

UNIVERSITY OF CAPE COAST

DESCRIPTIVE STUDY ON SERVICE QUALITY AND CLIENTS  
SATISFACTION IN OPHTHALMOLOGY CARE IN NSAWAM  
GOVERNMENT HOSPITAL

MATILDA PADIKIE TETTEH

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GOVERNMENT HOSPITAL

BY

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fulfillment of the requirement for the award of master of Business  
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## DECLARATION

### Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature..... Date.....

Name: Matilda Padikie Tetteh

### Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature.....Date.....

Name Dr. (Mrs) Gloria Agyapong

## ABSTRACT

The main thrust of the study was to assess the service quality and patients' satisfaction at the ophthalmology unit of the Nsawam Government Hospital. To achieve this purposes, the study employed quantitative approach through the use of descriptive survey. In the quest of selecting the sample, Convenience sampling method was used in the study to select 260 clients of ophthalmology unit of the Nsawam Government Hospital for the study. A self- developed questionnaire was used for the data collection. The data collected were analysed using descriptive statistics (means and standard deviation, frequencies and percentages) and inferential statistics (Linear Multiple Regression). The results on objective one gave ample evidence to settle that generally, most of the clients at the ophthalmology unit of the Nsawam government hospital have a high expectation about the service quality at the ophthalmology unit. Again, it was found that most clients at the ophthalmology unit of the Nsawam government hospital are somewhat satisfied with the services rendered by the hospital. Finally, it was evidence from the study that all the service dimensions are key determinants for clients expect at the ophthalmology unit of the Nsawam government hospital. However, Tangibility and assurance recorded the highest values to suggest that they have significant effect on the clients' expectation. It was recommended that the management of health facilities in the metropolis should, as matter of urgency, take drastic steps to improve upon the quality of care given at their facilities in order to improve upon the satisfaction level of patients because they are generally not satisfied with their services.

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I thank my family so much for their unflinching support and to my good friend and school mate, Mr. Baah Abekah, I say Jehovah God richly bless you.

**DEDICATION**

To my late mother, Juliana Abena Adobea

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## LIST OF ACRONYMS

<b>CHAG</b>	Christian Health Association of Ghana
<b>GHS</b>	Ghana Health Service
<b>MOH</b>	Ministry of Health
<b>NVIC</b>	Non Vision Impairing Conditions
<b>OPD</b>	Out Patient Department
<b>MTN</b>	Mobile Telecommunication Network
<b>SSNIT</b>	Social Security and National Insurance Trust
<b>VI</b>	Vision Impairing
<b>WHO</b>	World Health organization

## CHAPTER ONE

### INTRODUCTION

#### **Background to the Study**

The quest for service quality and client satisfaction in the healthcare industry has become a topical issue in recent times in Ghana. Over the past few years, the Ghana Health Service (GHS) and the Ministry of Ghana (MOH) have put in a lot of efforts through capacity building of healthcare providers aimed at improving client satisfaction and quality of service in all public health facilities (Fenny, Enemark, Asante, & Hansen, 2014). This is in lieu of the fact that the quality of service rendered in most public health facilities fall short of expectation in the sight of the public.

In the year 2007, the GHS launched the guiding principle of plan to improve patient safety and satisfaction and the over - all quality of care which was expected to be adhered to by all health professionals in the country. This was an attempt made by the GHS, MOH to raise the fallen standards of professionalism in the health care sector in the country. On the whole, most clients and patients accessing health care in any health facility cannot be taken for granted and one cannot underestimate one's knowledge as far as health is concern in view of accessibility to the internet (Cheng, Lim & Tang, 2000).

Rendering good, effective and quality health care is a moral and professional requirement of all health workers (Zineldin, 2006) and the right to receive good and quality care is also the fundamental right of all patients (GHS, patient charter, 2005). In an attempt to make the services provided in the health facilities to meet the expectation and satisfaction of all clients and patients, the role of good interpersonal relations between healthcare providers and clients

cannot be washed away (Zarei, Arab, Froushani, Rashidian, & Tabatabaei, 2012) Service quality has been defined by many scholars including who defined it as the deeds, processes and performances.

Farley, Enguidanos, Coletti, Honigman, Mazzeo, Pinson, and Wiler (2014) opined that service quality is a consumer's overall mental picture of the relative inferiority or superiority of the organization and its services. Goetsch and Davis (2014) defined quality service as a dynamic state associated with products, services, people, processes and environments that meets or exceeds expectations and help produce a higher value. Patient satisfaction and service quality have some similarities in meaning but they have been used interchangeably in many studies. It is an accepted fact that service quality may lead to patient satisfaction in the health care industry. Patient satisfaction can be said to be (Oh, 1999).

Taylor and Baker (1994) also described patient satisfaction as an emotional reaction, a transaction specific measure. In the era of stiff competition among industry players in the health sector, patient satisfaction has been a major driving factor in that a satisfied customer/client may be a very good ambassador of the health facility that rendered the service to him/her. (Taylor & Baker, 1994) opined that patient satisfaction has most often linked to good emotional interactions of clients with healthcare service providers. Patient satisfaction is premised on certain tenants/factors including customization, professionalism, competence and good interpersonal communication (Ramsaran-Fowdar, 2005).

Ophthalmology is the practice of medical and surgical care of the eyes and any issues related to vision. Medical and surgical treatment of diseases involving the visual system and awareness of disease manifestations are also an

integral part of the practice of ophthalmology. The consequences of visual impairment can have short or long duration in all age groups including lost of educational and employment opportunities (Jose, 2016).

### **Statement of the Problem**

The eyes are one of the most essential organs in the human body. The average person perceives up to 80 percent of all impressions by means of the sight. The need to take good care of the eyes can therefore not be over emphasized. Diseases of the eye or ocular morbidity affect all categories of age groups of any population. These may include vision impairing (VI) and non – vision impairing conditions (NVIC). In Africa, conditions of the eye account for 6<sup>th</sup> to 8<sup>th</sup> reasons for an individual to visit a health care facility (Ofosu, Osei, Hagan, Biekro, & Awedoba, 2018).

According to statistics of the World Health Organization (WHO, 2017) programme on Prevention of Blindness, about 285 million people globally live with visual impairment. Of this figure, 39 million are blind and 246 million have moderate or severe visual impairment. Studies have also shown that, millions of the world's population stands the risk of visual loss due lack of adequate eye care especially among citizens living in low and middle income countries (Opoku, Swabey, Pullen, & Dowden, 2018) In spite of this staggering statistics, the WHO indicates that almost 80% of the world's eye related diseases are treated and preventable. Many people who have various eye problems sometimes seek other alternatives to orthodox care due to perceived lack of quality ophthalmic services in many state owned and other privately owned health care facilities in the country (MOH, 2015).

In Ghana, most clients and patients seek healthcare in various facilities including public, private, Christian Health Association of Ghana (CHAG or mission facilities), and quasi – government facilities like cocoa clinic, maritime hospital or the Social Security and National Insurance Trust (SSNIT) hospitals. Over the last few decades, poor quality of service rendered by the public health facilities to the citizenry have compelled many to have other choices in meeting their health needs (Ayimbillah-Atinga, Abekah-Nkrumah, & Ameyaw Domfeh, 2011) According to the statistics, almost half of Ghana's population seek healthcare in non- government institutions (MOH, 2013) and the Ghana Health Service believes it is one of the means to increase access and universal coverage (Ayimbillah-Atinga et al., 2011) Many lower and Middle income countries including Ghana continue to struggle to improve upon quality of care in public health facilities. Factors such as poverty, geographical location, unavailability of services for the treatment of special problems and incompetent healthcare management have affected service quality (Cassels, 1995).

Coupled with these factors is the lack of professionalism on the part of health care providers that leaves many clients dissatisfied with service quality. Research conducted by (Ayimbillah Atinga et al., 2011) has revealed that every dissatisfied client in any health facility is likely to tell at least 72 other people. In Ghana, the many reasons why there is a lot of dissatisfaction in service quality in the healthcare industry including long waiting time at the Out Patient Department (OPD), unavailability of certain essential medicines (programme drugs such as sulphadoxine pyramithamide for pregnant women, HIV drugs among others), poor sanitary conditions in some facilities, lack of proper places



of convenience, poor interpersonal communication, lack of properly explained medical instructions and lack of privacy (Assefa & Mosse, 2011).

It is less expensive to maintain and keep old and loyal clients of a facility than efforts made at gaining new ones. Health care providers must therefore go the extra mile of keeping their loyal customers through the provision of excellent service quality (Bedi, 2010) He further argued that the health seeking client has many choices in the era of proliferation of healthcare facilities. Many research work have already been carried out on service quality and patient satisfaction in general healthcare. For instance,(Vidhya, Rajakumar, & Tamizhjothi, 2013) conducted a study in selected hospitals in India on patient perceived quality and emotional satisfaction. In the year 2014, Fenny et al also carried out a research work on patient satisfaction with primary health care, comparing national health insurance card holders to those who were not insured. The result of their study revealed that, a greater portion of insured patients were satisfied with quality of care compared to the non- insured. However, literature is limited specifically on service quality in ophthalmology care. This study will there seek to throw more light on service quality and patient satisfaction in ophthalmology care in Nsawam Government Hospital in the Eastern Region of Ghana.

