Public and Private Hospitals in Cameroon: Service Quality and Patients' Choice of Hospitals

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ABSTRACT

As many governments struggle to find the necessary resources to invest in the public healthcare system, private healthcare providers are becoming an important alternative for patients. Service quality has become a very important concept in healthcare. However, there is a paucity of research conducted in this area in African countries.

This study tries to identify important factors customers consider when choosing a healthcare provider. It also applies the SERVQUAL model to compare the level of service quality provided by public and private hospitals in the Northwest Region of Cameroon. Furthermore, it looks at customers overall level of satisfaction with the services, their repurchase intentions and their recommendation of the service to others.

A total of 244 hospital users in Cameroon responded to a 3 part questionnaire in English. The findings of the study revealed that generally, there was no difference between public and private hospitals users in terms of selection factors. Customers' expectations from both types of hospitals were low. A significant relationship was found between service quality dimensions and overall customer satisfaction. A positive significant relationship also existed between overall customers' satisfaction, loyalty and positive word of mouth.

There is overall dissatisfaction with both customers who can and those who cannot afford healthcare in Cameroon. This is a surprise finding especially for private healthcare providers who need to improve the quality of service they offer to the elite group of customers who are willing to pay for it. As for the public sector, the

government needs to invest more resources towards improving the services of public hospitals.

ÖZ

Birçok devlet sağlık sektörüne gereken ilgi ve kaynak aktarımını sağlayamamaktadır.Dolayısıyla özel sağlık kuruluşlarının önemi gün geçtikce artmakta, özellikle bu hizmetleri alabilecek durumda olan müşteriler için.

Servis kalite anlayışı sağlık sektöründe önemli bir rol oynamaktadır. Bu alanda birçok çalışma yapılmasına rağmen, Afrika ülkelerindeki sağlık alanında yapılan çalışmalar kısıtlıdır. Bu tez Kamerun'un kuzeybatısındaki kamu ve özel hastanelerdeki müşterileri kıyaslayarak hastane seçim kıstasları, servis kalitesi ve müşteri memnuniyeti arasındaki ilişkiyi sorgulamaktadır. Ayrıca müşteri memnuniyeti ile hizmetten tekrar faydalanma eğilimi ve başkalarına tavsiye arasındaki ilişki incelenmektedir. İngilizce hazırlanan, üç bölümlük bir ankete toplam 224 kişi cevap vermiştir.

Araştırmanın sonunda, kamu ve özel hastane müşterileri hastane seçim kıstasları açısından bir farklılık göstermemektedir. Müşterilerin hem özel hem de kamu hastanelerinden beklentileri genellikle düşüktür.

Hem kamu hem de özel hastane müşterilerinin memnuniyet ölçeği puanlarının ortalamanın çok altında olduğu görülmektedir. Çalışmada ayrıca kapsamlı müşteri memnuniyeti, hizmetten tekrar faydalanma eğilimi ve hizmeti başkalarına önerme eğilimi arasında tutarlı ve pozitif bir ilişki tespit edilmiştir.

Sonuç olarak, hem özel hem de kamu hastane müşterisi aldığı hizmetten genel olarak memnun değildir. Kamerun 'daki kamu hastane yöneticileri kısıtlı kaynaklarını daha verimli kullanarak servis hizmet kalitesini yükseltmeye çalışmalı ve devlet bu alana daha çok kaynak ayırmalıdır. Diğer yandan, özel sektör yöneticileri fakirliğin yaygın olduğu bir ülkede paralı ve elit müşterilerini tutmak istiyorlarsa müşterilerinin ödediği bedelin karşılığını vermek zorundadırlar.

Anahtar Kelimeler: Hastane Seçim Kıstasları, SERVQUAL, Müşteri memnuniyeti, Kamu ve özel hastaneler, Kamerun.

To My Family

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Chapter 1

INTRODUCTION

1.1 Health

Health as such is an intrinsic value and a requirement for people's welfare and development (Greve, 2008). Demand for healthcare services is growing worldwide especially in the developing countries. The World Health Organization (WHO) defined health as "the state of complete physical, mental and social well-being and not merely the absence of disease" (WHO, 1948, no. 2, p. 100). The medical dictionary defines healthcare as "the prevention, treatment and management of illness and the preservation of mental and physical well being through the services offered by the medical and allied professionals".

It's often said that "Health is Wealth" as the wealth of a nation depends largely on the health state of its population. Observing the relationship between the health of a nation, its healthcare system, and the economic and political situation is always important especially in developing countries (Lindholm & Thanh, 2003). Most governments in developing nations should be able to assess the level of economic development, as well as implement policies that have an impact on the incidence of diseases and injuries, find

ways in which healthcare can be financed, review ownership and management of hospitals, and what medical technologies and pharmaceuticals are used and for whom.

Health can be viewed more practically as a conceptual framework which covers availability, accessibility and affordability. In most developing countries, health is viewed mainly as the absence of a disease, as most of the population suffers from a variety of physical, mental and social problems such as malnutrition, poverty, wars, and poor governance which leads to economic crises. An estimated number of 1.2 billion people worldwide live below the poverty line of less than $1 a day, while each day, about 80 million people worldwide go hungry and die from curable diseases (CIDA 2006). In Cameroon, more than 48% of the population live below the poverty line of less than 1$ a day (IRINNEWS, 2009). In developing nations, one of the most pressing issues is the limited availability of resources. Despite the abundance of natural resources available in most developing countries, mismanagement, corruption and theft by the government officials is the order of the day.

Presently, Primary Health Care (PHC) which is the widest scope of healthcare involving patients of all ages and socioeconomic and geographical backgrounds is the most important form of healthcare. WHO, outlined the ultimate goal of PHC as "better health for all", with the following key elements needed to achieve this goal;

- Reducing exclusion and social disparities in health (Universal Coverage Reforms)

- Organizing health services around people's needs and expectations (Service Delivery Reforms)

- Integrating health into all sectors (Public Policy Reforms)

- Pursuing collaborative models of policy dialogue (Leadership Reforms),

- Increasing stakeholder participation (WHO, 2009).

Although Cameroon as well as other developing nations has signed the Universal Declaration of Human Rights, there is limited research to determine whether Cameroonians perceive healthcare to be a basic human right.

1.2 Cost of Healthcare in Developing Countries

In most developing countries such as Cameroon with no health insurance policy to cover the cost of healthcare treatment, patients have to cover the cost of their treatment from their pockets. In fact, more than half of the population in developing countries cannot afford valuable healthcare treatment. The sensitivity of cost of treatment in developing countries is visible with the richer segment of the population using the best public and private hospitals, and the poorer section preferring self-care or the public hospitals (Tembon, 1996). Weinger & Akuri (2007) showed that overarching poverty is regarded as the primary threat to women's health in Africa, as lack of money is stated as the primary obstacle barring women from maintaining good health. The women in this study blamed living in poverty for their inability to buy drugs and afford medical care. Kamgnia (2008 p. 10), stated that "Low incomes, salary cutbacks, low producer prices, unfavorable terms of trade, large family sizes and parental irresponsibility are all contributing causes in explaining poverty in Cameroon".

Since good quality care comes with a price tag, quality is often correlated with price as more expensive facilities tend to offer a higher quality of services. In most developing nations, high quality healthcare facilities are fewer and more expensive, hence the tradeoff between quality and cost. Inability to afford healthcare by patients can be viewed as a violation of the "right to health" leading to endemic and pandemics common to poor communities and nations. Sooner or later, these national problems become a global problem in one way or another.

