THE EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION IN THE HEALTH SECTOR. A CASE STUDY OF KWAME NKRUMAH UNIVERSITYOF SCIENCE AND TECHNOLOGY (KNUST) HOSPITAL

KUMASI

By

TONY JULIAN KOFI ASANTE. MB. ChB, MGCS

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DECLARATION

I hereby declare that this submission is my own work towards Executive Master of Business Administration (EMBA) 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 any University except where due acknowledgement has been made in the text.

ASANTE TONY JULIAN KOFI

.... 05/10/09.....

(Candidate) (Signature) (Date)

CERTIFIED BY:

Dr Kofi Poku

.... 19/10/09

Supervisor Signature Date

CERTIFIED BY:

.... 19/10/09

Head, Marketing and Corporate Strategy Signature Date

DEDICATION

I dedicate this work to:

My fiancée, Nana Amea Effa-Ababio;

My Parents, Mr. and Mrs. Asante; and

All my Siblings.

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First, I would like to thank God for giving the wisdom to go through the program. I will forever be grateful to my fiancé for her love and encouragement.

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TABLE OF CONTENTS

CHAPTER TWO: REVIEW OF RELEVANT PRIOR LITERATURE

CHAPTER THREE: THE RESEARCH METHODOLOGY AND THE PROFILE OF KNUST HOSPITAL

CHAPTER FOUR: RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

LIST OF TABLES

TABLE **PAGE**

LIST OF FIGURES

FIGURE **PAGE**

ABSTRACT

The health care industry presents a very dynamic, unexpected, ambiguous and uncertain environment in which "quality" issues have occupied a central position. Quality of care is related to all issues vital to healthcare; from reform to access and patient preferences, and is inseparable from the issue of efficiency.

The premium for the national health care insurance program has very little room to increase and is unable to reflect the actual cost. This has a serious effect on the operating cost as well as the medical treatment quality. In light of this, this research sought to ascertain whether clients' of the KNUST hospital were satisfied with the services they were receiving. This study employs five dimensions of service quality scale; tangibility, reliability, responsiveness, assurance, and empathy that were developed by Parasuraman (1985). Purposive sampling was employed on 150 outpatients and 50 KNUST clinic staff. Through a five point Likert-type scale, clients' expectation of a perfect service provider was compared with the practices at KNUST Hospital to determine gaps. The study revealed that facilities at the hospital were visually appealing; however, clients were not actually satisfied with the services. This was because these services were not provided promptly due to inadequate health providers and also insensitivity to clients needs.

It is recommended that the administration of the hospital should develop and implement policies and practices to tackle the shortage of health care staff and to provide training on service quality and customer care to the existing staff.

CHAPTER ONE

THE RESEARCH INTRODUCTION AND CONTEXT

1.1 Background of study

The issue of healthcare quality has drawn considerable attention from both academics and practitioners over the past few years. In the wake of pressure to move towards a managed care environment, healthcare providers are being forced to drive down costs, while at the same time maintain acceptable levels of quality. According to Short and Rahim (1995) governments are being forced to cut financial supports and funding in the health care industry. According to Carlos Guidotti (2002), the health expenditure of the main European countries range between seven (7%) and ten (10%) of the Gross domestic product (GDP), thus being an important voice in public budget. However, expenditure problems are just a single part of the scenario: advanced economies have nowadays a highly demanding population. The unsatisfaction of citizens related to the national health system is partly due to the real and documented episodes of "malpractice" partly due to a new consciousness: to be the owners of rights as taxpayers, thus having legitimate expectations and demands about the treatment they receive. Additionally, we now live in a world of media; the citizens have unprecedented chances to get information about every aspect of their life. For example, the new scientific and therapeutic discoveries gain a wide echo on the television and newspapers, causing an increase in people's expectations toward health in the ideal sense, often accompanied by a critical stand regarding the current state of things. Thus, health administrators must contain costs, yet at the same time not sacrifice quality.

However, it is known according to Mills et al(2002) there was sometimes a cost/quality trade off, meaning that driving down costs through contracts was in some cases at the expense of quality of service. These pressures are especially acute for public university hospitals, which must survive with decreased Government funding and limited student service fee. Consequently, the ability to define, measure, and monitor quality is critical to the survival of university health facilities and other public health institutions.

As identified in customer satisfaction review, the importance of any business achieving and maintaining positive customer satisfaction is paramount to its survival. As such KNUST hospital is in need of an appropriate measure of satisfaction from its primary customers; Patients.

This study is an investigation into one of the five identified gaps from the Met-Expectations Model of customer. The basis of the model states that service quality can be defined by the differences between the customer- external – and the organization-internal. This is true of not only the actual delivery of a service, but also those perceptions and expectations of the service delivery and its accompanying processes. Any differences, or gaps, can be used to identify the relative strengths and weaknesses in the service quality of an organization and assist in correction of any problems.

The specific gap that this project will investigate is known as the Expectation Gap. This is the difference between customer expectation and management perceptions of customers' expectations. It is important for an organization to be clearly aware of what it is exactly that the customers expect in comparison to its own expectations. It is the vital first step in the process of developing an accurate measure of customer

satisfaction. From here, the organization is able to set organizational standards, or benchmarks, that meet customer standards for service delivery. The next step in the progression is identification of any gaps between accepted standard and actual performance.

The final step is to use this customer satisfaction information to implement effective changes in organizational processes that please the clients.

1.2 Statement of the Problem

The KNUST Hospital's mission is to provide Quality healthcare to students and staff of the university as well as the general public at an affordable cost. The hospital receives funding from the University itself, and some little government subvention but the bulk of its funds come from seeing those from the immediate environs. According to the KNUST Health News (vol.1 No.2), about Twelve thousand private, staff and sixteen thousand student clients respectively were seen in the first quarter of 2007.

The funds received from the university are operated on an insurance system where every student pays a premium at the beginning of each semester for his medical care. They do not have to pay for care upfront, when they assess healthcare. The bulk of the funds needed to keep the hospital running therefore have to come from its clients within the environs and not from the university. There are other health facilities within the reach of these individuals with similar facilities as KNUST hospital such as Bomso clinic which is just a stone throw from KNUST campus and other allied health facilities like Allen clinic. There is therefore now increased competition with health delivery

within KNUST's immediate locality. This has even become worse because many of these hospitals have also become accredited by the National health insurance scheme. Clients as a result, do not have to pay upfront for healthcare in these health facilities as well. Clients are at will to seek health care at facilities where in their opinion service delivery meets their expectation. Any business achieving and maintaining positive customer satisfaction is paramount to its survival. It is therefore imperative for KNUST to acquire an appropriate measure of satisfaction from its clients. With such information the hospital will gain competitive advantage, attract more clients and make it more profitable by knowing and providing service that directly meet customer expectation. Additionally, there is the need for critical study of quality of service in the health sector.

This has necessitated this research to find out the effect of service quality on customer satisfaction of clients seeking medical care at KNUST hospital.

1.3 Research Questions

Related to the problem, the research seeks to address four main questions outline below:

1) What is KNUST hospital's staff perception of service quality?

2) What is KNUST clients' perception of service quality?

3) What are the service dimensions that lead to customer satisfaction?

4) What are the effects of service quality on customer satisfaction?

1.4 The Objectives of the Study

In an attempt to address the above questions, the following general and operational objectives were set for the study:

(a) General objective

The general objective of the study is to measure the service quality of KNUST hospital. This will be realized considering the following operational objectives.

(b) Operational objectives

i) To ascertain service providers' perception of service quality

ii) To ascertain clients' perception of service quality

iii) To assess the effect of service quality on customer satisfaction

iv) To recommend critical success factors to management to improve linking clients' perception of service quality to resource allocation decision.

1.5 Significance of the Study

Having gone through this research work, a lot of issues would be raised with possible solutions. The significance of the study would be as follows:

a) The measurement of service quality in healthcare is a critical area of research. As Total Quality Management is a critical element in strategic planning, the measurement of service quality is essential in determining what quality attributes contribute most to customer satisfaction and ultimately to revenue. Additionally, such measurement is necessary to evaluate cost associated with service provision.

b) It will offer some vast of information to managers, which can facilitate benchmarking and other quality strategies (Lam and Woo, 1997).

c) It will assist healthcare providers to be able to identify areas that need improvement within their system (Self and Sherer, 1996; Yasin and Green, 1995). The profitability of a system may also be impacted by improving service quality, as customer satisfaction is directly related to profitability.

d) It will allow consumers to make informed decisions regarding provider selection.

e) It will help establish how from an academic point of view, service quality can be managed in health facilities

f) The study can be used as reference for further research.

To other researchers studying on a related subject, this study would serve as a platform to enhance their work. It will serve as a rich source of literature to other researchers and the limitation of this research may be built on by others studying on the same topic.

Though this research is to partially fulfill an academic requirement for the award of a master's degree, it is expected that recommendations would be provided to complement management efforts at linking clients' perception of service quality to resource allocation decision.

1.6 Scope of the Study

The University Hospital is a semi-autonomous institution which does not depend solely on government subventions for achieving its objectives. For this reason, KNUST is viewed as a revenue generating organisation rather than a spending organisation. This study is therefore limited to finding out the healthcare providers and clients' perception of service quality and its effect on customer satisfaction which is linked to profitability.

1.7 Outline of Research Methodology

The researcher sought permission from the authorities of KNUST hospital after providing a letter from the school of Business, KNUST. The data collection instrument was developed by the author as a modification of the five dimensions of service quality developed by Parasuraman (1985). The questionnaire was then pretested at the KNUST clinic.

A sample size of fifty (50) KNUST hospital staff and a total of one hundred and fifty (150) clients were selected. Responses were obtained from the staff using fifty (50) interview schedules via a questionnaire after they have been randomly selected. Fifty (50) each of Private, KNUST staff and Student clients', were selected purposively after these clients had received their outpatient's cards while waiting for their turn to see the doctor. Consent was then sought from them and were asked to respond to the sections A and B of the questionnaire (Appendix 1). Clients were then followed to the Pharmacy which is the final exit point where they completed sections C and D of the questionnaire. The responses were then scanned and coded for analysis.

The statistical package for social sciences (SPSS) and Microsoft Excel was used to process the data and their implications explained.

1.8 Limitations of the Study

The major limitations associated with the study were:

1. Ideally, the study should have covered all the state owned hospitals in Ghana based upon problems associated with generalization of findings. However, KNUST Hospital is chosen due to time constraints and financial resources available for the study.
2. The choice of KNUST Hospital is not on any merit but, it is hoped the service providers and clients are not too different from those in the other state owned hospitals. It is believed that findings of the study will depict a fair representation of the effect of service quality on customer satisfaction in the health sector.
3. Delays in response to information requested.
4. The educational level of both service providers and clients will affect the quality of response.

1.9 Structure and Organization of the Study

The research work is divided into five (5) chapters.

1 Chapter one is dedicated to the introduction and research context. Further relevant sections have addressed the statement of the problem, research questions, and the

objectives of the study, significance of the study, scope and limitation of the study. Finally the structure and organisation of the study.

2 Chapter two is devoted to literature review. Various views from different authors were reviewed as regards measurement of service quality and its effect on customer satisfaction.

3 Chapter three concentrates on the methodology of the research and the profile of the KNUST Hospital.

4 Chapter four focuses on the Findings, Analysis and Discussions of results.

5 Chapter five covers the summary, recommendations and conclusions.

6 References

7 Appendices

1.10 Chapter Summary

This introductory chapter of the study:

- Provided an overview of the study background, problem statement of the study, and an outline of the study;
- Also stated the general and operational objectives that were examined as well as the research questions that directed the study;
- Further provided the justification of the study, scope of the study, and the limitations that were encountered in carrying out the study; and
- Ended with an overview of what to expect in the study.

CHAPTER TWO

REVIEW OF RELEVANT LITERATURE

2.1 Introduction

The previous chapter of the study seeks to provide an overview of the study background, problem statement of the study, and an outline of the study. This seeks to address the objectives of the study, significance of the study, the scope of the study, the limitations and the structure and organisation of the study. This chapter focuses on a review of relevant literature of service quality, its measurement and its effect on customer satisfaction. The theoretical review, which forms the basis of this chapter, is structured as follows:

2.2 Definition of service quality in the health sector

2.2.1 Service Quality model

2.3 The direct effect of service quality on repatronage intentions

2.4 Customer care

2.4.1 Components and requirements of customer satisfaction

2.4.2 Importance of customer satisfaction

2.4.3 A model of customer satisfaction

2.5 The direct effect of customer satisfaction on repatronage intentions

2.2 Definition of Service Quality in the Health Sector

The health care industry presents a very dynamic, unexpected, ambiguous and uncertain environment in which "quality" issues have occupied a central position. According to Koeck (1997) Quality of care is related to all issues vital to healthcare from reform to the question of access and to the problems associated with ineffective, inappropriate, patient preferences, and choices, and is inseparable from the issue of efficiency.

Mohanty et al. (1996) have argued that although health care systems have some unique factors, they bear many similarities to other industrial systems and can be subjected to the same forms of analysis, evaluation and improvement. Improvement in quality has become essential in the healthcare sector in order to enhance efficiency and effectiveness of services. Process management(Varghese,2001;Reddy and Acharyulu,2003), patient satisfaction/expectation surveys(Mahapatra et al.,2001;Verma and Sobti,2002),reducing hospital infection rates(Vij et al.,2001) and TQM(Reddy et

al.,2002;Gupta and Kant,2002) are some of the reported cases reported quality improvement strategies in India.

Quality literature in healthcare abounds with implementation of various quality management practices including Total quality management in the developed countries (Yang, 2003). As healthcare organizations are becoming more and more complex, old models of quality assurance, relying on provider-based preset standards are insufficient to solving quality problems. Concepts of total quality management (TQM) and continuous quality improvement (CQI) have taken a central role in the healthcare quality management (McLaughlin and Simpson, 1999).

According to Lakhe and Moharty (1994), total quality management is a solution for improving quality of products in developing economies so that they can compete in the global market.

By adopting the concept TQM or CQI, a healthcare institution can move away from an inspection- oriented quality improvement system to one that orients itself to a systematic transformation of an organizational culture through a roll-out plan involving customer focus ,key-process monitoring, data driven tools and techniques, and team empowerment(Klein et al,1998).

The health care system is beset with problems such as medical treatment transferal system that is not practical. Most patients still prefer to go to bigger hospitals for treatment. There is shortage of physicians and medical technicians making recruitment of these professionals difficult. The premium for the national health care insurance program has a very little room to increase and it freezes the operating expense and is

unable to reflect the actual cost. This has a serious effect on the operating cost as well as the medical treatment quality. How to solve these problems is the most critical issue for most health institutions. Many hospitals worldwide have started to implement quality activities; such as ISO 9000, Health Quality improvement circle (HQIC) and medical quality Indicator Program (MQIP). These approaches are very helpful to upgrade the quality of medical care and service, and to reduce the operating cost. However, if hospitals want to solve these problems more effectively and practically, it is necessary to implement Total quality management (Kim and Johnson, 1994; short and Rahim, 1995).

At the current development of TQM, its content has reached a consensus among researchers and practitioners (Yang, 1997) as follows:

- Customer focus- to understand the requirement of customers proactively and to take proper actions to fulfill the customers' needs. The aim is to satisfy customers.
- Continuous improvement –to discover the problems continuously and to analyze the critical root causes, then eliminate those barriers completely.
- Employee participation-every employee is accountable for responsibility for quality. Everyone is required to involve and commit themselves in all quality activities.
- Teamwork- to overcome sectionalism and to realize the teamwork and cooperation for improving quality then embark on quality activities.
- Process focus- to standardize the processes and to take proper quality control in the key steps of the operation procedures to prevent any defects in the process.

- Systemization- for the effective prevention and the efficient control of quality, all the quality activities should be conducted and implemented systematically.

- Empowerment-every employee is autonomous to do the right thing at the first time in order to get good quality performance.

- Leadership- in the implementation process of TQM, the top management should play a key role. The top management should be a coach to teach and influence the subordinates.

Thus from the TQM practices mentioned above, if enterprises can successfully implement TQM, they will be able to reach a holistic quality. Several researchers have asserted that successful implementation of TQM can result in significantly superior outcome in health care organizations (short and Rahim, 1995; counte et al, 1995; Zabada et al, 1998), such as:

- Upgrade service quality;

- Improve health care quality and productivity;

- Prevent costly or fatal mistakes in medical treatment;

- Reduce the cost of medical treatment

- Satisfy both external and internal customers.

Therefore, adopting TQM practices will not only help the financial crisis of the healthcare organizations, but also overcome many critical issues that they are currently facing(short and Rahim,1995)

It is not as smooth or successful as in the manufacturing or service industries to adopt TQM in the health care industry. In the healthcare organizations, there are barriers from the cultural background and the traditional professional style of leadership among physicians during the implementation of TQM. Yang(2003) in his paper on establishment of TQM system for the health industry stated that, he conducted a survey for a hospital to identify the major obstacles, which might be incurred while TQM is implemented in the health care industry as several studies stated(short and Rahim,1995;Lin and Glousing,1995;Zabada et al. ,1998).For example :

- Organizational structure-Traditionally, the health care organizations use "functional-hierarchical structure' as the base. This will cause poor communication between sections.