### **Purpose of the Study**

The purpose of the study was to assess the service quality and patient's satisfaction at the ophthalmology unit of the Nsawam Government Hospital.

### **Specific Objectives**

1. To assess the level of service quality patients/clients expect from the eye clinic of the hospital

2. To assess the level of clients' satisfaction with eye care.
3. To find out the key determinants of service quality clients expect at the unit.

### **Research Questions**

1. What is the level of expectation of clients in the service quality at the ophthalmology unit of the Nsawam government hospital?
2. To what extent are clients satisfied with the services rendered at the ophthalmology unit of the Nsawam government hospital?
3. What are key determinants of service quality clients expect at the unit?

### **Significance of the Study**

Findings from the study will be of great benefit to key institutions or stakeholders. Copy of the findings will be made available to the Nsawam Government Hospital and the ophthalmology department. Eye care professionals will synthesize the findings and adopt some of the recommendations that will improve service quality and customer satisfaction. The managers of healthcare institutions, Directors of Ghana Health Service at the various levels will also learn from the research findings on ways customer care and service quality/quality assurance will be improved in all health institutions.

### **Delimitations**

The study was delimited to only the Ophthalmology unit of the Nsawam Government Hospital. This there affected the generalizability of the findings.

## **Limitations**

The use of the convenience sampling method to select participants for the study introduced some form of information bias into the research. This is because all the people selected have better information on eye care than others who do not receive services from the eye department.

## **Definition of Terms**

**Ophthalmology** – the practice of medical and surgical care of the eyes and any issues related to vision.

**Ocular morbidity** - Diseases of the eye

**Tangibility**- the physical structures, equipments and installations that may appeal to customers.

**Reliability** - this is the firm's ability to perform the promise service accurately and dependably.

**Responsiveness** - is the firm's readiness to meet to meet needs of customers and provide prompt services as and when they need them.

**Empathy**- deals with the nature of care rendered to suit the individual's peculiar needs.

**Assurance** - the knowledge and courtesy of the personnel of the organization to sustain the trust and confidence of clients.

## **Organization of the Study**

The project was organized into five chapters. The first chapter will consider the background of the study, problem statement, purpose of the study, research questions, significance of the study, delimitations, limitations and definition of terms. Chapter Two was on the literature review and the theoretical framework underpinning the research. Chapter Three threw more light on the

methods employed in conducting the study while the fourth chapter presented the results and discussion generated from the research. Chapter Five presented the summary, conclusions and the recommendations from the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Introduction**

This part of the study will comprise of two parts; theoretical review of the models underpinning service quality and the second part will focus on the empirical literature that can lend support to the study. This will enable the researcher connect the findings from the empirical findings to the findings on the field and will also be a guide in meaningful conclusion from the study. The study will be based on sub-themes including; service quality in ophthalmology care, concept of patient satisfaction; patient information needs; and socioeconomic variables in patient satisfaction.

### **Theory of Planned Behaviour (Säilä, 2008)**

The Theory of Planned Behaviour is simply an extension of the TRA which seeks to address the seeming over reliance on intentions to predict behaviours and satisfaction of customers or clients. The construct ‘perceived behavioural control’ is formed by combining the perceived presence of factors that may facilitate or impede the performance of a behaviour and the perceived power of each of these factors.

Critique of the models Meta-analytic reviews of the TPB provide strong support for the predictive validity of the theory (Conner & Armitage, 1998). The theory provides a ‘parsimonious explanation of the informational and motivational influences on behaviour’ (Pui-Mun, 2006, p. 1430); it is easy to comprehend, and can be applied to a wide range of research scenarios. There are, however, a number of limitations which limit the scope of use and the extent to which it can be deemed to be a complete model of consumer purchase decisions.

### **Model of Service Quality**

SERVQUAL is a multi-dimensional research instrument, designed to capture consumer expectation and experience of a service along the five dimensions with twenty-two items that believed to represent service quality. It has become the dominant measurement scale in the area of service quality. SERVQUAL is designed to be measured on the distinctive dimensions of service quality: tangibles, reliability, responsiveness, assurance and empathy, to measure the knowledge gap between customer expectation and experience. The knowledge gap is the difference between the customer’s expectations of the service provided and the company’s provision of the service. The literature

establishes that, service quality itself is as a result of a comparison between consumers' pre-purchase expectations and the actual service received or experienced from the service provider (Parasuraman et al, 1990, Grönroos, 2007).

In simple words tangibles are about creating foremost impressions. All organizations desire that their consumers get an exceptional and positive foremost impression. Focusing on this particular dimension will help them to gain maximum benefit (Swar & Sahoo, 2012). Ladhari (2011) concisely explain the idea of tangibles role in banking sector. Service quality is key tool to achieve customer's attention. Varying behaviors and attitudes of customers demand high service quality to attain their perception of service. The association between dimensions of service quality and customer satisfaction was investigated by Ibáñez et al. (2006). They found a significant relationship between reliability of services on the satisfaction level of customers.

Finally, these external customers have the highest expectation on the reliability of the Malaysian public service. Ojo (2010) investigated the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria. A total of 230 respondents participated in the study. Regression analysis and Pearson product moment correlation coefficient were employed in analyzing the data. The study revealed a positive relationship between service quality and customer satisfaction.

Using the SERVQUAL approach, Wisniewski (2001) carried out a study to assess customer satisfaction within the public sector across a range of Scottish Councils services. In the library service, the analysis of gap scores revealed that

tangibles and reliability had negative gaps which indicate that customer expectations were not met. On the other hand, responsiveness and assurance were positive implying that customer expectations were actually exceeded by the service provided. Furthermore, Donnelly (2008) carried out a study to explore the application of SERVQUAL approach to assess the quality of service of Strathclyde Police in Scotland. The survey captures customers' expectations of an excellent police service and compares these with their perceptions of the service delivered by Strathclyde Police.

### **Servqual Model**

The service quality model (Rater model) shortened as SERVQUAL was developed in 1988 by three academic researchers in the field of service marketing, namely Zeithaml, Parasuraman and Berry. The use of the model was initially limited to the service firms and marketing institutions, it is now being used in many sectors including the healthcare industry as a measure of service quality and customer satisfaction. It assesses set of factors that influence customer's perception of a firm's overall service quality. Zeithaml et al. (1988) argued that service quality is the consumer's assessment of the overall delivery and value of the firm, which the SERVQUAL model puts into five distinctive dimensions.

**Reliability.** This is the firm's ability to perform the promise service accurately and dependably. In the area of ophthalmological care, reliability of the healthcare system ascertains if the health facility is able to deliver on its promise to clients. Are ophthalmological services available to clients and patients when the need arises?

**Tangibility.** Zeithaml et al. (1988) described this dimension as the physical structures, equipments and installations that may appeal to customers. This include the personnel who use the equipments to deliver services to clients and patients.

**Responsiveness** is the firm's readiness to meet to meet needs of customers and provide prompt services as and when they need them. It also touches on the manner personnel are receptive to customers.

**Empathy** deals with the nature of care rendered to suit the individual's peculiar needs. All patients and clients have different health needs and as such the care should be patient/client centered according to (Zeithaml, 1988) model synthesis.

**Assurance** is knowledge and courtesy of the personnel of the organization to sustain the trust and confidence of clients.

The SERVQUAL model has been applied in a number of studies done in improving service quality and patient satisfaction and has proved to be an effective one. In one such study done in Bahrain, (Ramez, 2012) used the SERVQUAL model to ascertain the service quality of healthcare rendered by health facilities in that country. The study primarily sought to look into the dimensions of service quality and its effects on patient satisfaction.

It was revealed by Ramez that empathy, responsiveness and tangible dimensions of the model obtained the highest impact on the overall service quality. This led Ramez to conclude that, there was a significant relationship service quality and patient satisfaction and patient behaviour intention in seeking healthcare. The SERVQUAL model was also used by Newman, Maylor and Chansarkar (2001) to carry out an empirical study that compared the quality



of healthcare services delivered by private and public health facilities in Pakistan. The study observed that private health facilities provided better service quality than their private counterparts when the model was used to measure the service quality rendered by the two categories of health care providers (Peprah & Atarah, 2014) also studied service quality in the Brong Ahafo Regional Hospital using this same model. When all the dimensions were analyzed at the end of the study, tangibility and empathy were rated very high by patients who participated in the study as what satisfied them the most.

### **Service Quality**

Service quality is defined as “any intangible act or performance that one party offers to another that does not result in the ownership of anything” (Scotti, Harmon, & Behson, 2007).