Present day studies confirm that patients from poor and rural areas often do seek quality care despite the hurdles of price and distance (Ndeso-Atanga, 2003). In most developing countries, the cost of transportation to seek healthcare services, the consultation and treatment cost, and finally the cost of drugs is generally higher than expected. These should be provided free at the point of delivery according to the human rights quotes (Tembon, 1996). In developing nations not only is their uncertainty regarding the availability of medication specifically targeting the health needs of these countries, but even where drugs exist to combat major illnesses, they are typically not affordable for the vast majority of the afflicted (Greve, 2008). In most developing countries, it's rare to find public hospital facilities (especially in rural areas) that have adequate supplies to fulfill their task. Hence, there is an increase in health inequality thus, pressuring the government to increase its investment and spending in this sector. That is why most people in developing countries depend on the government to improve the health sector and offer subsidies to the cost of treatment.

1.3 Accessibility of healthcare in developing nations

Adequate access and efficiency of healthcare services within a nation is essential for economic development and for the long term sustainability of the nation. However, access to vital medicines remains a critical and delicate issue. Governments most of which have signed the corresponding human rights treaties or conventions are primarily responsible for the respect and implementation of the basic right to health. Yet, in many less developed countries the ''right to health'', like many other human rights, remains poorly implemented and there are also deficits in health politics and policies (Greve, 2008).

Access to healthcare in most developed nations has been facilitated by health insurance systems and sophisticated emergency and ambulatory services. These nations have well equipped hospitals with adequate research facilities and high quality technical staff to attend to patients at every hour of the day. In sparsely populated areas in Ontario, Canada, more than 32,000 remote video consultations per year with specialists improve health care access for residents visiting local clinics. According to Cisco estimates, this system saves, $8 million (US) in medical related travel costs per year (Paolini, 2009). In many countries, public healthcare continues to fall short of demand, and remains unevenly distributed among the population (Mainardi, 2007). In most developing countries, the public healthcare sector focuses on making services equitably available to all within a designated budget. Therefore, access and cost containment are paramount. In less developed countries, patients have to travel long distances to the closest clinic or hospital to receive basic treatment and to more distant institutions for specialized, emergency care or for hospitalization (Paolini, 2009).

Access to healthcare in Africa and Cameroon remains limited because the infrastructure is poor or nonexistent for many people in the rural communities and those living outside the main cities. Many do not have the money to pay for treatment especially since hospitals and doctors often expect immediate cash payment. This shows the need for the implementation of a good health insurance policy scheme in these nations in order to take care of such conditions.

Easy, cheap and fast access to medical care is desperately needed in Cameroon. In the 90's, medical missions in Cameroon sent medical teams to setup free clinics throughout Cameroon, especially in areas where medical care is scarce and where poor infrastructure has discouraged previous efforts (Kim, 2002). Despite the numerous government reforms to bring public healthcare to the population, only a few regions within the country can boast of an extensive coverage of healthcare facilities. A majority of the population still lacks access to healthcare facilities and when they are available, they tend to be very expensive to purchase. Hence, a majority of the population only visit the hospital in cases where the illness is at an advanced stage and cannot be treated at home (that is, after many attempts of self treatment to suppress the signs and symptoms). Access to medical services is fundamental in every country, as this reflects their socioeconomic and political structure; which unfortunately is a situation to wait and see in Cameroon.

1.4 Healthcare providers

The most common array of organizations providing healthcare services in countries today are either public, private (for- profit) organizations, or private (non-profit) organizations. In a free market economy set up, all three organizations compete with

each other for the provision of services and where patients have to make a choice of which hospital to choose or be referred to. Privatization of most service industries is common in most countries today. The healthcare sector is not an exemption. The simple rationalization for economic efficiency represents the basis for wide "privatization movements" in healthcare that have been experienced by several western countries over the last twenty five years (Barbetta, *et al*, 2004).

1.4.1 Characteristics of Public Hospitals

The public healthcare sector is owned by the government and comprises all structures controlled and financed by the state. The aim of the public sector is not to earn a profit and it doesn't operate within narrow internal financial goals. However, its goals are more diverse with various external stakeholders. Public hospital managers have relatively limited discretion with the standards and ways of service delivery due to legislation and policies of the government (Ayadi,*et.al*,, 2009). This sector has a soft budget constraint (Barbetta,*et.al.,* 2004).

Public hospitals recruit and regularly pay their employees based on defined terms and period intervals. In Africa, government hospital staff is paid monthly. The staff is guaranteed of regular salaries hence, they become less motivated and quality standards become a major problem. Public healthcare services have been slow to adopt quality methods, partly because of difficulties in defining and measuring quality. Professional staff have rightly refused to accept definitions of quality only as customer satisfaction alone. This may account for some health promotion staff not seeing the relevance of the quality movement for their own health programmes (Ovretveit, 1996). Research shows

patients' expectations in public hospitals are already low to begin with, since, they are aware that they are paying minimal fees for treatment (Manaf & Nooi, 2004; Angelopoulou, *et. al.,* 1998).

One common practice eating into the social networks in developing nations is corruption and the healthcare sector is no exception to this practice, especially in the public hospitals. With the knowledge that patients of public hospitals have to pay less, the hospital staff may derive methods to extract money from these patients. Andaleeb (2001) stated corrupt practices have also exacerbated the woes of patients and in-depth interviews indicated that a variety of ingenious practices have evolved to obtain money from patients for the mere facilitation of due services.

The situation in Cameroon is no exception. In an article published by the Eden news paper (Cameroon, 2009) titled "Limbe Regional Hospital (a Public Hospital in Cameroon) still to readjust after the strike", it was reported that treatment in the wards were haphazard, and patients complained of the unscrupulous bills the general hospital is asking them to pay. Patients were allegedly assigned to particular people from whom to buy drugs, spirit, and plaster or cotton Nurses were reportedly collecting medical supplies from patients and not returning them. Patients were also asked to clean their immediate surroundings and create an enabling environment before receiving the doctor who comes visiting at an unexpected time. There was only one ward servant to assist in the whole maternity unit where four to nine women could be received daily. There was also a lack of basic working equipment like forceps, BP machines, delivery tables, X-Ray units and offices for doctors. One interesting thing to note is the fact that these

government hospitals in Cameroon also hold the best medical staff in the country, who are well trained and with vast experience.

1.4.2 Characteristics of Private Hospitals

The private healthcare sector is composed of for-profit (owned by private individuals or group of individuals) and non-profit organizations (controlled financially by NGOs and some missionaries). These hospitals have the responsibility to generate income, pay taxes to the government, pay their staff and strive to survive in a competitive free market environment where the government hospitals offer services at a lower cost. Research found that non-profit and for-profit private hospitals were equally responsive to changes in financial incentives (represented by an increase in state funding for services provided to indigent patients) and significantly more responsive than public hospitals. At the same time, both profit and non-profit institutions tend to use growth in revenues to increase their financial assets, while public institutions did not (Barbetta, *et al*, 2004).

Despite the fact that the government of Cameroon has made a series of sectoral reforms, reviews suggest that patients are bypassing the improved public sector health facilities and are seeking care further afield in private hospitals and with other quality healthcare providers (Ministry of Health, 1994).

In order to generate income to run the hospital and pay taxes, private hospitals have to be more efficient in the provision of better quality services as compared to their public counterparts. Patients are willing to pay more in the private hospitals if they are confident of receiving quality healthcare treatment. Hence the desired expectation of

patients of private hospitals is high, while the zone of tolerance is narrower when compared to that of public hospital patients (Zeithaml, 1998).

1.5 Customers of the Healthcare Sector

Anyone who has a disease physically or mentally is considered ill and if he/she is willing to seek medical care, then he/she becomes a patient. Patients are thus the customers of healthcare providers. Most often, patients' choice of healthcare providers are subjective. Sometimes, preference given to a healthcare provider can be from the objective nature of the symptoms from which the patient is suffering. When a disease dictates quality treatment, this factor dominates the choice made and the reason given for it (Ndeso- Atanga, 2003). The degree of patient information and involvement has dramatically changed over the last decade. This change in status, from that of a follower of medical prescriptions to that of an active part of the cure, has led to an upgrading of standards, as far as quality is concerned (Cornelia & Vasilachi, 2009).