- Leadership style-Most leaders of health care organization are specialized in their professionalism with authority. The "unchallengeable" leadership cannot allow them to accept the opinions from their subordinates

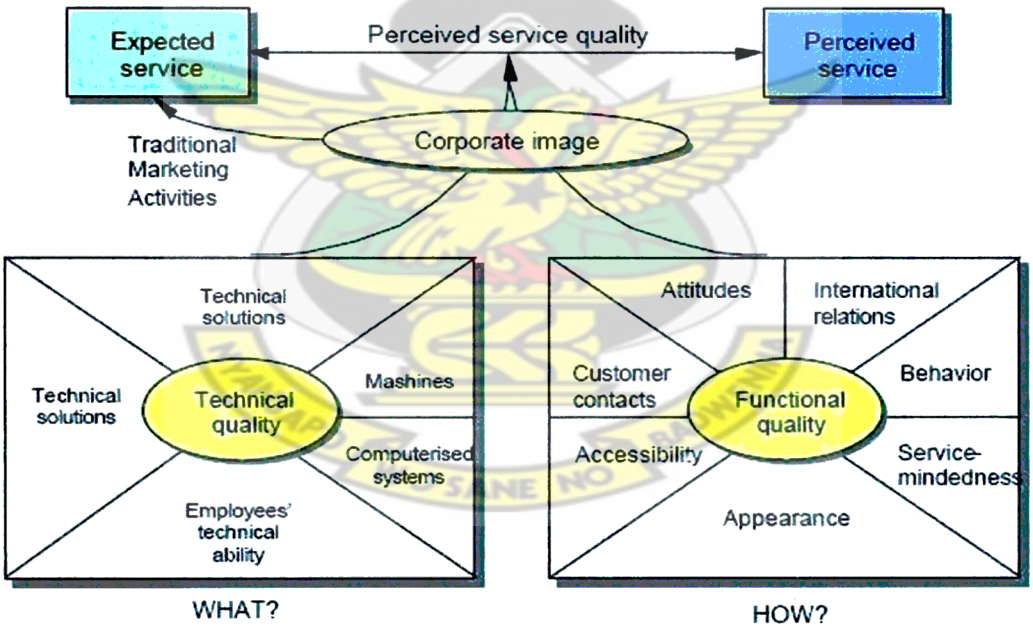
- Organization culture- The health care organizational structure and leadership style create a highly hierarchical, bureaucratic, and authoritarian culture. It conflicts with the ideal of empowerment.

- Professional autonomy-The physicians, medical technicians, and clinical professionals work independently in their fields. The whole process is also much sectionalized. It is difficult to coordinate mutually with others as a team. Furthermore; different departments might have different points of view on TQM.

2.2.1 Service Quality Model

According to Gronroos (1982), the quality of a service perceived by customers will differ depending on what strategy the company chooses to deliver and promote that service. The model holds that the quality of service, as perceived by the customer, can be divided into technical and functional quality dimensions. The former denotes what the customer perceives as the output of a service production process and the latter how the technical quality is produced and transferred to the customer during buyer-seller interactions.

Figure 1: The Service Quality Model



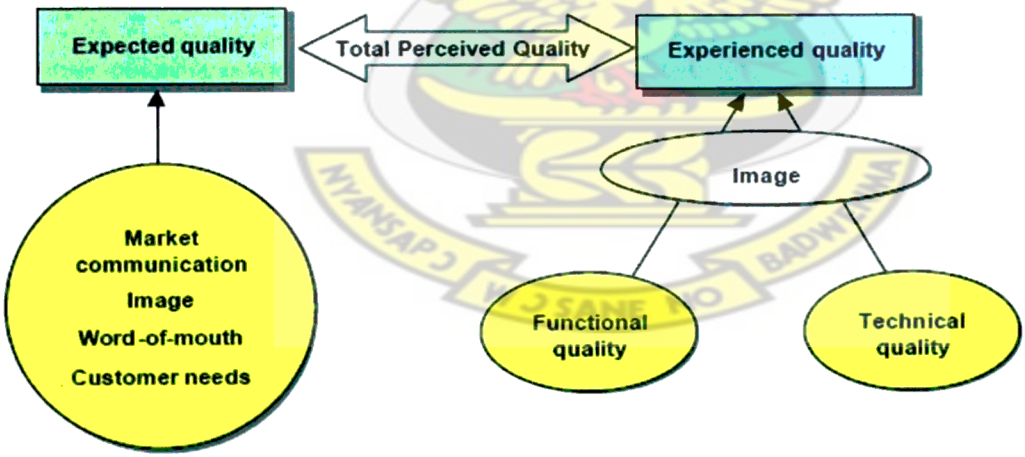
Source: Gronroos, 1982

Gronroos posits that the technical quality is the 'basic condition for a positively perceived total quality, but the functional quality is the one that adds competitive edge'

(Gummesson and Gronroos 1987).Furthermore, in the relationship marketing, the growth of the importance of functional quality in comparison to technical quality became a strategic one (Gronroos, 1993).

There are differences between perceived and expected service quality and it's suggested that the quality is perceived subjectively. Gronroos (1988) further develops the model by positing that in the case of a company, which extends product offers with services, it is more appropriate to talk about total perceived quality. According to him, a high perceived quality is obtained when the experienced quality exceeds customer expectation, i. e the expected quality. However, if the expectations are unrealistic, the total perceived quality will be low, even if high quality was experienced (Gronroos 1988)

Figure 2: The Total Perceived Quality



Source: Gronroos, 1988

The expected quality is heavily influenced by market communication (advertising, sales, Public Relations and direct mail), word-of –mouth, company image and customer needs. While the company directly controls market communication, the word of mouth and company image are outside its immediate reach. Gronroos concludes that the total perceived quality is not only defined by level of technical and functional dimensions, but also by the gap between the expected and the experienced quality.

2.3 The Direct Effect of Service Quality on Repatronage Intentions

Substantial empirical and theoretical evidence in the literature suggests that there is a direct link between service quality and behavioral intentions(Bitner,1990;Bolton and Drew,1991a).Among the various behavioral intentions, considerable emphasis has bee placed on the impact of service quality in determining repeat purchase and customer loyalty(Jones and Farquhar,2003). As pointed out by Bolton (1998), service quality influences a customer's subsequent behavior, intentions and preferences. When a customer chooses a provider that provides service quality that meet or exceeds his or her expectations, he or she is more likely to choose the same provider again. Besides, Cronin and Taylor (1994) also found that service quality has a significant effect on repurchase intentions. Other studies which support that repurchase intentions are positively influenced by service quality include Zeithaml, Berry and Parasuraman (1996), Cronin and Taylor (1992, 1994), Cronin and Choi et al. (2004).

Hence, it has been hypothesized that: Service quality is positively related to re-patronage intentions

2.4 Customer Care

Many clients seeking medical care have time and again made reference to front desk and other health care providers not having a welcoming smile. This means a smile goes beyond the face to help in the healing process. This may be for some clients all they need to recover from their ailment. In Sarah cook and Steve Macaulay's' paper on "customer service: what's a smile got to do with it? They asserted that some 12 years ago customer service training started for many organizations in the UK and was received by a rather cynical audience who believed it was all about keeping a smile on ones face, come what may. However, today there is considerable focus on improving customer service in every sector and current knowledge of how to achieve this has strengthened considerably. Yet achieving exemplary service still seems elusive; in particular many managers are left wondering whether they should put emphasis on the "hard" or the "soft" aspects, the head versus the heart.

They concluded that though "soft " issues are key and many successful service companies stress the importance of developing customer-friendly values, a positive environment and interpersonal skills to match It is accepted that "hard" aspects are important too and include process alignment, customer surveys ,benchmarking standards and capacity management. They concluded that ones ability to handle times when something goes wrong demonstrates the interplay of "hard" and "soft", service delivery necessitates a complex blend of these approaches. A recent British Airways advertisement (1997) for customer service Agents is headed (in the shape of a smiling face) "when you are smiling,, the whole world smiles with you". It talks of a service

role in providing a "friendly and efficient check-in, a warm welcome, a helping hand and a reassurance presence.

In the paper "the real cost of making customers wait" Peter T.Ittig (1994) emphasizes that the level of service capacity that is provided influences the level of demand that will arise. Additional capacity may result in greater demand. A premise in the movie 'field of Dreams' was "if you build it they will come". In services management, the provision of additional capacity may produce additional customers, particularly if the additional capacity reduces the waiting time imposed on customers. A basic tradeoff here involves the cost and timeliness of service. Timeliness is related to customer satisfaction and to whether customers return. A discussion of the tradeoff is provided by Siferd et al (1992).When customers are external; a waiting time has an effect that is similar to that of a price. Customers become aware of the price demanded in money and in time and adjust their behavior accordingly. Even in cases in which there may appear to be monopoly control over customers, as in a hospital emergency room, there is an adjustment of behavior at the margin. Long delays for service will cause some patients to consider an outpatient facility or a private practitioner in the future.

The issue of time and consumer behavior has received attention from differing perspectives in economics, marketing and management science. The view of many economists has been waiting time is a form of price. For example Becker (1965), commented that "the full costs of these activities would equal the sum of market prices and the forgone value of the time used up". A paper by Zeithaml (1988) discussed the concept of "perceived price" and included "time costs" as part of the perceived price,

"From the consumer's perspective, price is what is given up or sacrificed to obtain a product".

In his paper "Consumer health information needs and services in Nigeria" Popoola (2000) asserts that, the Government has made it a matter of policy to allocate at least 5percent of its budget to the health sector in every fiscal year. The experience of health management in Nigeria suggests that the provision of good consumer information is a key factor in attracting or wooing clients to particular providers. More over, those medical establishments which do provide consumer health information services are particularly likely to attract comparatively young, socially advantaged patients who are likely to demand fewer episodes of care and be low-cost clients. Kaiser Permanente (1987) remarks that the existence of consumer health information and health promotion programmes within particular health management organizations (HMO) should result in the adoption of healthier lifestyles, and consequently even lowers utilization of services and costs to the provider. In addition, Rees (1982) posted that the recognition of communication as a crucial element in patient satisfaction has led to many US hospitals producing brochures describing services, and some establishing consumer health information centres or libraries. Similarly, Hayward (1976) confirmed that there was a significant decrease in postoperative pain and complications in those patients given access to information.

A humane approach to health care involves the considerate and courteous treatment of patients, good communication and information giving, and a health-promoting environment, in short, quality health care. National consumer council(1989) states that patients having access to information on their own health and treatment compare

favorably with those who are not in terms of patient satisfaction, length of hospital stay and readmission rates. Thus health standards could be improved by provision of consumer health information services.

2.4.1 Components and Requirements of Customer Satisfaction

Customer satisfaction begins with a clear, operational definition from both the customer and the organization. Understanding the motivations, expectations, and desires of both gives a foundation on how best to serve the customer. It may even provide information on making improvements in the nature of the business. This is the heart of research into customer satisfaction (Naylor and Greco, 2002).The importance of clearly defining they key concepts and elements of satisfaction provide a template by which information can be gathered about what is, and what is not working. This includes both the hard measures- those that are more tangible and observable(i.e., number of complaints, average wait time, etc) and soft measures in those less tangible aspects(i.e. friendliness, helpfulness, politeness, etc) (Hayes,1998).In order to know about customer satisfaction, one needs to know what to look for(Mitchell,1999).The organization needs to seek this information from both within and without.

The organizational requirements of customer satisfaction are the internally based processes, components, standards, and criteria that a business strives to achieve. These are the performance goals and benchmarks set forth by the business, for the business. They are the elements of corporate culture (Hayes, 1988).Meeting or exceeding these is often an indicator of success or failure. At times, these indigenous components of

customer satisfaction may overlap with those set forth by the customer, at times they are divergent.

Those processes, components, and standards that are deemed important by the customer are an important source of information. In order for a business to meet the needs and desires of the customer, the business must know the needs and desires of the customer. This important component helps to set the standards and components of satisfaction from the perspective of the consumer (Hayes, 1998).

Satisfaction dimensions are developed from previously identified requirements. These are the specific components that make up the requirement. Thus, if a customer and organizational requirement is for customer service, the satisfaction dimension may include interactions, timeliness and responsiveness. These are the clusters that define the requirements (Hayes, 1998)

Critical incidents are the specific operations that relate to the satisfaction dimensions. These are often the concrete and measurable behaviours and actions of employees, groups, or organization. This may also include policies, procedures, and protocols in place within the organization.

2.4.2 Importance of Customer Satisfaction

Satisfying customers is one of the main objectives of every business. Businesses recognize that keeping current customers is more profitable than having to win new ones to replace those lost(Leadership Factor,N.D).Management and Marketing theorists

underscore the essence of customer satisfaction for a business success(McColl-Kennedy and Schneider,2000;Reichheld and Sasser,1990).

Accordingly, the Malcolm Baldrige National Quality Award recognizes the role of customer satisfaction as the central component of the award process (Dutka, 1993).

Good customer satisfaction has an effect on the profitability of nearly every business. For example, when customers perceive good service, each will typically tell nine to Ten people. It is estimated that nearly one half of American business is built upon the informal, "word –of –mouth" communication(Gitomer,1998;Reck,1991).Improvement in customer retention by even a few percentage points can increase profits by 25percent or more(Griffin,1995).The university of Michigan found that for every percentage increase in customer satisfaction, there is an average increase of 2.37% of return on investment (Keiningham and Vavra,2001).Most people prize the businesses that treat them the way they like to be treated, they will even pay more for his service.

However, a lack of customer satisfaction has an even larger effect on the bottom line. Customers who receive poor service will typically relate their dissatisfaction to between fifteen and twenty others. The cost of gaining a new customer is ten times greater than the cost of keeping a satisfied customer (Gitomer, 1998).

If the service incident is so negative, the negative effects can last years through repeated recollection and recounting of the negative experience (Gitomer, 1998; Reck, 1991).

The message is obvious –satisfied customers improve business and dissatisfied customers impair business (Anderson & Zemke, 1998; Leland & Bailey, 1995).

Thus customer satisfaction is an asset that should be monitored and managed just as any physical asset. Therefore businesses that hope to prosper will realize the importance of this concept by putting together a functional and appropriate operational definition (McColl-Kennedy & Schneider, 2000).

2.4.3 A Model of Customer Satisfaction

A model of measuring customer satisfaction that has received considerable attention in the service industry is the Met-Expectation Model. This is also known as the discrepancy, Disconfrimation of the expectation Model, Gap model for managing quality (Parasuraman,Berry & Zeithaml,1985,1993).The basic premise of the model can be defined by the difference between the customer and the organization in terms of services quality(Parasuraman, Berry& Zeithamal,1985). This is true of perceptions, expectations, and actual service delivery from the two perspectives. These differences, or gaps, can be used to identify the relative strengths and weakness in service quality of an organization (Grapentine, 1999).

The Met-Expectations Model of customer satisfaction is based upon a framework of five potential Service quality gaps(Parasuraman, Berry & Zeithaml,1985).The first four are those on the provider side of service .The fifth relates to the customer side of service. These gaps are-

Gap 1: The difference between customer expectations and management perceptions of customer expectations.

This is simply the point of knowing what the customer expects. Failure to do so can lead to poor perceptions of satisfaction with service quality. This is the cornerstone of effective business- knowing one's customer (Dutka, 1993).

Gap 2: The difference between management perceptions of customer expectations and service quality expectations.

This gap relates to the consistency between the organization's established specifications of service quality and expectations of its customers. The intended service must meet the expected service. The more exact these are the more likely that the organization is measuring the important qualities of service anticipated by its customers.

The customer must determine the standards of service delivery for satisfaction to be positive (Shostack, 1990; Takeuchi & Quelch, 1990).

Gap 3: The difference between actual service quality specifications and the actual delivered.

This is referred to as the service performance gap. This is the difference between what an organization stipulates as service standards and practices and what employees actually deliver to customers. These differences could be due to either the inability or the unwillingness of staff to perform as the organization describes. Organizations' must closely and carefully monitor the provision of service. Failure to do so will lead to lower customer satisfaction (Gitomer, 1998).

Gap 4: The difference between service delivery and what is communicated to customers.

The consistency between organizational assurances of service delivery and actual service is the issue with regards this gap. The aim is to follow through on promises made to customers by the organization.

Failure to deliver as promised can lead to customer dissatisfaction not only with the service, but the company as well. This is identified as a significant reason for customer defection (Reichheld & Sasser, 1990)

2.5 The Direct Effect of Customer Satisfaction on Repatronage Intentions

A wide variety of studies has been done to support the link between customer satisfaction and behavioral intentions (Fornell, 1992; Rust and Zahorik, 1993; Taylor and Baker, 1994; Patterson and Spreng, 1997). Bearden and Teel (1983, p21) argue that 'customer satisfaction is important to the marketer because it is generally assumed to be a significant determinant of repeat sales, positive word of mouth, and customer loyalty'. Similarly, Anderson and Sullivan (1993) have also argued that the more satisfied the customers are, the greater their retention. This view is also supported by Ranaweera and Prabhu (2003) study that the effects of customer satisfaction on retention are found to be significant and positive. Specifically, the levels of customer satisfaction will influence the level of repurchase intentions and this is supported by research in a wide variety of studies (Rust and Zahorik, 1993; Taylor and Baker, 1994; Patterson and Spreng, 1997; Bolton, 1998; Hellier et al., 2003). On the basis of the above, it was then hypothesized that: Customer satisfaction is positively related to re-patronage intentions

2.6 The Effects of Service Quality on Customer Satisfaction

In any service industry, a critical decision for a firm is the determination of the appropriate level of service quality. When customers are not satisfied with a service, they are not only likely to terminate the service but also to relate their unfavorable service experience to others resulting in decreased current and potential sales (Keaveney 1995, Richins 1983). To retain existing customers and acquire new customers, firms invest huge resources to improve service quality. However, pursuing the highest level of service quality often costs too much. Anderson, Fornell and Rust (1997) have shown that the relationship between customers' satisfaction – a measure of service quality - and a firm's profitability tends to be negative in service industries. For managers, it is therefore essential to understand the effects of improving the level of service quality on current and potential customer relationships.

2.7 Quality Measurement

The assessment of service quality is traditionally done by speaking with customers. Three system outcomes are focused on: perceived service quality, satisfaction, and behavioral intention (Baker and Taylor, 1997; Cronin and Taylor, 1992; Zeithaml *et al.*, 1996). To determine perceived service quality, a customer is generally asked if they felt the level of service was high quality or poor quality. Additionally, customers are asked if they are satisfied or dissatisfied with the service system. To examine behavioral intention, customers are often asked if they would return to the same system for service. They are also asked if they would refer a friend to the same service system.

Measurement tools often question a customer's perceptions of specific system characteristics, as well as how they relate to the three outcome dimensions.