Thus service quality can be intended to be the way in which customers are served in an organization which could be good or poor. Parasuraman defines service quality as “the differences between customer expectations and perceptions of service” (Parasuraman, 1988). Parasuraman argued that measuring service quality as the difference between perceived and expected service was a valid way and could make management to identify gaps to what they offer as services.

### **Ophthalmology services in Ghana**

Ophthalmological care services in Ghana are rendered by government hospitals and clinics, the Christian Health Association of Ghana (CHAG), and some private facilities (Drislane, Akpalu, & Wegdam, 2014). Closed to one-third of Ghana’s health facilities are operated by the private health providers. According to the GHS, the eye care team in Ghana primarily

comprises ophthalmologists, optometrists, and ophthalmic nurses. Statistics from the various health regulatory bodies (Nursing and Midwifery Council of Ghana and the Medical and Dental Council of Ghana), there are 91 ophthalmologists, 370 optometrists, and about 500 ophthalmic nurses in the country seeing to the ophthalmic service needs of the estimated 29 million Ghanaians. What makes the eye care sector even worrying is the unequal distribution of eye care professional in the country. The 2013 annual statistics published by the GHS indicated that, almost 75% of professionals in the eye industry have concentrated their activities only in the urban areas. This ultimately places the rural folks in a big disadvantage which will hinder access to quality eye care services. In the Nsawam Government Hospital, there are four ophthalmic nurses, one ophthalmologist, one optician and two optometrists serving the entire district and even other parts of the Greater Accra region due its close proximity.

In Ghana, ophthalmological care service are lacking even in most district hospitals. This put extra work on the few facilities that render the eye care services. This affects the service quality in most hospitals including Nsawam Government hospital. In facilities where ophthalmology services are provided, eye care professionals grapple with obsolete working equipment and other logistical constraints.

### **Concept of service quality and Patient satisfaction**

The concept of service quality in health care has gained much attention in Ghana in view of the increasing number health care facilities in both the private and public sectors. Since the late 2000s, the numbers of health facilities have more than doubled in Ghana (GHS, 2014). In Ghana now, clients and

patients have a myriad of choices to make when thinking of where to access health care services whether for generalized medicine or specialized service like ophthalmic care. (Aagja & Garg, 2010) defined health quality as “the difference between patient’s perceptions of services offered by a particular health center and their expectations about the health center offering such services”. (Kucukarslan & Nadkarni, 2008) argued that, patient’s expectations are hinged on their experiences of the best care rendered to them by a previous health care provider. They further argued that satisfied clients are motivated to continue to enjoy such services, disseminate such good news to others and highly recommend the services of the health care facilities to others in need of same services.

However, Dawn and Lee (2004), opined that, unfulfilled expectations in any services provided by health care facilities will leave clients highly dissatisfied. To remain competitive in the healthcare sector, it is important for industry players and actors to realize the need to continuously monitor and measure customer expectations (Muhammad Butt & Cyril de Run, 2010) Interestingly, service quality and patient’s satisfaction have been pushed to the background in most public health facilities in Ghana (Iddrisu, Nooni, Fianko, & Mensah, 2015).

Simple suggestion box and process that a dissatisfied clients will follow to register their dissatisfaction is non- existent in most facilities in the public health sector. Many researchers have in the past touted the role service quality theories have played in helping to shape policies and regulations on service quality in the healthcare industry. Many evidence are available that lend support to the assertion that service quality leads to increased patient satisfaction and

the tendency for patients to remain loyal to their care providers (Ayimbillah Atinga et al., 2011). Studies have shown that the dimensions of service quality that are of utmost importance to clients in ophthalmology care span from areas as access to eye care service, physical environment (tangibility), communication with clients, waiting time, availability of medical personnel, responsibility and patients expectations (Alkhalaileh, Hasan, Al-Kariri, & Ibaid, 2017).

### **Empirical Review**

A number of empirical studies have been carried out by many researchers on patient satisfaction and perceived service quality across the world. Chimed-Orchir (2010) carried out a study in perceived service quality in healthcare services with much emphasis on patient satisfaction in selected hospitals in Mongolia. The study sought to examine service quality through the assessment of differences in the expectation and actual perception of clients and patients. A total number of 157 patients were interviewed using a SERVQUAL model questionnaire. The findings of the study did show a high index of patient satisfaction and perception of service delivery even though the study recommended for improvement in all the various 7 dimensions of service quality. In another study carried out in two hospitals in the northern region of Ghana to investigate patients' satisfaction on healthcare delivery, Atinga et al (2011) found out that support/care, environmental condition of the hospitals and waiting time constituted key determiners of what patients use in determining what constituted service quality in healthcare. In 2012, Atinga studied the perception of patients holding the National Health Insurance Authority (NHIA) cards regarding service quality in certain NHIA accredited health facilities.

Questionnaire were administered to insured patients in the selected facilities and four dimensional areas of service quality were assessed namely: patient interactions with service providers, demeanor of service provider, infrastructure and physical facility and time spent for service rendered. The study results indicated that, the human interaction aspect of the model significantly indicated service quality whilst general waiting time was perceived to be long.

Turkson (2009) also undertook a study in the Komenda- Edina- Eguafo – Abrem district of the Central Region in Ghana. The study assessed service quality in healthcare in four dimensions of the SERVQUAL model including: waiting time and interaction with service providers, cleanliness of the hospital environment, satisfaction with visit and availability of prescribed drugs. In all, 803 clients and patients were given questionnaire to respond to and the study also held four focus group discussions in 13 communities. The findings of the study showed that, greater majority of the patients were highly satisfied with the care rendered in the various health facilities. However, in areas such as waiting time, poor attitude of some of the staff, inadequate staff and lack of ambulances to transfer referred patients to higher facilities were major drawbacks in the quality of healthcare services. It is evident from the aforementioned studies that the researches concentrated on service quality in general healthcare, thus creating some gap. This research will attempt to fill this gap that has been left in service quality in ophthalmology.

### Conceptual framework

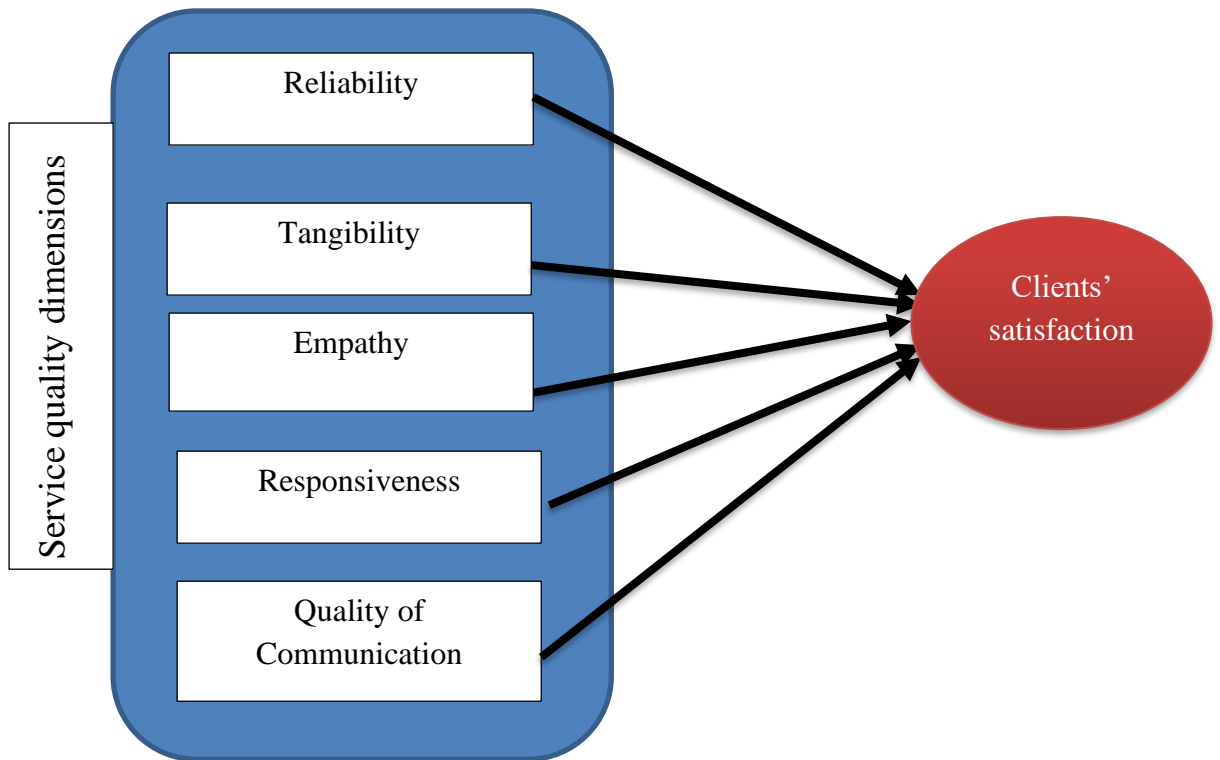


Figure 1: Conceptual Framework

### Chapter Summary

In summary, according to studies mentioned above, the quality of service appears to have a direct bearing with patients' satisfaction. However, many of these evidences are foreign based and lacks local content. This study therefore, sought to provide empirical evidence in the case of Ghana specifically at Nsawam Government Hospital.