1.6. Service Quality in the Healthcare Sector

Patients' experiences either directly or vicariously from outside sources (friends and relatives) is an important method of verifying whether provision of healthcare is synonymous with high quality (Suzuki, 1999). Due to the diversity of patients in the healthcare sector, service quality varies from patient to patient. Since each patient possess his/her own unique pre-conception of how healthcare services should be delivered, healthcare providers should ensure they are sensitive to such varied expectations and provide the services that match the expectations of these patients. Mefford (1993), stated quality control is more difficult in the service industry than manufacturing, therefore, there is clearly a need to examine patients' perceptions of

service quality. If patients' expectations meet their perceptions of a service, they tend to view the service as favorable. A satisfied patient is always loyal to the healthcare provider and promotes the provider by positive word of mouth, and is willing to pay whatever the cost to gain better medical care. Enhancing patients' satisfaction is a crucial healthcare determinant in the present day (Quinn, 1992), since service quality perceptions not only impact patients derived satisfaction, but also the selection of specialist and non- specialist providers (Ndeso- Atanga, 2003; Labarere *et al*, 2004).

Patients are always worried about the outcome of the treatment, the process of being treated, the seriousness of the underlying situation and are also anxious about those left back home hence making the overall assessment of service quality more complex and important (Eleonora *et al*, 2004). Hence, healthcare providers should be precisely informed on the characteristics of each patient with respect to treatment procedures (Pitt and Jeantrout, 1994). Healthcare providers and employees should be required to adapt and modify their service delivery processes to exceed the unique expectations of these patients (Berry *et al*, 1988). Overall, for hospitals to maintain and improve their quality of services, they should not only focus on the clinical and economic factors, but, also on patients' expectations and perceptions of care. Surveys are thus an important tool that managers and administrators could utilize to evaluate and continuously monitor quality for sustainability in the healthcare sector (Eleonora *et al,* 2004).

1.7 Aim of the Research

With endemic diseases such as malaria, schistosomiasis and sleeping sickness and the prevalence of HIV/AIDS amongst large parts of the population of Cameroon (HIV prevalence rate is 5.1%), there is still a great concern with regards to the quality of

healthcare services offered to patients in the country (World Bank, 2008). The average life expectancy rate of a Cameroonian stands at 51 years as compared to 75 years in the United States of America and other industrialized countries (World Bank, 2008). 48% of the population lives below the poverty line - less than one US$ a day. In 2001, it became evident that only 15% of population had access to health care in Cameroon (Camlink Men's Initiative, 2008).

The cost of healthcare services to Cameroonians has increased over the past decade, since the government can no longer afford free treatment in the public healthcare system. Unlike most developed countries where there is a formal health insurance sector, no such system exists in Cameroon leaving most patients in need and unable to afford medical services- especially in emergency situations. Those who can afford to pay for health care services usually prefer private healthcare providers or leave the country to seek medical care abroad.

With an increasing number of public and private healthcare providers within the country, the quality of service offered by these providers needs to be assessed. Andaleeb (2000) stated that if quality issues are being compromised by these establishments, it calls for re-evaluation of policy measures to re-define their role, growth and coverage and to seek appropriate interventions to ensure that these institutions are more quality focused and better able to meet the needs of their patients. This study is designed to determine the factors considered by patients in choosing a hospital/clinic within the country and secondly to compare the quality of healthcare services between public and private hospitals from the perspective of Cameroonian patients. This study also aims to evaluate

the level of customer satisfaction with Cameroonian hospitals, recommendation to others, and willingness to visit the hospital again whenever the need arises.

1.8 Importance and Contribution of the Study

The importance of the study lies in the fact that it measures the present satisfaction with the healthcare sector in Cameroon, while at the same time identifying the attributes of healthcare that are most important to Cameroonians. There is a paucity of research conducted in the field of service quality within the African continent and this study hopes to make a contribution.

To conclude, some recommendations will be proposed for policymakers in order to improve the quality of healthcare services in both the public and private sectors within the country. This would go a long way to improve the health sector, customer satisfaction, loyalty and human capital investment that is necessary for economic growth and development in Cameroon.

1.9 Structure of the Study

Chapter 1 represents the introduction of the study and also gives an overview of health and healthcare systems worldwide. Chapter 2 reviews the theoretical and empirical literatures on service quality and the application of the SERVQUAL model in the healthcare sector. Chapter 3 explains and gives an overview of the healthcare system in Cameroon. Chapter 4 outlines the nature of the questionnaire used for this study and the data used. Chapter 5 provides analysis and interpretations of the empirical results. Lastly, Chapter 6 presents the conclusion, policy implications and recommendations for further study.

Chapter 2

SERVQUAL, SELECTION CRITERIA AND EVIDENCE FROM THE LITERATURE

2.1 Service Quality

Unlike products, service quality is an elusive and indistinct concept that is difficult to assess and measure (Nazlee & Shahjahan, 2007). Many attempts have been made towards defining service quality with Gronroos (1983), attempting to qualify service quality into "What is done" and "How it is done". Zeithaml (1988) defined service quality as the customer's overall assessment of excellence. Hence most of the time, quality service is viewed as excellence resulting from the difference between the individual's expectation and perceptions of the service in line with the process in which it's delivered. The judgment may also depend on whose perception is sought. In 1985, Parasuraman *et al.* defined service quality as the difference between predicted or customer expectations and customer perceptions, stating that the quality of service embraces both the final service outcome and the delivery process. This also led to the Gap Theory development which is theorized as the inter-relationships between customer expectations and perceptions.

Parasuraman *et al.* (1985) stated that acknowledgement of the intangible, heterogeneous and inseparability characteristics of services are important in the understanding of service quality especially in the healthcare sector.

2.2 Characteristic of services

A service is the production of an essentially intangible benefit, either in its own right or as a significant element of a tangible product, which through some form of exchange, satisfies an identified need (Palmer, 2005). Cowell (1984) further states that, services are those separately identifiable, essentially intangible activities which provide want satisfaction, and that are not necessarily tied to the sale of a product or another service. Services are unique because of the following characteristics:

2.2.1 Intangibility:

Since services involve performances, processes and actions, they cannot be seen, felt, tasted or touched in the same way as objects. Services are not inventoried like goods and it's difficult to manage them. The most concerning part of services is that they cannot be easily communicated to customers making quality difficult for customers to assess. Taking into account the services in the healthcare sector, they cannot be seen or touched by the patient but the patient can see and touch the instruments used in performing the services (Zeithaml, *et al*, 2006).

2.2.2 Heterogeneity:

Since no two people have the same taste or objectives, likewise no two services will be precisely alike. Secondly, since humans are the providers of these services,(at different times of demand and by different employees) these people may differ in their performance from day to day leading to varying outputs for the delivered services.

Customers are the main focus, since each has unique demands or experiences the service in a unique way. Thus it is challenging to ensure consistent services. Quality often depends on many factors that cannot be completely controlled by the provider. This can be noticed in a case where two patients suffering from diabetes are administered different doses of insulin, depending on the needs of their individual bodies, because diabetes manifests itself in different ways in every patient.

2.2.3 Inseparability:

Most services are simultaneously produced and consumed. While goods can be produced in one factory, transported to the inventory section in the next town, and sold in another country, services on the other hand must first be paid for, then produced at the moment and consumed at the same time. Consumers for services are always present when the service is being produced and my even participate in the production process. Other consumers of the services may also be present and share their own views during the production of the service. Take for example a patient who needs to be operated upon. He pays the operation fees, is admitted into the hospital and taken to the theater. Before the operation, he shares his views with other patients and the surgeons. He must be present before during and after the operation. The surgeon produced the service and the patient consumed it there and then in the theater.

