitoring and supervision were better in the private health facilities.

Conclusion: Generally, the quality of health care delivery was perceived to be high. Private health care facilities should be encouraged to recruit more trained health care providers while monitoring and supervision in the public facilities are improved upon.



TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENT.....	iii
DEDICATION.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS/ ACRONYMS	x
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the study.....	1
1.2 Problem Statement	2
1.3 Rationale for Study	3
1.4 Main Objective.....	4
1.4.1 Specific Objectives	4
1.5 Research Questions	4
CHAPTER TWO: LITERATURE REVIEW	6
2.1 Global Concern for Quality of Health Services	6
2.2 Quality of Health Services in Ghana.....	6
2.3 Meaning of Quality	7
2.4 Quality Health Care.....	8
2.5 Quality Assurance in Health Care	8
2.6 Clients Perception on Quality Health Care	9
2.7 Assess the Quality of Health Care Provided	10
2.7.1 Factors influencing health seeking behaviour and client's first point of call	13

2.7.2 Factors influencing quality health care provision	15
2.7.3 Long waiting time and staff attitude.....	15
2.7.4 Health worker motivation.....	15
2.7.5 Employees' Capacity and Skill.....	16
2.7.6 Effective communication.....	17
2.7.7 Availability of essential medicines	17
2.7.8 Technology	18
CHAPTER THREE: METHODOLOGY.....	19
3.1 Study Design	19
3.2 Study Area	19
3.3 Study Population	20
3.3.1 Inclusion criteria;.....	20
3.3.2 Exclusion criteria;.....	20
3.4 Sampling Strategy	20
3.5 Sample Size Estimation.....	22
3.6 Data Collection Techniques	23
3.7 Data Management and Analysis.....	23
3.8 Limitations of the study	24
3.9 Ethical Consideration	24
3.10 Dissemination of Study Finding.....	24
CHAPTER FOUR: RESULTS	25
4.1 Background characteristics of respondents	25
4.2 Frequency of hospital attendance	26
4.3 Clients' perception of the quality of care provided	27
4.4 Clients' perception of staff characteristics	28

4.5 Factors influencing clients' health seeking behaviour and their first point of call	29
4.6 Client's assessment of quality of health care provision using the service quality attributes.....	32
4.7 Factors influencing quality of health care provided in the municipality	33
4.8 Comparison of service quality between private and public health facilities....	34
4.9 Audit of the six health facilities	36
CHAPTER FIVE: DISCUSSION.....	37
5.1 Clients' perception of the quality of care provided in the municipality	38
5.2 Factors influencing clients' health seeking behaviour and first point of call ...	38
5.3 Assessing the quality of health care provided by clients using the service quality attribute	39
5.4 Factors influencing quality of health care provision.....	40
5.5 Comparing quality of health care between public and private facilities	41
5.6 Clinical audit conducted for the six facilities.....	41
CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS.....	43
6.1 Conclusion.....	43
6.2 Recommendations	43
REFERENCES.....	45
APPENDIX.....	51
 LIST OF TABLES	
Table 3.1: Number of respondents selected from each health facility	23
Table 3.2: Sample size calculations at 80% power (5% margin of errors at 95% Confidence level) for estimated proportions of factor influencing health seeking behaviour and quality of health care delivery.	23
Table 4.1: Background characteristics of respondents	27

Table 4.2: Client's perception of the quality of care provided	29
Table 4.3: Univariable analysis of factors influencing clients' health seeking behaviour and their first point of call	32
Table 4.4: Final multivariable model for factors influencing clients' health seeking behaviour and their first point of call	34
Table 4.5: Comparison of service quality between private and public health facilities	
37 Table 4.6: Audit of the six health facilities	
39	

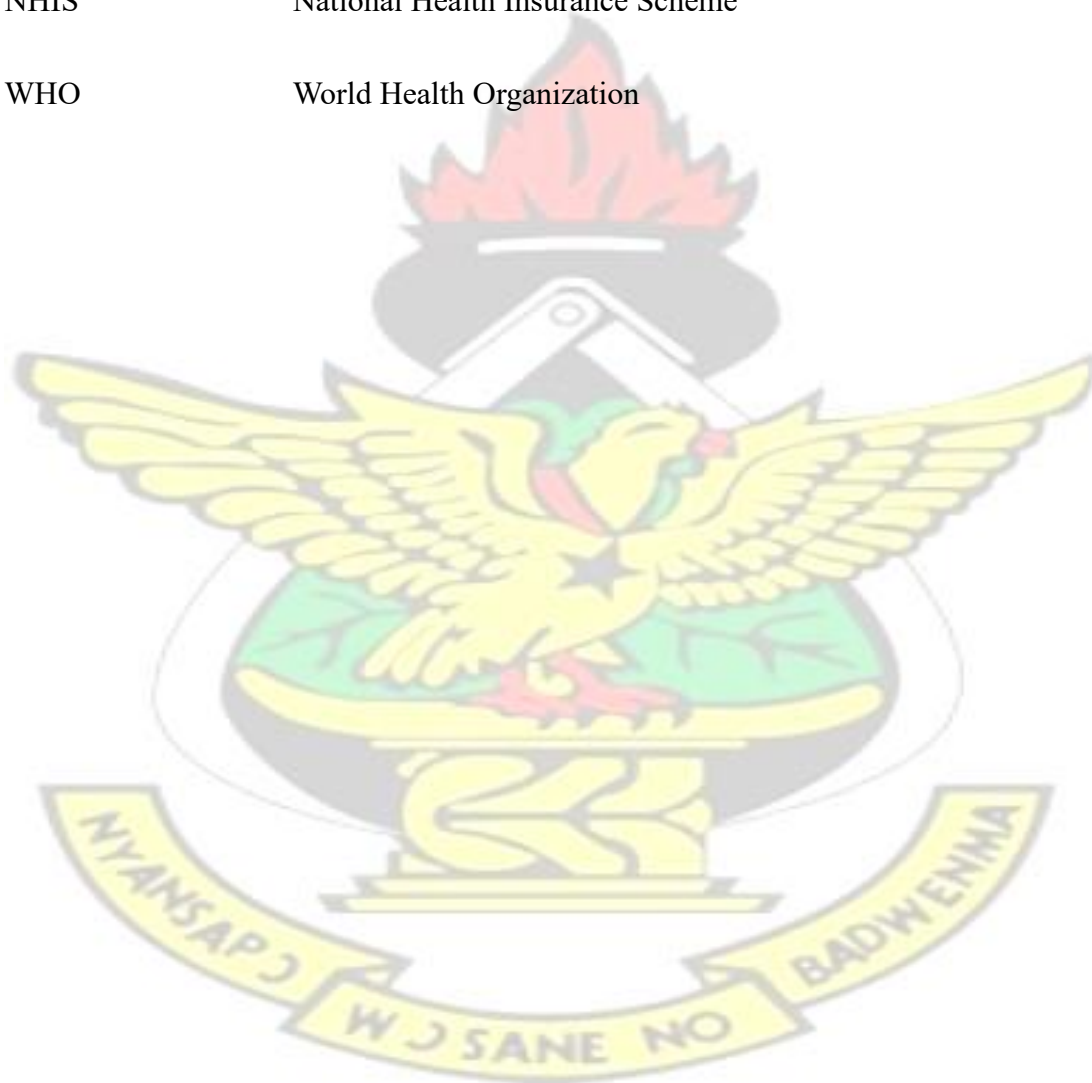
LIST OF FIGURES

Figure 4.1: Frequency of hospital attendants	28
Figure 4.2: Clients' perception of staff characteristics	30
Figure 4.3: Client's assessment of quality of health care provided using the service quality attributes	
35 Figure 4.4: Factors influencing quality health care provision	
36	

LIST OF ABBREVIATIONS/ ACRONYMS

CHRPE	Committee on Human Research Publication and Ethics
EMRs	Electronic Medical Records
GHS	Ghana Health Service
GRNA	Ghana Registered Nurses Association
HIS	Health Information System

HIT	Health Information Technology
ICD	Institutional Care Division
MOH	Ministry of Health
MHD	Municipal Health Directorate
SARM	Service Availability and Readiness Assessment Mapping
NHIS	National Health Insurance Scheme
WHO	World Health Organization



CHAPTER ONE INTRODUCTION

This chapter presents the background, rationale, problem statement, main objective, specific objective and research questions of the study.

1.1 Background to the study

A healthy population, characterized by balanced birth and death rates, and a low incidence of disease, is essential to the development and prosperity of a nation. This can be achieved if the quality of health care provided to the people is successful in the appropriate management of diseases and is available to the large majority of the population at an affordable cost. Thus, quality patient-care should be an underlying principle of a nation's health (Scott and Ashish 2014).

Series of initiatives have emerged globally out of the concern to improve the quality and availability of health services to deal with existing and up-and-coming health problems. The Ministry of Health (MOH), Ghana has been concerned with quality of health care delivery over the years but improvements in quality of care have been slow to some extent, because quality improvement activities have not received adequate priority (Doyle and Haran 2001). Despite the huge interest in quality health care, what constitutes "quality health care" is far from clear (Sofaer and Firminger 2005).

The client's perception of quality of care is critical to understanding the relationship between quality of care and utilization of health services and is measured as an outcome of healthcare delivery. If health programmers are to succeed in communities, it is important to get the opinions of the local people together with their degree of satisfaction with existing services (Chahal et al. 2004). Ascertaining views of clients are considered important as they are the recipients of the services and

increasingly there is recognition that client satisfaction is an important indicator of the quality of health care (Kuzma et al. 2012).

The study is to examine the client's perception of, and assess the quality of health care provided in selected health facilities in Ejisu Juaben Municipality. An assessment of the performance of the health sector at the municipal level, from a clients' perspective would likely disclose certain constraints to provision of quality care, and would provide an opportunity for the prioritization and institutionalization of a quality assurance programmes, to help the health sector achieve its goal of better health and healthcare for those dwelling in the Municipality.

1.2 Problem Statement

For some time now, access to health care has been the focus in developing countries, access to health care and quality of health care cannot be separated.(Offei et al. 2004). Alatinga and Williams (2012) are of the opinion that real improvement in quality of care cannot occur if the user perception is not positively affected. The client's perception of quality of care is fundamental to understanding the relationship between quality of care and utilization of health services.

Clients' health seeking behaviour is dependent on the quality health care being provided at the health care facilities. Clients will seek health care where care is perceived to be of good quality, likewise may refuse to seek health where care is believed to be of poor quality. Offei and colleagues agree that poor quality of health care leads to loss of client's lives, low morale among health workers, trust, respect, and poor recognition of health care providers (Offei et al. 2004).

Factors perceived by client to be affecting clients satisfaction level of quality health care delivery in the Ejisu Juaben Municipality include; poor attitudes of health

professionals deterring people from accessing care, inadequate history taking and lack of physical examination by prescribers to arrive at proper diagnosis, co-payment in some health facilities, long waiting time, inadequate laboratory investigations for proper diagnosis due to National Health Insurance Scheme capitation and lack of health education to promote health (Alatinga and Williams 2012).

The study seeks to assess the quality of care provided, and the factors that influence the quality of health care delivery in the Municipality. It will also find out those factors that influence client health seeking behaviour as well as first point of call in the Municipality.

The clients' perception is significant, as it impacts on their health-seeking behaviour, and utilization of services. Appreciating the clients' perception of quality health care can aid health service planners and policy makers to plan towards satisfying the needs of the clients.

1.3 Rationale for Study

Access to health care and quality of care are inseparable and so client's perception of quality of health care delivery is crucial since it can influence their health seeking behaviour and first point of call.

There have been studies in some African countries including Ghana, affirming that private health care delivery is synonymous with quality health care delivery either than in the public health facilities. Much study has not been done on the quality of health care in the public health facilities (Wangari et al. 2013).

This study seeks to determine client's perception of, and assess the quality of health care delivery in health facilities in the Ejisu-Juaben municipality.

1.4 Main Objective

To determine client's perception of health care delivery and assess the quality of health care provided in health care facilities in Ejisu Juaben Municipality, Ashanti Region, Ghana.

1.4.1 Specific Objectives

1. To determine clients' perception of the quality of care provided in health facilities in Ejisu Juaben municipality.
2. To assess the quality of health care provided in health facilities in the municipality.
3. To examine factors influencing clients' health seeking behaviour and first point of call in Ejisu Juaben municipality.
4. To identify factors influencing the quality of health care delivery in the municipality.