## **CHAPTER THREE**

### **RESEARCH METHODS**

#### **Introduction**

This chapter highlighted the methodology used in carrying out the entire research. It covered the research design used for the study, the setting where the research took place as well as the population and the sampling procedure used. The chapter also dealt with the instrument used in data collection, the data collection procedure and how data was analyzed.

#### **Research Approach**

Positivists may use inductive and deductive inquiry, but the idea is to establish a more generalized law or principle that enables the researcher to use logical deduction in specifying how that idea operates in some concrete, practical situations. The positivist empirically tests outcomes predicted by the principle in concrete settings using very precise measures (Busco, 2009). In this way, the established general law or principle tends to cover many specific situations.

On the quantitative research techniques, it gather numerical data and use statistical analysis to draw meaningful conclusions (Busco, 2009). According to Ellis and Levy (2010), researchers who use the quantitative research methodologies usually develop a theory by inductive reasoning, engage in a theory-building process, and try to support the theory by drawing and testing the conclusions that follow logically from the theory.

## **Research Design**

The study was quantitative in nature. The descriptive cross sectional method was used to sample heterogeneous respondents through an interviewer administered questionnaire. The questionnaire was administered to out-patients who visited the eye clinic within a specific period of time. Only patients who have obtained the age of 18 years and above were selected through convenient sampling method. This is because by age 18, an individual was considered matured in Ghana and could make informed decision once he has a sound mind.

## **Profile of the Study Organization**

Nsawam Government Hospital is located in Nsawam in the Nsawam Adwoagyiri Municipality of the Eastern Region. It was established some 80 years ago by the colonial government. It is the main referral point for all health centres and clinics in the municipality as well as the adjoining villages. Interestingly, many people from Ga West and Ga North in the Greater Accra Region seek healthcare in the hospital. The hospital can boast of all the units/departments one would find in any standardized district hospital. Notable among them include medical wards, surgical wards, Obstetrics and Gynecology, Pediatric departments and modern theatre.

Other specialized department also include ophthalmology, dentistry, and physiotherapy. Daily OPD attendance is about 450 and has a bed capacity of 250. The ophthalmology department is one of the last department to be set up in the hospital. There are four ophthalmic nurses, one ophthalmologist, one optician and two optometrists serving the entire district and even other parts of the Greater Accra region. These same staffs do a lot of outreach programmes to bring ophthalmological care closed to the doorstep of the far to reach areas of



the municipality. On a daily basis, about 35 to 55 clients visit the unit for eye care services.

### **Population**

The population comprised of both men and women aged 18 years and above who had the need for ophthalmological care. According to data gathered at the eye clinic of the hospital, the population of clients/patients who access eye care services monthly is about 870.

### **Sampling Procedure**

Convenience sampling method was used in the study. It is one of the non-probabilities sampling where members of the target population that meet certain criteria and are willing to participate are selected to be part of the study (Dornyi, 2007). The researcher conveniently selected patients (adults males and females) who visited the out- patient department of the eye clinic and were willing to be part of the study.

### **Sample Size Calculation**

The sample size for the study was calculated using Krejcie and Morgan (1970) formula:

$$S = \frac{X^2 NP(1-P)}{d^2 (N-1) + X^2 P(1-P)}$$

$S$  = is the sample size.

$X^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

$N$  = is the population size.

$P$  = is the population proportion (assumed to be .50 since this would provide the maximum sample size).

$d$  = the degree of accuracy expressed as a proportion (.05).

$N = 800$

Based on the above, the computation gave the sample size as 260.

The table below gives a summary of the sample size calculation

### **Data Collection Instruments**

A structured questionnaire made of a modified form of the SERQUAL model will be adapted and used. This model was chosen because many studies conducted on service quality in industries and healthcare sectors employed the model and yielded good study outcome. It is made of 22 items based on specific dimensions of service quality which include; tangibility, reliability, empathy, responsiveness, assurance and communication. The instrument was developed by Zeithaml et al. (1988) and later modified by (Ramez, 2012) to measure the variables. It comprised of two major sections. The first part looked at the demographic characteristics of the study participants. Demographic characteristics have influence on perception of service quality and client satisfaction and therefore it shall be analyzed. The second part also looked at the six dimensions of service quality. Each dimension has about six items that sought specific responses from respondents.

### **Data Collection Procedure**

One research assistant was trained on how to administer and collect data. Data was collected on the same day it was administered to help minimize loss to follow up and non -respondents in view of the scanty time available to respondents who were clients and patients. The researcher used three weeks to administer and collect data.

### **Data Processing and Analysis**

The data collected was entered into an excel spreadsheet and cleaned to minimize errors. Statistical methods used to analyze data include the mean and standard deviation in a statistical table. SPSS version 25 was also used to analyze data and to generate results for the study.

### **Ethical Clearance**

Introductory letter was obtained from the department through my supervisor. This was presented to the Medical Superintendent of the hospital for permission. Oral concern was also sought from every respondent before questionnaire was administered. Participation was entirely voluntary and even when a participant had enrolled on the study; he/she had the right to withdraw at any time as he so wishes.

### **Chapter Summary**

The research design was a descriptive survey involving quantitative techniques. The study involved service quality and patients' satisfaction at the ophthalmology unit of the Nsawam Government Hospital. The sampling techniques used were Convenience sampling method was used in the study. The research instrument to be used in the study was mainly questionnaire. The pre-test was conducted. Validity and reliability was ensured in the study. The next chapter presents the results and discussions based on the research questions.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **Introduction**

This chapter presents the results of the analysis of the questionnaire data based on the purpose of the study. The purpose of the study was to assess the service quality and patient's satisfaction at the ophthalmology unit of the Nsawam Government Hospital. The data was based on the 100% return rate data obtained from 260 respondents selected from the Nsawam Government Hospital located in Nsawam in the Nsawam Adwoagyiri Municipality of the Eastern Region. The quantitative data were analysed using inferential statistics (Linear Multiple Regression, LMR) and descriptive statistics (means, standard deviations, frequencies, and percentages). The first part of this chapter describes the demographic characteristics of the lecturers. In the second part, the research findings are presented based on the research questions formulated for the study.

#### **Description of Respondents**

This section on the questionnaire (Biographical) discusses the background information of the respondents. These include the respondents' gender, age, educational background, type of patient, time of being and patient and employment status. The graphs show the distribution of the respondents their biographical information.

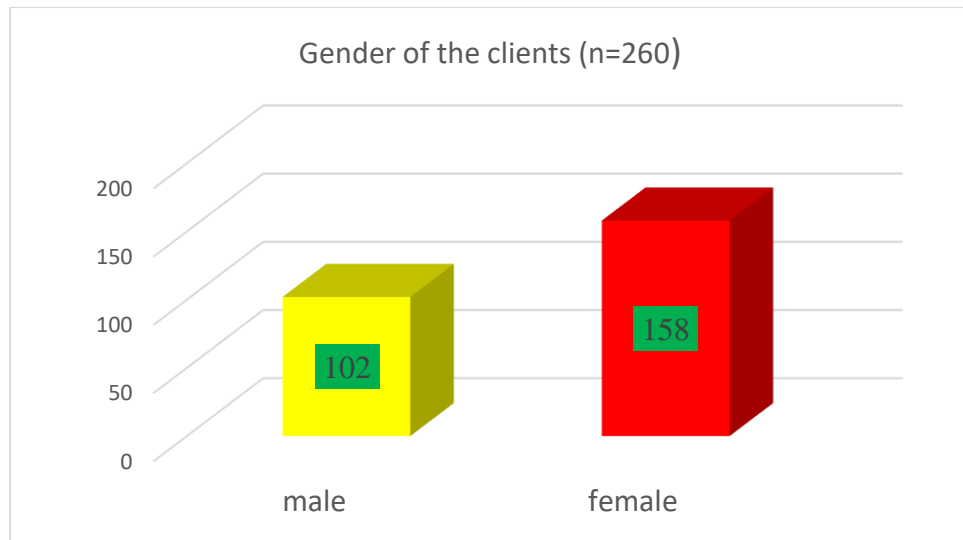


Figure 2: Gender of the respondents (clients of ophthalmology unit of the Nsawam government).

Source: Fieldwork, Padikie (2019).

The bar graph give evidence to believe most clients of ophthalmology unit of the Nsawam government are female (n=158). The males were the least to attend the hospital (n= 102).