When a customer enters into a service experience, they bring expectations of that service with them. Customers use a variety of inputs to form expectations about a service system. Past experience, current needs and requirements, and communications with the system all factor into the development of customer expectations (Morgan, 1992). How can a service industry use these expectations to improve service quality? Parasuraman, Zeithaml, and Berry proposed a "zone of tolerance" in which service organizations should try to operate. The zone is the difference between someone's view of how an excellent organization should perform and the minimum he or she is willing to accept. If a service is delivered within this zone, the customer will assess a high quality rating for that service experience (Schneider and White, 2004).

A customer's perceptions are another key factor in their judgment of service quality. A customer compares their perceptions of the current service process to expectations they created prior to the service experience. The basis for evaluating service from the customer's perspective is the comparison between expected and perceived service (Edvardsson and Gustavsson, 1991). The gap between perceptions and expectations are used by the customer to judge service quality. Customers base their service quality judgments on the gap that existed between their perceptions of what happened during

the service transaction and their expectations for how the service transaction should have occurred. When these gaps exist, quality is compromised (Murphy, 1993).

Therefore, a quality control strategy in services is to narrow and eventually close these gaps. To determine the service quality of a system; the gap must first be measured.

2.7.1 SERVQUAL Measurement Tools

SERVQUAL is a survey instrument that measures the perception expectation gap. It is the most widely recognized and utilized method of measuring service quality by both researchers and practitioners (Newman, 2001). This is largely due to the generalized nature of SERVQUAL. It can be modified and revalidated for any service industry.) . Studies have shown that perceived quality of healthcare services has a greater influence on patient behaviors than other factors such as access and cost. These behaviors include satisfaction, referrals, and usage (Andaleeb, 2001)

Quality in healthcare systems can focus on a number of aspects within the system. The technical aspects of care, relationships between practitioner and patient, and the amenities provided are all important factors in a quality consideration (Andaleeb, 2001). Service quality in healthcare has been defined as the "provision of appropriate and technically sound care that produces the desired effect" (McAlexander *et al.*, 1994). More recently, however, the definition has come to include the delivery of the service and how it relates to customer needs and expectations (Self and Sherer, 1996).

There are some difficulties in evaluating service quality within healthcare systems. Unlike other services, the customer is highly involved in healthcare services. They often have a very intimate relationship with their provider that extends over long periods of time (McAlexander *et al.*, 1994). Some attributes of the system are difficult for the

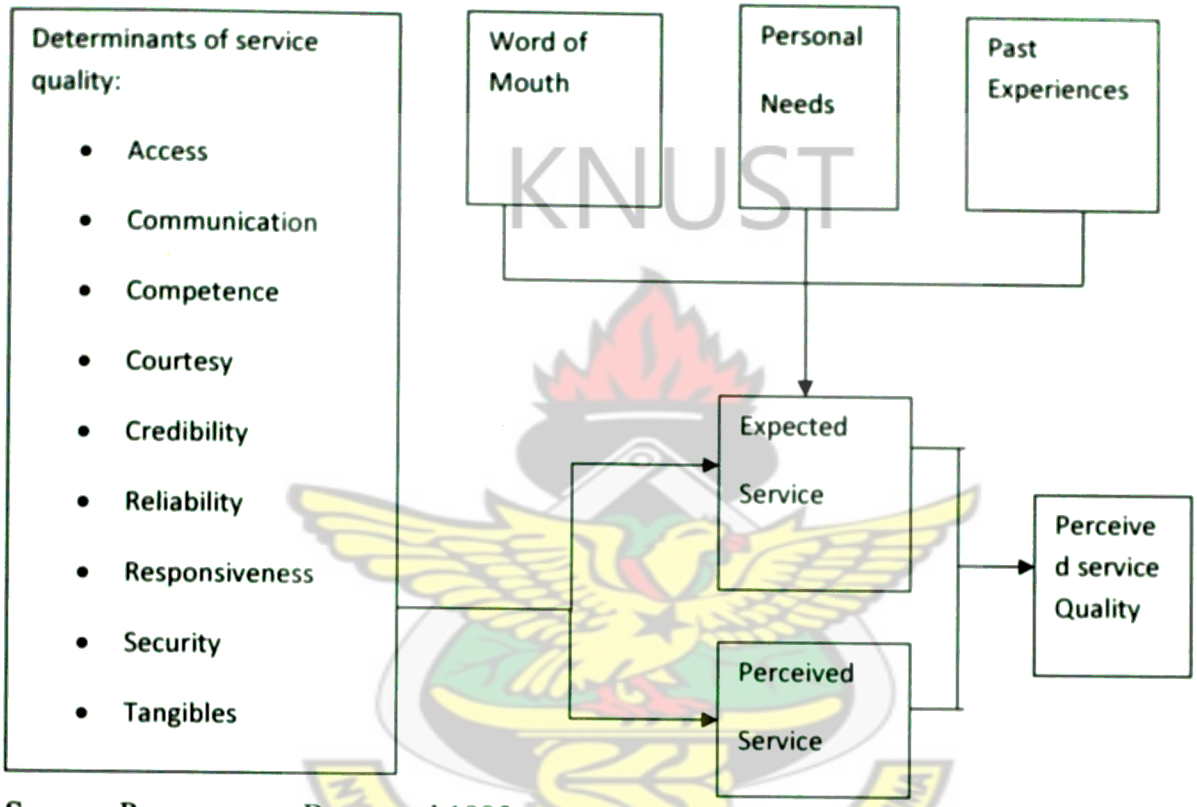
customer to comprehend and assess. The high degree of complexity associated with healthcare tasks may make a customer's assessment of the system invalid (Wong, 2002). While customers may lack the medical knowledge to assess particular aspects of the system, their input regarding perceptions of the system are still an invaluable tool for providers (Yasin and Green, 1995).

The selection of items relevant to healthcare was based on past use of survey instruments in the healthcare field (Babakus and Mangold, 1992; Dean, 1999, McAlexander *et al.*, 1994; Pakdil and Harwood, 2005). The use of SERVQUAL in healthcare systems has produced varied results (Asubonteng *et al.*, 1996). Some studies have found that SERVQUAL was not successful in measuring patient expectations and perceptions in the healthcare domain (McAlexander *et al.*, 1994). However, the overwhelming majority of service quality studies in the healthcare domain have shown SERVQUAL to be an accurate and valid measure of service quality (Babakus and Mangold, 1992; Dean, 1999; Lam, 1997; Reidenbach and Sandifer-Smallwood, 1990; Scardina, 1994; Taylor and Cronin, 1994; Vandamme and Leunis, 1993; Wong, 2002). SERVQUAL has been shown to be useful in revealing the differences between patients' preferences and their actual experience, thus identifying areas in need of improvement (Pakdil and Harwood, 2005). Studies have also shown that dimensions may vary within the healthcare industry, depending on the specific application area (Dean, 1999; Lam, 1997).

The Servqual model measures the difference between customers' expectations about general quality of a certain group of service providers and their perception about the actual performance of a service provider from that group. It uses a set of service quality

determinants. As shown in figure 4.This model defines customer satisfaction as perceived service quality, which is the gap between expected service and perception of service actually received

Figure 3: Service Quality Model



Source: Parasuraman, Berry et al.1985

The research will be employing the SERVQUAL instrument to measure service quality.

2.7.1.2 Other Quality Instruments

Other instruments have been tested and used in other developing countries like India. As hospitals in India are not only growing in number but in size, complexity and the types of services provided, there is an ever-growing need for professional management of hospitals (Tabish, 1996; Sharma, 1998).A number of private and corporate hospitals

are constantly innovating and improving the clinical and service aspects like never before in order to provide world-class quality. In the absence of an accrediting body for hospitals, leaders in the industry look for different approaches like accreditations from organizations abroad and hospital grading by commercial organizations to improve quality and attract new markets. Nandaraj et al (2001) examined the feasibility of introducing accreditation in mumbai hospitals. Here, stakeholders supported such a system but it could not be implemented because of financial constraints.

Many Indian hospitals are getting ISO certification and Apollo Group of Hospitals in its efforts to position itself as an Indian MNC in global health care is undergoing the US Joint Commission on Accreditation of Healthcare Organizations (JCAHO) certification process. However, external reviews did not generate any new knowledge, rather was found to be confirmatory than revelatory, and so not lead to major changes in policy, strategy or practice (Walshe et al,2001). Industry leaders in India are also voicing their concerns about the usefulness of ISO and JCAHO certification for Indian hospitals. In general, ISO certification helps achieve consistency in production of a product or service and providing assurance to customers that the specific practices are in provider's stated quality systems.ISO certification does not address the people issues specifically employee motivation ,leadership style, social concern and what should be improved in order to gain competitive position. Therefore, models of TQM based on quality awards and empirical research for identifying critical factors have provided better framework to implement quality practices and measure performance of hospitals.

In a paper on "quality management in healthcare organization: a case study of a south Indian hospital" Usha et al (2007) stated that in order to determine an organizations

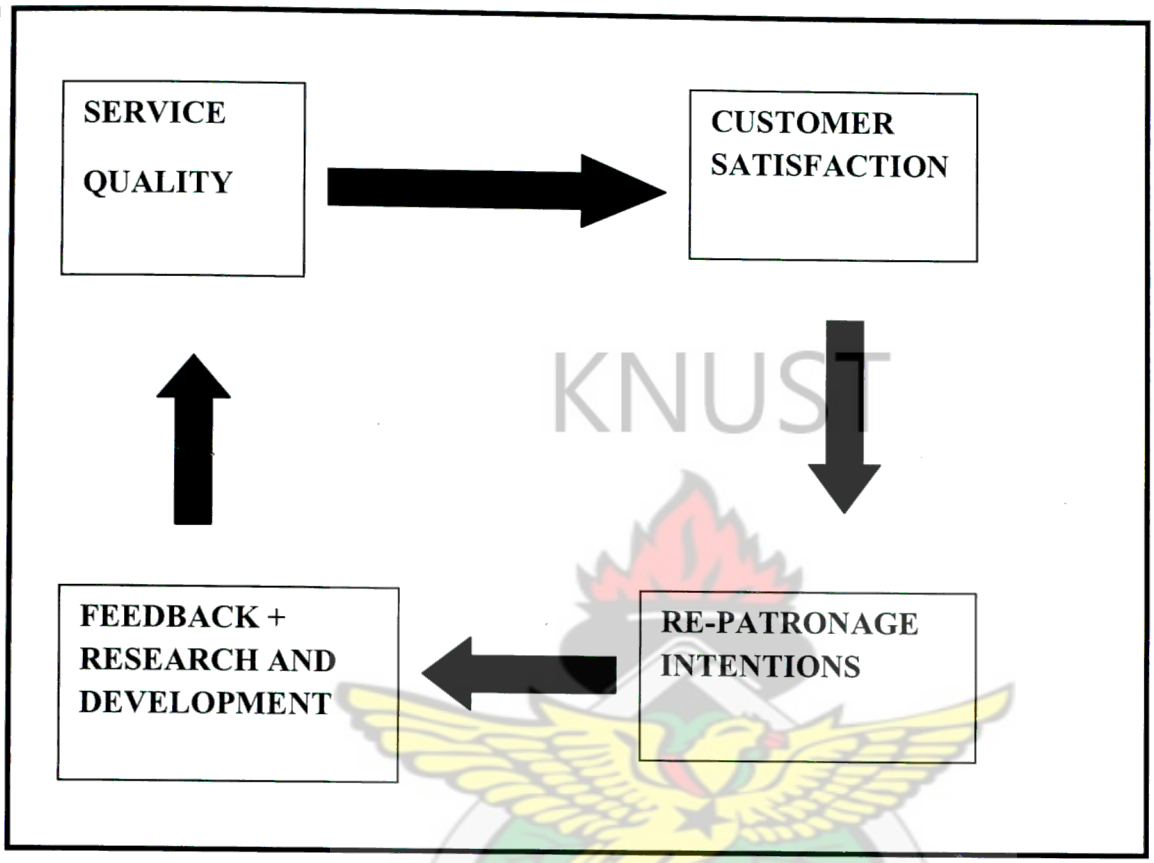
level of quality management and continuous improvement, many studies have also used the MBNQA (Counte and Meurer, 2001). It concludes that health care organizations are undergoing major changes like in any other developing nations and making sincere efforts to establish quality management practices. While the TQM philosophy has its roots in manufacturing and industry, it is based on many techniques, which could easily be transferred to the health care setting. In the United States the Malcolm Baldrige National Quality Award criteria(MBNQA) was instituted for the health care organizations on similar lines of the manufacturing industry, recognizing the importance of quality (Baldrige National Quality Program,2003).The MBNQA has evolved from a means of recognizing and promoting exemplary quality management practices to a comprehensive framework for world-class performance, widely used as a model for improvement(Flynn and saladin,2001).currently, there are newly established criteria for performance excellence that have been specially tailored for the health-care providers. Meyer and Collier (2001) empirically tested the Baldrige Model of quality management for the health care industry using data from 220 US hospitals and determined the causal relationships among the Baldrige Health Care pilot criteria. The seven criteria are: leadership, strategic planning, customer and market focus, measurement, analysis and knowledge management, human resource focus, process management and business results. As a result, its underlying theoretical framework is of critical importance, since the relationships it portrays for the different criteria convey a message about the route to competitiveness. Therefore, it is judged that the MBNQA health care criteria would provide a good framework to analyze quality management practices in the situation where the hospital has obtained ISO certification and strives

for continuous improvement based on TQM principled including committed leadership, customer focus and satisfaction, process improvement, service design, human resource management and social responsibility.

2.7 Conceptual Framework of the effect of service quality on customer satisfaction

Based on the original view of Parasuraman, Zeithaml and Berry (1985), service quality can be conceptualized as a function for the differences between expectation and performance along with hospital attributes such as hospital equipment, physical facilities of hospital, empathy of health personnel and its overall image. Next,customer satisfaction has been conceptualized in this study as the clients cumulative post visit evaluation based on the most recent services experience at the hospital. Also, a repatronage intention construct has been conceptualized as a customer's likelihood of revisiting the hospital in the ensuing months by adopting the definition of Hellier et al (2003). Service quality has a positive effect on customer satisfaction with resultant increase revisits all other things being equal.

Figure: 4 Conceptual Framework of the effect of service quality on customer satisfaction



Source: Author's Construct, April 2008

CHAPTER THREE

THE RESEARCH METHODOLOGY AND THE PROFILE OF KNUST HOSPITAL

3.1 Introduction

The previous chapters provided the introductory and contextual matter of the study and reviewed prior relevant literature, thereby placing the study in its right perspective.

This chapter covers the research methodology of the study and the background of the study area. Section 3.1 describes the method and techniques that were adopted to collect the data for the analysis of the study as contained in chapter four. The research design and methodology of the study have been described under the following sub-heading:

3.2 Methodology

3.2.1 The research design;

3.2.2 The population of the study;

3.2.3 The sample of the study;

3.2.4 The data collection techniques;

3.2.5 The method of data analysis;

The profile of KNUST Hospital has also been described under the following headings:

3.3 History of KNUST Hospital

3.3.1 The vision of KNUST Hospital;

3.3.2 The mission of KNUST Hospital;

3.3.3 Objectives of KNUST Hospital;

3.3.4 Facilities of KNUST Hospital;

3.3.5 Hospital Operations

3.3.6 Hospital Services

3.2 METHODOLOGY

The significance of this sub-section is to show in a coherent manner, the systematic steps that were taken during the data collection stages. The research design was the first step taken during the data collection process.

3.2.1 The Research Design

The instrument for collecting adequate data in this study was developed by the author. The measure is a modification of other instruments that are used to collect service quality and customer satisfaction information. It consisted of 22 items for the management and staff and 40 items for the clients (patients) of KNUST Hospital. For the management and staff, it comprised four (4) demographic items for comparison purposes, two (2) questions determine the position and length of time in current position, fifteen (15) statements based on the Modified Servqual instrument presented in the form of a five-point Likert scale with "Strongly disagree =1" and "strongly

agree=5" and one (1) question to weigh the importance of each SERVQUAL dimension by allocating a total of 100 points across the five dimensions. For the clients, it comprised three (3) demographic items for comparison purposes, four (4) questions determine the client type, length of time , frequency the client has been assessing health care, where private clients live , how long private clients take to get to KNUST Hospital and how they pay for their healthcare. Possible responses are provided for each question. Fifteen (15) pairs of statements representing the five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. Each service dimension is presented as a structure statement. The first set of 15 statements measured clients' expectations of service quality regarding Ghanaian hospitals in general, while the second set of 15 statements measured clients' perceptions specific to the KNUST hospital quality of service provided. The questions were also presented in a five-point Likert scale. Additionally, clients were asked to rate the importance of each SERVQUAL dimension toward a measure of customer satisfaction by allocating a total of 100 points across the five dimensions. Two (2) questions also assessed the effect of service quality on customer satisfaction. The first step in the development of this instrument involved the development of simple demographic items that could be used for comparison purposes without identifying respondents.

The second step is that, it is a fact finding exercise, thus a case study of KNUST hospital is used and as such the survey method of data collection was employed to collect data of quantitative nature.

The next step is that a structured questionnaire was designed to collect the data. Finally, these questionnaires were scanned to ensure that data on key concepts was collected and various responses were appropriately coded for the analysis of data in chapter four.

3.2.3 The Sample of the Study

The procedure for this project involved five (5) steps. The researcher sought permission from the authorities of KNUST Hospital regarding the purpose and nature of the project. To ensure transparency and protect the confidentiality of the respondents, the researcher had to provide a letter from the School of Business, KNUST to show that the research is purely for academic purposes. Again, the authorities of the hospital also demanded a research proposal from the researcher which was also provided before approval for the research was granted.

The introduction to the instrument briefly repeated the purpose of the project with the elements of informed consent regarding voluntary participation, confidentiality and potential benefits. The total population of the management and staff was Hundred (100).

A sample size of fifty (50) respondents were selected which represent fifty (50%) percent of the target population. Random sampling technique was used to arrive at the figure, and in all fifty (50) interview schedules was used to interview the fifty (50) respondents.