1.5 Research Questions

1. What do clients think about the quality of health care provided in health facilities in the municipality?
2. Are clients satisfied with the quality of health care provided in the health facilities?
3. What factors influence the health seeking behaviour as well as first point of call of clients in the municipality?
4. What factors determine quality of health care delivery in health facilities in the municipality?

KNUST



CHAPTER TWO LITERATURE REVIEW

This chapter gives an account of current knowledge, substantive findings as well as theoretical contribution that has been published by researchers on the topic under study.

2.1 Global Concern for Quality of Health Services

According to the World Health Organization (WHO), the improvement of quality health care is regarded as a permanent responsibility and priority for development of health service. WHO in the early 1980s, encouraged member states to establish measures in improving quality of health services.

Member States in developing countries are now expressing interest in improving quality of health care, with emphasis on outcome as a measure of quality (Aldana et al. 2001).

Some African countries have moved ahead in national quality programme implementation. In 1994, Zambia began a national quality assurance programme ahead of other African countries. The South African National Policy on Quality in Health Care provides measures of improving the quality of care both in the public and private sectors. The aim of government is to assure quality, and constantly improve health care by measuring the breach between standards and actual practice (Mseleku 2007).

2.2 Quality of Health Services in Ghana

In Ghana, several reviews conducted over the last decade have revealed the quality of health care services to be inadequate both by objective measures and in the opinion of health care providers and clients. In 1998 a quality assurance review by staff of Institutional Care Division (ICD), Eastern Regional Health Directorate of Ghana Health Service and Liverpool School of Tropical Medicine recognized that the

monitoring of quality-related activities from both national and regional levels was inconsistent and unstructured. Also varieties of quality indicators developed and in use were not standardized and their definitions were not always alike (Bannerman et al. 2007).

It was further noted that, despite the fact that a good number of guidelines, protocols and standard operating procedures had been developed to improve clinical quality, their propagation and utilization was inadequate.

In 2004 a baseline census of 165 facilities found that a little less than one-third had quality assurance teams in place. A review of several researches on quality of care concluded that poor staff attitude was the most common complaint when clients were interviewed about quality of care received in public health facilities (Bannerman et al. 2007).

To ensure adequate quality of client's care, quality assurance programme expected to become vital to routine health service delivery should be implemented in Ghana (Offei et al. 2004).

2.3 Meaning of Quality

A person's opinion about a service or product depends on what he expects from it. Some of the words used to describe quality include attractive, long-lasting, meeting standards, healthy and value for money. Even though different words are used to explain quality, Offei and colleagues define it as the extent to which a product or service satisfies a person or a group (Offei et al. 2004).

2.4 Quality Health Care

Defining quality in health care is a challenge due to the various disciplines and professionals responsible for client care and the varied clients with countless needs to be satisfied. According to Offei and colleague quality of health care demands attention to the needs of patients and clients, using tested methods that are safe, affordable and reduce deaths, illness, and disability (Offei et al. 2004). Quality health care can also be described as striving for and reaching excellent standards of care. It involves assessing the appropriateness of medical tests, treatments and measures to continually improve personal health care in all fields of medicine (Berwick et al. 1990).

Quality health service can be grouped into two quality dimensions: technical quality and functional quality. Technical quality in the health care sector is defined mainly on the basis of the technical accuracy of medical diagnoses and procedures or the conformance to mentioned professional specifications. Functional quality refers to the manner in which health care service is delivered to patients (Dean and Lang, 2008).

2.5 Quality Assurance in Health Care

According to the ICD, quality assurance is defined as “a planned, systematic approach for continuously assessing, monitoring and improving the quality of health care within available resources to meet the expectations of both providers and users. The Service Provision Assessment Survey of 2002 also defines quality assurance activities as monitoring quality of care, identifying problems and instituting changes that resolve the problem (Ghana Statistical Service et al. 2003). It involves the setting of standards and monitoring to see if there is gap between what is being done and what is expected and addressing the gap on a regular basis (Offei et al. 2004).

2.6 Clients Perception on Quality Health Care

Improving client perceptions of service quality has become a central concern to health managers, policy makers and researchers in recent years. Consequences of low-perceived quality of care include poor compliance with treatment and advice, failure to pursue follow-up care and dissuading others from seeking care (Otani and Harris 2003).

Many experts believe that clients' perception of quality health care should be an element of evaluating health outcome. Perceived quality of service is explained as the client's opinion about a product's overall excellence or superiority, based on perceptions of what is received and what is given (Zeithaml 1988).

Donabedian (1980) argues that patients' perception is important, as it affects their health-seeking behaviour and utilization of services and provides pertinent information to the policy makers, to improve the quality of health care delivery.

Perceived poor quality of health care will result in decreased client's attendance, low revenue, loss of lives and trust among others. On the other hand perceived good quality of health care will enhance client attendance, quality of life and increased revenue.

Some studies suggest that, patients' perceptions of quality of healthcare are highly dependent on the quality of their interactions with their healthcare clinician and team (Clark 2003). Duffy supports the fact that effective communication is essential in quality health outcomes for clients and healthcare teams. The connection that a client feels with his or her clinician can ultimately improve their health mediated through participation in their care, adherence to treatment, and patient selfmanagement (Duffy et al. 2004).

Client's satisfaction is regarded as an outcome of care, and it is one of the major contributors toward better patient compliance, and may result in better clinical outcomes and good perception about a facility. Client's satisfaction with medical care is a multi-dimensional construction reflecting patients' expectations, values and experiences (Baker and Streatfield 1995).

Client satisfaction with the quality of health care is based on considerations such as: affordable fees, promptness of attention, good staff attitude, respect for patients and their rights, provision of privacy and confidentiality, provision of adequate information, availability of drugs and other logistics and clean environment. Turkson (2009) is of the opinion that if health programmes are to succeed, it is vital to seek the views of local people together with their level of satisfaction with available services.

2.7 Assess the Quality of Health Care Provided

In the past few years, there has been a surge in measuring and reporting the performance of health care systems and processes. The rationale for measuring quality improvement is the belief that good performance reflects good-quality practice, and that comparing performance among providers and organizations will encourage better performance (Rockville 2006).

Another way to measure process quality is to determine whether care meets professional standards. This assessment can be done by creating a list of quality indicators that describe a process of care that should occur for a particular type of patient or clinical circumstance and then evaluating whether patients' care is consistent with the indicators. Quality indicators are based on standards of care, which are either found in the research literature and in statements of professional medical organizations or determined by an expert panel (Schuster et al. 2005).

According to Donabedian and Bashshur (2003) quality health care can be assessed using three criteria; structures, processes and outcomes. Structure includes all the factors that affect the context in which care is delivered. This includes the physical facility, equipment, and human resources, as well as organizational characteristics such as staff training and payment methods. These factors control how providers and patients in a healthcare system act and are measures of the average quality of care within a facility or system. Structure is often easy to observe and measure and it may be the upstream cause of problems identified in process.

Process is the sum of all actions that make up healthcare. These commonly include diagnosis, treatment, preventive care, and patient education but may be expanded to include actions taken by the patients or their families. Processes can be further classified as technical processes; how care is delivered, or interpersonal processes; which encompass the manner in which care is delivered. According to Donabedian, the measurement of process is nearly equivalent to the measurement of quality of care because process contains all acts of healthcare delivery. Information about process can be obtained from medical records, interviews with patients and practitioners, or direct observations of healthcare visits (Donabedian 1980).

Outcome contains all the effects of healthcare on patients or populations, including changes to health status, behaviour, or knowledge as well as patient satisfaction and health-related quality of life. Outcomes are sometimes seen as the most important indicators of quality because improving patient health status is the primary goal of healthcare. However, accurately measuring outcomes that can be attributed exclusively to healthcare is very difficult (Donabedian 1980).

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).

A quality assessment measures the difference between expected and actual performance to identify gaps in the health care system, which would serve as a starting point for quality improvement activities.

According to WHO (2006), a health system should be assessed using the six areas or dimensions of quality, including; effective, efficient, accessible, acceptable/patientcentered, equitable, and safe services.

Effective; delivering health care that is adherent to an evidence based and results in improved health outcomes for individuals and communities, based on need.

Efficient; delivering health care in a manner which maximizes resource use and avoids waste.

Accessible; delivering health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need.

Acceptable/patient-centered; delivering health care which takes into account the preferences and aspirations of individual service users and the cultures of their communities.

Equitable; delivering health care which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status.

Safe; delivering health care which minimizes risks and harm to service users (WHO, 2006).

2.7.1 Factors influencing health seeking behaviour and client's first point of call

Health-seeking behaviour has been defined as the activity undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy (MacKian 2003). Individuals seek help on health issues based on a number of reasons and the factors which influence the choice of treatment sources. Access to healthcare facilities in terms of cost of treatment and healthcare provider attitude are also determinants of health seeking behaviour and clients' first point of call. There are indications that cost of prescribed medicines, poor access to facilities and patient delays affect the patronage and utilization of public health services which increase the use of other treatment sources such as community pharmacies, drug peddlers, herbal medicine and religious or spiritual care (Afolabi et al. 2013).

Some studies in other parts of Africa have shown that a variety of factors influence healthcare-seeking behaviour of individuals and these include; poverty (Gilson and McIntyre 2005), distance to health facilities (Rutebemberwa et al. 2009) and previous negative experiences of clients with treatment (Montgomery et al. 2006). Previous studies point out that diversity of other factors such as the relatively low status of women, cultural beliefs and practices, and perception of the cause of the illness may also contribute to delay for individual to access medical care as the first point of call (Rutherford et al. 2010).

Observations indicate that if individuals perceive certain illness to be unrelated to medical causes, they are less willing to go for medical care, or at the very least, may delay the pace at which they take up medical care (Dillip et al. 2012). Shaikh and Hatcher (2005) also report that, the utilization of health care system, public or private, formal or non-formal, may depend on socio-demographic factors, social structures,

level of education, cultural beliefs and practices, gender discrimination, status of women, environmental conditions, the disease pattern and health care system itself.

Education is an essential factor in utilization of healthcare though it is closely intertwined with economic status. An individual may not go to a medical professional or seek care if they don't know the harms of their failure to do so, or the importance of proper treatment.

Lack of adequate health information has been associated with variations in health care utilization at various health facilities; studies have analyzed the role of information on the demand for medical care as essential since more informed clients are likely to visit health facilities when they are sick (Muriithi 2013).

At the level of the health care provider, the quality of medical care in terms of technical efficiency as indicated by availability of essential drugs has been cited as a determinant of demand for health care (Sahn et al. 2003).

According to Akins and colleagues, cost is not important determinant of health care (Akin et al. 1986). However, other studies have also found out that cost is indeed important determinant of demand for health care and can therefore influence individuals health seeking behaviour (Mwabu et al. 1993).

Gender and educational level of individuals have significant influence on the health seeking behaviour. Individuals in households with women of higher levels of education are more likely to use health care facility (Cohen and Levinthal, 2001).

The effect of household size on the demand for healthcare has been found to be positive and significant; it has been observed that large households sought care from non-hospital facilities (Sarma 2003). The above studies show various factors can influence the health seeking behaviour and first point of call of sick individuals.

2.7.2 Factors influencing quality health care provision

The factors affecting quality health care are varied and widespread. Access to health insurance, socioeconomic status, employee capacity, attitude of health staff, effective communication, technology and beliefs about health care, are the most important factors considered in providing quality of care (Mpiani 2005).

2.7.3 Long waiting time and staff attitude

Attitude of health care staff towards patients, long waiting period in the health facilities, and the way in which treatment is communicated to patients are essential factors that influence the quality of health care. Bad attitude of health workers could scare patients and prevent them from even asking important questions that could make treatment helpful (Ghana Health Service, 2007).

Long waiting time for treatment deter lots of patients particularly those in the informal sector who may have to give up a whole day's income in order to seek care in the health facilities. Besides, long waiting period delay treatment and hence can deteriorate health status. Finally, when treatment, such as drug dosage, is not clearly communicated to the patient, the resulting wrong treatment could deteriorate patient's health (Amporfu et al. 2013).

The attitude of health workers has been described by some individual as rude, uncaring, and indifferent. The poor attitude of health care workers and long waiting periods have been found to be the most common complaints made by patients that they think can affect quality of health care provision (Bannerman et al. 2010).