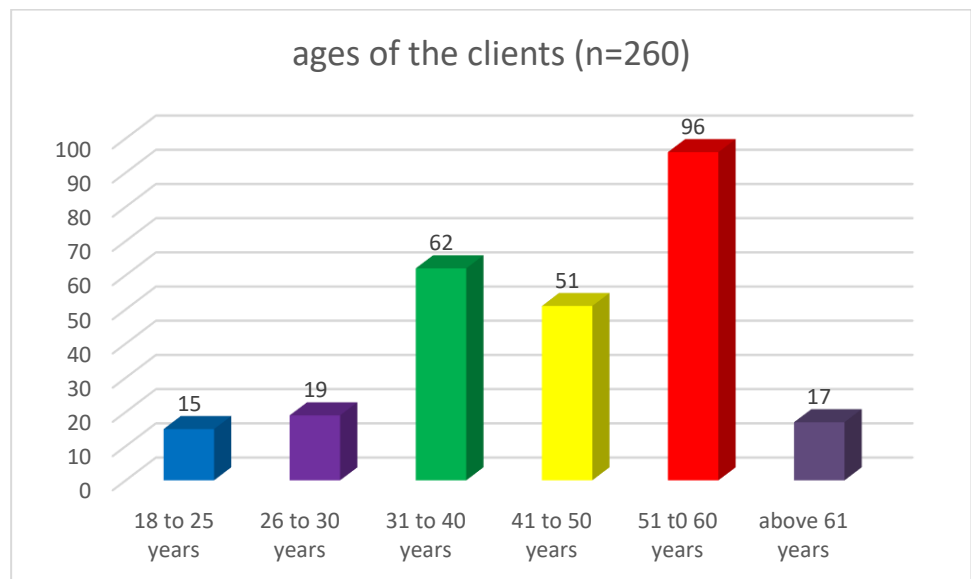


Figure 3: Ages of the respondents (clients of ophthalmology unit of the Nsawam government).

Source: Fieldwork, Padikie (2019)

Figure 3 show that most of the clients were old enough and were falling from 50 years and above

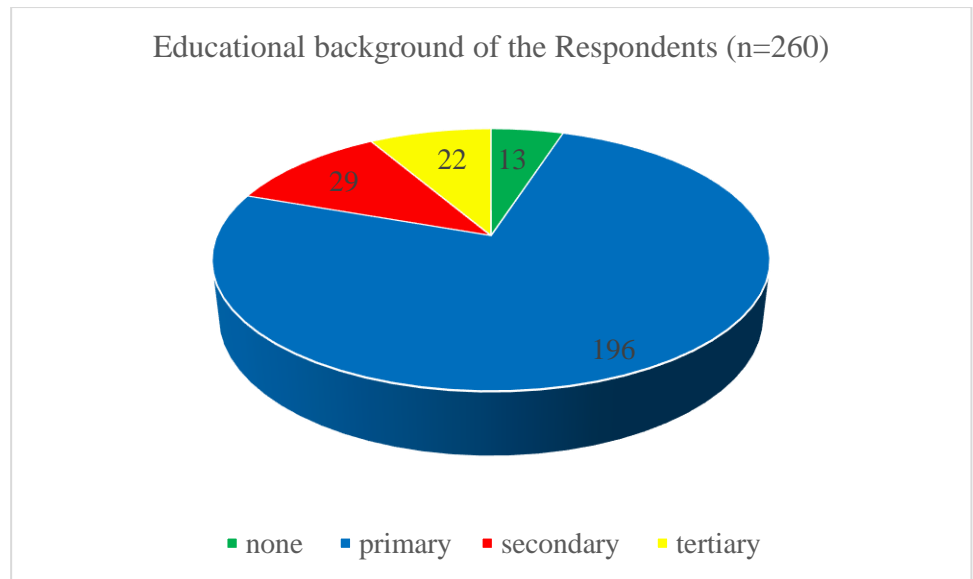


Figure 4: Educational background of the respondents (clients of ophthalmology unit of the Nsawam government).

Source: Fieldwork, Padikie (2019)

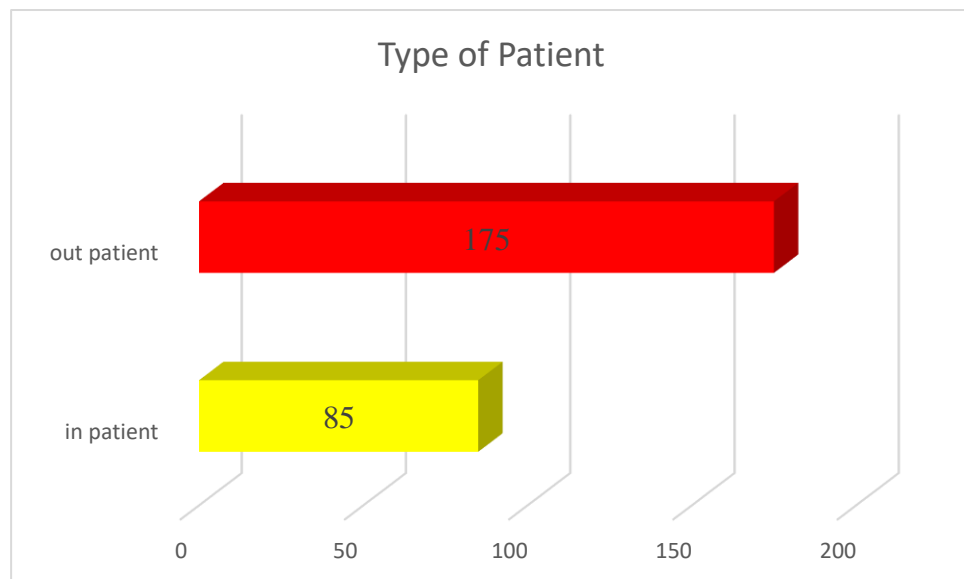


Figure 5: Type of Patient of the respondents (clients of ophthalmology unit of the Nsawam government).

Source: Fieldwork, Padikie (2019)

The results from Figure 5 show that most of the clients of ophthalmology unit of the Nsawam government were out-patients. This is to suggest that most were just visiting the hospital for treatment

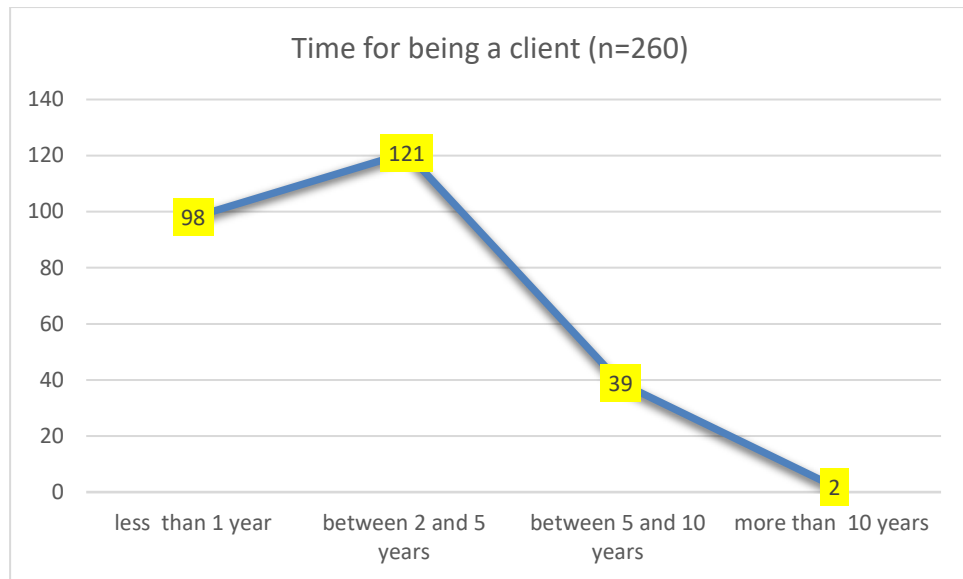


Figure 6: Time for being a client of the respondents (clients of ophthalmology unit of the Nsawam government).

Source: Fieldwork, Padikie (2019)

The results show that most of the clients of ophthalmology unit of the Nsawam government has being clients for 2 and years

**Research Question One: What is the level of expectation of clients in the service quality at the ophthalmology unit of the Nsawam government hospital?**

This aspect of the questionnaire assessed the level of expectation of clients in the service quality at the ophthalmology unit of the Nsawam government hospital. The results are presented in Table 1.

**Table 1: Results on the level of expectation of clients in the service quality at the ophthalmology unit of the Nsawam government hospital**

DSQ	Mean	Std. D	Remarks
Tangibility	45.64	7.23	High expectation
Assurance	35.68	2.64	High expectation
Reliability	31.27	2.26	High expectation
Responsiveness to Patients	29.32	2.30	High expectation
Quality of Communication	27.22	2.21	High expectation
Empathy	26.14	4.65	High expectation

Source: Fieldwork, Padikie (2019) (n=260)

The results on the level of expectation of clients in the service quality at the ophthalmology unit of the Nsawam government hospital are presented in table 2. As shown in Table 1, the results show that generally, most of the clients have a high expectation about the service quality at the ophthalmology unit. This was palpable after all the dimensions scored a mean greater than the average mean of 24.91. Again, the studies of Lee, et al., (2000); Gilbert and Veloutsou (2006); Sulieman (2011); Buttle, (1996) and Buttle & Ahmad (2001) all suggest service quality leads to customer satisfaction.