A sample size of one hundred and fifty (150) respondents comprising fifty (50) Private clients, (50) KNUST staff, and (50) Students clients, were selected by purposive sampling after clients had received their outpatient cards while waiting for their turn to

see the doctor. The questionnaires were administered based on their availability and willingness.

3.2.4 The Data Collection Technique

Primary data was employed in the study. Primary data was sourced from both management and staff of KNUST hospital and Clients seeking healthcare at the hospital through the use of questionnaire (See Appendix 1).Secondary data was sourced from a review of related literature on service quality and customer satisfaction.

3.2.5 The Method of Data Analysis

The statistical package for social sciences (SPSS) was used in processing primary data obtained through questionnaires. Qualitative explanations were made of quantitative data to give meaning to them as well as explain their implications. From these, appropriate recommendations were made on the findings of the research.

3.3 History of KNUST Hospital

The University Health Services is a full-fledged 100-bed hospital; second in status only to the Komfo Anokye Teaching Hospital (KATH) in the Kumasi Metropolis, catering for about 150,000 people made up of staff, students and residents of the surrounding communities.

It is the medical arm of the Kwame Nkrumah University of Science and Technology. It is located in Kumasi, Ashanti Region in the northwestern part of the university campus

and stretches along the Kumasi-Accra express way. It was originally started in 1952 for the college of Technology as a dressing station.

In 1972, the female, children and male wards were constructed to enable the hospital receive more in-patients. The out-patient department and the theatre were added in 1973.The maternity ward was initially an isolation ward which was converted for maternal purposes. In 1997; the hospital acquired an ultramodern X-ray machine.

The KNUST Hospital was primarily set up to cater for the health needs of staff, their dependents and students of the university. However, it has now extended its services to the general public and provides health services to about 30 surrounding communities with a rapidly increasing population. Thus, the hospital plays the role of a district Hospital.

The University Health services offer services in General medical care as well as specialist services.

3.3.1 The Vision of KNUST Hospital

To become a leading university hospital with wide scope, general and specialist services comparable to renowned medical centres in Ghana which will serve as a centre of medical care for the university staff, students and the general public, to make the KNUST Health Services a centre of excellence for quality health care, teaching and research.

3.3.2 The Mission of KNUST Hospital

To promote and preserve the health status and well being of the University Community through efficient and compassionate delivery of quality health care to their patients. Continuous improvement in the quality of the care and services they provide; education and training of physicians and other health care professionals to ensure the future availability of comprehensive health services for the University Community.

3.3.3 Objectives of KNUST Hospital

1. To provide prompt attention to patients in both medical and emergency care.
2. To improve the quality of health care to the university community.
3 To increase access to Medical care for 24hours.
4. To train Residents and Housemen.
5. To serve as training facilities for KNUST students

3.3.4 Facilities of KNUST Hospital

The facilities of the hospital have been grouped into two main departments namely:

Out-patient Department: This comprises the Medical Records Unit, Laboratory, X-Ray, Ultra Sound Scanner and ECG Machine, Pharmacy, Ambulance Emergency Units, Blood Bank and Consulting Rooms.

Clinical Services, In-Patient Department: This comprises Surgery, Obstetrics and Gynaecology Theatre, Dental Clinic, Female Ward, Male Ward, Children's Ward/pediatrics, and Maternity Ward

3.3.5 Hospital Operations

The Hospital is owned by the Kwame Nkrumah University of Science and Technology. The Hospital Management is made up of the following:

Director: He is in-charge of the Hospital as well as the Health Services of the whole University. He is responsible to the Vice-Chancellor.

Hospital Administrator: The Administrator is responsible for the day-to- day management of the Hospital. He assists the Director to manage the hospital. He is responsible to the Director, University Health services.

Chief Nursing Officer: The chief Nursing Officer is responsible for the Nursing activities of the Hospital. She supervises the Nurses and Anaesthetists. The chief Nursing Officer is responsible to the Director, University Health Services.

There is a Health Services Management Committee made up of selected members of the University Community. The Vice-Chancellor appoints the chairman. The Management Committee is responsible for advising the University Hospital Management Team. Functionally, the Director, Administrator and the Chief Nursing Officer form the typical tripartite management committee, which runs the hospital.

3.3.6 Hospital Services

The hospital provides the following services to its target group. They are Out-Patient services, In-patient services, Maternal Care, Institutional Pharmacy, Radiography (X-ray), Ultrasound Scanning, Laboratory services, Surgery, Obstetrics and Gynaecology, Public Health Unit, Reproductive Health, Oral Health services and Ambulance services.

CHAPTER FOUR

RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

4.1 Introduction

The previous chapters of the study addressed the contextual, theoretical and descriptive aspects of the study. The focus of this present chapter is to analyse the field data and examine the findings in the light of the objectives of the study. This chapter provides information on the data collection procedure adopted, and analysis of the data and findings. The responses from the respondents are described, analysed and inferences made to established relationships. The quantitative data collected from the questionnaire interviews were coded for analysis. Microsoft Excel Spreadsheet was used to analyse the quantitative data. The quantitative data was also thoroughly discussed in relation to the objectives of the study.

The analyses and discussion of the field data have been presented in the following structure:

1. Background of management and staff, and job position

2. Health providers' perception of service quality

3. Health providers' weight of importance of each SERVQUAL dimension

4. Background of clients, length of time of accessing healthcare

5. Clients expectations of service quality

6. Clients' perception of service quality

7. Clients' weight of importance of each SERVQUAL dimension

8. The effect of service quality on customer satisfaction

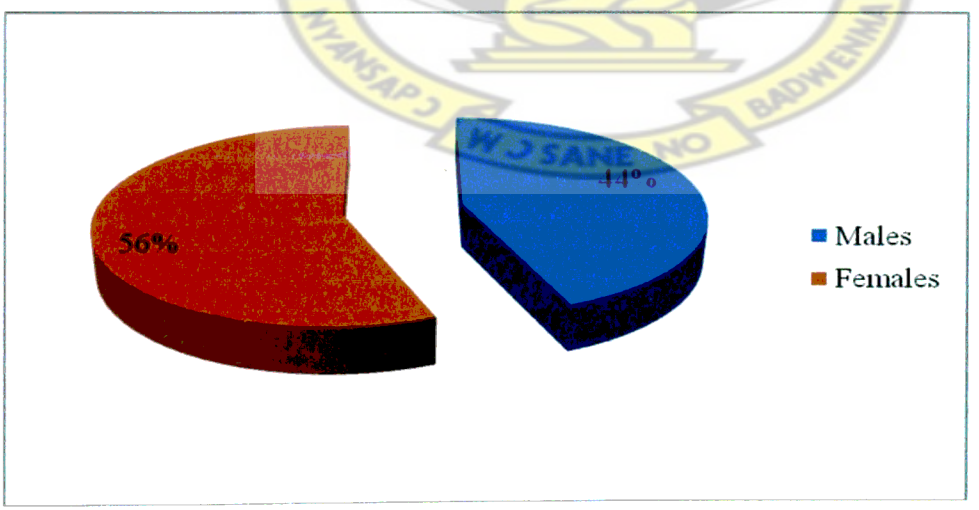
4.2 Background of Management and Staff of KNUST Hospital

These include gender, age group, educational attainment, marital status, job positions, and length of time in job position. Frequency tables were used in analyzing the data gathered from the respondents.

4.2.1 Gender of Respondents

Out of the fifty (50) respondents interviewed, 22 of them were male representing 44% and 28 of them female representing 56% as indicated

Figure 5: Gender of KNUST Hospital Staff



Source: Field Survey, April 2008

The 56% majority of respondents being females is a clear indication of gender equality and empowerment through the provision of gainful employment.

4.2.2 Age Distribution of Respondent

The majority of the respondents (46%) were within the age range of 20 and 30 years while (28%) were within the range of 31 and 40 years. Staff within ages 41 and 50 years constituted 23%, whereas 51 and 60 years represented 3%. Therefore, many of the employees have several years to render service to the hospital.

Table 1: Age Distribution of Hospital Staff

Age Brackets	Frequency	Percentage
20-30 years	23	46
31-40 years	14	28
41-50 years	12	23
51-60 years	1	3
Total	50	100

Source: Field Survey, April 2008

4.2.3 Educational Attainment of Respondents

The analysis of this variable revealed that the majority of respondents (64%) have had tertiary education. 34% of respondents also had secondary education whereas 2% had other forms of education, which is professional training. The majority of health

providers or professionals (64%) who have had their tertiary education is a step in the right direction toward the empowerment of the ordinary citizen through education. Also, all other things being equal, the quality of service rendered by these professional will be on the high side.

Table 2: Educational Attainment of Respondents

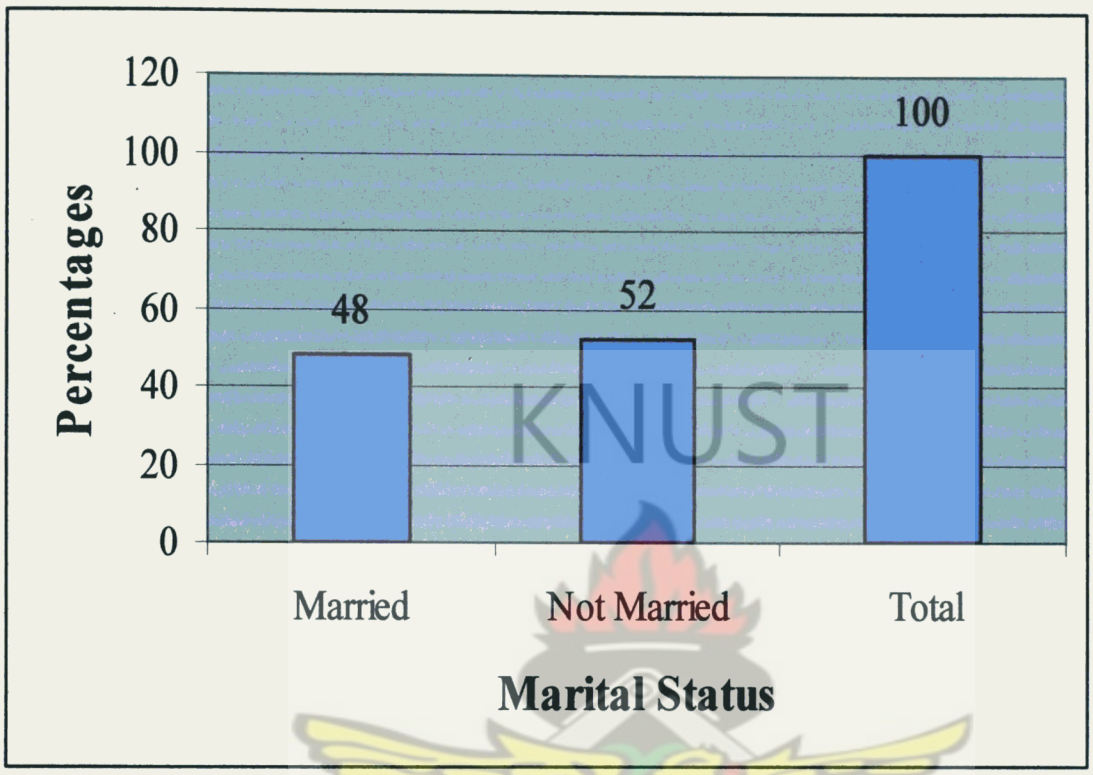
Educational Attainment	Frequency	Percentages
Tertiary	32	64
Secondary Education	17	34
Other Forms of Education e.g. professional training	1	2
Total	50	100

Source: Field Survey, April 2008

4.2.4 Marital status of Respondents

Out of the 50 respondents interviewed, 24(48%) of them were married and 26(52%) were single. The majority of respondents being single could be partly as a result of the majority of these respondents being in the 20-30 years age bracket.

Figure 6: Marital Status of Respondents



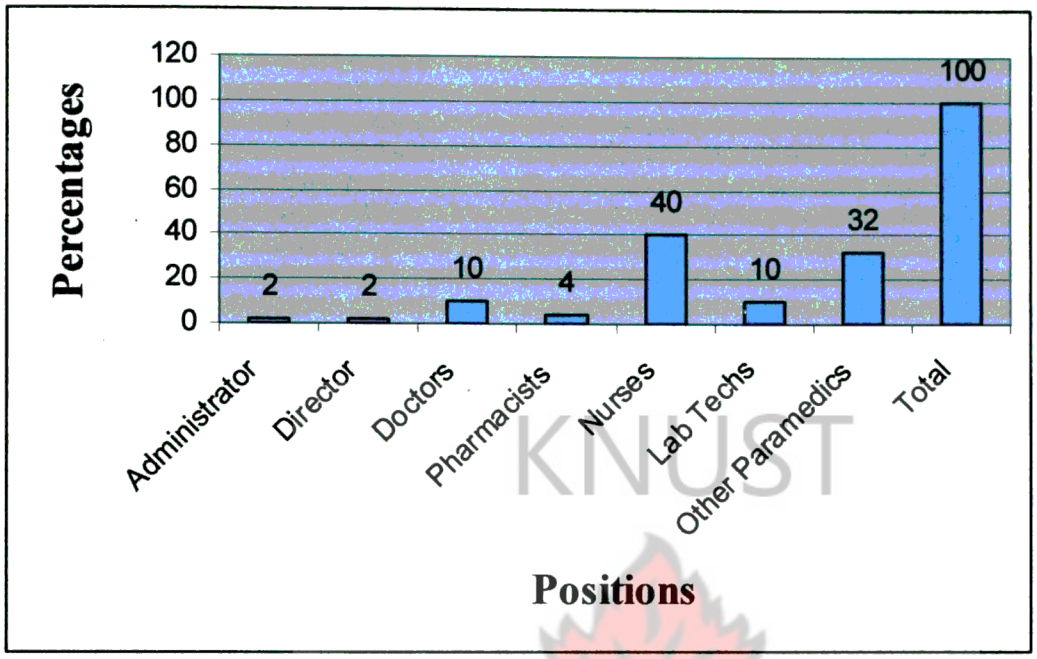
Source: Field Survey, 2008

4.2.5 Position of Respondents

The job position of respondent are director 1(2%), administrator 1(2%), 20(40%) being nurses, 5(10%) doctors, Pharmacists 2(4%), laboratory Technicians 5(10%), others including healthcare assistants, orderlies and records officers' being 16(32%).

The core healthcare staff is inadequate considering the population of people KNUST hospital serves. This is a reflection of the general lack of health personnel nation wide.

Figure 7: Position of Respondents



Source: Field Survey, April 2008

4.2.6 Duration in Current Position

Most of the respondents had worked for 1-5years (54%). Those who had spent less than 1year were 11(22%). Nine (18%) had spent between 6-10years. Only 3(6%) had worked for more than 10years. It appears not many healthcare providers render long service to KNUST.It may be due to the fact that most of these personnel are within the 20-30 years age bracket

Table 3: Duration in Current Position

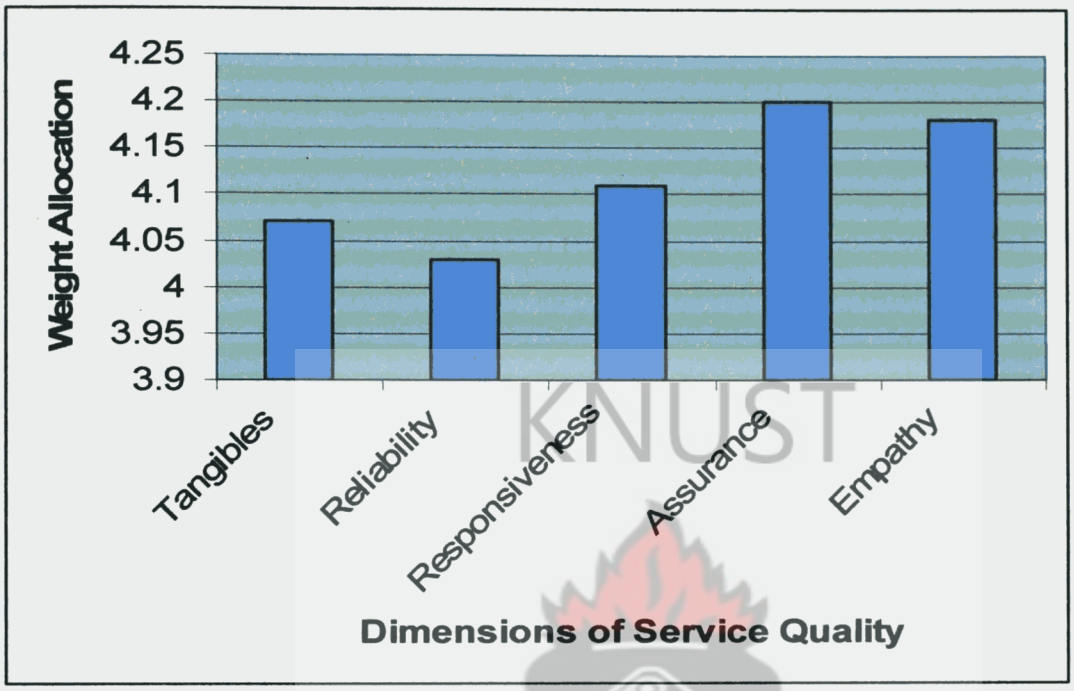
Duration	Frequency	Percentage
Less than 1 year	11	22
1-5 years	27	54
6-10 years	9	18
More than 10 years	3	6
Total	50	100

Source: Field Survey, April 2008

4.2.7 Health Providers' Perception of Service Quality

When interviewed, health providers had the perception that assurance is a critical issue in the provision of quality health care services. This was followed by empathy, responsiveness, tangibles and reliability respectively. Implying that health service providers see the need for the client of their hospital to be assured that they are being provided with quality service, in that, their clients should feel safe in their interactions with them, they as health services providers should be knowledgeable, polite and get adequate support from their employers to do their jobs well. Assurance as being foremost to health providers also correlated to clients' expectation when they go to access healthcare.