2.7.4 Health worker motivation

Health worker motivation provides a new dimension of quality of care. Low motivation leads to insufficient conversion of knowledge and underutilization of available

resources and hence can influence quality health care delivery. Low health worker motivation has often been identified as a central problem in health service delivery and its quality. Motivated staff will use and manage equipment and materials more effectively than unmotivated staff. Low motivation also adds to the drive factors for the migration of health providers, both from rural areas to the cities and out of the country (Malik et al. 2010).

Health worker motivation can potentially affect the provision of health services. Low morale among the work-force can undermine the quality of service provision and drive workers away from the profession. The quality of the health services, their efficacy, efficiency, accessibility and viability depend on the performance of those who deliver them and it is therefore important to make personnel development a central issue in health policy (Mbilinyi et al. 2011).

2.7.5 Employees' Capacity and Skill

As defined by WHO, the core responsibilities of health service providers for quality improvement are ensuring that “the services they provide are of the highest possible standard and meet the needs of individual service users, their families, and communities. Health worker knowledge, skills, and motivation are critical in ensuring health services are of high quality (World Health Organization 2006).

Highly skilled physicians, nurses, administrators, and auxiliary staff are critical to producing high-quality outcomes and effective quality improvement and therefore growth in health care facilities (Argote 2000). Health facilities need to place great emphasis on recruiting and retaining top-level health professionals accompanied by an effort to encourage these professionals to form working team to promote quality services.

Brown and Duguid, (2003) are of the opinion that, for facilities to provide quality service and achieve growth, they must employ effective human resource strategies concerning selective hiring, and retention of health professionals.

To improve efficiency in service delivery, public health facilities must build the capacity to attract and employ adequate number of high-quality staff because employees' capacity affects quality of health care delivery.

2.7.6 Effective communication

Effective communication between clients and their health care providers has been shown to improve the quality of health care. It is a strong predictor of overall patient satisfaction and associated with improved health outcomes. Clients who can successfully communicate with their providers are more likely to elicit an empathetic response from providers, have a better understanding of their diagnoses and treatment options, and better participate in shared decision making (Bagchi et al. 2009).

In addition, when the medical tests and the nature of the treatment are clearly explained, it alleviates their sense of vulnerability (Wangari et al. 2013).

2.7.7 Availability of essential medicines

A major factor affecting the quality services is the lack of essential medicines, which is a persistent problem in Kenya. The 2013 Service Availability and Readiness Assessment Mapping (SARAM) found that non availability of medicines was the most important barrier to quality cited by healthcare consumers, and a key factor in the underuse of public health facilities (MOH, 2013a).

2.7.8 Technology

Technology for the process of information and data play a significant role in the quality service delivery in health facilities. Technology facilitates service assessment and improvement process and is therefore essential in the delivery of quality health care (Allen 2001) Davis recommends the kinds of quality-related Information Technology investments that the health facilities need to make include: Moving to a paperless system that provides information at the right time (electronic medical records, e-hospital notes with input at bedside). Moving towards bar-coded medications and automatic dispensing, coordinating patient admissions with bed capacity, immediate tracking of filled beds and daily changes in nursing care (Davis et al 2002).

It's clear that technology is giving the health care facilities a much-needed upgrade, from medical translation tools to mobile apps that help patients live healthier lives, the advances in technology could help save money in health care costs and improve the quality of patient treatment. Patients who can connect with their doctors more easily, for instance, won't need to make expensive and perhaps unnecessary trips to their specialists. Doctors will be able to collaborate with other physicians and experts in new ways and use computers to analyze patient and medical data, allowing them to provide quality treatment for their patients (Lee 2013).

Studies have shown that the use of health information technology (HIT) or health information systems (HIS) has increase clinicians' adherence to evidence-based guidelines and has a corresponding impact on patient clinical outcomes(Jamal et al. 2009). Technology in health care is a key since it facilitates the delivery of quality health care service.

A recent systematic review conducted by Buntin and colleagues for the Agency for

Healthcare Research and Quality found that HIT, including Electronic Health Records (EHRs), can increase the delivery of guideline-adherent care, improve quality of care through clinical monitoring and reduce rates of medical errors. Health information technology and in particular, electronic health records have been advertised as cost-effective, sustainable solutions for improving quality in medical care (Buntin et al. 2011).

CHAPTER THREE METHODOLOGY

This chapter describes the study method such as study population; inclusion and exclusion criteria, sampling strategy, sample size estimation, data collection techniques, data analysis and ethical considerations.

3.1 Study Design

The study is an analytical cross-sectional study conducted in six selected health facilities in the Ejisu Juaben Municipality from July to August 2014.

3.2 Study Area

Ejisu- Juaben Municipality, is one of the 27 districts in the Ashanti Region, with its capital at Ejisu. It's a rapidly growing district with the female population of 63,456, representing 52.5% and the male population of 57,413 (47.5%). The municipality is located in the central part of the Ashanti Region and shares boundaries with six (6) other districts in the region namely Kumasi, Kwabre, Afigya Sekyere, Asante Akim North, Asante Akim South and Bosomtwi Kwanwoma Districts. It lies within latitude 1.15°N and 1.45°N and longitudes 6.15°W and 7.00°. There are 24 health facilities comprising 7 hospitals, 5 health centres, 5 clinics and 7 maternity homes in the municipality. Nine of the health facilities are public facilities, 3 are quasigovernment

and the remaining 12 are private facilities. Previous studies conducted in some of the facilities show that most of the clients were satisfied with the quality of care provided.

3.3 Study Population

The study population was clients seeking health care on outpatient basis and health care providers in the selected public and private health facilities within the study period. These are; the Ejisu Government Hospital, Juaben Government Hospital, Onwe Government Hospital, Ernest Medical Centre, Living Waters Hospital and Dakopon Hospital.

3.3.1 Inclusion criteria;

1. Health care facilities in the municipality with at least 100 clients per week
2. Clients who sought care at least once in the selected facility prior to the index visit
3. Clients who were at least 18 years of age (for legal reasons) at the time of the study and consented to be part

3.3.2 Exclusion criteria;

1. Health care facilities in the municipality with less than 100 clients per week
2. Clients who visited the selected facilities for the first time or those under 18 years of age at the time of the study
3. Clients with critical or emergency medical conditions or on admission
4. Clients who declined consent were also excluded from the study

3.4 Sampling Strategy

Six health facilities from the municipality were purposively selected based on the outpatients load, only facilities with at least 100 outpatients per week were selected for

inclusion into the study due to sample size requirements and to reduce the time spent in the field during data collection. Altogether, three private health facilities; Living Waters Hospital, Dakopong Hospital and Ernest Medical Centre and three public health facilities; Ejisu Government Hospital, Juaben Government Hospital, and Onwe Government Hospital were selected. A multi stage sampling strategy was used to select participants from the six health facilities. The estimated number of clients selected from each facility was determined using probability proportional to size (Table 3.1) and the individual clients in each facility was selected by systematic random sampling. The sampling fraction (x) for each day was obtained by dividing the number of outpatient clients above 18 years of age (N) at the time of the selection, by the estimated number of participants (n) selected from the facility that day. The first participant (y) was selected from the first ' x ' individuals using simple random sampling (balloting). The rest of the respondents were selected by a predetermined pattern ($y + x, y + 2x, y + 3x \dots$) till the desired number was reached. On the average 6-12 clients were selected per day in each smaller facility (facilities with less than 500 Out Patient Department (OPD) clients per week), and an average of 1922 clients were selected per day in the larger facilities (facilities with more than 500 OPD clients per week).

For the audit of care provided, a Quality Assurance checklist recommended by the Ghana Health Service (GHS Quality Assurance checklist 2012) for comparing systems, structures and processes with recommended standards in administration, outpatient, medical, surgical, paediatric, maternity and laboratory units was used.

Table 3.1: Number of respondents selected from each health facility

Facility	Average weekly attendance	Estimated sample size
----------	---------------------------	-----------------------

Juaben Government Hospital	900	100
Ejisu Government Hospital	850	95
Onwe Government Hospital	350	38
Living Waters Hospital	1000	110
Ernest Medical center	400	45
Dakopon Hospital	100	12
Total	3600	400

3.5 Sample Size Estimation

Sample size estimation was done using Epi Info version 3.5.1 (Centers for Disease Control and Prevention, Atlanta, USA), at 80% power, 95% confidence interval, and 5% margin of error. Assuming the prevalence of the factors influencing health seeking behaviour and quality of health care provided are similar to those observed by Joshi et al (2014) in Nepal and Mahabubur et al., (2011) in Bangladesh, respectively (Table 3.2), a sample size of 360 had adequate power to detect these factors. Assuming 10% non-respondents' rate, a total sample size of 400 clients was required.

Table 3.2: Sample size calculations at 80% power (5% margin of errors at 95% Confidence level) for estimated proportions of factor influencing health seeking behaviour and quality of health care delivery.

Factors influencing health seeking behaviour	Assumed Proportion (%)	Odds Ratio (OR)	Estimated Sample size
Long waiting time ^a	51.4	1.69	253
Absence of nearby facility ^a (Distance)	18.9	1.29	93
Provided poor quality care ^b	52.4	1.71	256
Type of health care provider ^b	41.5	0.48	360

^aJoshi ., et al (2014) ; ^bMahabubur et al.,(2011)

3.6 Data Collection Techniques

Interviews were conducted with the selected participants using structured questionnaires administered by three (3) trained research assistants in either Twi or English. The audits as well as interviews with the health providers were conducted in English by the MPH candidate using checklists. The data collections tools were pretested at the Church of God Clinic in the same Municipality. This was done to determine whether the concept and questions were understood by the respondents.

3.7 Data Management and Analysis

All data collection forms and questionnaires were kept secured under lock and key in cabinets and were accessible to only the research staff. All databases were secured with password-protected access system

Quantitative data was double entered into Epi Info, cleaned and after range and consistency checks were done, transferred to Stata version 13 (Stata Corp, College Station, Texas, USA) for statistical analysis. Descriptive statistics were used to summarize, clients' perception of the quality of healthcare provided. Categorical variables were compared using the chi-square or Fisher's exact tests and continuous variables compared using percentages frequencies. Factors associated with seeking care in an orthodox health care facility as the first point of call were examined using univariable and multivariable regression with robust error variance to estimate crude and adjusted relative risks (RR) with 95% confidence intervals (CIs). This regression technique allows for an unbiased estimate of the RR when the out-come of interest occurs more than 10% of the time (Zou 2004) was the case for the factors associated with seeking care in an orthodox health facility as the first point of call. $P < 0.5$ was considered statistically significant.

3.8 Limitations of the study

The study excluded the smaller facilities such as the clinics and health centres and used only hospitals mainly due to the sample size, financial and time constraints. It is possible that the quality of care in these smaller facilities might be different from that in the larger facilities. Only six out of the 24 facilities in the municipality were purposively sampled. Therefore, it might not be appropriate to generalize the results to all facilities in the municipality. Translating some questions and words from English to Twi might have been difficult or altered the meaning of the question(s) leading to misunderstanding of the question(s). However, this is expected to be minimal, as the research assistants were trained.

3.9 Ethical Consideration

Permission was obtained from the Municipal Health Directorate and selected health care facilities. The study was approved by the Committee on Human Research, Publications and Ethics (CHRPE) of the School of Medical Sciences, Kwame Nkrumah University of Science and Technology. Informed consent was obtained from study participants prior to selection into the study.

3.10 Dissemination of Study Finding

The research findings will be presented to and discussed with all stakeholders at feedback meetings with the Head and staff of the Ejisu Municipal Health Directorate and a dissemination workshop organized for staff of the Directorate, members of the Ghana Registered Nurses Association (GRNA) and other healthcare providers.

CHAPTER FOUR RESULTS

This chapter presents the main findings of the study including background characteristics of the respondents; client's perception of the quality of care provided, and factors influencing their health seeking behaviour and the quality of health care provided in the selected health care facilities

4.1 Background characteristics of respondents

In all, 400 clients seeking care in six selected facilities were selected and interviewed. In addition 12 heads of the selected facilities and departments were also interviewed and a clinical audit conducted.

Table 4.1 shows the socio-demographic characteristics of the respondents. The mean age of the clients was 35.9 years (standard deviation, 13.2 years). Nearly two thirds (65.5%) of the respondents were young adults between the ages of 20 and 39 years. More than half 233(58.2%) of the respondents were females. Majority (88.9%) of the clients had attained some level of formal education, while about 11% had no formal education. More than half (54.0 %) of the respondents were single. Majority (82.0 %) of the participants were Christians and three quarters were employed. Most (85.0%) of the respondents had registered with the National Health Insurance Scheme.