2.2.4 Perishability:

While goods can be produced, saved, stored, resold or returned to the producer, services on the other hand cannot be saved, stored, resold or returned. You cannot tell the surgeon to take his services back after the surgery and give back your money no matter what the outcome of the process is. You cannot also resell the procedure to another

patient with the same condition. Once the service is performed and consumed, it cannot be returned, saved or reused later. This implies a need for a strong service recovery strategy when services are delivered below the expectation of the consumers.

2.3 Zone of Tolerance for services

Considering the fact that services are heterogeneous, the extent to which customers recognize and are willing to accept the variation in service delivery is termed as the zone of tolerance (Zeithaml, *et al*, 2006). Since desired service is what the customers hope to enjoy from every provider, and the adequate service is the minimum level considered acceptable by the customers, the difference between the desired and adequate service is termed the "zone of tolerance". Outside this zone, the customer becomes satisfied if the service perception exceeds the desired services while below the adequate service signifies customer dissatisfaction. Since healthcare services are a very delicate sector dealing with human beings, the customer's zone of tolerance is very narrow in this sector. Customers often seek healthcare providers who can deliver above the desired services for patients.

2.4 Service Quality and behavioral outcome

One of the most important outcomes of service quality is customer satisfaction. Oliver (1997) stated that satisfaction is the judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment. Zeithaml *et al.,* (2006) said satisfaction is the customer's evaluation of a product or service in terms of whether that product or service has met the customer's needs or expectations. Satisfaction is inclusive and influenced by perceptions of service quality, product quality, price, situational factors as well as personal factors.

Boshoff & Gray (2004) stated, the process-oriented approach in defining customer satisfaction seems more appropriate in the service environment given that consumption is an experience and consists of collective perceptual, evaluative and psychological processes that combine to generate consumer satisfaction.

From every encounter-specific perspective, satisfaction is viewed as a post-choice evaluative judgment of a specific purchase occasion (Zeithaml *et al.,* 2006). Previous studies indicate that customer's assessment of service quality is positively related to the customer's engaging in word-of-mouth actions. On the other hand, when a customer's assessment of service quality is negative, the customer will engage in unfavorable actions (Athanassopoulous *et al*., 2000). A positive relationship exists between positive performance of the service, customer satisfaction and loyalty (Boshoff & Gray, 2004).

Service quality has become more important in a free and competitive market setup. Improved services leads to higher sales, customer satisfaction, and reduced cost and hence, long term profitability. Hence, most industries can enjoy the benefits of the positive outcomes of customer satisfaction (Oliver, 1997), profitability (Raju & Lonial, 2001), customer loyalty (Reichheld & Sasser, 1990) and market share (Hasin *et al*, 2001; Jacoby & Chesnut, 1978).

2.5 Service Quality in the Healthcare Sector

Healthcare providers worldwide, (Hospitals, pharmacies, clinics etc) have responded to free markets by strategic developments that ensure that services at least match the expectation of users (Gronroos, 1982; Bensing, 1991; Waal *et al*, 1993). Service quality assessment could give further information on patients' satisfaction (Labarere *et al*, 2004).

Functional and technical forms of quality are common in service providing sectors like the health care sector (Gronroos, 1984). Technical quality (quality of fact) in the healthcare sector is defined on the basis of the technical accuracy of the diagnoses and procedures (Emin & Glynn, 1991). While functional quality, is the manner and how the healthcare service is delivered to the patient.

Research has shown that patients have very little information towards assessing technical quality of healthcare, hence functional quality is usually the primary determinant of a patient's quality perception (Donabedian, 1980; Bopp, 1990). Thus patients base their evaluation of service quality on the interpersonal skills of doctors and nurses, and other human resource aspects of healthcare providers rather than on the technical quality which is the most important in the recovery process. Carman (2000) stated that patients consider perception of service quality as an attitude which is a function of attributes based on the technical and functional components of quality.

Patients are passive receivers of treatment determined by healthcare professionals and therefore are not in position to understand the technical and medical aspects. Research

found a strong link between patient satisfaction and service quality. Noor & Phang (2008), showed patients were satisfied with both the physical and clinical dimensions of the service, although they are more satisfied with the clinical dimensions than the physical.

Research also found a strong link between patient satisfaction, purchase intentions, and loyalty towards the healthcare provider (Lebarere *et al*, 2004; Hasin *et al*, 2001). The most notable outcome of patients' satisfaction which is positive word of mouth, reduced operation costs for health care providers leading to an increased market share (Boshoff & Gray, 2004). Health care providers always strive to provide the most appropriate treatment for their patients (Bopp, 1990), since it's the main focus of the patient and their relatives.

2.6 SERQUAL INSTRUMENT

During the development of the SERVQUAL scale in 1985, Parasuraman, Zeithaml and Berry suggested 10 dimensions for perceived quality; tangible, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and a willingness to understand the customer (Boshoff and Gray,2004).

Later, Parasuraman *et al.* (1998), refined the instrument into 5 dimensions and validated it across various service sectors such as banks, education, communication, insurance, maintenance, credit cards and the healthcare sector (Arasli *et al.,* 2005; Carman, 1990; Lam, 1997; Sheikh, Mobeen,Azam & Rabbani, 2006). The 5 dimensions consisted of the following;

1) Tangibility: this refers to facilities, equipment and the presence of personnel

This is the physical representation or snapshot of the service environment the customer will use to rate the quality of services offered. In the healthcare sector, it is what a patient views physically when he visits a hospital including the buildings, staff, environment, other patients and equipment/facilities physically available on site. Most organizations use tangibles to signal service quality to customers and create a positive image in the minds of strangers.

2) Reliability: this refers to the ability to perform the service responsibly and accurately.

This is the ability of the service provider to perform the promised services, resolve problems and provide accurate pricing services. This dimension is very important for the customer's overall assessment of service quality. Hence firms must understand the core expectation of their customers and provide the core services in the most direct way.

3) Responsiveness: this refers to the willingness to provide help and prompt services to consumers.

This involves attentiveness and promptness in dealing with customer requests, questions, complaints and problems. In the healthcare sector, customers don't like to wait in order to be attended to. That is why the waiting time in most hospitals is important. The services provided by the provider must be customized to satisfy the individual customer's need. Each patient in the hospital gets a particular plan of treatment because they are suffering from different ailments.

4) Assurance: this refers to the knowledge and courtesy of employees and their ability to convey trust and confidence

When customers feel uncertain about the outcome of a service or they regard the services as having a high risk, they need some degree of assurance to make them gain confidence in the service and the provider. A patient diagnosed with a medical condition that requires surgery must surely be afraid since the outcome of the surgery cannot be predicted before it's performed. Hence the doctors must try to build the confidence of this patient and make him trust his services.

5) Empathy: this refers to caring and individualized attention provided to customers

This involves understanding the personal needs of each customer, knowing their unique characteristics, and delivering customized services towards these needs. Knowing the customers by name is even more important in building a good customer relationship. In the healthcare sector, sick people require attention. The importance of empathy before and after surgery builds a lot of hope and trust in the patient. The family members and friends of patients are always impatient while waiting for the outcome of processes. They need attention and require care to reduce the level of nervousness and anxiety they feel.

The 5 dimensions of the scale had 22 pairs of items in total. The first of the pair aimed at measuring the expectations while the other measured the perception of customers. Five-point or seven- point Likert scales were used by different researchers. Prejmerean &

Vasilache, (2009) used the five- point Likert scale to determine the differences in patients' perceptions of healthcare service quality, by taking a sample of 10 clinics in Romania. Andaleeb (2000) used the seven-point Likert scale to compare the quality of services provided by private and public hospitals in urban Bangladesh.