Figure 8: Health Service Providers' Perception of Service Quality

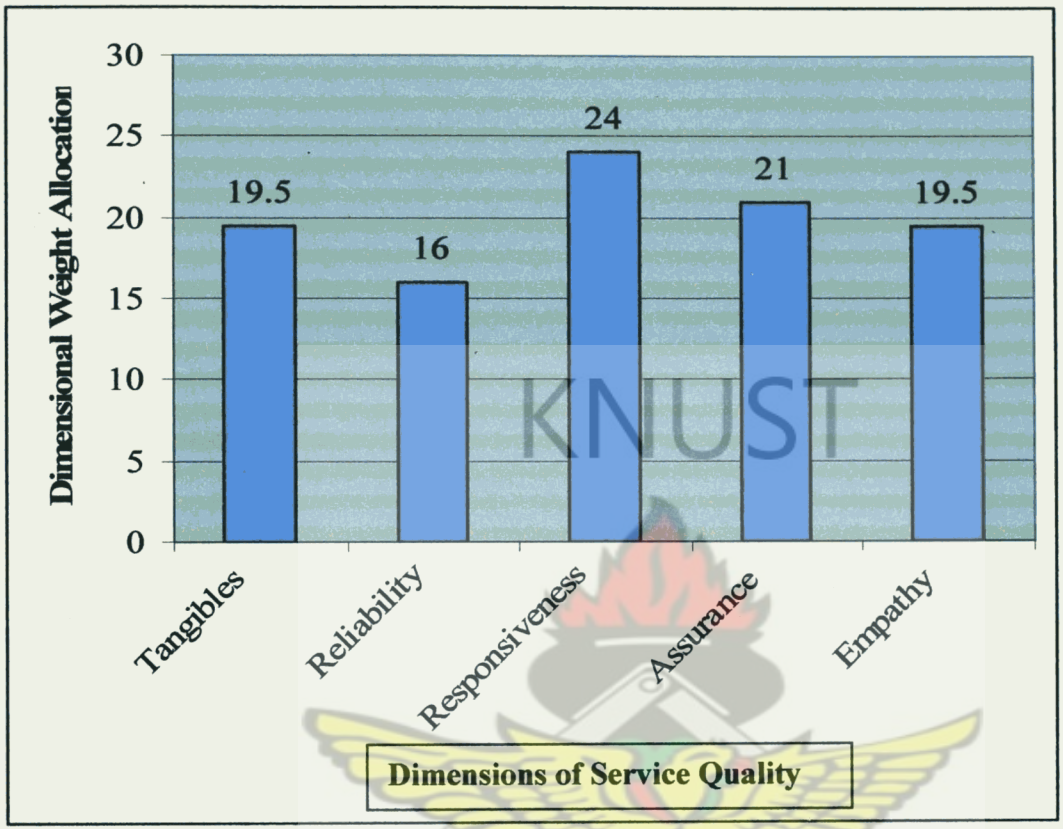


Source: Field Survey, April 2008

4.2.8 Health Providers' Weight of Importance of Each SERVQUAL Dimension

In allocating a total of 100 points across the five SERVQUAL dimension in terms of weight of importance, health providers when interviewed allocated a total of 24 points to responsiveness thereby making it more important. This was followed by assurance (21 points), both tangibles and empathy (19.5 points) and reliability (16 points). This implies that health providers see telling clients when services will be rendered, and they willing to help clients as key. It is reassuring to know that since clients will benefit immensely especially as regards emergency medical care.

Figure 9: Health providers' weight of importance of each SERVQUAL dimension



Source: Field Survey, April 2008

4.3 Background of Clients

These include gender, age groups, marital status, client type, duration of healthcare assessment, frequency of visits per year.

4.3.1 Gender of Respondents

Most of the respondents were males 55.33% while 44.7% were females as shown below. The 44.7% of respondents being females is quite appreciable even though more could be done to enhance accessibility to primary health care by women.

Table 4: Gender of Clients

Gender	Frequency	Percentage
Males	83	55.33
Females	67	44.67
Total	150	100

Source: Field Survey, April 2008

4.3.2 Age distribution of Clients

Most of the respondents (52.67%) were in the age range 18-30years.The least 6.67% were those aged above 50years. 27.33% were in the age range 31-40years. Only 20 clients (13.33%) were in the age range 41-50years. This correlates with the population structure of a developing country like Ghana.

Table 5: Age distribution of Clients

Age	Frequency	Percentage
18-30yrs	79	52.67
31-40yrs	41	27.33
41-50	20	13.33
Above 50	10	6.67
Total	150	100

Source: Field Survey, April 2008

4.3.3 Marital Status of clients

Most of the respondents were not married 52%, while 48% were married. This is partly as a result of the majority of respondents being in the 18-30years age bracket

Table 6: Marital Status of Clients

Marital Status	Frequency	Percentage
Married	72	48
Single	78	52
Total	150	100

Source: Field Survey, April 2008

4.3.4 Where Clients Reside

Majority of the respondents interviewed lived in localities which are very near the jurisdiction of the hospital and these localities include Bomso, Ayigya, Ayeduase Kotei, Top High and Kentinkrono. It is quite palpable that the hospital sees to patient from localities and communities as far as Patasi and Asafo.

Table 7: Where Clients Reside

Location	Frequency	Percentage
Bomso	8	16
Ayigya	12	24
Ayeduase	12	24
Top High	2	4
Kentinkrono	2	4
Oforikrom	1	2
Asafo	1	2
Kotei	6	12
Deduako	1	2
Patasi	1	2
Oduom	1	2
Anloga	1	2
Emena	1	2
Ahinsan	1	2
Total	50	100

Source: Field Survey, April 2008

4.3.5 Duration of Time to the KNUST Hospital

There was a 100 percent affirmation by the respondents that it takes them not more than one hour to get to the hospital. This is a clear indication that the health facility is accessible to all the respondents, in terms of distance. Thus,

Table 8: Duration of Time to the KNUST Hospital

Duration	Frequency	Percentage
1 hr	50	100

Source: Field Survey, April 2008

4.3.6 Clients Enrolled in the National Health Insurance Scheme

Financing health care provision especially in third world countries is very dicey and as such the Government of Ghana in 2003 introduced the Mutual Health Insurance Scheme as a means of increasing accessibility to health care. In light of this, 76 percent of the 50 respondents interviewed asserted that they had enrolled in the Scheme with the remaining 24 percent affirming in the negative.

Table 9: Clients Enrolled in the National Health Insurance Scheme

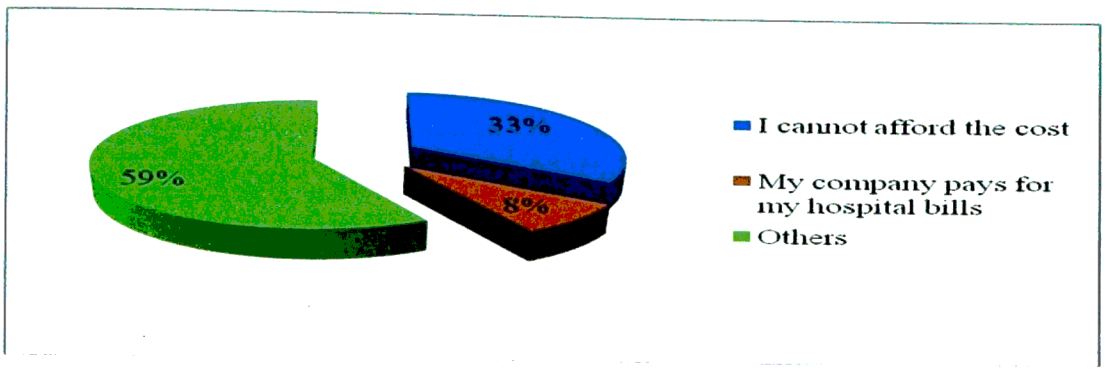
Response	Frequency	Percentage
Yes	38	76
No	12	24
Total	50	100

Source: Field Survey, April 2008

- If no, why don't you have the national health insurance?

Of the 12 (24 percent) respondents who had not enrolled in the Scheme, 33 percent and 8 percent stated their reasons as their inability to afford the premium and their medical bills being paid by their companies or employers. 59 percent gave other reasons aside the two aforementioned ones.

Figure 10: Reasons Why Some Clients are not enrolled in the National Health Insurance Scheme



Source: Field Survey, April 2008

4.3.7 Number of years of Accessing Health Facility

Majority of the clients interviewed affirmed that they had been attending the health facility for the past 1 to five years (48.67 percent), 28 percent 12 percent and 11.33 percent affirmed that they had been attending the health facility for more than 10 years, less than a year and from 6 to 10 years respectively. It is a significant finding since the responses from these clients may give a true reflection of the happenings at the hospital.

Table 10: Number of Years of Accessing the KNUST Hospital

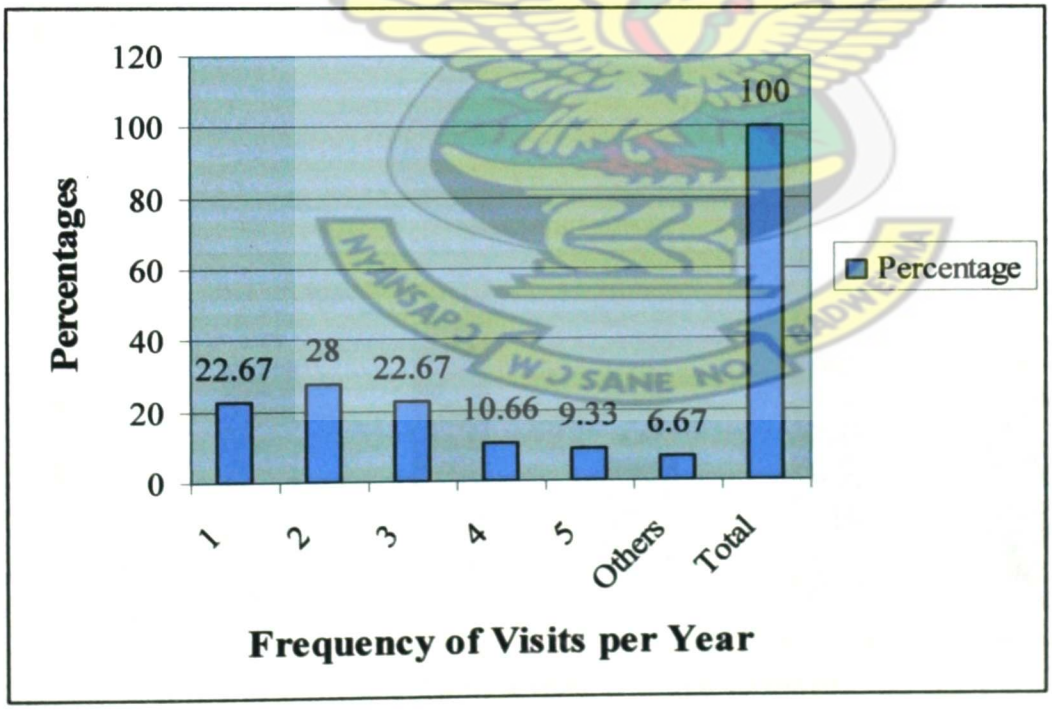
Number of years	Frequency	Percentage
Less than 1 year	18	12
1 to 5 years	73	48.67
6 to 10 years	17	11.33
More than 10years	42	28
Total	150	100

Source: Field Survey, April 2008

4.3.8 Average Frequency of Hospital Visits' per Year

28 percent of the respondents do visit the hospital at least twice a year whiles 22.67 percent, 10.66 percent and 9.33 percent visit the hospital at least once, thrice, four times and five times a year with the remaining 6.67 percent visiting more than 5 times a year. It is unclear why clients do not frequently attend hospital. It may also be because clients younger than 20years were not included in the study. The low percentage of clients attending more then 5 times may be those with chronic illness such as Diabetes and Hypertension.

Figure 11: Average Frequency of Hospital Visits per Year

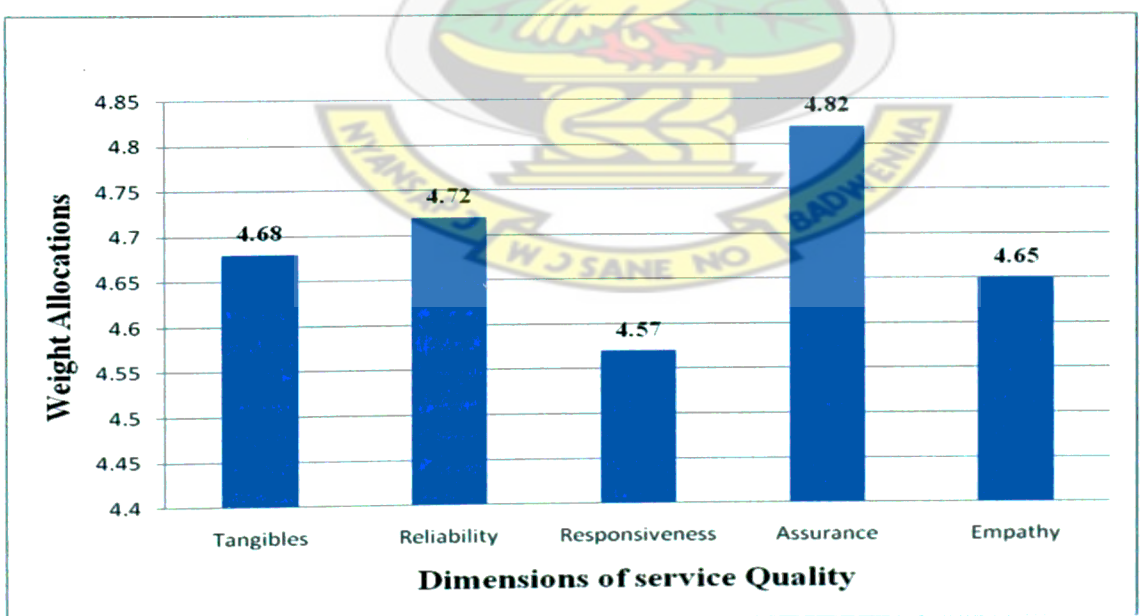


Source: Field Survey, April 2008

4.3.9 Mean Expectation of Service Quality by Clients

Each client attending any hospital has some basic expectation as to what quality service is and as such when clients to the KNUST hospital were interviewed as to what they expected before attending the hospital it emerged that assurance with a mean of 4.82 was the foremost expectation this was followed by the following, in a descending order; reliability (mean of 4.72), Tangible (mean of 4.68), empathy (mean of 4.65) and responsiveness (mean of 4.57).This correlates with those of the health providers, which will impact positively on the kind of service clients will enjoy. In seeking reliable healthcare, clients expect prompt service regardless of the constraints of the health facility. This is especially as regards students who cannot afford to miss academic activity. This has necessitated the opening of the students' clinic in 2008.

Figure 12: Mean Expectation of Service Quality

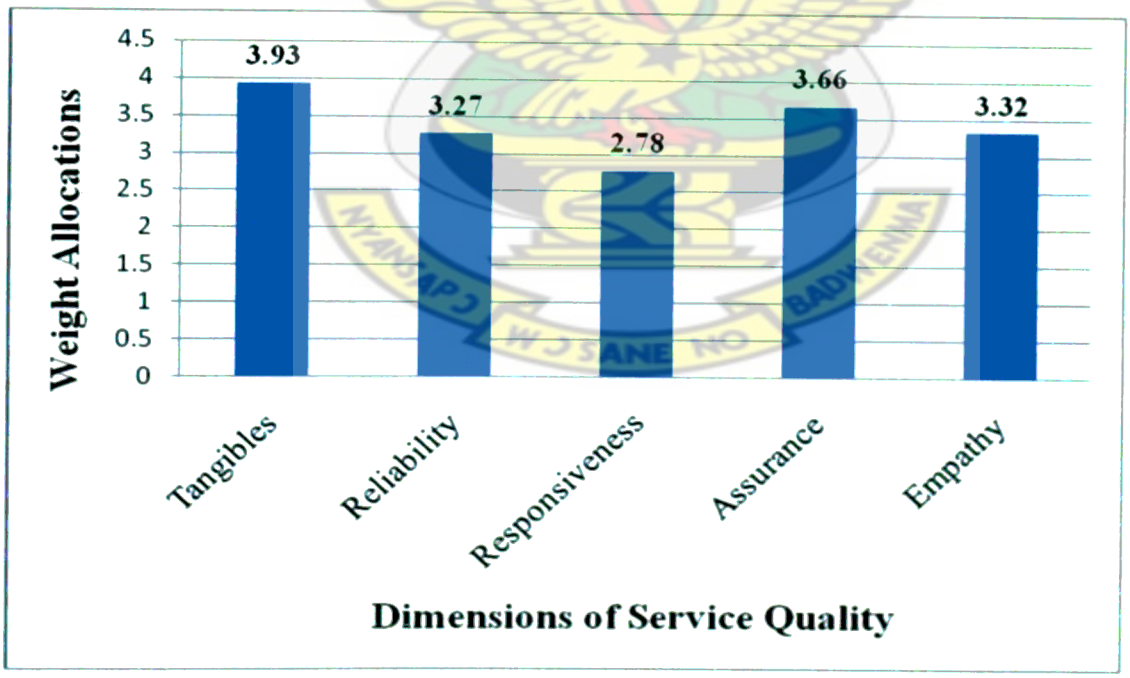


Source: Field Survey, April 2008

4.4 Mean Perception of Service Quality

When the clients to the KNUST hospital were also interviewed as to what their perceptions of the overview of the hospital was in terms of the five SERVQUAL dimensions, it was brought to bear their perceptions were quite impressive even though they fell far short of what the expectations were. As such, in a descending order, tangibles has a mean of 3.93, assurance- mean of 3.66, empathy- mean of 3.32, reliability- mean of 3.27 and responsiveness- 2.78. Clients assert facilities at the clinic are impressive and this is the dimension with the highest perception. Responsiveness was the least satisfactory and it's imperative for health providers' to pay more attention if KNUST is to gain competitive advantage considering the satisfactory infrastructure.