Table 4.1: Background characteristics of respondents

VARIABLE	FREQUENCY	PERCENTAGE
	N=400	(%)
Age group (years)		
<20	15	3.7
20-29	141	35.2
30-39	121	30.2
40-49	59	14.1

50+	64	16.0
Sex		
Female	233	58.2
Male	167	41.7
Educational background		
No formal education	45	11.1
Basic	16	3.3
Secondary	244	61.3
Tertiary	95	23.7
Marital status		
Single	216	54.0
Married	184	46.0
Religion		
Christian	332	83.0
Moslem/Others	68	17.0
Registered with NHIS		
Yes	340	85.0
No	60	15.0
Occupation		
Skilled	140	35.0
Unskilled	160	40.7
Unemployed	100	25.7

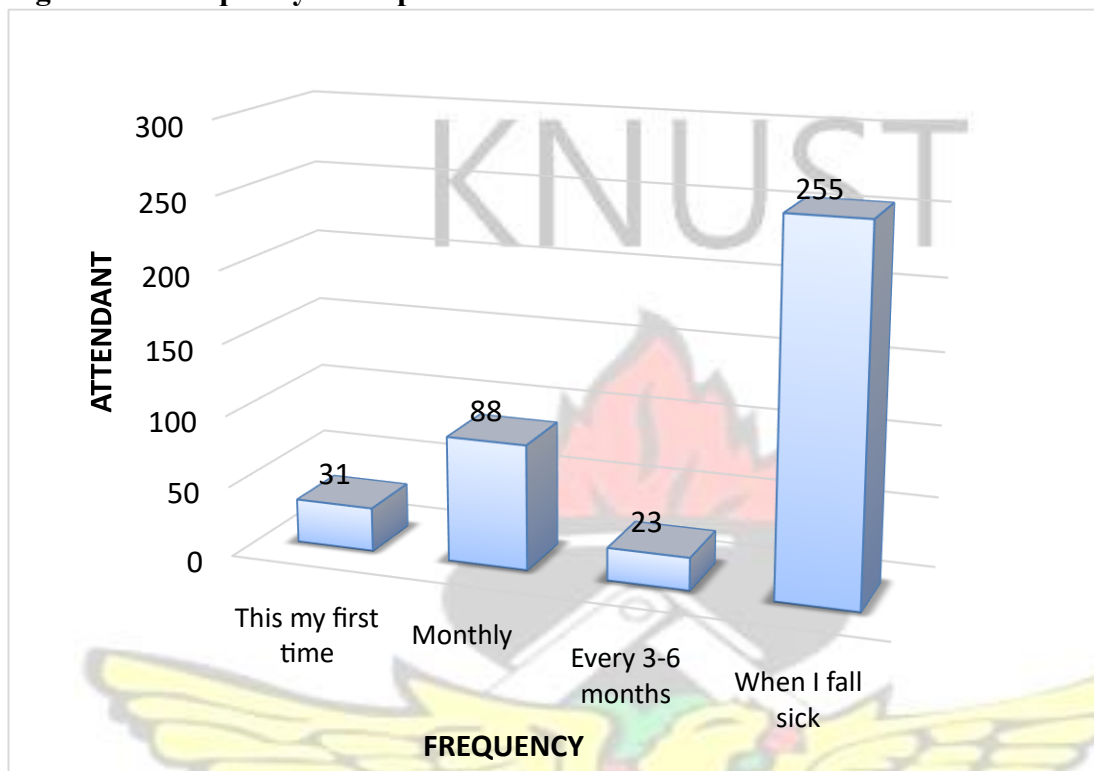
Source: Field survey, 2015 **National Health Insurance Scheme (NHIS)**

4.2 Frequency of hospital attendance

Figure 4.1 below shows the frequency of hospital attendance. Nearly two-thirds (63.7%) of the clients indicated that they visited the hospital when they fell sick. Less than 10% (7.7%) of the clients had visited the facility for the first time, while the

remaining 29.7% said they visited the health facility at monthly or 3-6 monthly intervals

Figure 4.1: Frequency of hospital attendants



Source: Field survey, 2015

4.3 Clients' perception of the quality of care provided

Table 4.2 below shows clients' perception on the general appearance and overall cleanliness of the facility. Regarding the general appearance, over half of the respondents, 213 (53.2%) reported that it was better than expected, 153(38.2 %) said it was about what they expected and only a few 34(8.50%) claimed it was worse than they expected. In relation to the overall cleanliness of the facility, most of the respondents 240(60.0%) reported it was better than they expected, 31(7.7%) thought it was worse than expected.

Table 4.2: Client's perception of the quality of care provided

CLIENT'S PERCEPTION	FREQUENCY	PERCENTAGE (%)
---------------------	-----------	----------------

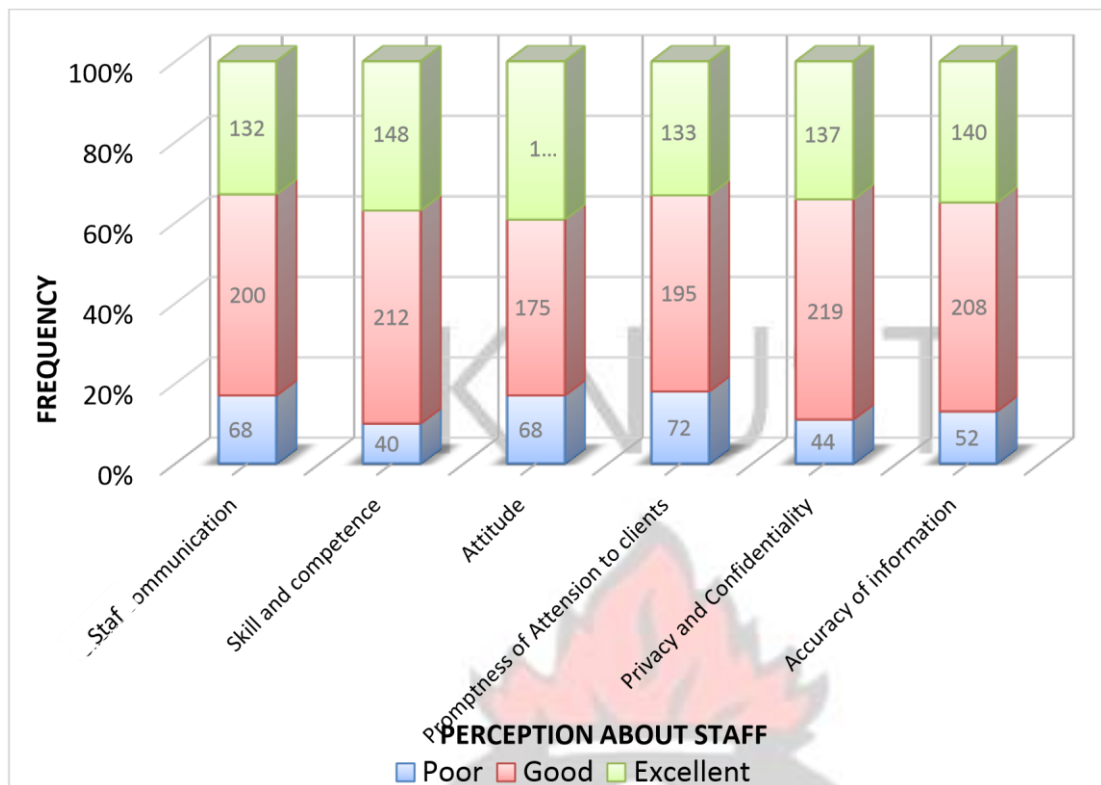
General Appearance		
Worse than expected	34	8.5
About what I expected	153	38.2
Better than expected	213	53.2
Overall Cleanliness		
Worse than expected	31	7.7
About what I expected	129	32.2
Better than expected	240	60.0

Source: Field survey, 2015

4.4 Clients' perception of staff characteristics

Figure 4.2 shows clients' perception of staff characteristics including staff communication to clients, staff skill and competence, staff attitude towards clients and promptness of attention to clients, privacy and confidentiality, as well as accuracy of information provided to clients. Half (50%) of the respondents perceived staff communication skills to be good and a third (33%) rated it as excellent. More than half 212 (53%) of the respondents felt the skill and competence of staff was good, 148 (37.0%) reported it as excellent. More than 80% of respondents rated staff attitude as good 175 (43.7%) and 157 (39.2%) as excellent. Almost half of the respondents 195 (48.7%) indicated the attention to clients to be good and a third, (33.2%) said it was excellent. More than half 219 (54.7%) of respondents considered privacy and confidentiality to be good, 137 (34.2%) considered it to be excellent. Accuracy of health information provided was reported to be good by 208 (52.0%) and excellent by 140 (35.0%) clients. Only few clients reported the staff characteristics to be poor. Overall, most respondents perceived staff characteristics to be of high standard.

Figure 4.2: Clients' perception of staff characteristics



Source: Field survey, 2015

4.5 Factors influencing clients' health seeking behaviour and their first point of call

Overall, 93.50% of the clients sought care in orthodox health facilities as their first point of call. Univariable analysis of factors influencing clients' health seeking behaviour and their first point of call is shown in Table 4.5. Clients between ages of 20-39 years were more likely to use orthodox health facilities as their first point of call compared to those under 20 years old (unadjusted RR 1.13; 95% CI 1.09-1.12; $p=0.01$) or those of least 40 years of age (unadjusted RR 1.05; 95% CI 0.98-1.12; $p=0.01$). Christians (unadjusted RR, 1.78; 95% CI 1.2 2.53; $p=0.01$) compared to Muslims and those of other religious affiliations were more likely to seek orthodox health care as point of first call. Clients whose travel time was less than 30 minutes compared to those whose travel time was more than 30 minutes (unadjusted RR 1.12; 95% CI 1.01-1.24; $p=0.006$), as were clients whose waiting time was less than 30 minutes compared to those whose waiting time was more than 30 minutes (unadjusted RR 1.40; 95% CI 1.01-1.93; $p=0.04$) were more likely to first seek care in an orthodox healthcare

facility. Clients who did not have to pay for the cost of treatment compared to those who had pay at least 10 Ghana cedis (unadjusted RR 1.13; 95% CI 1.02-1.25; $p=0.06$) as were NHIS insured clients compared to noninsured clients (unadjusted RR 1.24; 95% CI 1.06-1.43; $p=0.01$) were also more likely to seek orthodox health care as first point of call. Gender, marital status, occupation and staff attitude were not significantly associated with seeking care in an orthodox health care facility as the first point of call.

Table 4.3: Univariable analysis of factors influencing clients' health seeking behaviour and their first point of call

Variable	Orthodox health care as first point of call, n (%)	Unadjusted relative risk (RR) (95% CI)	P-value
Age group (years)			0.01
<20	15 (100)	1.13 (1.09, 1.19)	
20-39	230 (88.1)	1	
40+	112 (92.5)	1.05 (0.98, 1.12)	
Sex			0.89
Males	149 (89.8)	1	
Females	211 (90.2)	1.00 (0.93, 1.07)	
Marital status			0.35
Single	144 (92.3)	1.08 (0.97, 1.21)	
Married	163 (89.5)	1.05 (0.93, 1.17)	
Divorced	53 (85.6)	1	
Religion			0.03
Christian	307 (93.0)	1.22 (1.07, 1.40)	
Moslem /others	53 (75.7)	1	
Occupation			0.29
Unemployed	86 (87.8)	1	
Skilled	132 (92.9)	1.06 (0.97, 1.15)	
Unskilled	142 (88.6)	1.01 (0.922, 1.10)	
Travel time			0.02
<30mins	273 (92.3)	1.12 (1.01, 1.24)	
30+ mins	78 (82.1)	1	
Waiting time			0.07
<30mins	224 (87.8)	1	
30+mins	124 (93.2)	1.06 (0.99, 1.13)	
Payment			0.06

No payment	209 (92.9)	1.13 (1.02, 1.25)	
<10	77 (90.6)	1.10 (0.98, 1.24)	
10+	74 (82.2)	1	
NHIS registration			0.01
Yes	315 (92.5)	1.24 (1.06, 1.43)	
No	45 (75.0)	1	
Staff attitude affect point of first call			0.41
Yes	300 (90.6)	1.04 (0.95, 1.49)	
No	60 (87.0)	1	

NHIS-National Health Insurance Scheme

On multivariable analysis (Table 4.6) age, religion and registration with the NHIS were significantly associated with clients choosing orthodox health care facilities as first point of call. Clients younger than 20 years were less likely to use orthodox health facilities as first point of call compared to those between the ages of 20-29 (adjusted RR 1.14; 95% CI, 1.10-1.52; $p = 0.03$). Christians compared to nonChristians (adjusted RR 1.19; 95% CI 1.04-1.36; $p=0.01$) were more likely to use orthodox facilities as point of first call as were clients who had registered with the NHIS compared to those who had not registered with the NHIS (adjusted RR 1.12; 95% CI 1.02-1.36; $p=0.05$). Travel time ($p=0.10$), waiting time ($p=0.10$) and payment for services rendered in the facility ($p=0.60$), were no longer significantly associated with choice of orthodox health care facilities as point of first call.