3.6.1 The Gap Model

Boshoff & Gray (2004, p.29) stated "*The best-known method of operationalising service quality is the Gap Model/SERVQUAL approach suggested by Parasuraman, Zeithaml and Berry (1988). It is based on the 'expectancy disconfirmation' paradigm and measures service quality perceptions (as opposed to so-called 'objective' quality) by comparing customer expectations with the service performance*". Given the financial and resource constraints under which service organizations operate, it is essential that customer expectations are properly understood from the customers ' perspective and that any gaps in service quality are identified and corrected immediately. The following gaps exist in the service sector;

i. The customer gap 1: this is the difference between the customer's expectations and management's perceptions. This results mainly from a lack of marketing research and a tall management structure resulting in lack of upward communication.

ii. Provider gap 2: this is related to management's perceptions and service specifications- and refers to not having the right service quality designs and standards. This results mainly from poor service designs, absence of

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customer-driven standards and inappropriate physical evidence and servicescape.

iii. Provider gap 3: results from the differences in service specifications and service delivery. This is related to delivering the service designs and standards. It also includes deficiencies in human resource policies, customers who do not fulfill roles, problems with service intermediaries and failure to match demand and supply.

iv. Provider gap 4: This is the difference between service delivery and external communication factors. It refers to not matching performance as promised. This may result from lack of integrated service marketing communications, ineffective management of customer expectations, overpromising and inadequate horizontal communication (Zeithaml *et al*, 2006)

If service quality is regarded as an important factor in healthcare, users must be able to measure it and use it practically. Health care services are even more difficult to standardize due to the heterogeneity of the provider, the recipient of the service, and the unique interaction of the provider and recipient (Suzuki, 1999). Several tools have been developed to measure patient's perceptions and expectations but the SERVQUAL instrument developed by Parasuraman *et al* (1988) remains the main tool. While the findings of Erin and Glynn(1991) investigated and confirmed the use of the scale in the healthcare sector, other studies identified less dimensions or used modified versions of the instrument and identified additional dimensions (Andaleeb, 2000; Arasli *et al* ,2006).

2.6.2 Criticisms of the SERVQUAL instrument

The SERVQUAL instrument has been subjected to a fair share of criticisms. Buttle (1995) questioned the paradigmatic problems, dimensions and the validity of the instrument.

In addition, some researchers have questioned the practicalities of administering the SERVQUAL tool. O'Niell *et al.,* (2001) and Andersson, (1992) have questioned the practicality of asking customers about their expectations of a service immediately before consumption and their perceptions of performance immediately after the service encounter. They suggest that to make matters worse, expectations may not even exist or be clear enough in the respondents' minds to act as benchmark against which perceptions are assessed.

At the moment, no credible scale exists to replace the SERVQUAL in measuring service quality. As suggested by Parasuraman *et al.* (1998), the instrument could be modified to make the instrument more relevant to the service or situation at hand since the SERVQUAL instrument provides a basic skeleton that can be modified (Andaleeb, 2000; Arasli *et al.*, 2006; Craig & Steven,2006)

2.7 Review of Literature

2.7.1 Factors influencing patients' choice of Hospitals

In today's competitive health care industry, healthcare providers strive to determine how important service attributes are to potential customers and how those attributes influence customer choice of a healthcare provider. Al-Doghaither *et al* (2003) stated the

ability to provide accessible and cost-effective health services to patients depends on a thorough understanding of the factors associated with the choice and use of services, especially those factors which can be manipulated to improve the provision of health care services. Hence, in order to understand why patients choose one hospital over another, it is important to look at the major factors that patients consider. Andaleeb (2000) pointed out that whatever the arguments for or against public and private hospitals, a time-honored test of hospital efficacy lies in the view and preference patterns of those who select, use and evaluate them.

Al-Doghaither *et al* (2003) indicated the set of determinant variables for the utilization of health services seems to be more complex in traditional societies of the developing world when compared with the developed countries. Additional factors are involved in the selection process due to: cultural differences, which include differences in the way illness concepts and health behavior, are viewed, and the different sociodemographic conditions. In his study involving 303 respondents from randomly selected health care centers in Riyadh, Saudi Arabia, stepwise discriminant analysis revealed that the main factors associated with choosing a hospital were medical services, accessibility, age, sex and education. Little importance was given to income and occupation.

Hamid *et al*, (2005) pointed out that in a typical healthcare system where providers are heterogeneous in terms of qualification, efficiency and other dimensions, the choice of provider by the customer depends on a number of factors like service fee, quality of care, access to care, perception of the providers, flexibility of payment system, type of illness, severity of illness and socioeconomic and demographic conditions of the

consumers. In his studies based on data collected from advanced and non-advanced villages in Upazilla, Bangladesh, he found out that 52% of the people in the selected area received healthcare treatment from informal providers. He also found out that those patients with low household educational level preferred informal providers because of cheap treatment, easy access, and availability when ever needed.

Studies conducted in Africa, pointed to financial factors and quality of healthcare as the main determinants in the selection of of healthcare providers by the customers.

Tembon (1996), collected data from 1100 households in Ndop, a health district in the Northwest Province of Cameroon to confirm that there were many factors that influence the choice of healthcare. Among these factors was quality of care which is the most important factor. Other factors included the time spent seeking treatment, household income and size, distance, and cost of health care. The study found that those with higher incomes tend to choose private health units and those with larger families tend to choose government health units. He concluded that since household income influences the choice of private health units, policies targeting poverty alleviation should be instituted in the rural areas to provide households with income.

Amaghionyeodiwe (2008), investigated the determinants of households' choice of a health care provider in Nigeria using individual and household based questionnaires and involving a multifunctional logit model. Results revealed that both distance and cost of treatment are significant factors in discouraging individuals from seeking modern health care services. However, cost of treatment was less important as a determinant of the choice of health care provider. Results showed that cost of treatment was a major reason

why many low income households opted for the self-care option. Furthermore, the study showed that older people tend to patronize both public and private hospitals.

2.7.2 Service Quality in the Healthcare sector

Nazlee & Shahjahan (2007), used a modified SERVQUAL instrument, refined by Andaleeb (2000) (where some Bangladesh-specific service-quality parameters such as baksheesh and discipline were added) to compare the services of public, private and foreign hospitals in Bangladesh. In this study, 400 exit- interviews were conducted using the above questionnaire. The results indicated that the overall quality of service was better in the foreign hospitals when compared to that of private and public hospitals in Bangladesh.

Arasli *et al*. (2006), geared service quality into public and private hospitals in a small island using the modified version of the SERVQUAL instrument. Here, 454 respondents in Northern Cyprus were used to compare the quality of service in public and private hospitals. They identified six factors; empathy, giving priority to the inpatient needs relationship between staff and patients, professionalism of staff, food and the physical environment. The results proved that the expectations of inpatients were not met in either public or private hospitals.

Tolga & Jiju (2006), aimed to examine the differences in service quality between public and private hospitals in Turkey by applying the SERVQUAL model. Two questionnaires containing 80- items were distributed to 200 outpatients. The results indicated patients in private hospitals were more satisfied with service quality than those of public hospitals. Inpatients in private hospitals were more satisfied with doctors, nurses and supportive

services than their public counterparts. They found that cost and expertise of doctors is the biggest determinants of service quality in the public hospitals.

A limited number of studies have made use of the SERVQUAL instrument in comparing the services offered by public and private hospitals from the patient perspective in African countries;

Boshoff & Gray, (2004) used the SERVQUAL instrument with 10 dimensions to investigate whether superior service quality and superior transaction specific customers will enhance loyalty (measured in purchasing intentions) among patients in the private health care industry in South Africa. He analyzed 323 questionnaires to reveal that empathy of nursing staff and assurance impacted positively on the loyalty and cumulative satisfaction of patients in the private hospital sector in South Africa.

Mostafa (2005) used 332 patients from 12 hospitals in Egypt to investigate how patients perceive service quality in Egyptian public and private hospitals by using the SERVQUAL instrument. In this study, a three factor solution of the instrument was highlighted and the model tested significant.