Figure 13: Mean Perception of Service Quality

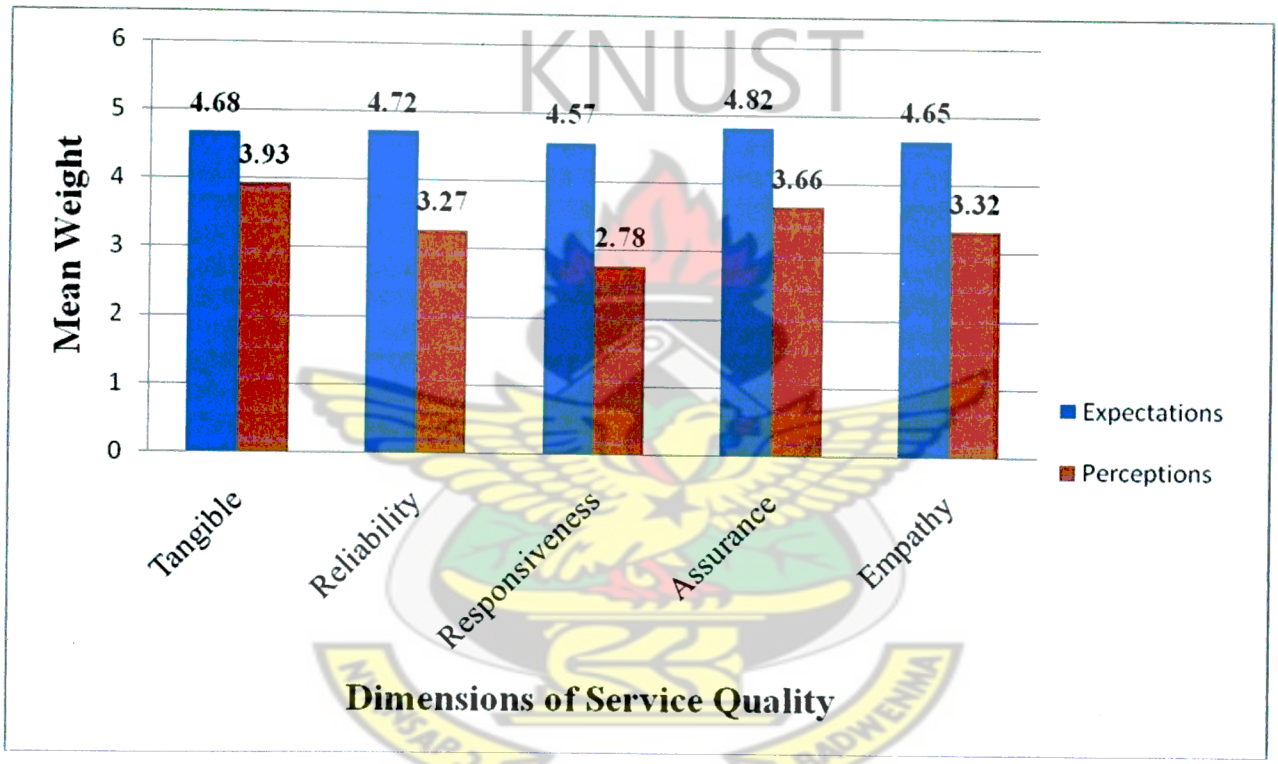


Source: Field Survey, April 2008

4.4.1 Mean Expectations and Perceptions by SERQUAL Dimension

Using the five SERVQUAL dimensions to ascertain the quality of health care provision, the perception of quality health care at the KNUST hospital fell short of what their expectations were. This is further elaborated with the figure below:

Figure 14: Mean Expectations and Perceptions by SERVQUAL Dimensions



Source: Field Survey, April 2008

4.4.2 Gap Scores of Mean Expectations and Perceptions by SERVQUAL Dimensions

From the data analysed it quite evident that there is no positive gap (perceptions exceeding expectation). Not withstanding that, in terms of tangibles the KNUST

hospital faired very well which was followed by assurance. The largest negative gap was for responsiveness which implies that the health providers were not quite sensitive to the plights of their clients. Health providers' education on customer care and services will go a long way to salvage the name calling its staff has earned.

Table 11: Gap Scores of Mean Expectations and Perceptions by SERVQUAL Dimensions

SERQUAL Dimensions	Expectations	Perceptions	Gap Scores
Tangibles	4.68	3.93	-0.75
Reliability	4.72	3.27	-1.45
Responsiveness	4.57	2.78	-1.79
Assurance	4.82	3.66	-1.16
Empathy	4.65	3.32	-1.33

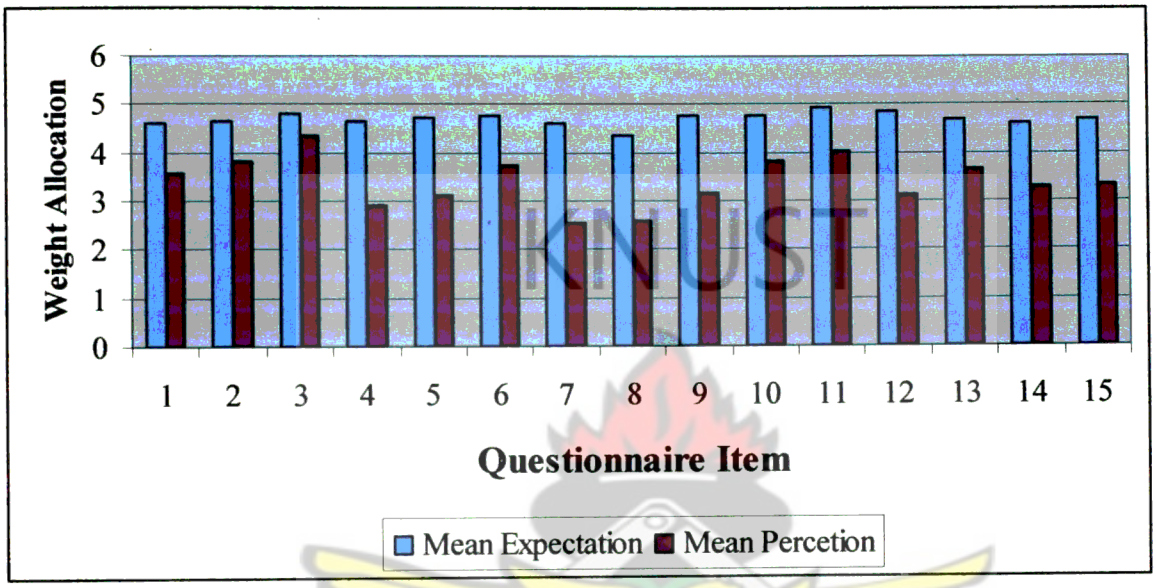
Source: Field Survey, April 2008

4.4.3 Mean Expectation and Perception by Questionnaire Item (section B Appendix I)

The figure below displays the information for each questionnaire item. As stated above, perceptions fell short of expectations for each category indicating negative service gaps. In analyzing the distance (gap) between expectations and perceptions, reliability and responsiveness exhibit the largest gap scores whiles tangibles has the smallest. Thus, clinic performance with respect to tangibles is more closely in line with patients'

expectations than that of reliability and responsiveness. It is hoped that with the commencement of the students' clinic positive gains will be made in this regard.

Figure 15: Mean Expectation and Perceptions by SERVQUAL Dimensions



Source: Field Survey, April 2008

4.4.4 Means of Expectations, Perceptions and Gap Scores of Questionnaire Items

In addition to looking at the service gaps across the five quality attributes, it is useful to examine particular questionnaire items. As shown in the figure below there were no positive gaps. The smallest negative gaps were for statement 3, 'Hospital employees should appear neat' (-0.45) and statement 2, 'The physical facilities of the hospital should be visually appealing' (-0.80). These statements fall under the tangibles attribute. Thus this attribute is not as important as the others as such, more critical attributes need better considerations. The largest gaps were for statement 8, 'It is realistic for patients to receive prompt service from hospital employees' (-2.05), statement 7, "Hospital should

tell patients exactly when services will be performed and statement 4, "Hospital should provide services at the time they promise to do so" (-1.76). These statements fall within the responsiveness and reliability attributes respectively. These attributes are very critical in the appraisal of quality health care services. Health provider staff numbers should be increased to commensurate the increase in clientele as a result of the national health insurance scheme. This will help reduce drastically the waiting time. Continuous training on customer service and customer care should also be an integral part of the healthcare delivery system. The frustration of waiting in long queues and an irritating healthcare provider will aggravate rather than alleviate an individual's ailment.

Table 12: Means of Expectations, Perceptions and Gap Scores of Questionnaire Items

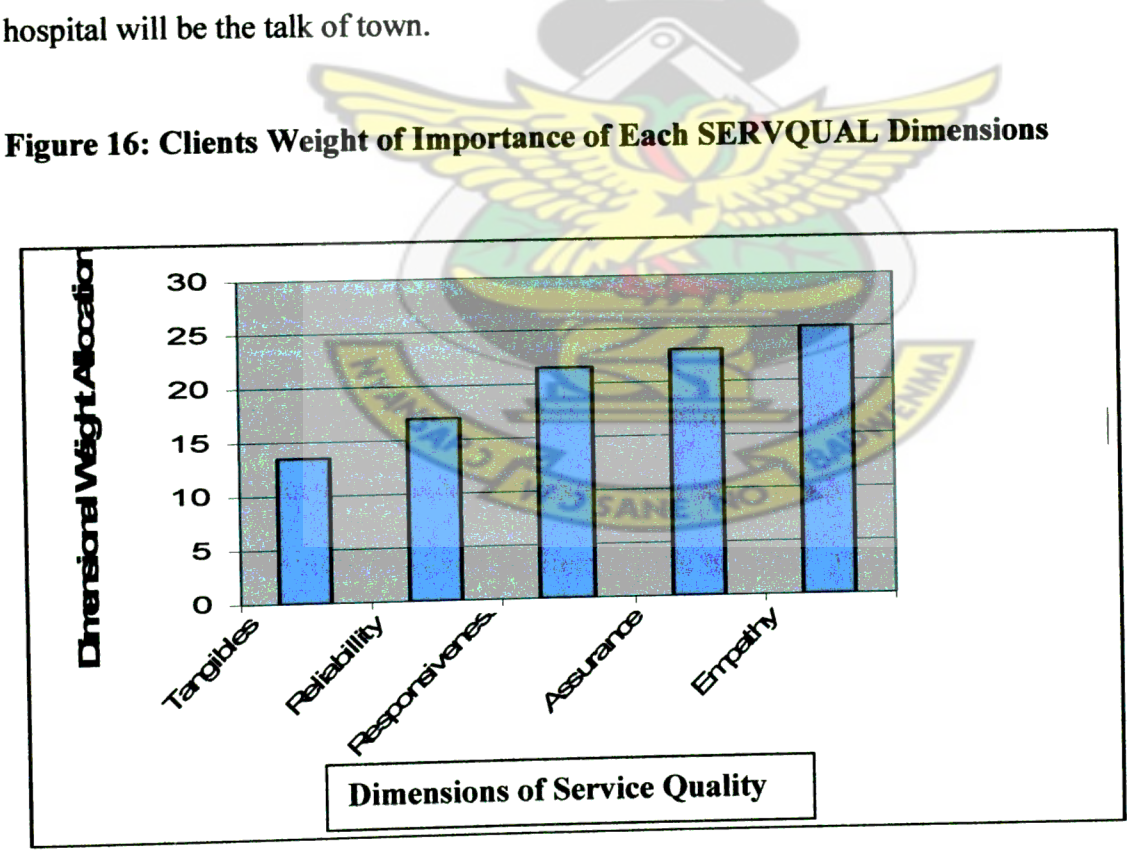
Questionnaire Item		Expectation	Perception	Gap Score
Tangibles	1	4.62	3.59	-1.03
	2	4.63	3.83	-0.80
	3	4.79	4.34	-0.45
Reliability	4	4.66	2.9	-1.76
	5	4.71	3.13	-1.58
	6	4.76	3.76	-1
Responsiveness	7	4.36	2.59	-1.77
	8	4.59	2.54	-2.05
	9	4.75	3.18	-1.57
Assurance	10	4.78	3.81	-0.97
	11	4.93	4.04	-0.89
	12	4.86	3.12	-1.74
	13	4.69	3.64	-1.05
Empathy	14	4.61	3.3	-1.31
	15	4.67	3.33	-1.34

Source: Field Survey, April 2008

4.4.5 Clients' Weight of Importance of Each SERVQUAL Dimension

According to these mean weight of importance of each SERVQUAL dimension as per the responses of the clients, tangibles was the least important attribute which was followed by the following in an ascending order; reliability, responsiveness, assurance and empathy. This means clients do not really pay too much attention to the physical appearance of the facility, rather the experience of the place, i.e., the attitude of the staff, how they are communicated to, and length of time spent there and how much they feel they have been helped. Actually these should be viewed as part of the therapy. These are valued probably more the medication they have been given to go and take. If activities aimed at this are incorporated into the clinics organizational culture, KNUST hospital will be the talk of town.

Figure 16: Clients Weight of Importance of Each SERVQUAL Dimensions



Source: Field Survey, April 2008

4.4.6 The Effect of Service Quality on Customer Satisfaction

- Based on the service received today, will you visit the hospital again?

85.33 percent of the interviewees asserted that based on the services provided to them by the hospital, they will visit the health facility should the need arise; with the remaining 14.67 percent affirming in the negative.

Table 13: Clients Who Expressed Their Intensions of Returning

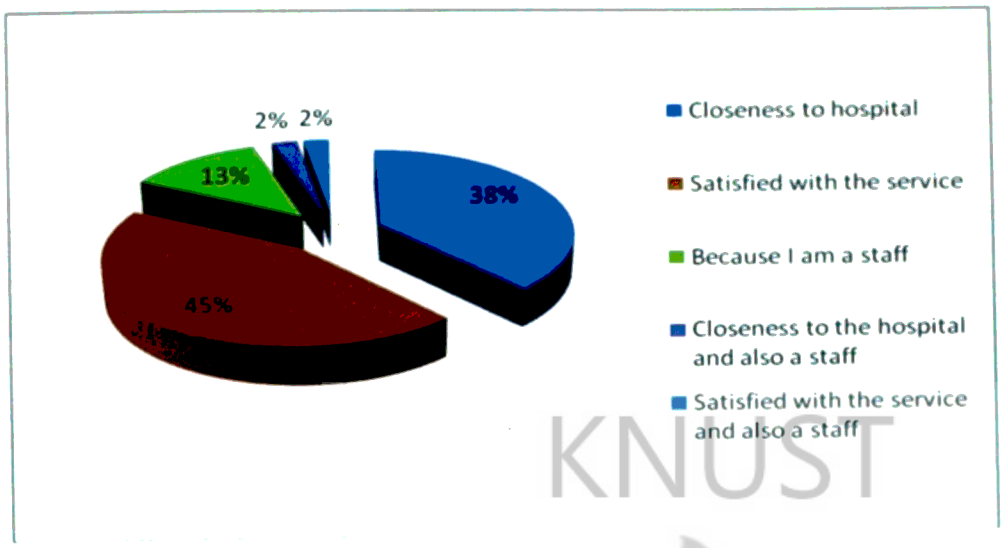
	Percentage	Frequency
Yes	128	85.33
No	22	14.67
Total	150	100

Source: Field Survey, April 2008

- If yes, why will you come back to this hospital?

Of the 128 respondents, (85.33 percent) who expressed their intents of visiting the hospital again, 45 percent made that expression as a result of the satisfaction they derived from the services rendered to them by the hospital. 38 percent and 13 percent asserted that their reasons for visiting the hospital again were that they lived close to the hospital and they are staff of the KNUST respectively. Two percent each stated that gave two reasons as to why they will visit the hospital again should the need arise and these are (1) closeness to the hospital and also a staff and (2) satisfaction derived from the services received together with they being staff.

Figure 17: Reasons Why Clients Will Return to the Hospital



Source: Field Survey, April 2008

- If no, why will you not come back to this hospital?

Of the 22 respondents (14.67 percent) who asserted that they will not be visiting the hospital again, 31.82 percent each gave their reasons as health professionals not being polite and the incompetence of some health professionals, while 18.18 percent also gave their reason as the insufficient attention given to them. The remaining 18.18 percent gave other reasons apart from the three aforementioned ones. These fall within the responsiveness (-1.79), reliability (-1.45) and empathy (-1.33) dimensions which have shown wide gaps.

Table 14: Reasons Why Customers Would Not Return

Reasons	Frequency	Percentage
Health professionals are not polite	7	31.82
Incompetence of health professionals	7	31.82
Insufficient attention given to patients	4	18.18
Others	4	18.18
Total	22	100

Source: Field Survey, April 2008

- Will you come to this hospital if there's another facility in this locality rendering similar services at the same cost?

Majority of the clients (52%) affirmed that they would not have visited the hospital had there been another health facility providing similar services at the same cost. This is partly so because of the health providers are not responsive to their peculiar needs (responsiveness with a gap score of -1.79)

Table 15: Clients Who Would Return Despite a Facility in This Locality Rendering Similar Services at the Same Cost

	Frequency	Percentage
Yes	24	48
No	26	52
Total	50	100

Source: Field Survey, April 2008

Though generally, clients are satisfied with the services rendered by the hospital, 52% of the private patients said they would have opted for another. This may be a pointer to the silent majority who are unsatisfied with the care they are receiving at this facility, in the light of afore mentioned reasons.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter deals with the concluding part of this study. It extensively presents the summary of findings in this study as well as the recommendations to these findings. The general conclusion is also highlighted in this chapter.