Table 4.4: Final multivariable model for factors influencing clients' health seeking behaviour and their first point of call

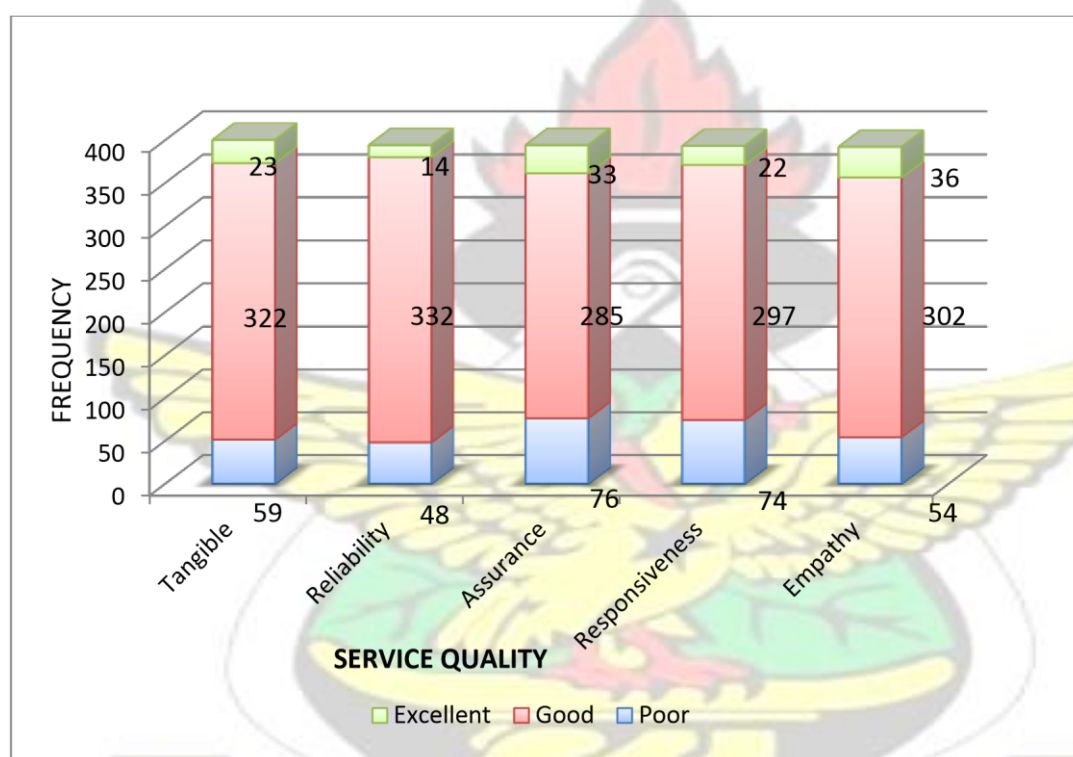
Variable	Orthodox health care as first point of call n (%)	Adjusted relative risk (RR) (95% CI)	P value
Age group			0.03
< 20	15 (100)	1.14 (1.10, 1.22)	
20-39	230 (88.1)	1	
40+	112 (92.5)	1.04 (0.98, 1.12)	
Religion			0.01
Christian	307 (93.0)	1.19 (1.04, 1.36)	
Moslem/ others	53 (75.7)	1	
Travel time			0.10
<30mins	273 (92.3)	1.08 (0.98, 1.19)	
30+mins	78 (82.1)	1	
Waiting time			0.10
<30mins	224 (87.8)	1	
30+ mins	124 (93.2)	1.54 (0.98, 1.12)	
Payment			0.60
No payment	209 (92.9)	1.05 (0.95, 1.13)	
<10	77 (90.6)	1.04 (0.93, 1.17)	
10+	74 (82.2)	1	
NHIS registration			0.05
Yes	315 (92.5)	1.12 (1.02, 1.36)	
No	45 (75.0)	1	

4.6 Client's assessment of quality of health care provision using the service quality attributes

Figure 4.3 summarizes the clients' assessment of quality of care provided in the municipality. Most of the respondents (range 71% - 83%) assessed the physical facility, equipment and staff (tangibles), the ability to carry out services accurately (reliability),

the politeness of employee and their ability to inspire confidence in clients (assurance), the wiliness to help clients and to provide prompt service (responsiveness) and the caring nature of the health staff (empathy) to be good. Less than 20% and 10% of respondents respectively, rated the service quality attribute to be poor and excellent respectively.

Figure 4.3: Client's assessment of quality of health care provided using the service quality attributes



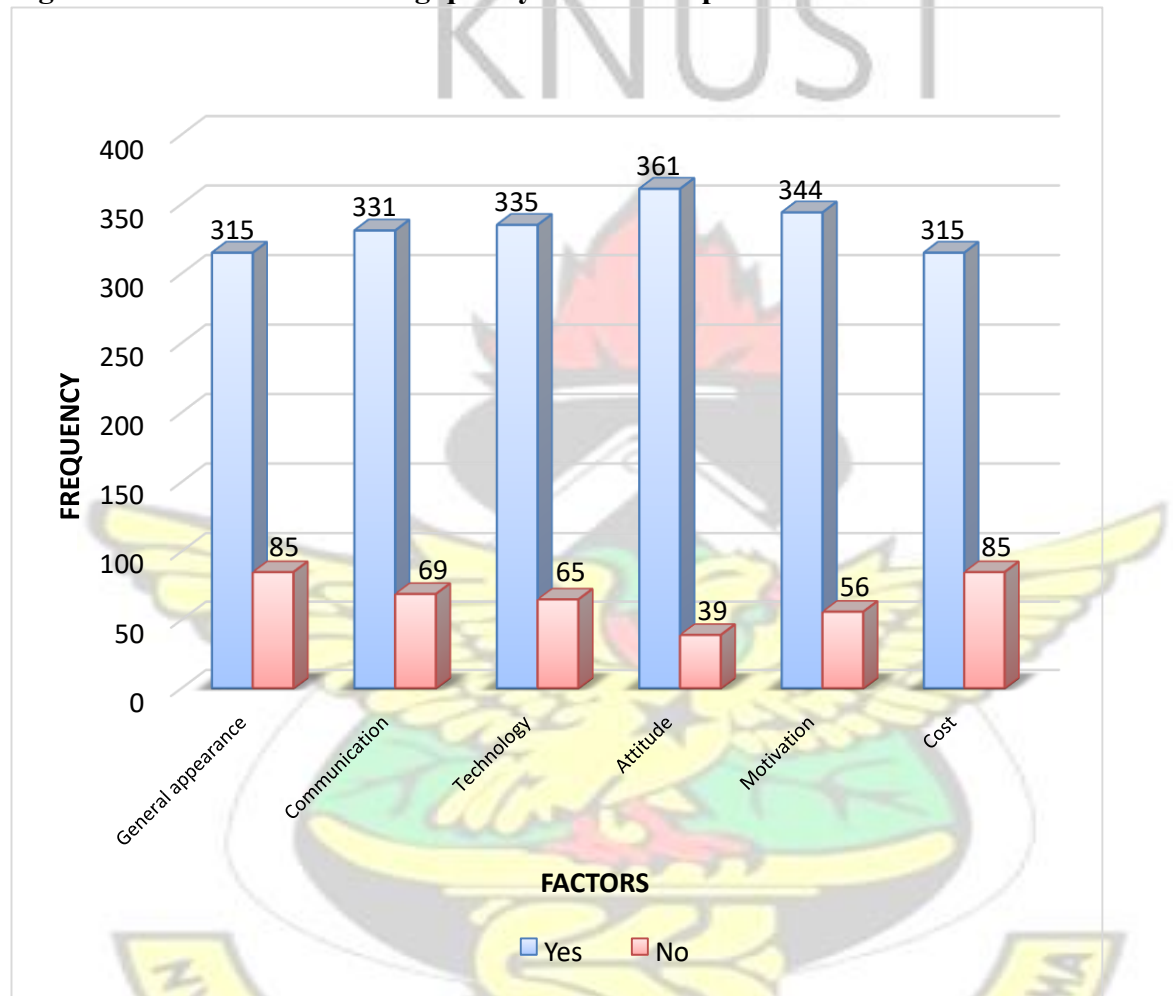
Source: Field survey, 2015

4.7 Factors influencing quality of health care provided in the municipality

Figure 4.4 displays the factors influencing the quality of health care provided in the municipality. For general physical appearance of facility, 315 (78.7%) clients felt it influenced the provision of quality health care. Over 80% of the clients thought that communication and technology were essential factors influencing quality of health care provided. Majority 361 (90.2%) and 344 (86%) of the respondents considered

health care providers' attitude and motivation respectively as important determinants of the quality of health care delivery. On the other hand, majority of the participants 344 (86.0%) did not regard cost (payment) as a barrier to obtaining quality health care; they believed quality health care should be expensive.

Figure 4.4: Factors influencing quality health care provision



Source: Field survey, 2015

4.8 Comparison of service quality between private and public health facilities

Table 4.5 compares the quality of health care (as assessed by the clients) between the private and public health facilities using the service-quality attributes. Tangibles (physical facilities, equipment and staff) were generally considered to be better in the public facilities compared to the private facilities (87.39% vs. 85.29%, $p < 0.001$).

Table 4.5 Comparison of service quality between private and public health

facilities				
Variable	Public (n=230)	Private (n=170)	Chi square (x ²)	P value
Tangibles				
Poor	29 (12.6%)	25 (14.71%)	10.69	0.001
Good	195 (84.7%)	128 (75.29%)		
Excellent	6 (2.6%)	17 (10.00%)		
Reliability				
Poor	40 (17.3%)	13 (7.5%)	14.39	0.002
Good	186 (80.8%)	147 (86.4%)		
Excellent	4 (1.7%)	10 (5.8%)		
Assurance				
Poor	65 (28.2%)	16 (9.4%)	12.56	0.001
Good	152 (66.0%)	134 (78.8%)		
Excellent	13 (5.6%)	20 (11.7%)		
Responsiveness				
Poor	58 (25.2%)	22 (12.9)	11.58	0.001
Good	165 (71.7%)	133 (78.2)		
Excellent	7 (3.0%)	15 (8.8)		
Empathy				
Poor	47 (20.4%)	14 (8.2%)	13.38	0.002
Good	166 (72.1%)	137 (80.5%)		
Excellent	17 (7.3%)	19 (11.1%)		

All degrees of freedom (df) =2

On the other hand reliability (ability to perform service accurately), assurance (politeness of employees and ability to inspire confidence in clients), responsiveness (their willingness to help client and provide prompt service and empathy (the caring nature of the staff) were much better (good or excellent) in the private health facilities compared to the public health facilities (all p-values=0.002 or 0.001).

4.9 Audit of the six health facilities

The results of the audit carried out in the six selected health facilities are summarised in Table 4.5. The audit covered various managerial aspects including; management structures (institution organogram, mission and plan), and functional internal management committees. Functional operational committees included quality assurance, procurement, disciplinary and infection prevention and control committees, functions and services as well as human resource management. Functions and services covered all the services rendered by the facilities, while human resource management comprised the number and categories of staff, as well as staff development and appraisal.