Ayadi *et al., (*2009) evaluated public healthcare and its importance for customers, healthcare providers and the society. They evaluated patients' expectations, perceptions and satisfaction with the responsiveness provided by public healthcare providers in South Africa using the SERVQUAL instrument. Overall, patients were least satisfied with the waiting time for receiving medicine as well as the waiting time for treatment.

Chapter 3

HEALTHCARE SYSTEM IN CAMEROON

3.1 Background Information on Cameroon

Cameroon, generally called "Africa's miniature" is located in West Africa, with the south western region opened to the Atlantic Ocean. With a total surface area of 475,442 square kilometers (183,569 sq mi), it's the world's 53rd largest nation, with a population of about 19,500,000 million inhabitants (Wikipedia, 2009). The country is bordered to the north by Chad, south by Gabon and Equatorial Guinea, to the east by The Republic of Congo and the West by Nigeria. Cameroon is a member of the Economic Community of Central African States (CEMAC- *Communauté Économique des États d'Afrique Centrale).* With over 200 ethnic groups and more than 250 local languages, Cameroon is one of the two bilingual countries of the world with English and French as the official languages. Cameroon's colonial masters were France and England after Germany.

The country is made up of ten provinces, Yaoundé (Central province) is the capital city and Douala (Littoral province) is the economic capital of the country. On the 12th of November 2008, the provinces were changed to regions with the numbers remaining constant. The currency in use is the Franc (CFA) which is common to all the countries within the CEMAC community.

There is religious freedom within the country. Christianity is common in the southern and western regions of the country, while, Islam is common to the three northern regions. Due to the socio-cultural background of the country, there are other small spiritual indigenous beliefs common to some villages and households.

Located along the Equator, Cameroon's climatic condition varies according to terrains, from a tropical climate along the coast, to semi arid and hot in the North. The weather conditions alternate between the wet and the dry season all throughout the year.

Like most developing countries, Cameroon largely depends on agriculture for its economic potential. The agricultural sector contributed about 43.9% to its Gross Domestic Product (GDP) in 2007(CIA, 2007). The discovery of oil resources well situated along the coast line in the southern region of the country has been a big boost to the Cameroonian economy contributing about 7.5% to the GDP in 2004 (Organization for Economic Co-operation and Development, 2004). The French company SONARA (Société Nationale de Raffinage), i.e. National Oil Refinary is the sole exploiter of crude oil in Cameroon with a single refinery located at Limbe, in the South West Province of Cameroon. Some of the main commercial exports include banana, coffee, cocoa, cotton, oil palm, rice, rubber, sugar, tea, timber (which covers about 36% of the surface area) and tobacco. The Gross national income (GNI) of the country is $20.6 billion while the GNI per capita is $1, 050. The service sector contributed 40.2% of the total $23.240 billion GDP (Nominal) in 2008 (CIA, 2008). The population grows at the rate of 2% (which is relatively low for an African Country), the infant mortality rate stands at 86.6 infants per 1000.

The government of Cameroon spends 3.8% of GDP on public education facilities (Tulane, 2008) with French and English as languages of instruction. Primary school education is free in the public primary schools. Cameroon has an adult literacy rate of 68% (World Bank, 2008).

The country currently struggles to implement the International Monetary Fund (IMF) and World Bank programs aimed at encouraging investments, improving the agricultural sector, and the re-capitalization of the banking sector. The inflation rate is estimated to be 5.3% in 2008 and the current labor force is 6.759 million (CIA, 2008).

3.2. The Structure of the Healthcare System in Cameroon

Healthcare in Cameroon is similar to most of the setups in developing countries. Cameroonian hospitals form the main pillars of the health sector. Most of the major hospitals are concentrated in the urban centers. The Central Hospital in the University of Yaoundé is the referral teaching hospital. The Gynecology-Obstetric and Pediatrics hospital of Yaoundé and the Central Hospital of Yaoundé are the main hospitals in the capital. Ten provincial hospitals are located at the headquarters of each province serving as the main reference hospital in that province. There are many district hospitals at the divisional and sub divisional levels. Alongside the district hospitals are the health centers and clinics in the rural areas and the health posts. The later are managed by outreach programs through primary health care coordinators, which are present in the villages for the treatment of minor injuries and for reference purposes.

Training of health care personnel takes place within the country. There are 10 centers for training nurses and nurse- aides; 7 schools for assistant nurses; 7 for state registered nurses (SRN); 3 post-basic schools for nurses-midwives and Nurses anesthetist; and a university health center for the training of medical doctors, senior nursing officers and medical specialists (Awasum, 1992). Religious groups (missionaries) and other privately owned training centers offer training for their hospitals as well as other healthcare centers.

In 2008, the doctor to patient ratio stood at 1:10,500 (Peace Corps, 2008). The uneven distribution of resources including human capital investment, constitute a big issue to the population in Cameroon, especially in the rural communities. Although hundreds of medics graduate annually, because of poor distribution, their presence in the field remains almost unnoticed. Many doctors do not like being posted to the rural areas because they believe that working in the villages is like a punishment. Rural posts also do not allow doctors the opportunity for a private practice, where they can earn more money (Lukong, 1998).

Alongside the government facilities are the private hospitals and clinics. These are operated by some well-known missionaries offering healthcare services at a low cost. Non- governmental organizations (NGO) and privately owned hospitals, clinics and pharmacies are also operational within the country. The Ministry of Public Health oversees the healthcare system within the country working in correspondence with the provincial delegations of public health. At the lower level are the divisional delegations

and the hospital directors. The government is the main source of financing to the public health sector supported heavily by foreign aid donors, NGO's and public enterprises.

Due to its rich socio-cultural background, a lot of traditional healers exist in the country. Traditional healers form part of the private healthcare sector. These healers are found mostly in the villages serving the population of the community without hospitals or other options. They make use of blind treatment procedures and only hope on super natural beliefs for healing. In urban centers where people are aware of the services offered by hospitals and the use of diagnostic testing, hospitals are preferred over traditional healers.

3.2.1 Historical Review of the Healthcare System

The health care system in Cameroon has come a long way, though there is still much to be done. Despite the gradual development of the nationwide health system in 1960 by the government, health services that were established by the colonial masters in most urban centers still remain (Giovanni, 2008) .The contribution of the French doctor Eugene Jamot who fought against sleeping sickness during the 1960s cannot be neglected. By creating the "Zones de Démonstration des Actions de Santé Publique" (Zone DASP), the independent government aimed at extending healthcare to all communities within the country.

In 1978 under the regime of President Amadou Ahijou, the Germano - Cameroon project for the reinforcement of Primary Healthcare Care (PHC) was launched (Atangana, 1981). During this period, about 20% of the villages in Cameroon were served with community health posts (CHP). The network was controlled from the Ministry of Public

Health in Yaoundé. Financed by the German and Cameroon governments, the project was managed by the Deutsche 'Gessellschaft Fur Techische Zusammenarbiet' (GTZ-German Agency for Technical Co-operation. Due to the increase in demand and pressure to step up the quality of the PHC in general and at the hospitals, health centers and health posts in particular, the system became increasingly difficult to manage from Yaoundé. These difficulties were also coupled with the high operating and management costs. Thus, the total government expenditure for health declined from 8 %(1980-1982) to 1% (1990-1991) due to macro economic factors such as inflation and devaluation of the local currency.

In 1982, the PHC system was officially launched in Cameroon following a presidential decree with regards to the 1978 Alma-Ata recommendations on Health for All (HFA). The main objective was moving from intermittent provision of health services to an integration of village-health care activities into the system (Giovanni, 2008). This marked the beginning of constructive healthcare reforms to extend healthcare services through the provinces to the rural communities (MINPAT, 1986).