5.2 Summary of Findings

In undertaking the study as to the effect of service quality on customer satisfaction in the health sector with the KNUST hospital being the core institution of study, vital issues were stumbled upon. These issues form the summary of findings of this study and they are ostentatiously scrutinized below:

5.2.1 Gender Equality and Empowerment

Gender equality and empowerment is one of the key pillars of the Constitution of the Republic of Ghana. It is also enshrined in a number of Conventions of the United Nations Organization and one of the Millennium Development Goals. The 56% majority of KNUST Hospital staff respondents being females is a clear indication of gender equality and empowerment through the provision of gainful employment even though more could be done. (Overseas Development Institute, 2008)

5.2.2 Educational Attainment

An educated society is an enlightened society, as such governments the world over year-in year-out invests heavily in education especially, tertiary education. The majority of health providers (64%) who has had their tertiary education are a step in the right direction toward the empowerment of the ordinary citizen through education. Also all other things being equal, the quality of service rendered by these professional will be on the high side.

The remaining 36% could be encouraged to further their education up to the tertiary level so as to add more value to themselves.

5.2.3 Health providers' perception of service quality

When interviewed, health providers had the perception that assurance (mean of 4.2) is a critical issue in the provision of quality health care services. This was followed by empathy (mean of 4.18), responsiveness (mean of 4.11), tangibles (mean of 4.07) and reliability (mean of 4.03) respectively. Implying that health service providers see the need for the client of their hospital to be assured that they are being provided with quality service, in that, their clients should feel safe in their interactions with them, they as health services providers should be knowledgeable, polite and get adequate support from their employers to do their jobs well.

5.2.4 Number of Years of Assessing the KNUST Hospital

Majority of the clients interviewed affirmed that they had been attending the health facility for over a year (88%). This has a positive connotation on the outcome of this

study since all other things being equal, they will have a better view as to what their expectations and perceptions of the quality levels of services provided by the KNUST hospital.

5.2.5 Expectations and Perceptions of Service Quality by Customer

Each client attending any hospital has some basic expectation as to what quality service is. When clients to the KNUST hospital were therefore interviewed as to what they expected before attending the hospital, it came to light that, assurance with a mean of 4.82 was the foremost expectation. This was followed by the following, in a descending order; reliability (mean of 4.72), Tangible (mean of 4.68), empathy (mean of 4.65) and responsiveness (mean of 4.57).

When the clients of the KNUST hospital were also interviewed as to what their perceptions of the overview of the hospital was in terms of the five SERVQUAL dimensions, it was found that their perceptions were quite impressive even though they fell far short of what the expectations were. As such, in a descending order, tangibles has a mean of 3.93, assurance- mean of 3.66, empathy- mean of 3.32, reliability- mean of 3.27 and responsiveness- 2.78.

5.2.6 Gap Scores of Mean Expectation and Perception of Service Quality by SERVQUAL Dimension

Using the five SERVQUAL dimensions to ascertain the quality of health care provision, the perception of quality health care at the KNUST hospital fell short of what their expectations were.

From the data analyzed, it was quite evident that there were no positive gap (perceptions exceeding expectation). Not withstanding that, in terms of tangibles (mean of -0.75) the KNUST hospital faired very well which was followed by assurance (mean of -1.16). The largest negative gap was for responsiveness (mean of -1.79).

The largest gaps were for statement 8, 'It is realistic for patients to receive prompt service from hospital employees' (-2.05), statement 7, "Hospital should tell patients exactly when services will be performed and statement 4, "Hospital should provide services at the time they promise to do so" (-1.76). These statements fall within the responsiveness and reliability attributes respectively which implies that the health providers were not quite sensitive to the plights of their clients and the clients did not also receive prompt service.

5.2.7 Effects of Service Quality on Customer Satisfaction

Based on the service received at the hospital, 85.33% of the interviewees asserted that they will visit the health facility should the need arise with the remaining 14.67 percent stating the negative.

Of the 128 respondents (85.33 %) who expressed their intention of visiting the hospital again, 47% made that intimation as a result of the satisfaction they derived from the services rendered to them by the hospital. 38% and 15% said that their reasons for visiting the hospital again were that they lived close to the hospital and that they are staff of the KNUST respectively.

Not with standing the general satisfaction attained by the client of the hospital, majority of these respondents (52 %) made the incursion that they would not have visited the hospital had there been another health facility providing similar services at the same cost. This is partly so because health providers are not responsive to their peculiar needs (responsiveness with a gap score of -1.79). This is also attributable to them as clients not receiving prompt service from hospital employees (largest negative score of questionnaire item of -2.05) which was followed by the hospital employees not telling patients exactly when services will be performed (second largest negative score of questionnaire item of -1.77).

The hospital's inability to deliver prompt services to its clients is as a result of a tremendous increase in the number of hospital attendance since the inception of the National Health Scheme. As per the hospital's Mid Year Statistics of 2007, total private client attendance for the 1st quarter of 2007 was 23,951 which was a 74.85% of the 2006 figure of 17,929 for the same quarter after the hospital was accredited by the NHIS as a Service Provider. (KNUST Health News, Vol.1 No.2 pg.4)

As a result of the sharp increase in the number of hospital attendance without a corresponding increase in the number of health professionals and facilities, there is a serious pressure on the existing health facilities and professionals, thereby increasing the average waiting time of accessing health services. All other things being equal, the hospital is unable to deliver prompt services.

5.3 Recommendations

Based on the critical findings made by the research as to the effect of service quality on customer satisfaction at the KNUST hospital, the following are a number of recommendations that are geared towards mitigating the aforementioned findings:

- **Computerization of Hospital Operations**

The total Information Communication and Technology (ICT) Systems of the hospital need a proper appraisal. This is to enable the hospital take stock of their current and future ICT needs. A system which is abreast with current ICT trends is a recipe for success in the 21st Century. In light of this, for the hospital to work and achieve maximum outputs, it has to get effective and efficient systems in place.

Each department of the health facility, especially the Out Patients Departments (OPD) and the Records Department should be computerized with up- to- date ICT facilities and softwares. This has the potential of minimizing errors which are mostly associated with manual work.

- **Incorporation of the training of Houseman Doctors at the KNUST Hospital**

Doctor-Patient Ratio is a very serious issue in third world countries which is worsened by the poaching of health professionals from these countries by the advanced countries. This problem is also fueled by the inability of these third countries to train medical professionals to meet the health needs of their ever growing populations.

The KNUST hospital should consider training houseman doctors at the hospital. This will aid the beefing up of health professionals performing their duties at the hospital.

This will help address the heavy work load at the hospital which has been worsened by the introduction of the National Health Insurance Scheme

- **Organization of Customer Care and Satisfaction Programmes for Health Professionals of the Hospital**

Many clients seeking medical care have time and again made reference to front desk and other health care providers not having a welcoming smile. This means a smile goes beyond the face to help in the healing process. This may be for some clients all they need to recover from their ailment. In Sarah Cook and Steve Macaulay's' paper on "customer service: what's a smile got to do with it? They asserted that some 12 years ago customer service training started for many organizations in the UK and was received by a rather cynical audience who believed it was all about keeping a smile on ones face, come what may. However, today there is considerable focus on improving customer service in every sector and current knowledge of how to achieve this has strengthened considerably.

As a way of sharpening the customer care skills and ability of the health professionals of the KNUST hospital, the hospital should organize periodic seminars and workshops for their employees so as to put them in better positions to manage the peculiar needs of each client to the hospital.

- **Regular University Subvention and Reimbursement of NHIS Premiums**

The success of any organization or institution is partly dependent on the funds it is able to mobilize to implement the projects, plans and programmes that aid it in achieving its mission and vision statements. The irregular university subventions coupled with delays

in imbursement of the hospital by the National Health Insurance Secretariat are major factors militating against the hospital's mission and vision statements

The KNUST hospital should institute measures that are aimed at making irregular subventions from the KNUST and delays in reimbursement of NHIS premiums a thing of the past.

- **Expansion of Existing Facilities at the KNUST Hospital**

Facilities at the hospital should be expanded whiles those in deplorable states be renovated. As such the management of the hospital should come up with innovative ways of accessing funds to undertake these projects. This includes bringing on board some multinational organizations and development partners especially those who are more inclined to the health sector to sponsor some of the activities and projects of the hospital.

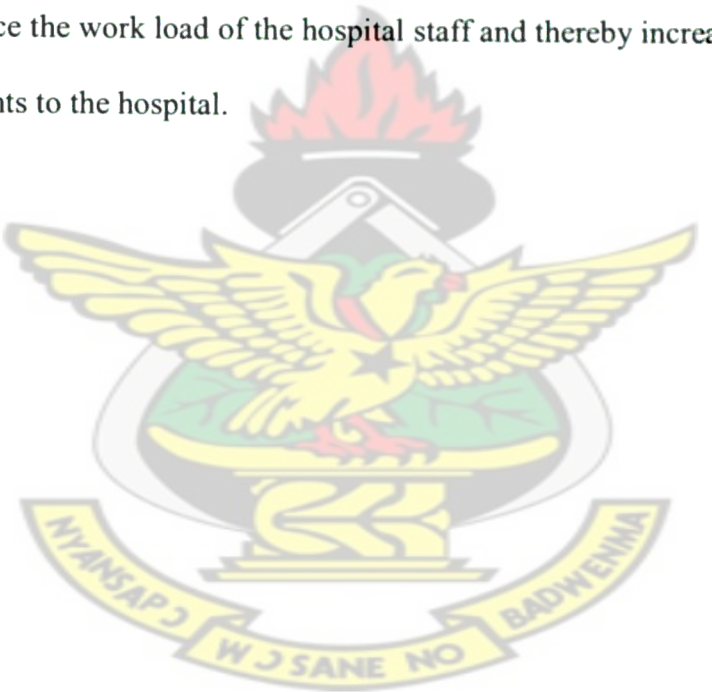
All other things being equal, with an increase in facilities at the hospital, there will a corresponding reduction in the waiting time of accessing health care services. This also has the potential of increasing customer satisfaction.

5.4 Conclusion

A wide variety of studies have been done to support the link between customer satisfaction and behavioral intentions (Fornell, 1992; Rust and Zahorik, 1993; Taylor and Baker, 1994; Patterson and Spreng, 1997). Bearden and Teel (1983, p21) argue that 'customer satisfaction is important to the marketer because it is generally assumed to be a significant determinant of repeat sales, positive word of mouth, and customer loyalty'.

In the light of this, this research sought to ascertain whether clients of the KNUST hospital were actually satisfied with the services they were receiving at the hospital. It came to light that, even though facilities at the hospital were visually appealing, they were not actually satisfied with the services being provided by the hospital. This was because these services were not provided promptly and also the hospital's employees do not tell patients exactly when services were to be performed.

Not withstanding these findings, it is incumbent on the administration of the hospital to come up with innovative measures that are aimed at increasing the facilities at the hospital so as to reduce the work load of the hospital staff and thereby increase the level of satisfaction of clients to the hospital.



REFERENCES

Andaleeb, S. S. (2001). "Service quality perceptions and patient satisfaction: a study of hospitals in a developing country", *Social Science & Medicine*, Vol. 52 pp.1359-70.

Anderson, E. W., and Sullivan, M. W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. *Marketing Science*, 12(2), 125-143.

Anderson, E. W., Fornell C. and Rust R. (1997). "Customer Satisfaction, Productivity, and Profitability: Differences between Goods and Services," *Marketing Science,* Vol. 16, No. 2, 129-145.

Anderson,K. and Zemke,R. (1998). Delivering Knock your socks off service. New York:AMACOM

Asubonteng, P., McCleary, K. J., and Swan, J.E. (1996). "SERVQUAL revisited: a critical review of service quality", *The Journal of Services Marketing*, Vol. 10 No.6, pp.62.

Babakus, E., and Mangold, W.G. (1992). "Adapting the SERVQUAL scale to hospital services: an empirical investigation", *Health Services Research*, Vol. 26 No.6, pp.767-86.

Baker, T. L., and Taylor, S. A. (1997). "Patient satisfaction and service quality in the formation of customers' future purchase intentions in competitive healthcare settings", *Health Marketing Quarterly*, Vol. 15 No.1, pp.1-15.

Bearden, W. O., and Teel, J. E. (1983). Selected Determinants of Consumer Satisfaction and complaint Reports. *Journal of Marketing Research,* 20(1), 21-28.

Bitner, M. J. (1990). Evaluating Service Encounters: The effects of Physical Surroundings and Employee Responses. Journal of Marketing, 54(2), 69-82.

Bolton, R. N., and Drew, J. H. (1991). A Multistage Model of Customers' Assessments of service Quality and Value. *Journal of Consumer Research*, 17(4), 375-385.

Bolton, R. N. (1998). A Dynamic model of the duration of the customer's Relationship with a Continuous service Provider. *Marketing science*, 17(1), 45-66.

Guidotti, C. (2002). "Quality and health sector: two worlds apart?" Essay from http://www.economicswebinstitute.org/essays/qualityh.htm

Choi, K. S., Cho, W. H., Lee, S. H., Lee, H. J., and Kim, C. K. (2004). The Relationships among Quality, Value, Satisfaction and Behavioral Intention in Health Care Provider Choice: A south Korean Study. *Journal of Business research*, 57(8), 913-921.

Counte, M. A., Glandon, G. L., Oleske, D. M., and Hill, J. P. (1995). "Improving hospital performance: issues in assessing the impact of TQM activities", *Hospital & Health Services Administration*, Vol. 40 No.1, pp.80-94.

Counte, M. A., and Meurer, S. (2001). "Issues in the assessment of continuous quality improvement implementation in health care organizations", *International Society for Quality in Health Care*, Vol. 13 No.3, pp.197-207.

Cronin, J. J., and Taylor, S. A. (1992). "Measuring service quality: a reexamination and extension", *Journal of Marketing*, Vol. 56 No.3, pp.55-68.

Cronin, J. J., and Taylor, S. A. (1994). SERVPERF versus SERQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*,58(1),125-131.

Cronin, J. J., Brady, M. K., and Hult, G. (2000). Assessing the effects of Quality, value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments. Journal of Retailing, 76(2), 193-218.

Dabholkar, P. A. (1995). A contingency Framework for Predicting Causality between Customer Satisfaction and Service Quality. *Advances in Consumer Research*, 22(1), 101-108.

Dean, A. M. (1999). "The applicability of SERVQUAL in different healthcare environments", *Health Marketing Quarterly*, Vol. 16 No.3, pp.1-21.

Dutka, A. (1993). AMA (American Marketing Association) Handbook for Customer Satisfaction. Chicago: NTC publishing.

Edvardsson, B., Gustavsson, B. (1991). "Quality in services and quality in service organizations: a model for quality assessment", in Brown, S.W. (Eds),*Service Quality: Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, MA, pp.319-40.

Flynn, B. B., Saladin, B. (2001). "Further evidence on the validity of the theoretical models underlying the Baldrige criteria", *Journal of Operations Management*, Vol. 19 No.6, pp.617-52.

Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1),6-21

Gitomer, J. (1998). Customer satisfaction is worthless, customer loyalty is priceless: How to make customers love you, keep them coming back, and tell everyone they know.Austin,TX:Bard Press

Griffin, J. (1995). Customer loyalty: How to earn it, how to keep it. New York: Lexington Books

Gronroos, C. (1982). Strategic management and Marketing in the service sector. Helsinkis, Swedish School of Economics, Research Report 0357-5764;8.

Gronroos, C. (1988). "Service Quality. The six criteria of good perceived SQ".Review of Business 9(3):10-13

Gronroons, C. (1993). From marketing Mix to relationship Marketing: Towards a Paradigm shift in Marketing. Helsinki, Swedish School of Economics, Research Report 0357-4598;263:2-20

Grapentine, T. (1999). The history and future of service quality assessment. Marketing research,10,4-20

Gummesson, E. and C. Gronroos (1987). Quality of Products and Services: a tentative synthesis between two models. Karlstad, centre of service Research, University of Karlstad, Research Report 87:3

Gupta, S. K., Kant, K. (2002). "Quality dimensions in hospital infection control", *Journal of the Academy of Hospital Administrations*, Vol. 14 No.1.

Hayes, B. (1998).Measuring Customer satisfaction. Milwaukee,WI:ASQ Quality press.

Hayward, J. (1976), "Information: a prescription against pain", Royal College of Nursing, London.

Hellier, P. K., Geursen, G. M., Carr, R. A., and Richard, J. A. (2003).Customer repurchase intention: A general structure equation model. *European Journal of Marketing*, 37(11/12)1762-1800.

Jones, M. A., and Farquhar, J. D. (2003).Contact Management and Customer Loyalty. *Journal of Financial services Marketing,* 8(1), 71-78.

Keaveney, Susan M. (1995), "Customer Switching Behavior in Service Industries: An Exploratory Study," *Journal of Marketing*, Vol. 59, April, 71-82.

Keiningham, T.L. and Vavra, T.G. (2001). The Customer delight Principle: Exceeding Customers expectations for bottom-line success. Chicago:McGraw-Hill.

Kim, P. S., and Johnson, D. D. (1994), "Implementing total quality management in the health care industry", *The Health Care Supervisor*, pp.51-7.

Klein, D., Motwani, J., and Cole, B. (1998), "Quality improvement efforts at St Mary's Hospital: a case study", *Managing Service Quality*, Vol. 8 No.4, pp.235-40.

Koeck, C. M. (1997), "Doing better: a global medical interest", in Kazandjian, V.A. (Eds),*The Effectiveness of CQI in Health Care: Stories from a Global Perspective*, ASQC Quality Press, Milwaukee, WI.

KNUST Health News, A Quarterly Newsletter of the University Hospital, KNUST, Vol.1 No.2,p.4

Lakhe, R. R., Mohanty, R. P. (1994), "Total quality management-concepts, evolution and acceptability in developing countries", *International Journal of Quality & Reliability Management*, Vol. 11 No.9, pp.9-33.

Lam, S. S. K. (1997). "SERVQUAL: a tool for measuring patients' opinions of hospital service quality in Hong Kong", *Total Quality Management*, Vol. 8 No.4, pp.145-52.

Lam, S. S. K., Woo, K. S. (1997), "Measuring service quality: a test-retest reliability investigation of SERVQUAL", *Journal of the Market Research Society*, Vol. 39 No.2, pp.381-96.