**Research Question Two: To what extent are clients satisfied with the services rendered at the ophthalmology unit of the Nsawam government hospital?**

To gather evidence for the study, the selected clients at the ophthalmology unit of the Nsawam government hospital were made to rate



their responses using Least satisfied, Agree, Somewhat satisfied, Moderately satisfied, Satisfied and Highly satisfied. Using means, the scales was scored as (: 1= Least satisfied 2= Somewhat satisfied, 3= Moderately satisfied, 4= Satisfied, 5 = Highly satisfied). The criterion value of 3.00 was established for the scale. To obtain the criterion value (CV=3.00), the scores were added together and divided by the number scale (5+4+3+2+1= 15/5=3.00). To understand the mean scores, items/statements on satisfied with the services rendered at the ophthalmology unit of the Nsawam government hospital that scored a mean of **0.00 to 2.99** was regarded as low satisfaction. Those items/statements that scored mean from **3.00 to 5.00** was regarded as high satisfaction. Table 2 presents the results.

**Table 2: Clients’ Satisfaction**

Statements	M	SD
	Statistic	Std. Error
	Test Value=3.00	
Staff are time conscious and duty bound	3.27	.613
Staff are courteous in interacting with patients	3.42	.614
Staff care about the services rendered at the eye clinic	3.21	.631
Staff give room for patients to ask for clarifications on procedures	3.11	.687
Staff take time to explain how patients are to handle conditions at home after they have receive treatment	3.07	.501
Staff explain treatment outcomes in simple terms to patients	3.04	.506
Staff explain the need to come for follow up care to patients	3.01	.479
I will recommend the eye clinic of the Nsawam Government hospital to anyone with eye problem	2.91	.510
Mean of Means/StD	3.38	.567
Source: Fieldwork, Padikie (2019)	(n=260)	

**Key-M= Mean, SD =Standard Deviation, MR=Means Ranking, N=Sample Size**

Table 2 presents results on how clients are satisfied with the services rendered at the ophthalmology unit of the Nsawam government hospital. Table 2 give evidence to believe that generally clients at the ophthalmology unit of the Nsawam government hospital are somewhat satisfied with the services rendered. This was evident after the nurses responses scored an average mean ( $MM=3.38$ ) greater than the Test Value of 3.00.

For example, most of the clients indicated that the Staff are somewhat time conscious and duty bound ( $M=3.27 > TV (3.00)$ ,  $SD=.613$ ,  $n=260$ ) and this explains that majority of the clients at the ophthalmology unit of the Nsawam government hospital are satisfied with the services rendered. In another results, the clients pointed out most of the Staff are somewhat courteous in interacting with patients ( $M=3.42 > TV (3.00)$ ,  $SD=.614$ ,  $n=260$ ) and this could elucidate how majority of the clients at the ophthalmology unit of the Nsawam government hospital are really satisfied with the services rendered.

Again, it was found that Staff somewhat care about the services rendered at the eye clinic ( $M=3.21 > TV (3.00)$ ,  $SD=.631$ ,  $n=260$ ). In another results, it was found that Staff really give room for patients to ask for clarifications on procedures ( $M=3.11 > TV (3.00)$ ,  $SD=.687$ ,  $n=260$ ).

The clients further asserted that the Staff somewhat take time to explain how patients are to handle conditions at home after they have receive treatment ( $M=3.07 > TV (3.00)$ ,  $SD=.687$ ,  $n=260$ ). In another results, it was found that staff somewhat explain treatment outcomes in simple terms to patients ( $M=3.04 > TV (3.00)$ ,  $SD=.506$ ,  $n=260$ ).

The results from the current study corroborate with another study carried out in two hospitals in the northern region of Ghana to investigate patients' satisfaction on healthcare delivery, Atinga et al (2011) found out that support/care, environmental condition of the hospitals and waiting time constituted key determiners of what patients use in determining what constituted service quality in healthcare.

In 2012, Atinga studied the perception of patients holding the National Health Insurance Authority (NHIA) cards regarding service quality in certain NHIA accredited health facilities. Questionnaire were administered to insured patients in the selected facilities and four dimensional areas of service quality were assessed namely: patient interactions with service providers, demeanour of service provider, infrastructure and physical facility and time spent for service rendered. The study results indicated that, the human interaction aspect of the model significantly indicated service quality whilst general waiting time was perceived to be long.

The results share common view with that of Turkson (2009) also undertook a study in the Komenda- Edina- Eguafo – Abrem district of the Central Region in Ghana. The study assessed service quality in healthcare in four dimensions of the SERVQUAL model including: waiting time and interaction with service providers, cleanliness of the hospital environment, satisfaction with visit and availability of prescribed drugs. In all, 803 clients and patients were given questionnaire to respond to and the study also held four focus group discussions in 13 communities. The findings of the study showed that, greater majority of the patients were highly satisfied with the care rendered in the various health facilities.

However, in areas such as waiting time, poor attitude of some of the staff, inadequate staff and lack of ambulances to transfer referred patients to higher facilities were major drawbacks in the quality of healthcare services. It is evident from the aforementioned studies that the researches concentrated on service quality in general healthcare, thus creating some gap. This research will attempt to fill the this gap that has been left in service quality in ophthalmology

**Research Question Three: What are key determinants of service quality clients expect at the unit?**

**The Empirical Model**

A multiple linear regression was adopted. It was to regress Reliability of Service delivery, Assurance of service quality, Tangibility of service delivery, Empathy of service delivery, Responsiveness to patients and Quality of communication on clients of ophthalmology unit of the Nsawam government hospital. The objective of this procedure was to determine the key determinants of service quality clients expect at the unit. This model has the following form:

$$SQC = CT + \beta RSQ + \beta ASQ + \beta TSQ + \beta ESQ + \beta RP + \beta QC$$

**Where**

Service Quality Clients	= SQC
Constant Term	= CT
Reliability of Service Quality	= RSQ
Tangibility of Service Quality	= TSQ
Empathy of service delivery	= ESQ
Responsiveness to Patients	= RP
Quality of Communication	=QC

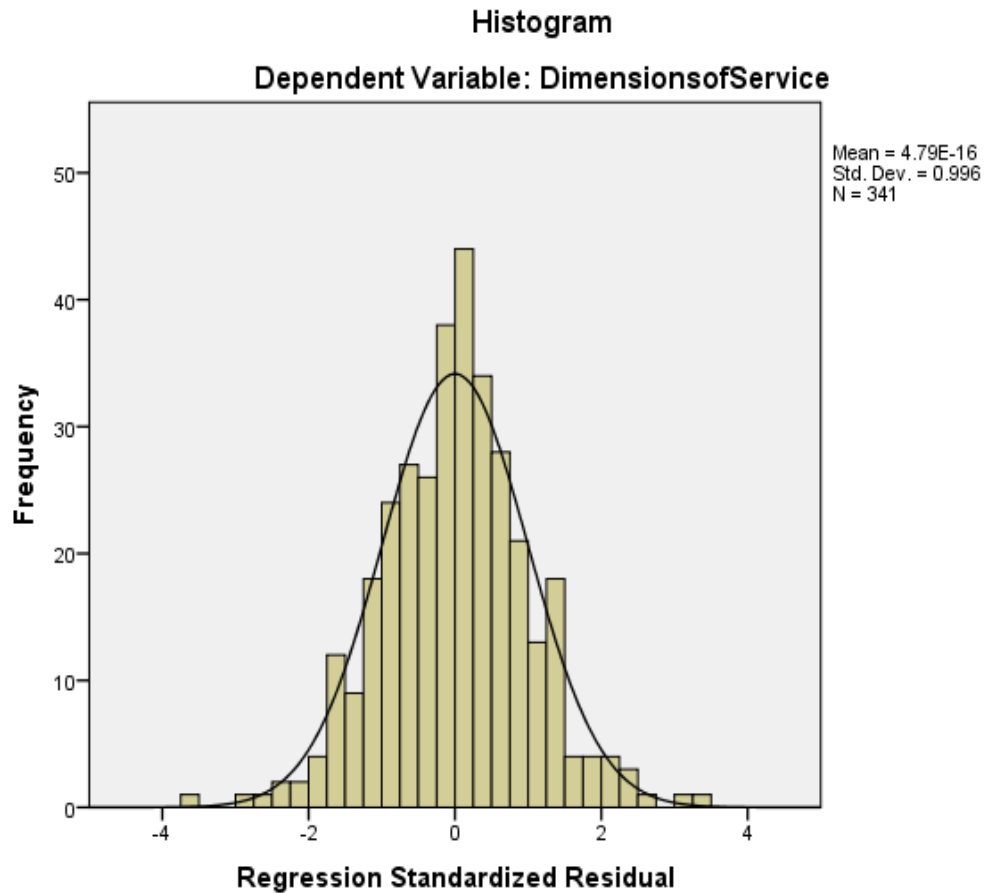


Figure 7: Normality Plot

Source: Fieldwork, Padikie (2019)

Figure 6 presents the normality of the study variables. The gathering of the variables at the centre of the normality curve implies that the variables were normal and as such multiple regression could be used for the analysis. Table 3 presents the results of the mean and standard deviation of the predicted variables (dimensions of service quality of clients).