By 1985, the PHC system in Cameroon implemented vertical management and the holistic approach to healthcare delivery. This was planning to take healthcare closer to the people and at affordable prices, aiming at "health for all" by the year 2000 (Valentine, 2000). The Ministry of Public Health attempted to decentralize planning, with community co- management and co-financing of healthcare facilities which were centered on addressing the aspects of curative care. Till then, the hospitals, clinics and health posts had been operating independently of the other levels of the national health

care delivery system. Transportation equipment such as motor bikes, fuel and bicycles were provided by the GTZ to the supervisors from the provincial and divisional levels in order to aid in visiting and controlling the rural health posts. Due to poor financing, very few of these rural posts exist today (Tembon, 1996).

In 1989, the new PHC implementation strategy (which was later officially adopted in 1992 as the Reorientation of Primary Healthcare in Cameroon) was aimed at making healthcare available for all and organized the healthcare system into 3 levels; ministerial, provincial and district. This system also aimed to create local health committees who could manage and finance their own health services.

In 1991, the GTZ accepted to solely finance the training program for staff after the PHC reorientation while the Cameroon government was to finance all the other aspects of the reforms. Due to the economic crisis in the country at that period, the government couldn't provide the capital and other resources to sustain the program. Hence fallen standards in the quality of services, infrastructure and management were recorded in the public healthcare sector. As a result of these fallen standards, the pressure exerted on the health sector from the public led to the emergence of many private hospitals, clinics and pharmacies in the country.

The new strategic healthcare document "Plan National de Développement Sanitaire" (PNDS, 1998) which was supported by the World Bank, aimed at encouraging decentralization by making health districts fully up and operating through financial recovery. The project also emphasized the control of HIV/AIDS within the country.

Several other health reforms have been in place from the year 2000 which were aimed at enforcing the above plan and ensuring effective functioning of the cost recovery mechanism in order to sustain the public health sector in Cameroon.

3.2.2 Healthcare delivery facilities in Cameroon

In Cameroon, health care services are provided by public hospitals, privately funded hospitals, mission hospitals or local pharmacies as well as the traditional or folk medicine doctors (Marie, 2002). In the public healthcare settings, physicians, state registered nurses, and midwives attend to the patients.

The public health care system is organized in the following hierarchical form;

The Ministry of Public Health located in Yaoundé and supported by three other ministries; the Ministry of Public Service & Administrative Reform, the Ministry of Economic Planning & Regional Development and the Ministry of Territorial Administration & Decentralization.

A) Ten health delegations represent the ministry in each province (now known as regions). The provincial delegations control, supervise and coordinate health activities throughout the province.

B) Healthcare services are provided at the following levels;

- the provincial hospitals (serving as the regional reference hospital),

- the divisional hospitals (managed by the divisional health officer and the medical doctor at each hospital),

- the sub divisional hospitals which receive cases from the lower centers,

- the health centers (preventive and curative services) managed by Registered Nurses-(RN) or Nurse aides and responsible for supporting primary healthcare activities such as immunization in the villages,

- The community services (out-reach programs through primary healthcare coordinators) (Tata, 1994).

In 1992, there was one central teaching hospital in Yaoundé for all referrals from the provinces. Two specialist hospitals exist alongside the teaching hospital; one in Yaoundé and one in Douala the economic capital of the country. There are 49 hospitals at the divisional level, 120 sub divisional hospitals, 50 maternal and child healthcare centers, 716 rural health centers and several health post (Awasum, 1992).

By 1997, the population had increased to 13.5 million. The country had 1,031 public healthcare facilities which included; 1 teaching hospital, 2 referral hospitals, 3 central hospitals, 8 provincial hospitals, 38 divisional hospitals, 132 district hospitals and 847 health centers (World Bank, 1996), that was staffed by 14,292 public medical staff(Ministry of Public Health:1998). In 2006, there were a total of 172 district hospitals all over the country.

In Cameroon, there is an important sub sector of private healthcare providers who compliment and often compete with government providers. They consist of nonprofit religious missions and NGOs, for profit providers and traditional healers (Ntangsi, 1999). According to the World Bank (1998) report, the bulk of the nonprofit facilities are operated by the Catholic mission (197 facilities including 8 hospitals with a staff of

about 1,315) and the Protestant healthcare services (124 health facilities including 24 hospitals with a staff of 2,633). Generally, private hospitals in Cameroon are expensive and mainly serve only those who can afford it. However, in some parts of the country like the North West province, private and mission owned healthcare settings offer services that maybe absent in public hospitals such as physician specialty care or durable healthcare equipment (Marie, 2002). Approximately 2642 health care facilities (Public and private) now operate in the country.

Currently, there are 17 hospitals in the province (ten public and seven private (both mission and individuals) with 1590 beds belonging to the private sector and 2,271 beds to public sector (Bamenda, 2008). There is a remarkable increase in the number of health centers from 95 health centers (21 missions and 74 public) in 1996 (Tembon ,1996) to 123 health centers presently (46 private, 77 public), 6 departmental centers for preventive medicine, a mission leprosarium and 13 maternal and child health centers (both public and private).

It's worth mentioning the existence of numerous unregistered clinics, health centers, local pharmacies, drug stores and other medical posts all over the urban streets and in some rural centers. The high taxes and operational cost of official medicine providers could be the main reason for these underground operations.

Chapter 4

DATA AND METHODOLOGY

4.1 Questionnaire Design

A questionnaire was designed to collect data for this research. The questionnaire used for this study embodies questions on attributes that belong to one of the five dimensions of service quality. These dimensions are tangibility, reliability, responsiveness, assurance and empathy. It also contains items on selection factors patients consider when choosing a hospital or a healthcare provider.

The questionnaire was divided into three main sections. The first section of the questionnaire covers the demographic elements of the study and some of the questions in this section were related to respondent's age, sex, income level, occupation, type of hospital, departments used at the hospital, other alternative forms of healthcare treatment apart from hospitals. The last part of this section had questions to measure the overall satisfaction, repurchase intentions of patients and recommendation of the hospital to others. A 5 point scale with 1 –"very dissatisfied", 2 – "dissatisfied", 3 – "Neutral", 4 – " satisfied" and 5 – " very satisfied" was used to grade the overall satisfaction of the patients. A single question was used to measure repurchase intentions and recommendation of the service to others.

The second section of the questionnaire covers hospital selection factors. These are important factors patients consider in choosing a hospital. This section attempts to get respondent's ratings of the importance of some 18 proposed factors patients consider in choosing a hospital.

The last section of the questionnaire formed the backbone of the study. The questions in this section were a modified version of the SERVQUAL instrument to suit the purpose of the study. The attributes of this section were broadly grouped into five service quality dimensions (Parasuraman, 1985).This section embodies 35 pairs of questions. The questions attempt to get respondents rating of their own expectations and perception on some 35 service quality attributes or constructs which account for satisfaction.

5 point Likert scales, are used for both section 2 and 3 of the questionnaire. The Likert scales for section 2 ranged from 1 to 5. A scale of 5 indicates very important, 4 indicates important, 3 indicates neutral(undecided), 2 indicates unsatisfied, and 1 indicating very unsatisfied. While the scale for section 3 ranged from 5(strongly agree), 4 (I agree), 3 (I am undecided), 2 (I disagree) and 1 (I strongly disagree).

4.2 Sample and Data collection

The sample population for the study consisted of those who experienced healthcare services over the last 10 months, from both public and private hospitals and clinics in the North West province of Cameroon. The North West province of Cameroon was chosen for this research primarily due to its accessibility followed by the composition of its population. This is the only province in the country which to a greater extent represents

all the population of the regions of the country. The convenience sampling technique was used to get candidates above the age of 18 and who had utilized the services of a hospital over the past 10 months. The questionnaires were shared along the streets of Bemenda in the Capital, in all the accessible residential areas within the city.