Clinical practices were compared with accepted standards. The overall total score was 128 per facility; the total score assigned to each managerial component related to the number of items that was audited in that category. Living Waters Hospital and Ernest Medical Centre, both private facilities, had the highest and lowest score of 102 and 60 respectively. The remaining health facilities (3 public and 1 private) had scores of 81-99. Unlike the private health facilities, majority of the staff in the public health facilities had the requisite qualifications and the numbers with operational committees and good management structures in place. Nevertheless, strict supervision and monitoring were better in the private facilities compared to the public health facilities (Table 4.5)

Table 4.6: Audit of the six health facilities

Variable	Score	NAME OF FACILITY					
		J G H	E G H	O G H	L W H	E M C	D H
Management structure	5	4	4	4	4	3	3
Operational committees	4	1	2	1	2	-	-
Inst. Mission and plan	4	3	4	3	2	-	-

Basic service provided	12	12	12	11	11	8	9
Basic nursing practices	10	9	9	8	9	8	9
Quality assurance	10	5	6	5	5	-	-
Staff category	14	12	11	13	12	9	9
Staff development	5	2	3	2	3	1	1
Basic OPD practises	5	4	4	3	4	3	3
Basic In-patient care	12	9	8	8	10	6	9
Basic equipment (wards)	10	7	7	6	9	5	7
Basic equipment (maternity)	10	8	8	7	9	5	9
Standard protocols (Mat.)	6	4	4	3	5	3	5
Basic laboratory equipment	10	8	7	6	9	5	7
Standard protocols (Lab)	6	4	4	4	5	3	5
Basic laboratory reagents	5	5	5	4	5	4	5
TOTAL SCORE	128	97	99	88	102	60	81

JGH – Juaben Government Hospital

LWH – Living Waters Hospital

EGH – Ejisu Government Hospital

EMC -- Ernest Medical Centre OGH –

Onwe Government hospital

DH - Dakopon Hospital

CHAPTER FIVE DISCUSSION

This chapter discusses the main study findings in relation to existing literature on the subject as well as the policy implications of these findings.

This study aimed to determine clients' perception of quality of health care provided and assess the managerial functions and services provided compared to the accepted standard in health facilities in Ejisu-Juaben Municipality. Generally, respondents were satisfied with the quality of the healthcare provided. Significant factors associated with choosing orthodox health care facilities as the first point of call were; age of the client, religion and registration with the NHIS. Most respondents regarded the general appearance and overall cleanliness of the health facilities (either private or public) to

be better than their expectation and service quality was generally better in the private facilities compared to the public facilities. With the exception of one private facility which attained less than 50% (47%) of the total score assigned in the audit, all other facilities attained more than 60% of the total score.

5.1 Clients' perception of the quality of care provided in the municipality

Majority of the respondents (80%) were satisfied with the quality of healthcare they received in both public and private facilities and perceived the quality of care in the municipality to be good or excellent. This probably explains why an overwhelming majority (90%) of the clients sought health care in orthodox health facilities as their first point of call. This is in agreement with findings of a previous study in a district in the Central region where most of the indicators of quality used were scored positively by a greater proportion of respondents (Turkson 2009). These findings suggest that the quality of health care delivery in the two districts was high as most clients were satisfied with the quality of health care they received.

Another study in the upper East Region of Ghana shows that most clients are satisfied with quality of care received at the health facilities they visit which indicates good health care delivery by providers (Aliu and Mahamadu 2014)

5.2 Factors influencing clients' health seeking behaviour and first point of call

Health seeking behaviour of individuals is determined by a number of factors. Similar to the findings of a previous study by Koenig et al (2012), religious affiliation was significantly associated with health seeking behaviour of clients. Christians were more likely to seek care in an orthodox health care facility as the first point of call compared to individuals of other religions. Consistent with the findings of a study in Uganda, clients who lived far from health facilities were less likely to seek health care due to

long duration of travel time (distance) and cost of travel. Increasing distance would increase the likelihood of a household opting for selftreatment rather seeking care in the formal sector (Rutebemberwa et al. 2009). Long waiting time has been a key complaint of clients seeking care in health facilities (Bannerman et al. 2010). In agreement with the results of a previous study, clients were less likely to seek care in an orthodox health facility if the waiting time for consultation was more than 30 minutes. On the other hand, Mutirith (2013) is of the view that waiting time does not affect the health seeking behaviour of some individuals, as some clients can wait for a long time at a health facility. For low income groups, waiting time in a public facility where user fees are low can be taken as a substitute for payment of high user fees, waiting for treatment at a facility is synonymous with using time as a resource to pay for quality service where fees are low (Muriithi 2013). Clients who had registered with NHIS were more likely to visit orthodox health care facilities as the first point of call. This is consistent with findings of Aliu and Mahamadu (2014) who reported that the introduction of the NHIS had led to a tremendous increase in out-patient-department because little or no payment was made for cost of care in the health facilities. Similarly Cisse (2011) found user fees (payment) to be key in determining health seeking behaviour of sick individuals.

5.3 Assessing the quality of health care provided by clients using the service quality attribute

All the service quality attributes (tangibles, reliability, assurance, responsiveness and empathy) were generally reported to be good in both public and private health facilities. However tangibles were rated better in the public than in the private health facilities. Nevertheless, quality of care was reported to be better in private than in the public facilities. A study conducted in three African countries including Ghana affirms

quality of health care to be better in private facilities compared to public facilities. This is mainly due to better provider-client interactions and adherence to recommended protocols in private facilities. Doctors spend much time with their clients and so they are able to ask questions and treatment regimen are explained better in the private than the public health facilities (Coarasa et al. 2014)

5.4 Factors influencing quality of health care provision

Effective communication between clients and their health care providers has been shown to improve the quality of health care. It is a strong predictor of overall patient satisfaction and associated with improved health outcomes (Bagchi et al. 2009). The results of this current study compared well with an earlier study in Kenya where most clients felt communication influenced the quality health care provided (Wanjau et al. 2012).

As observed in a recent systematic review, HIT systems including electronic health records can improve the quality of care through clinical monitoring and reduce rates of medical errors. Consequently, HIT and in particular, electronic health records have been touted as cost-effective, sustainable solutions for improving quality in medical care (Buntin et al. 2011). Most clients in the current study possibly agreed with this notion as they considered technology to have a positive impact on the quality of health care provided.

Poor attitude of health workers has been found to be a factor influencing quality of health care delivery. It has been suggested that health care workers' attitudes and beliefs can influence the quality of health care provided to their clients (Bannerman et al. 2010). In agreement with the above findings, majority of the clients in the current study felt that staff attitude was associated with the quality of health care provided.

The finding that health worker motivation influences quality of health care provided is supported by a study in Tanzania where health worker motivation was found to affect the quality of health services provided (Mbilinyi et al. 2011). As observed in this study, Wanjua and colleagues found that financial resources influenced the quality of health services in the public health sector in Kenya (Wanjau et al. 2012). Consistent with the findings of a previous study (Rademakers et al. 2011), the physical infrastructure of the health care facility also determined patients' overall assessment of the quality of care provided.

5.5 Comparing quality of health care between public and private facilities

While the public facilities had better infrastructure, all the other attributes were adjudged to be better in the private health facilities. This may suggest that most of the public health facilities might have the resources to deliver quality health care in the municipality. However, most respondents generally perceived quality of health care in the private health facilities to be better than that of the public sector. In a comparative analysis of the quality of health care delivery in the public and private sectors in Tanzania, Kenya and Ghana, quality of health provided in private health facilities was adjudged to be better than that of the public sector (Hutchinson et al. 2011). This could be as a result of proper and strict supervision at the private health facility. On the contrary, in Vietnam the quality of care was found to be better in public health facilities compared to private facilities, which was attributed to the better infrastructure and equipment in the public sector (Tuan et al. 2005).

5.6 Clinical audit conducted for the six facilities

Generally most of the facilities had the basic infrastructure and equipment for the provision of quality health. Unlike the private health facilities, majority of the staff in the public facilities have the requisite qualifications and numbers, nevertheless quality

of care was considered to be better in the private facilities possibly due to the better supervision in the latter. These findings may suggest that it is not sufficient to have the necessary infrastructure and human resource, but the necessary monitoring and supervision is also required to provide quality health care services. Indeed, Coarasa et al. (2014) contend that better infrastructure and training may be necessary, but alone these are not sufficient to provide high quality of care. It thus appears the private health facilities were more efficient in using limited resources to deliver quality health care to satisfy their clients (Andaleeb 2000). Previous studies have shown that the quality of care in private health facilities is generally better than those in public facilities (for facilities at similar levels of the health care delivery system) this is mainly due to better provider-client interactions and adherence to recommended protocols in private facilities (Hutchinson et al, 2011; Coarasa et al, 2014). For example, in India provider-client interactions and treatment accuracy were highest in private sector clinics with public doctors. The same doctor spent more time, asked more questions, was more likely to adhere to recommended clinical protocols, and had higher treatment accuracy in a private than public practice. While this often leads to better client satisfaction, it may come at a higher cost to the client in the private sector (Coarasa et al, 2014).

CHAPTER SIX CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Most clients perceived the general appearance and overall cleanliness of both private and public health facilities to be good. Generally, staff characteristics were also adjudged to be acceptable. Client age, religion and registration with the NHIS, were significantly associated with clients' choice of orthodox health care as their first point of call when sick. Using the service quality attributes (tangibles, reliability, assurance, responsiveness and empathy) the quality of health care provided in these facilities was generally rated as good in both private and public health facilities. Even though tangibles were adjudged to be much better in the public than private health facilities, all the other attributes were generally better in the private facilities. Effective communication, technology, staff attitude, health worker motivation and cost were perceived as factors influencing the quality of health care provided.

Generally most of the facilities were equipped with the basic infrastructure as well as managerial structures and provided basic services for the people in the municipality. Comparatively, the public health facilities had more qualified staff with the requisite professional qualifications with management structures and functional operational committees. Nevertheless, strict supervision and monitoring was better in the private facilities compared to the public health facilities. Overall, it is commendable that quality of health care was perceived to be good across facilities.

6.2 Recommendations

In view of the above findings it is recommended that:

Municipal Health Directorate (MDH)

The MDH should institute regular customer-relations training courses to help staff improve and maintain good inter-personal skills with their clients.

Quality assurance teams should also be established in both private and public health facilities to continuously ensure that practice is always in line with approved standards. Regular audits should also be organized to monitor the quality of health care provided in the municipality. The MHD should consider introducing a policy that will ensure that qualified staffs are recruited with regular maintenance of facility infrastructures and equipment to provide quality health care to clients.

Health care facilities

The management board /committee in the various facilities should organize regular in-service training on customer care for all categories of staff in order to maintain good client-staff relationship. Functional operating committees should be established in all the facilities for the smooth running of the facilities.

Public health facility heads should maintain strict supervision and monitoring of all categories of staff in their institution to ensure the provision of high quality of care in these facilities.

Low staff motivation can be a major contributing factor to poor service quality in healthcare facilities. Therefore facility heads should motivate their staff in order to get the best out of them. Health workers should be treated as internal customers of the health system to enable them deliver good quality care to patients (external customers). Health care providers should educate clients on the patient charter and encouraged them to lodge their complaints with the complaints desk and suggestion boxes.

Clients

Clients should make a conscious effort to read the patient's charter as well as other issues concerning their rights displayed at vantage points/notices in most facilities and from other sources.

Further research

Further research is required to determine factors that limit the quality of health care provision in the municipality and how the poor attitude of staff affects the quality health care provided.

REFERENCES

- Afolabi M. O., Daropale V.O., Irinoye A I and A, A. (2013). Health-seeking behaviour and student perception of health care services in a university community in Nigeria. *Scientific Health Research*. 5: 817-824. doi:10.4236/
- Akin, J.S., Griffin, C.C., Guilkey, D.K. and Popkin, B.M. (1986). The demand for primary health care services in the Bicol region of the .Philippines. *Economic Development and Cultural Change*: 34 (4), 755-782, 207.
- Alatinga, K.A. and Williams, J.J. (2012). Does membership in mutual health insurance guarantee quality health care? Some evidence from Ghana. *European Journal of Business and Social Sciences* 1(3): 103-118.
- Aldana, J.M., Piechulek, H. and Al-Sabir, A. (2001). Client satisfaction and quality of health care in rural Bangladesh. *Bulletin of the World Health Organization* 79(6): 512-517.
- Aliu, M. and Mahamadu, S. (2014). Assessing the quality of primary health care provided by accredited service providers in the Upper East Region, Ghana. *International Journal of Economics, Commerce and Management* 11(10).