The Leadership Factor: Working with Winners (n.d). Customer Satisfaction Retrieved February 5, 2002, from http://www.letssurvey.com

Leland, K., and Bailey.(1995). Customer Service for Dummies. Foster City, CA:IDG Books

Lin, B., and Glousing, J. (1995), "Total quality management in health care: a survey of current practices", Total Quality Management, Vol. 6 No.1, pp.69-78.

Mahapatra, P., Srilatha, S., and Sridhar, P. (2001), "A patient satisfaction survey in public hospitals professional care workers", *Journal of the Academy of Hospital Administrations*, Vol. 13 No.2, pp.11-15.

McAlexander, J.H., Kaldenberg, D.O., and Koenig, H.F. (1994), "Service quality measurement", *Journal of Healthcare Marketing*, Vol. 14 No.3, pp.34-40.

McColl-Kennedy, J., and Schneider, U. (2000). Measuring Customer satisfaction: Why, what and how? Total Quality Management,11(7),1-14

McLaughlin, C. P., and Simpson, K. N. (1999). "Does TQM/CQI work in health care?", in McLaughlin, C.P., and Kalunzy, A.D. (Eds),*Continuous Quality Improvement in Health Care-theory, Implementation, and Applications*, 2nd ed., Aspen Publishers, Gaithersburg, MD, pp.34-56.

Mayhew, D.J. (1999), *The Usability Engineering Lifecycle: A Practitioner's Handbook for User Interface Design*, Morgan Kaufmann, San Francisco, CA.

Meyer, S. M., and Collier, D. A. (2001), "An empirical test of the causal relationships in the Baldrige Health Care Pilot Criteria", *Journal of Operations Management*, Vol. 19 No.4, pp.403-26

Mohanty, R.P., Santi, K., and Haripriya, C. (1996), "A model for evaluating TQM effectiveness in health-care systems", *Work Study*, Vol. 45 No.2, pp.14-17.

Moody, D., Motwani, J., and Kumar, A. (1998), "Implementing quality initiatives in the human resources department of a hospital: a case study", *Managing Service Quality*, Vol. 8 No.5, pp.320-6.

Morgan, N.A. (1992), "The marketing-quality management interface", in Kunst, P., Lemmink, J. (Eds),*Quality Management in Services*, Van Gorcum, Assen, .

Mitchell. (1999). Reaching across boarders. Marketing News, 33(9), 19-21.

Mills,A., Brugha, R., Hanson, K, and McPake, B., (2002). "what can be done about the private health sector in low-income countries?". Bulletin of World Health Organisation, Vol.80 No.4, pp.325-330

Murphy, J.A. (1993). *Service Quality in Practice*, Gill and Macmillan, Dublin.

Nandaraj, S., Khot, A., Menon, S., and Brugha, R. (2001). "A stakeholder approach towards accreditation", *Health Policy and Planning*, Vol. 16 No.2, pp.70-9.

National Consumer Council (1989), *Consumers and the Health Service: MORI Survey*, NCC, London.

Naylor, M. and Greco, S. (2002). Customer Chemistry: How to keep the customers you want and say "goodbye-bye" to the ones you don't. Chicago: McGraw-Hill.

Newman, K. (2001). "Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank", *International Journal of Bank Marketing*, Vol. 19 No.3, pp.126-39.

Nielsen, J. (1993). *Usability Engineering*, AP Professional, Boston, MA, .

Nunnally, J.C. (1994). *Psychometric Theory*, 3rd ed., McGraw-Hill, New York, NY, .

Overseas Development Institute, (2008), Achieving the MDGs: the Fundamentals, Briefing Paper. http://www.odi.org.uk/resources/download/1933.pdf

Patterson, P.G., and Spreng, R.A. (1997).Modeling the Relationship between Perceived value, Satisfaction and Repurchase Intentions in a Business-to-Business, Services Context: An Empirical Examination. *International Journal of service Industry Management*, 8(5), 414-434.

Parasuraman,A., Berry,L. and Zeithaml,V. (1985). SERVQUAL: A multiple-item scale for measuring customer Perceptions of service quality. *Journal of Retailing*,64,26-43

Parasuraman,A., Zeithml,V.A and Berry, L. (1988). "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*,Vol.64 no.1,1988,pp12-40.

Parasuraman,A., Berry,L, and Zeithaml, V. (1993).More on improving service quality management . *Journal of Retailing*, 67,420-450.

Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1994).Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *Journal of Marketing,* 58(1), 111-124.

Pakdil, F., and Harwood, T.N. (2005), "Patient satisfaction in a preoperative assessment clinic: an analysis using SERVQUAL dimensions", *Total Quality Management*, Vol. 16 No.1, pp.15-30.

Pena, D. (1999), "A methodology for building service quality indices", *Annual Quality Congress Proceedings, Anaheim, CA*, pp.550-8.

Ittig, P. T. (1994), "The real cost of making customers wait" *International Journal of Service Industry Management,* Vol. 13 pp. 231-241

Popoola, S. O. (2000), Consumer health information and services in Nigeria, Library Review Vol49 No 3 pp,129-134.

Ranaweera, C., and Prabhu. (2003). On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of mouth. *Journal of Targeting, Measurement and Analysis for Marketing*, 12(1), 82-90.

Ravald, A., and Gronroos, C. (1996).The Value Concept and Relationship Marketing. *European Journal of Marketing,* 30(2), 19-30.

Reck,R. R. (1991). Turn your customers into your sales force. New York: Prentice Hall press

Reddy, B. K., Arundhathy, M., and Acharyulu, G. V. R. K. (2002), "A strategy for successful TQM in a corporate hospital: a study using six sigma", *Journal of the Academy of Hospital Administrations*, Vol. 14 No.2, pp.7-14.

Reddy, B. K., and Acharyulu, G. V. R. K. (2003), "A study on emergency care and patient discharge process-application of network analysis", *Journal of the Academy of Hospital Administrations*, Vol. 15 No.1, pp.23-7.

Reichheld, F. and Sasser, W. E.,Jr. (1990). Zero defections: Quality comes to services. In J.J. Sviokla and B. P. Shapiro (Eds.),Keeping Customers(pp.311-324).Boston: Harvard Business Review

Reidenbach, R.E., and Sandifer-Smallwood, B. (1990). "Exploring perceptions of hospital operations by a modified SERVQUAL approach", *Journal of Healthcare Marketing*, Vol. 10 No.4, pp.47-55.

Richins, Marsha L. (1983). "Negative Word of Mouth by Dissatisfied Consumers: A Pilot Study," *Journal of Marketing*, Vol. 47, 68-78.

Rust, R., and Zahorik, A. J. (1993).Customer Satisfaction, Customer Retention, and Market Share. *Journal of Retailing*,69(2),193-215.

Scardina, S. A. (1994), "SERVQUAL: a tool for evaluating patient satisfaction with nursing care", *Journal of Nursing Care Quality*, Vol. 8 No.2, pp.38-46.

Schneider, B., and White, S. (2004). *Service Quality: Research Perspectives*, Sage Publications, Thousand Oaks, CA.

Self, D.R., and Sherer, R. (1996). "Quality measures in healthcare", *Health Marketing Quarterly*, Vol. 13 No.4, pp.3-15.

Sharma, R.K. (1998). "Health management education: a paradigm shift", in Prakash, N. (Eds), Proceedings of the International Conference on "Opportunities and Challenges in Health Management Education in India", BITS, Pilani .

Shostack, G. L. (1990). Designing services that deliver. In J.J sviokla and B.P. Shapiro(Eds.), Keeping customers(pp.77-89).Boston: Harvard Business review.

Short, P.J., and Rahim, M.A. (1995), "Total quality management in hospitals", *Total Quality Management*, Vol. 6 No.3, pp.255-63.

Siferd, S., Benton, W., and Ritzman, L. (1992), "Strategies for service systems", European Journal of Operational Research, Vol. 56 pp.291-303.

Tabish, S. A. (1996). "Towards development of professional management in Indian hospitals", Journal of management in medicine, Vol.12 No.2, pp109-19.

Takeuchi, H., and Quelch, J. (1983), "Quality is more than making a good product", *Harvard Business Review*, No. July-August, pp.139-45.

Taylor, S. A., and Baker, T. L. (1994). An Assessment of the Relationship between Service Quality and Customer Satisfaction in the formation of Consumers' Purchase Intentions.Journal of Retailing,70(2),163-178.

Taylor, S. A., and Cronin, J. J. (1994), "Modeling patient satisfaction and service quality", *Journal of Healthcare Marketing*, Vol. 14 No.1, pp.34-44.

Usha Manjunath, Metri B.A. and Shalini Ramachandran "Quality Management in a Healthcare Organization: A Case of South Indian Hospital " THE TQM MAGAZINE, Emerald Group Publishing Ltd. West Yorkshire , England , in Vol. 19, Issue 2, March, 2007.

Vandamme, R., and Leunis, J. (1993). "Development of a multiple-item scale for measuring hospital service quality", *International Journal of Service Industry Management*, Vol. 4 No.3, pp.30-49.

Varghese, R. (2001). "Process reengineering in the radiology department in a corporate hospital", *Journal of the Academy of Hospital Administrations*, Vol. 13 No.1, pp.21-9.

Verma, D. P. S., and Sobti, R. (2002). "Patients' perceptions on medical services", *Journal of Services Research*, Vol. 2 No.1, pp.123-35.

Vij, A., Williamson, S.N., and Gupta, S. (2001). "Knowledge and practice of nursing staff towards infection control measures in a tertiary care hospital", *Journal of the Academy of Hospital Administrations*, Vol. 13 No.2, pp.31-5.

Walshe, K., Wallace, L., Freeman, T., Latham, L. and Spurgeon, P. (2001), "The external review of quality improvement in health care organizations: a qualitative study", International Journal for Quality in Health Care, Vol. 13 No. 5, pp. 367-74.

Wickens, C. D., Gordon, S. E., and Liu, Y. (1998). *An Introduction to Human Factors Engineering*, Longman, New York, NY.

Wong, J.C.H. (2002). "Service quality measurement in a medical imaging department", *International Journal of Health Care Quality Assurance*, Vol. 15 No.5, pp.206-12.

Yang, C. C. (1997). *Quality is the Best Strategy in Competition*, APEX International Management Consulting Co., Taiwan.

Yang, C. (2003). "The establishment of a TQM system for the health care industry", *The TQM Magazine*, Vol. 15 No.2, pp.93-8.

Yasin, M. M., and Green, R. F. (1995). "A strategic approach to service quality: a field study in a rural healthcare setting", *Health Marketing Quarterly*, Vol. 13 No.1, pp.75-85.

Zabada, C., Rivers, P. A., and Munchus, G. (1998). "Obstacles to the application of total quality management in health care organizations", Total Quality Management, Vol. 9 No.1, pp.57-66.

Zeithaml, V. (1988). "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence", Journal of Marketing, Vol. 52 pp.2-22.

Zeithaml, V. A., Berry, L. L., and Parasuraman, A. (1996). "The behavioral consequences of service quality", *Journal of Marketing*, Vol. 60 No.2, pp.31-47.

APPENDIX I

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ART AND SOCIAL SCIENCE

SCHOOL OF BUSINESS

QUESTIONNAIRE TO THE CLIENTS OF KNUST HOSPITAL

This questionnaire is intended for the collection of data that will help the researcher to assess **'The effect of service quality on customer satisfaction in KNUST Hospital'** which is chosen as the case study. The exercise is for academic purpose only. Whatever information you give will be kept confidential .Please, complete this questionnaire with appropriate answers with brief reasons or tick (/) where necessary.

SECTION A

BACKGROUND OF RESPONDENTS

1. Gender: Male [ ] Female[ ]
2. Age:

   i. 18 – 30years [ ] ii) 31−40years [ ]

   iii) 41−50years [ ] iv) above 60years [ ]

3. Marital status:

   i)Married [ ] ii) Single [ ]

4. What type of client are you?

i) Private [ ] ii) KNUST Staff [ ] iii) Student [ ]

5. How long have you been accessing Health care here?

i) Less than 1year [ ] ii) 1 to 5years [ ]

iii) 6 to 10years [ ] iv) More than 10years [ ]

6. How often do you visit this hospital in a year?

1[ ] 2[ ] 3[ ] 4[ ] 5[ ] other please specify.....

7. For Private Clients **ONLY**

i).Where do you live?.....

ii) How long does it take you to get to KNUST hospital?

1 Hour [ ] 2Hours [ ] 3Hours [ ] More than 5Hours [ ]

iii) Do you have National health Insurance? YES [ ] NO [ ]

If **no,** why don't you have National health insurance?

I cannot afford the cost [ ] my company pays for my hospital bills [ ]

Others (please specify).....

SECTION B

(To be answered before assessing healthcare)

The next section contains a variety of specific service dimensions related to measuring customer satisfaction. Based upon your personal beliefs, please choose on a scale of 1 to

5 how much you agree with the statements. "Strongly disagree =1" and "strongly agree=5". Please tick (/)

EXPECTATIONS

I. Tangibles

1. The hospital should have up- to- date equipment.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

2. The physical facilities of the hospital should be visually appealing.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

3. Hospital employees should appear neat.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

II. Reliability

4. Hospital should provide their services at the time they promises to do so.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

5. When patients have problems, hospital employees should be sympathetic and reassuring.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

6. Hospital services should be affordable.

1 [ ] 2[ ] 3[ ] 4[ ] 5[

III. Responsiveness

7. Hospital employees should tell patients exactly when services will be performed.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

8. It is realistic for patients to receive prompt service from hospital employees.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

9. Hospital employees should always be willing to help patients.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

IV. Assurance

10. Patients should be able to feel safe in their interactions with hospital employees.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

11. Hospital employees should be knowledgeable.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

12. Hospital employees should be polite.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ]

13. Hospital employees should get adequate support from their employers to do their jobs well.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

V. Empathy

1. The hospital has up -to- date equipment

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

2. The physical facilities of the hospital are visually appealing

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

3. Hospital employees appear neat.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

II Reliability

4. The hospital provides services at the time it promises to do so.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

5. When patients have problems, hospital employees are sympathetic and reassuring.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

6. The hospital services are affordable.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

III Responsiveness

7. Hospital employees tell patients exactly when services will be performed.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

8. Patients receive prompt service from hospital employees.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ]

9. Hospital employees are always willing to help patients

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

IV Assurance

10. Patients feel safe in their interactions with hospital employees

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

11. Hospital employees are knowledgeable.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

12. The hospital employees are polite.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

13. The hospital employees get adequate support from their employers to do their jobs well.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

V Empathy

14. The hospital gives patients personal attention.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

15 .The hospital has its patients' best interests at heart.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

16 .How much weight in terms of importance would you allocate each SERVQUAL

dimension by allocating a total of 100 points across the five dimensions above?

I) Tangibles [%] II) Reliability [%] III) Responsiveness [%]

IV) Assurance [%] V) Empathy [%

SECTION D

CUSTOMER SATISFACTION

1. Based on the service received today will you visit this hospital again? YES [ ] NO [ ]

i) If ***yes,*** why will you come back to this hospital?

Closeness to hospital [ ] Satisfied with the Service [ ]

(Please specify).....

ii) If ***No,*** why will you not come back to this hospital?

Please give reasons.....

18) Will you come to this hospital if there's another facility in this locality rendering similar services at the same cost?

YES [ ] NO [ ]

APPENDIX II

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ART AND SOCIAL SCIENCE

SCHOOL OF BUSINESS

QUESTIONNAIRE TO THE MANAGEMENT AND STAFF OF KNUST HOSPITAL

This questionnaire is intended for the collection of data that will help the researcher to assess **'The effect of service quality on customer satisfaction in KNUST Hospital'** which is chosen as the case study. The exercise is for academic purpose only. Whatever information you give will be kept confidential .Please, complete this questionnaire with appropriate answers with brief reasons or tick where necessary.

SECTION A

BACKGROUND OF RESPONDENTS

1. Gender: Male [ ] Female[ ]
2. Age:
   i. 20 – 30years [ ]
   ii. 31–40years [ ]
   iii. 41–50years [ ]
   iv. Above 60years [ ]

3. Educational Attainment:

i)Basic [ ] ii)Secondary [ ] iii)Tertiary [ ] iv)Others (specify).....

4. Marital status:

i. Married [ ] ii Single [ ]

5. Grade/Position

i Director [ ] ii Administrator [ ]

iii Doctor [ ] iv Nurse [ ]

v Pharmacist [ ] vi others (specify).....

6. How long have you been in your current position?

i Less than a year [ ] ii 1 to 5years [ ]

iii 6 to 10years [ ] iv More than 10years [ ]

SECTION B

Modified SERVQUAL instrument

The next section contains a variety of specific service dimension related to measuring customer satisfaction. Based upon your personal beliefs, please choose on a scale of 1 to 5 how much you agree with the statements. "Strongly disagree =1" and "strongly agree=5". Please tick (/)

I Tangibles

2. The hospital has up to date equipment

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

3. The hospital has visually appealing physical facilities

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

4. The hospital employees have neat professional appearance.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

II Reliability

5. This hospital provides services at the time it promises to do so.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

6. When patients have problems, hospital employees are sympathetic and reassuring.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

7. The hospital services are affordable.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

III Responsiveness

8. Hospital employees tell patients exactly when services will be performed.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

9. Patients receive prompt service from hospital employees.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

10. Hospital employees are always willing to help patients

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

IV Assurance

11. Patients feel safe in their interactions with hospital employees

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

12. Hospital employees are knowledgeable.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

13. Hospital employees are polite.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

14. Hospital employees get adequate support from their employers to do their jobs well.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

V Empathy

15. Hospital gives patients personal attention.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

16. The hospital has its patients' best interests at heart.

1 [ ] 2[ ] 3[ ] 4[ ] 5[ ]

SECTION C

17. How much weight in terms of importance would you allocate each SERVQUAL DIMENSION by allocating a total of 100 points across the five dimensions above?

I) Tangibles [%] II) Reliability [%] III) Responsiveness [%]

IV) Assurance [%] V) Empathy [%]