**Table 3: Descriptive (Means and Standard Deviation) Results of the Dimensions of Service Quality of Clients**

<b>DSQ</b>	<b>Mean</b>	<b>Std. D</b>	<b>Ranking</b>
Tangibility	32.61	7.250	1st
Assurance	28.66	4.684	2nd
Reliability	21.67	6.296	3rd
Responsiveness to Patients	19.02	2.345	4th
Quality of Communication	17.92	2.281	5th
Empathy	17.74	4.665	6th

Source: Fieldwork, Padikie (2019) n=260

Table 3 presents the descriptive analysis of the dimensions of service quality of clients at ophthalmology unit of the Nsawam Government Hospital. The results from the descriptive analysis show that there were differences in the means scores of the predictors/independent variables (dimensions of service quality). From the Table, Tangibility recorded the highest mean and standard deviation (mean=32.61, SD=7.250, n=260). Assurance followed with a mean and standard deviation of (mean=28.66, SD=4.684, n=260). Reliability recorded the third highest mean and standard deviation (mean=21.67, SD=6.296, n=260). Responsiveness to Patients had the fourth highest mean and standard deviation (mean=19.02, SD=2.345, n=260). The last variable, Empathy recorded the least mean and standard deviation (mean=17.74, SD=4.665, n=260).

From the descriptive analysis, it can be concluded that Tangibility contributed the most service quality of clients at ophthalmology unit of the Nsawam Government Hospital. However, in order not to give quick conclusion, the researcher further conducted regression analysis to gain more statistical evidence to confirm the findings. The findings are presented in Table 4.

**Table 4: Results of Multiple Regression Analysis of the Dimensions of Service Quality of Clients**

Model	Unstandardized Coefficients		Standardized Coefficients		p-value
	B	Std. Error	Beta ( $\beta$ )	t-value	
(Constant)	-	11.047		-5.654	.000**
	30.083				
Tangibles	1.443	.567	.276	5.83	.000**
Reliability	1.436	.534	2.55	1.23	.001**
Responsiveness	2.577	.435	-.173	.243	.000**
Assurance	.654	.072	.983	-.359	.007**
Quality of Communication	.733	.923	.923	-.233	.004**
Empathy	.738	.034	-.033	.172	.002**
Multiple R value		F value	69.47		
R Square value	.416a	P value	.000*		
Adjusted R Square	.176	Durbin-Watson	1.503		
	.170				

a. Dependent Variable: Dimensions of Service Quality of Clients:  
\*Significant at  $p < 0.05$

b. Independent Variable: Predictors (Tangibles, Reliability, Responsiveness, Assurance, Quality of Communication & Empathy)

Source: Fieldwork, Padikie (2019), n=260

Table 4 shows the results of the multiple regression analysis between independent variables/dimensions of service quality (tangibles, reliability, responsiveness, assurance, Quality of Communication and empathy) and dependent variable (Service Quality of clients). From the results, it is clear that all the independent variables (dimensions of service quality) produced a significant result ( $p > 0.000$ ).

Table 4 presents the coefficients model for the Dimensions of Service Quality on clients' at ophthalmology unit of the Nsawam Government Hospital.

From Table 5, the  $R^2$  (R-square) of .176 measures the goodness-of-fit of the estimated regression model in terms of the proportion of the variation in the independent variables as explained by the fitted sample regression equation. Thus about 87% of the variation in independent variables is explained and accounted for by the predictors (Tangibles, Reliability, Responsiveness, and Assurance & Empathy) and  $R^2$  value is significant at 5 percent confidence level.

The Durbin-Watson statistic is 1.503 and it tests for autocorrelation in the residuals from a statistical regression analysis, thus, it informs whether the assumption of independent errors is tenable and in this data the value is close to 2, hence the assumption has almost been met. The Durbin-Watson statistic is 1.503 and it is between the two critical values of  $1.5 < d < 2.5$ , therefore, the researcher assumed that there is no first order linear auto-correlation in the multiple linear regression data, thus, there is no autocorrelation in the sample

The results therefore give evidence to assert that all the dimensions of service quality help to predict or determine clients' expectation. Tangibles produced significant results ( $t=1.23$ ,  $n=260$ , Sig. =.001, 2-tailed) indicating that it does contribute to clients expectation at ophthalmology unit of the Nsawam Government Hospital. The Standardised Coefficients Beta ( $\beta$ ) of .276 indicates that when a unit increase with a value of .276 in independent variable (Tangibles), it will increase the dependent variable (Service Quality on clients' expectation).

Reliability also gave significant results ( $t=.243$ ,  $n=260$ , Sig. =.000, 2-tailed) indicating that it determines clients' expectation. When assessing the Standardised Coefficients Beta ( $\beta$ ) value (2.55), the result implies that, when there is a unit increase with a value of 2.55 in independent variable (Reliability),



it will lead to increase in dependent variable (Service Quality on clients' expectation) and vice versa.

The results on Responsiveness was not different producing significant results ( $t=-.359$ ,  $n=260$ ,  $\text{Sig.}=.007$ , 2-tailed). Further results from Responsiveness show that the Standardised Coefficients Beta ( $\beta$ ) value of  $-.175$  indicate that, when a unit decrease with a value of  $-.175$ , it will lead to decrease in independent variable (Responsiveness), as well as decrease in the dependent variable (Service Quality on clients' expectation).

Assurance also gave significant result of ( $t=.172$ ,  $n=260$ ,  $\text{Sig}=.002$ ) showing that is assurance is positively correlated to dependent variable (Service Quality on clients' expectation). When evaluating the Standardised Coefficients Beta ( $\beta$ ) value which is  $.983$ , it statistically mean that when a unit increase with a value of  $.983$ , it will lead to increase in independent variable (assurance), as well as increase the dependent variable (Service Quality on clients' expectation).

In relation to Empathy, the results show that it predicts clients' expectation ( $t=-7.98$ ,  $n=260$ ,  $\text{Sig}=.010$ , 2-tailed). The result practically means that empathy is positively related to dependent variable (Service Quality on clients' expectation). Also, when estimating the Standardised Coefficients Beta ( $\beta$ ) value which is  $-.033$ , the results practically means that statistically when a unit decrease with a value of  $-.033$ , it will lead to decrease in independent variable (empathy), as well as decrease the dependent variable (Service Quality on clients' expectation). But when assessing the Beta ( $\beta$ ) weight values (Standardised Coefficients) the results indicate that reliability have most significant effect on the clients' expectation.

**Table 5: Results of Multiple Regression Analysis of Contribution of each the Dimensions of Service Quality**

Model	R	R Square	Adjusted	Change Statistics	
			R Square	R Square Change	Ranking
Tangibility	.614 <sup>a</sup>	.377	.365	39.9(40.0%)	1st
Assurance	.64 <sup>b</sup>	.377	.365	32.9(33.0%)	2nd
Reliability	.837 <sup>c</sup>	.705	.693	15.0(15.0%)	3rd
Quality of Communication	.938 <sup>d</sup>	.874	.867	11.1(11.1%)	4th
Responsiveness	.941 <sup>e</sup>	.886	.877	06.1(6.1%)	5th
Empathy	.973 <sup>f</sup>	.895	.881	5.0 (05.0%)	6th

Source: Fieldwork, Padikie (2019) n=260

Table 5 shows the contribution of each the dimensions of service quality. Using the R Square Change Statistics from Table 5, it was evident that Tangibility as one of the Dimensions of Service Quality contributed more than all the other Dimensions of Service Quality. That is R<sup>2</sup> Change Statistic value of 39.9 representing 39.9%. Assurance as one of Dimensions of Service Quality contributed R<sup>2</sup> Change Statistic value of 32.9 representing 32.9% indicating the second contributor. Reliability as Dimensions of Service Quality contributed R<sup>2</sup> Change Statistic value of 15.0 (representing 15% showing the third contributor. Quality of Communication contributed the fourth with R<sup>2</sup> Change Statistic value of 11.1 representing 11%. Empathy contributed the least with R<sup>2</sup> Change Statistic value of 5.00 representing 5%.

The study lends ample support to the work Chimed-Orchir (2010) who carried out a study in perceived service quality in healthcare services with much emphasis on patient satisfaction in selected hospitals in Mongolia. Chimed-Orchir (2010) study sought to examine service quality through the assessment

of differences in the expectation and actual perception of clients and patients. The findings of the study did show a high index of patient satisfaction and perception of service delivery even though the study recommended for improvement in all the various 7 dimensions of service quality which is in line with the current findings.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

In this chapter, the most important findings are highlighted from the data analysis on service quality of clients at ophthalmology unit of the Nsawam Government Hospital.