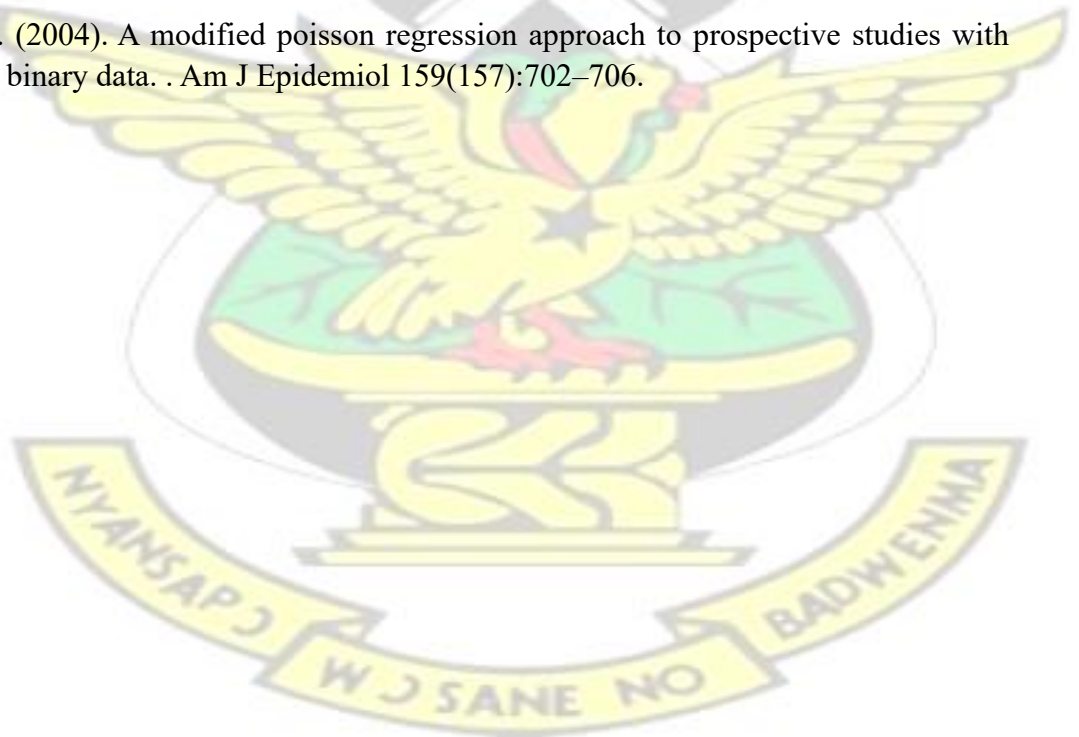
- Allen, T.J. (2001). Managing the Flow of Technology. Technology Transfer and the Dissemination of Technological Information within the RandD Organization,.
- Amporfu E., Nonvignon J., Ampadu S.(2013). Effect Of Institutional Factors On The Quality Of Ghana's Healthcare Delivery. Journal of African Development Spring Volume 15 (1) 116-117.
- Andaleeb, S.S. (2000). Public and private hospitals in Bangladesh: service quality and predictors of hospital choice. Health Policy and Planning 15(1): 95-102.
- Argote, L. (2000). Organizational learning, retaining and transferring knowledge. New York, Springer.
- Bagchi, A.D., af Ursin, R. and Leonard, A. (2009). Focus on Quality: Communication in the Health Care Encounter, Mathematica Policy Research, Incorporated.Princeton N J.
- Baker, R. and Streatfield, J. (1995). What type of general practice do patients prefer? Exploration of practice characteristics influencing patient satisfaction. The British Journal of General Practice 45(401): 654.
- Bannerman, C., Larbi W S., Plange, A., Brobbey, Y., Konadu, N.Y., M.Osei, Asare, W., Boye, C., Sarpong, A. (2010). Customer Care Mystery Shopping Report, Ghana Health Service
- Bannerman, C., Tweneboah, N.T., Offei, A., Nicholas, T.A. and Acquah, S. (2007). Quality Assurance Strategic Plan for Ghana Health Service. Institutional Care Division, Accra, Ghana Health Service.
- Berwick, D.M., Godfrey, A.B., Roessner, J., Plsek, P.E. and Garvin, D.A. (1990). Curing health care: new strategies for quality improvement; a report on the national demonstration project on quality improvement in health care, San Francisco, Calif, Jossey-Bass Publishers.
- Buntin, M.B., Burke, M.F., Hoaglin, M.C. and Blumenthal, D. (2011). The benefits of health information technology: a review of the recent literature shows predominantly positive results. Health Affairs 30(3): 464-471.
- Chahal, H., Sharma, R. and Gupta, M. (2004). Patient satisfaction in public outpatient health care services. Journal of Health Management 6(1): 23-45.
- Cisse, A. (2011). Analysis of health care utilization in Côte d'Ivoire. Department of Economics Research and management. University of Cocody, Abidjan.23-24
- Clark, P.A. (2003). Medical practices' sensitivity to patients' needs: opportunities and practices for improvement. The Journal of Ambulatory Care Management 26(2): 110-123.

- Coarasa, J., Das, J. and Hammer, J. (2014) "Private vs. Public" Finance & Development: A Quarterly Publication of the International Monetary Fund: 51 (4): 34-36.
- Cohen, W. Levinthal, A D, (2001). Technology Evaluation and Demand Heterogeneity : Implications for product and Process Innovation, management science, 47,611-628.
- Cooper, Z.N., McGuire, A., Jones, S. and Le Grand, J. (2009). Equity, waiting times, and NHS reforms: retrospective study. BMJ 339: b3264.
- Dillip, A., Alba, S., Mshana, C., Hetzel, M.W., Lengeler, C., Mayumana, I., Schulze, A., Mshind, H., Weiss, M.G. and Obrist, B. (2012). Acceptability—a neglected dimension of access to health care: findings from a study on childhood convulsions in rural Tanzania. BMC Health Services Research 12(1): 113.
- Donabedian, A. (1980). The definition of quality and approaches to its management. Ann Arbor, MI: Health Administration Press.
- Donabedian, A. and Bashshur, R. (2003). An introduction to quality assurance in health care. New York: Oxford University Press.
- Doyle, V. and Haran, D. (2001). Health reforms and quality of care: lessons learnt from Ghana and Central America. Quality in Health Care-Strategic Issue in Health Management.15(1) 67-71.
- Duffy, F.D., Gordon, G.H., Whelan, G., Cole-Kelly, K. and Frankel, R. (2004). Assessing competence in communication and interpersonal skills: the Kalamazoo II report. Academic Medicine 79(6): 495-507.
- Ghana Health Services, Ministry of Health, Annual Report by Policy Planning, Monitoring and Evaluation Division (2007). Accra.
- Ghana Statistical Service, Ministry of Health, Health Research Unit and ORC Macro (2003). Ghana Service Provision Assessment Survey 2002. Accra, Ghana Statistical Service.
- Gilson L. and McIntyre D. (2005). Removing user fees for primary care in Africa: the need for careful action. . British Medical Journal 1;331(7519):762-5.
- Hutchinson, P.L., Do, M. and Agha, S. (2011). Measuring client satisfaction and the quality of family planning services: a comparative analysis of public and private health facilities in Tanzania, Kenya and Ghana. British Medical Centre Health Services Research 11(1): 203.

- Jamal, A., McKenzie, K. and Clark, M.J. (2009). The impact of health information technology on the quality of medical and health care: a systematic review. *Health Information Management Journal* 38(3): 26.
- Joshi, C., Torvaldsen, S., Hodgson, R. and Hayen, A. (2014). Factors associated with the use and quality of antenatal care in Nepal: a population-based study using the demographic and health survey data. *BMC Pregnancy and child birth* doi:10.1186/1471-2393-14-94
- Kuzma, J., Solomom, J., Masono, A., Manari, B., Hopping, J., Pasum, E., Yvia, J. and Tenge, P. (2012). Assessment of patients' satisfaction with rural health services. *Contemporary PNG Studies. DWU Research Journal* 17 (6)
- Lee, E. (2013). 5 Ways Technology is transforming Health care,. BMO Harris Bank.
- MacKian, S. (2003). A review of health seeking behaviour: problems and prospects. *Health Systems Development. University of Manchester, Manchester, UK.*
- Malik, A.A., Yamamoto, S.S., Souares, A., Malik, Z. and Sauerborn, R. (2010). Motivational determinants among physicians in Lahore, Pakistan. *BMC Health Services Research* 10(1): 201.
- Mbilinyi, D., Daniel, M.L. and Lie, G.T. (2011). Health worker motivation in the context of HIV care and treatment challenges in Mbeya Region, Tanzania: a qualitative study. *BMC Health Services Research* 11(1): 266.K
- Ministry of Health, Service Availability Readiness Assessment Mapping (SARAM) report, 2013, Nirobe Kenya.
- Montgomery, C., Mwengee, W., Kong'ong'o, M. and Pool, R. (2006). To help them is to educate them': power and pedagogy in the prevention and treatment of malaria in Tanzania. *Tropical Medicine of International Health*. 11:1661–9.
- Mpiani, B. (2005). "Ghana Health Service Customer Care Training". Unit 1, Introduction to Customer Service Training in GHS.
- Mseleku, T. (2007). A Policy on Quality In Health Care For South Africa. Pretoria National Department of Health.
- Muriithi, M.K. (2013). The Determinants Of Health-Seeking Behavior In A Nairobi Slum, Kenya. *European Scientific Journal* 9(8).
- Mwabu, G., Ainsworth, M. and Nyamete, A. (1993). Quality of medical care and choice of medical treatment in Kenya: an empirical analysis. *Journal of Human Resources*: 838-862.
- Offei, A.K., Bannerman, C. and Kyeremeh, K. (2004). Health Care Quality Assurance Manual. Accra: Ghana Health Service.

- Otani, K. and Harris, L.E. (2003). A paradigm shift in patient satisfaction assessment. *Medical Care Research and Review* 60(3): 347-365.
- Rademakers, J., Delnoij, D. and de Boer, D. (2011). Structure, process or outcome: which contributes most to patients' overall assessment of healthcare quality? *BMJ Quality & Safety*: 20(4): 326-31 doi 10.1136.
- Rahman, M., Islam, M.M., Islam, M.R., Sadhya, G. and Latif, M.A. (2011). Health service seeking behavior and factors associated with under utilization of public health care facilities in a rural area of Bangladesh. *International Journal of Pharmacy Teaching and Practices*. 2(3,): 108 - 116
- Rockville, M. (2006). National Healthcare Disparities Report Agency for Healthcare Research and Quality. USA. *Resources of Health Service Research*. 41(2): xii-xix
- Rutebemberwa, E., Kallander, K., Tomson, G., Peterson, S. and Pariyo, G. (2009). Determinants of delay in care seeking for febrile children in eastern Uganda. *Tropical Medicine & International Health* 14(4): 472-479.
- Rutherford, M.E., Mulholland, K. and Hill, P.C. (2010). How access to health care relates to under-five mortality in sub-Saharan Africa: systematic review. *Tropical Medicine & International Health* 15(5): 508-519.
- Sahn, D.E., Younger, S.D. and Genicot, G. (2003). "The demand for Health Care Services in Rural Tanzania". *Oxford Bulletin of Economics and Statistics*: 65(2)241-259.
- Sarma, S. (2003). Demand for outpatient health care in rural India: a nested multinomial logit approach. Canadian Economics Association Conference. University of Manitoba: Doctoral Dissertation.
- Schuster, M.A., McGlynn, E.A. and Brook, R.H. (2005). How good is the quality of health care in the United States? *Milbank Quarterly* 83(4): 843-895.
- Scott Kirstin, W. and Jha Ashish K. (2014). Putting quality on the global health agenda. *New England Journal of Medicine* 371(1): 3-5.
- Shaikh, B.T. and Hatcher, J. (2005). Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. *Journal of Public Health* 27(1): 49-54.
- Sofaer, S. and Firminger, K. (2005). Patient perceptions of the quality of health services. *Annu. Rev. Public Health* 26: 513-559.