#### Summary of the Study

The main purpose of the study was to assess the service quality and patient's satisfaction at the ophthalmology unit of the Nsawam Government Hospital. Specifically, the study sought to find assess the level of service quality patients/clients expect from the eye clinic of the hospital, assess the level of clients' satisfaction with eye care, and finally to determine what constitute service quality among patients who access eye care in the hospital. To achieve this purposes, the study employed quantitative approach through the use of descriptive survey. In the quest of selecting the sample, Convenience sampling method was used in the study to select 260 clients of ophthalmology unit of the Nsawam Government Hospital for the study. A self- developed questionnaire was used for the data collection. Ethical consideration was ensured before the actual data collection. The data collected were analysed using descriptive statistics (means and standard deviation, frequencies and percentages) and inferential statistics (Linear Multiple Regression).

#### Key Findings

The following key findings were emerged from the study.

1. The results on objective one gave ample evidence to settle that generally,

most of the clients at the ophthalmology unit of the Nsawam government hospital have a high expectation about the service quality at the ophthalmology unit.

2. Again, it was found that most clients at the ophthalmology unit of the Nsawam government hospital are somewhat satisfied with the services rendered by the hospital.
3. Finally, it was evident from the study that all the service dimensions are key determinants for client's expectation at the ophthalmology unit of the Nsawam government hospital. However, Tangibility and assurance recorded the highest values to suggest that they have significant effect on the clients' expectation.

### **Conclusions**

Based on the findings of the study, it can be concluded that majority of the respondents were somewhat satisfied with services provided at ophthalmology unit of the Nsawam government hospital. It therefore calls for improvements in waiting time, staff attitude, respect for patients and their rights, hospital environment and information disclosure.

In addition, the findings emanating from the results indicate that, clients at the ophthalmology department have high expectation about service quality. As a matter of concern, there is the need for staff to live up to this high expectation.

It became quite obvious from the findings that, tangibility and assurance recorded the highest values to suggest that they have significant effect on the clients' expectation in the eye unit of the hospital.

## **Recommendations**

The management of health facilities in the metropolis should, as matter of urgency, take drastic steps to improve upon the quality of care given at their facilities in order to improve upon the satisfaction level of patients because they are generally not satisfied with their services.

Quality of care as a key determinant of the satisfaction among patients should be given the necessary attention in all satisfaction improvement activities and strategies.

All the three selected health facilities must all strive to satisfy their clients better by working towards scoring higher average satisfaction scores of not less than 3.50 out of 4.00.

The managers of all the three selected health facilities should ensure that their health care services are very affordable so that it meets the cost expectations of clients. This stems from the fact that the cost expectation of patients will influence their satisfaction; affordable health care cost will increase satisfaction and vice versa.

Efforts should be made to reduce the waiting time at the various health facilities. The expectation of patients is that they spent reasonable length of time when queued for services especially at consulting rooms, laboratories and pharmacies; therefore, anything on the contrary would cause dissatisfaction among them. This could be significantly reduced through effective management and planning of manpower, equipment and time. 6. Since the expectation of patients towards the facilities' environment is high, they tend to be disappointed and dissatisfied about the general services provided when their surroundings are

poorly kept, there are poor ventilations and inadequate health-related messages. Efforts should be put in place to always keep these facilities neat.

Patients expect that some amount of useful information about their conditions will be disclosed to them by their doctors and nurses, therefore, when this is not done, they will be dissatisfied. Hence, some minimal (reasonable) amount of their health-related information should be made known to them in order to improve upon their satisfaction levels.

### **Areas for Future Research**

The scope of this study should be extended to include more health facilities within the metropolis for more generalized conclusions about patient satisfaction with the quality of care. The Quality Assurance Departments of each facility should conduct regular studies to evaluate activities of the various units/departments for better service delivery. Also, a study to estimate the average waiting times for each unit and department can be done. Again, a study to look at inpatients and out-patients' satisfaction separately can be done.

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**APPENDICES**

**APPENDIX A**

**UNIVERSITY OF CAPE COAST**

**COLLEGE OF HUMANITIES AND LEGAL STUDIES**

**SCHOOL OF BUSINESS**

**DEPARTMENT OF MANAGEMENT**

**QUESTIONNAIRE**

This questionnaire is aimed at assessing the service quality and patient satisfaction at the Nsawam Government Hospital. This is purely an academic exercise and has no affiliation to any political group or civil society organization. Kindly indicate your preference among alternative answers for each question by ticking [] in the appropriate box. You are assured of confidentiality of this exercise because it will be solely used for academic purpose. Thank you for accepting to take part in this study.

**A. Demographic Information**

1. What is your gender?

a) Male []

b) Female []

3. Educational background

a) None []

b) Primary []

c) Secondary []

d) Tertiary []

4. What type of patient are you?

a) In-patient []

b) out-patient [ ]

5. How long have you been a patient of Nsawam Government Hospital Eye clinic?

a) Less than 1year [ ]

b) Between 2 and 5years [ ]

c) Between 5 and 10 years [ ]

d) More than 10 years [ ]

6. Employment status

a) Not employed [ ]

b) Trading/Business [ ]

c) Civil servant [ ]

d) Artisan [ ]

**B. Assessment of Service Quality at Nsawam Government Hospital.**

How important is the following statement on patients' expectation and overall patient satisfaction about the hospital's service quality at the eye clinic?

**Key: 1= Least agree 2= Somewhat agree, 3= Moderately agree, 4= Agree, 5 = Strong agreement.**

<b>Reliability of Service delivery</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
7. Hospital staff/eye care staff encourage patients to					



take their medication as prescribed					
8. Hospital staff/eye care staff are dependable when managing patients issues					
9. Hospital staff/eye care staff are professionals I can trust with patient's confidentiality					
10. Hospital staff/eye care staff ensure patients do not spend too much time waiting in queues and where there are delays explanations should be given					
11. Eye care workers are competent/professional at all times					
12. Work schedules are always honoured by hospital staff					

<b>Assurance of service quality</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
13. Hospital staff/eye care staff are polite and friendly					
14. Hospital staff/eye care staff are able to build trust and confidence in their patients					
15. Hospital staff give detailed explanation on procedures to patients to get informed consent before commencing treatment					
16. Hospital staff/eye care staff must ensure medications are taken on time and that they adhere strictly to the prescription regimen					
17. Hospital staff/eye care explain some of the common side effects of medications to patients					

18. Hospital staff/eye care staff create a friendly atmosphere for patients to feel safe and relaxed					
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<b>Tangibility of service delivery</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
19. Eye nurses are well groomed at all time when at post					
20. The eye clinic have modern ophthalmologic equipments					
21. All the infrastructure ( chairs, beds, patient washrooms)are physically appealing to patients					
22. The eye clinic have entertaining materials to engage patients whiles they wait for their turn. (TV, newspapers).					
23. There must be directional signs that will give easy access to the various departments in the hospital					
24. The physical plant/infrastructure are disable friendly					
25. The hospital have adequate security to safeguard lives and properties of patients					

<b>Empathy of service delivery</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
26. Hospital staff/eye care staff exercise a great deal of restraint when dealing with patients					
27. Hospital staff/eye care staff are responsive to patient's concerns					

28. Hospital staff/eye care staff have a listening ear					
29. Hospital staff/eye care staff address patients with their correct titles					
30. Hospital staff/eye care staff have the welfare of patients at heart					
31. Hospital staff welcome weaknesses in the facility					

<b>Responsiveness to patients</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
32. Hospital staff/eye care staff give a warm reception to patients					
33. Hospital staff/eye care staff are easily approachable					
34. Hospital staff/eye care staff do not hesitate to extend a helping hand to patients outside their official working schedule					
35. Hospital staff/eye care staff are always ready to assist patients to make informed choices when necessary					
36. Front desk workers at the eye clinic provide a smiling face as they receive patients					
37. Staff respond immediately to patients' call					

<b>Quality of communication</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
38. Hospital staff/eye care staff take time to explain procedures to me					
39. There was clarity of communication from Hospital staff/eye care staff					
40. All answers I had concerning my condition were answered to my satisfaction					

41. Hospital staff/eye care staff give me adequate information on my treatment					
42. Eye care nurses explain alternative treatment modalities to me					

**How satisfied are you on the hospital's service quality at the eye clinic?**

Key: 1= Least satisfied 2= Somewhat satisfied, 3= Moderately satisfied, 4= Satisfied, 5 = Highly satisfied.

<b>Patient satisfaction</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
43. Staff are time conscious and duty bound					
44. Staff are courteous in interacting with patients					
45. Staff care about the services rendered at the eye clinic					
46. Staff give room for patients to ask for clarifications on procedures					
47. Staff take time to explain how patients are to handle conditions at home after they have receive treatment					
48. Staff explain treatment outcomes in simple terms to patients					
49. Staff explain the need to come for follow up care to patients					
50. I will recommend the eye clinic of the Nsawam Government hospital to anyone with eye problem					