- Tuan, T., Dung, V.T.M., Neu, I. and Dibley, M. (2005). Comparative quality of private and public health services in rural Vietnam. *Health Policy and Planning*, . 5(20): 319-327. .
- Turkson, P. (2009). Perceived quality of healthcare delivery in a rural district of Ghana. *Ghana Medical Journal* 43(2): 65-70.
- Wangari, M.B., Anyango, D.M.O. and Wanjau, K. (2013). Factors affecting provision of service quality in the public health sector: A case of Kenyatta national hospital. *Prime Journal of Business Administration and Management* 3(8): 1149-1160
- Wanjau, K.N., Muiruri, B.W. and Ayodo, E. (2012). Factors Affecting Provision of Service Quality in the Public Health Sector: A Case of Kenyatta National Hospital. *International Journal of Humanities and Social Science*: (7)114-125.
- World Health Organization (2006). *Quality of care: a process for making strategic choices in health systems*. Geneva: World Health Organization.
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: a meansend model and synthesis of evidence. *The Journal of Marketing*: 3(52) 2-22.
- Zou G. (2004). A modified poisson regression approach to prospective studies with binary data. . *Am J Epidemiol* 159(157):702–706.



APPENDIX

QUALITY HEALTH CARE DELIVERY-QUESTIONNAIRE

SECTION A

Study ID:

--	--	--	--

Interview date:

--	--	--	--	--	--

Background data

1. Facility name.....

M F

--	--

2. Gender

3. How old are you now (in completed years)?

--	--

4. What is your marital status now? **(Tick (√) one of the options)**

1.Single	2.Married / cohabiting
----------	------------------------

5. What is your religion?

1. Christian	2. Moslem/Others.....
--------------	-----------------------

6. What is the highest level of school you have attended?

1. No formal education	2. Formal education
------------------------	---------------------

7. Have you registered with National Health Insurance Scheme?

1.Yes	2.No
-------	------

8. What do you do for a living? (occupation) (Tick (√) one of the options)

1. Professional-teacher, nurse, accounts, admin

2. Clerical/secretarial

3. Vocational-seamstress, hairdresser

4. Trader/business woman/food seller

5. Farmer/labourer/domestic worker

6. Unemployed

SECTION B

CLIENT'S HOSPITAL ATTENDANCE

9) How often do you visit this facility? (Tick (√) one of the options)

1 This my first time	2. Monthly
3. Every 3 - 6 Months	4. When I fall Sick

10) When was the last time you visited this facility for treatment?

1. About a month	2. 2-6 months	3. A year and above
------------------	---------------	---------------------

SECTION C

CLIENTS' PERCEPTION OF THE QUALITY OF CARE PROVIDED

11) Perception of the general appearance of the facilities (Tick (√) one of the options)

1. Much worse than expected	2. Somewhat worse than expected
3. About what I expected	4. Better than expected
5. Much better than expected	

12) Perception on overall cleanliness of the facility

1. Much worse than expected	2. Somewhat worse than expected
3. About what I expected	4. Better than expected
5. Much better than expected	

1 = poor 2 = Good 3 = Excellent

Indicators (Tick (√) n of the options)

- 13 What is your view on how staff communicate to clients during service delivery
- 14 What do you think about the skill and competency of the staff in the facility?
- 15 What do you think about the attitudes of health workers in the facility
- 16 What is your opinion on promptness of attention to clients?
- 17 What is your view on provision of privacy and confidentiality in the facility?
- 18 What is your view on provision of adequate information for clients?

1	2	3

SECTION D

FACTORS INFLUENCING THE CLIENTS HEALTH SEEKING BEHAVIOR AND FIRST POINT OF CALL

19) What do you do when you are sick for the first time (Tick (√) one of the options)

1. Seek orthodox care	2. Seek non- orthodox care
-----------------------	----------------------------

20. How long did it take to reach the facility from your residence? (travel time) (write in minutes)	
21. What as your mode of transport to the facility? (1.vehicle) (2. By foot)	
22. How long did you wait before being seen by a prescriber? (waiting time) (write in minutes)	
23. How much did you pay for your service? (write in Ghana cedi)	

1 = Yes 2 = No

Indicators (Tick (✓) one of the options)	1	2
24) Does staff attitude influence your choice of health care? 25) Does distance matter to you when seeking health care?		
26) Does waiting time influence your choice in seeking health care?		
27) Does your past medical experience influence your health seeking behaviour?		

SECTION E

ASSESSING THE QUALITY OF HEALTH CARE PROVIDED (SERQUAL)

1 = poor 2 = Good 3 = Excellent

Indicators (Tick (✓) one of the options)	1	2	3
28 How would you assess the physical facility and equipment (tangibles)?			
29 How would you assess their ability to perform service accurately? (Reliability)			
30 How would you assess the politeness of employees and their ability to inspire confidence in clients (Assurance)			
31 How would you rate their willingness to help clients and provide prompt service? (Responsiveness)			
33 How would you describe the caring nature of the staff in the facility (Empathy?)			

FACTORS INFLUENCING QUALITY HEALTH CARE PROVISION

1 = Yes 2 = No (Tick (✓) one of the options)

Indicators	1	2
34 Do you think communication in health influence quality of health care delivery?		
35 Can level of technology influence quality of health care delivery?		
36 Do you think the attitude of health care staff has an effect on quality health care delivery?		
37 Do you think health worker motivation can influence quality of health care delivered at this facility?		
38 Would you consider cost(payment) when seeking quality health care?		

CHECKLIST FOR FACILITY AUDIT

INSTITUTIONAL DETAILS

1 Name of Institution.....

2 Regions.....

3 Date.....

4 Districts.....

MANAGEMENT STRUCTURES

		YES	NO
1	Is there an institutional organogram?		
2	Is the organogram displayed?		
3	Is there an internal Management Committee?		
4	Is the committee functioning?		
5	Has the committee had any Management training / orientation as a team?		

Operational Committees

		Available		Functional?	
		YES	NO	YES	NO
	Quality Assurance Committee				
	Procurement Committee				
	Infection prevention and control				
	Disciplinary committee				

(Functionality – regular meetings, minutes, implementation of decisions, evidence of teamwork)

Institutional Mission and Plans

		YES	NO
No	Item / Statement		
1	Do you have a vision or mission statement for the institution?		
2	If yes, is it displayed (wards, offices, public)?		
3	Is there any action plan for the institution for the current year?		
4	Are medical staffs involved in setting the priorities for the plan?		

1. What proportion of your planned activities were you able to carry out last year...
2. What were the reasons for not completing all your activities?
3. Why is there no action plan.....

FUNCTIONS AND SERVICES

Do you perform/ provide the following functions and services in the facility?

	BASIC SERVICES	YES	NO
1	24 hour services		
2	Outpatient		
3	Emergency		
4	Pharmacy		
5	Public health		
6	Laboratory		
7	Obstetrics and Gynaecology		
8	Medical		
9	Surgical		
10	In patient		
11	Outreach services		
12	Referrals (Ambulance)		

QUALITY ASSURANCE SYSTEM

Assess the following

No	Items	YES	NO
1	Do you have a quality assurance (QA) team in the institution?		
2	If yes, is the team functional?		
3	Has the team received any training in QA?		
4	Are there QA focal persons in the units?		
5	Does the team carry out or promote the following activities? Tick as many as applicable		
	• Clinical conferences		
	• Mortality Conferences		
	• Peer reviews		
	• Clinical audits		
6	Is there a place in the facility where complaints could be sent?		
7	Assess 2 written complaints in the past 6 months for the process of reviewing and acting. Was the process adequate?		
8	Is there a suggestion box in the hospital?		
9	Is there a person /committee responsible for collating and acting on suggestions? (Verify using report)		

Comments on QA systems in the facility

.....

.....

HUMAN RESOURCE MANAGEMENT

Staffing levels

1. What is the total number of staff in the institution?.....

2. Do you have a designated officer in-charge of human resource management?

Yes..... No...

(Collect a copy of nominal roll)

3. Are there written job descriptions for all categories of staff?

Yes.....No.....

4. Comment:.....

5. How many of your staff are :

A. Permanent

B. Casual:.....

C. On contract:.....

Categories of health personnel and number at post

No.	Category	Number at post
1	Medical Officers	
2	Physician Assistant	
3	Nurse Registered General	
4	Midwife	
5	Enrolled Nurse	
6	Health Assistant	
7	Laboratory personnel	
8	Pharmacist and Pharmacy technicians	
9	Medical records	
10	Health Service Administrator	
11	Disease Control Officers	
12	Orderlies /labourers	
13	Stores / Supply's	
14	Accounts Officers	

Appraisal System

1. How often is staff appraised?

A. Quarterly

B. Biannually

C. Yearly

D. Never

2. Others (Specify).....

3. What percentage of your personnel was appraised at least once last year?.....

4. Do you discuss the performance of individual staff with them?

Yes..... No.....

Staff Development

1. Do you have an In-Service Training Co-ordinator? Yes.....No.....

2. Do you assess the training need of your staff? Yes.....No..... (Verify)

3. Do you have an In-Service Training plan for the year? Yes.... No..... (Inspect the Plan)

4. Do you have a structured in-service training programme for your staff?

Yes..... No.....

5. Are these training programmes related to the training needs? Yes..... No.....

6. How many of your staff did you train last year?

7. What are the most common personnel problems

CLINICAL PRACTICE

OUT PATIENT DEPARTMENT (OPD)

1. What time does the consultation start?

2. Are there direction signs..... Yes No

3. Is there an information desk for complains Yes No

4. Is the OPD environment clean? Yes No
5. Are client given health education? Yes No

PAEDIATRIC DEPARTMENT

1. Compare case fatality for two years (Malaria, Gastroenteritis)
2. Is the environment clean? Yes No
3. Display of protocol Yes No
4. Evidence of ward meetings (by minutes) Yes No

MEDICAL DEPARTMENT

1. Is the environment clean? Yes No
2. Display of protocol Yes No
3. Evidence of ward meetings (by minutes) Yes No

SURGICAL DEPARTMENT

1. Compare case fatality for two years (surgical wound infection rate)
2. Is the environment clean? Yes No
3. Display of protocol Yes No
4. Evidence of ward meetings (by minutes) Yes No

MATERNITY DEPARTMENT

1. Compare case fatality for two years (PPH, Eclampsia and No. C/S)
2. Is the environment clean? Yes No
3. Display of protocol Yes No
4. Evidence of ward meetings (by minutes) Yes No

Indicate availability and functional state of this basic equipment by department

Items	OPD	Medical	Surgical	Paediatrics	Maternity	Remarks
BP Apparatus						
Thermometers & Pulse Oxymeter						
Stethoscope						
Suction machine						
Resuscitation tray (well equipped)						
Functioning Oxygen Cylinders						
Linen storage & inventory						
Weighing Scale						
Diagnostic set						
Sterilizers/Autoclave						
Infection Prevention Practices						
1. Hand washing facilities						
2. Sharp container						
3. Disposal/ waste bin						

Indicate availability and function state of this basic equipment in Maternity

Department

No	Items	YES	NO	No	Items	YES	NO
1	Appropriate use of Partograph			6	Eclampsia		
2	Delivery Sets (at list 2 packs)			7	Suturing Set(at list 2 packs)		
3	Tape measure			8	Infant Incubator		
4	Vacuum extractor (list 2 packs)			9	Postpartum Haemorrhage Kit		
5	Fetal Scope			10	Placenta Disposal site		

Availability of Standard Laminated Obstetrics and Gynaecological Protocols in the Maternity Department

No	ITEMS	YES	NO	No	ITEMS	YES	NO
1	Postpartum haemorrhage			4	Pregnancy induced Hypertension		
2	Ante partum haemorrhage			5	Intra uterine foetal death		

3	Eclampsia			6	Referrals		
---	-----------	--	--	---	-----------	--	--

AVAILABILITY OF BASIC LABORATORY EQUIPMENT

Availability of Basic Laboratory Equipment						YES	NO
No	ITEMS						
1	Microscope						
2	Hot Air Oven						
3	Centrifuge						
4	Slides and Covers (Malaria smears, gram stain)						
5	Electrophoresis Machine						
6	Colorimeter						
7	Auto analyzers						
8	Automatic pipette						
9	Sample collection room						
10	Blood and other blood products (at three pints of each group)						
11	Reference books						
	Availability of standard operating procedures for the following	YES	NO		Availability of basic reagent for the following	YES	NO
1	Malaria			7	Liver Functioning Test		
2	Haemoglobin level Estimation			8	Reagent for Analyzers		
3	Stool examination			9	Dradkin preparation		
4	HIV			10	Sickling and Hb reagent		
5	Tuberculosis			11	Giemsa stain		
6	Urine Examination						

REFERENCE

- Ghana Health Service checklist for Clinical Audit in Health Facilities 2012
- Facility Baseline Assessment of Regional Hospitals and facilities in 28 target

District in seven Regions in Ghana, May 2005.