Selected graduates from the University of Buea and residents of the North West province were employed and trained to aid in distributing the questionnaires. A letter stating the purpose of the research and contact details including email addresses and phone numbers was attached with each questionnaire. Those who were suspicious were left to go without answering the questions.

Due to timing constraints, the research concentrated on heavily populated areas of the city. A total of 320 questionnaires were given out of which 304 were collected, 244 questionnaires were deemed fit for analysis giving a response rate of 80.2%.

4.3 Test of Hypotheses for the study

The t-test is probably the most commonly used statistical data analysis procedure for hypothesis testing. By using the t-test statistic we determine a p-value that indicates how likely we are to have gotten these results. By convention, if there is a less than 5% chance of getting the observed differences by chance, we reject the null hypothesis and say we found a statistically significant difference between the two groups.

The Pearson's correlation analysis was used to measure the relationship between satisfaction, repurchase intention and positive word of mouth (recommendation to others). The Pearson correlation coefficient measures both the strength and direction of

the linear relationship between two variables. The Pearson correlation coefficient is a number between -1 and +1 that measures both the strength and direction of the linear relationship between two variables. The magnitude of the number represents the strength of the correlation. A correlation coefficient of zero represents no linear relationship, while a correlation coefficient of -1 or +1 means that the relationship is perfectly linear. The sign (+/-) of the correlation coefficient indicates the direction of the correlation. A positive (+) correlation coefficient means that as values on one variable increase, values on the other variable tend to also increase; a negative (-) correlation coefficient means that as values on one variable increase, values on the other tend to decrease, that is, they tend to go in opposite directions.

The following hypotheses were developed in the study:

H1: There is no difference in terms of hospital selection factors between public and private hospital users in the Northwest Region of Cameroon.

H2: The SERVQUAL instrument does not significantly differ between patients of private and public hospitals in the Northwest Region of Cameroon.

H3: There is no significant difference between patients of public and private hospitals in the Northwest Region of Cameroon in terms of customer satisfaction.

H4: There is no relationship between customer satisfaction and positive word of mouth (Recommendation of hospitals to others) of public and private hospital customers in the Northwest Region of Cameroon.

H5: There is no relationship between customer satisfaction and repurchase intensions (loyalty) of public and private hospital customers in the Northwest province of Cameroon

H6: There is no significant difference between the SERQUAL GAP scores of public and private hospital users in the Northwest province of Cameroon.

Chapter 5

INTERPRETATION OF EMPIRICAL RESULTS AND DISCUSSION

5.1 Descriptive Analysis of Results

The quality of data was ensured through editing by the interviewers and random audit of 10% of forms by the study coordinator. The data was entered, checked for consistency and analyzed using the Statistical Package for Social Sciences *(SPSS)*.

Out of the total sample size of 244, the numbers of male respondents were 105 (43.0%), while 139 (57.0%) of the respondents were females. Exactly half of the respondents were single 122 (50.0%). Most of the respondents were between the ages of 18-27 (47.1%) followed by the age group 28-37(27.0%) and 101 (41.4%) of them had completed secondary school education. With regards to the occupation of the respondents, 62 (25.4%) of the respondents were students, 51 (20.9%) of the respondents were from the public sector, while 49 (20.1%) of the respondents were self employed. The greater majority of the respondents 144 (59.0%) earned a monthly income of between 1000 frs cfa ($2.2) – 25,000frs cfa ($55.5) . In terms of the type of hospitals they used, 115 (47.1%) respondents preferred the public hospital facilities, 69 (28.6%) had used the mission hospital facilities, while 60 (24.6%) used the privately owned hospital facilities (see table 1a and 1b)

Table 1(a):Demographic Breakdown of Hospital customers in Cameroon (n=244)

Demographic variables	Frequency	%
GENDER		
Male	105	43.0
Female	139	57.0
Total	244	100
AGE		
18-27	115	47.1
28-37	66	27.0
38-47	32	13.1
48-57	23	9.4
58-+	8	3.3
Total	244	100
EDUCATION		
Primary	50	20.5
Secondary	101	41.4
Vocational school	43	17.6
University first degree	38	15.6
Master/PhD.	12	4.9
Total	244	100
CIVIL STATUS		
Single	122	50.0
Married	104	42.6
Divorced	18	7.4
Total	244	100

Table 1(b): Demographic Breakdown of Hospital Customers in Cameroon (n=244) continue

OCCUPATION		
Civil Servants	51	20.9
Private sector	37	15.2
Self employed	49	20.1
Unemployed	45	18.4
Student	62	25.4
Total	244	100
MONTHLY INCOME LEVEL		
1000frs-25000frs	144	59.0
26000frs-50000frs	42	17.2
51000frs-100000frs	29	11.9
101000frs-200000frs	15	6.1
201,000frs-500000frs	13	5.3
501000frs-+	1	.4
Total	244	100
TYPE OF HOSPITAL USED		
Government Hospital	115	47.1
Mission Hospital	69	28.3
Private Hospital	60	24.6
Total	244	100

With regards to the major departments the patients visits while seeking medical care at the hospitals, 43 (17.6%) respondents used the services of the Obstetrics & Gynaecology department, closely followed by 40 (16.4%) respondents who used the services of the laboratory(see table 2)

Table 2: Respondents Profile by Hospital Departments used.

Departments	Frequency	%
Dermatology	26	10.7
Endocrinology	8	3.3
Hematology	28	11.5
Neurology	14	5.7
Obstetrics and Gynaecology	43	17.6
Urology	12	4.9
Ophthalmology	18	7.4
Cardiology	12	4.9
Laboratory	40	16.4
X-Rays	10	4.1
Emergency	3	1.2
General Practitioner	11	4.5
Orthopaedic	16	6.6
Pediatrics	3	1.2
TOTAL	244	100

Respondents were also asked to indicate whether they used alternative forms of healthcare, self- treatment or traditional healers. Besides hospitals, some of the respondents also made use of other methods of medical treatment for serious illnesses. 128 (52.5%) respondents made used of self treatment, while 125 (51.2%) respondents made used of traditional healers and finally, 174 (71.3%) respondents made use of treatment offered by friends/family/neighbors.

In terms of the overall satisfaction with the services of the hospital, 133 (54.5%) respondents indicated that they were satisfied with the hospitals they visited and 137

(56.1%) of the respondents stated that they intended to return to the same hospital if they were sick in the future. 129 (57.6%) respondents also stated that they would recommend the hospitals they visited to their friends and family.

5.2 Reliability Analysis for Hospital Selection Factors

The reliability analysis for the 18 selection factors was conducted to find out if the scale of the factors were suitable for further analysis. An Alpha coefficient = .9143 > 0.50 confirmed that all 18 selection factors were suitable for further analysis. The principal component analysis for each factor is shown in table 3.

Table 3: Reliability Analysis for Hospital selection Factors.

Important factors for hospital selection	Extraction
1 Proximity of hospital/clinic to my home	.653
2 Severity of illness	.574
3 Reputation of hospital/clinic	.579
4 Affordable charges for medical services	.535
5 Qualification of staff	.577
6 Availability of drugs	.546
7 Personal experience with the hospital/clinic	.511
8 Friend/relative works at the hospital/clinic	.673
9 Recommendation from family/friends about hospital/clinic	.549
10 Hospital has upto date technology/medical equipments	.580
11 Shorter waiting time/ Prompt service	.561
12 Experience of doctors	.685
13 Ease of accessibility	.557
14 External/internal appearance of hospital/clinic	.543
15 Courtesy/respect of staff toward patients	.669
16 Quality of medical services offered at hospital/clinic	.673
17 Variety of medical services offered at hospital/clinic	.551
18 Cleanliness/ hygiene of hospital	.653

Extraction Method: Principal Component Analysis

5.3 Analysis of Mean Scores for the Importance of Hospital Selection Factors.

The means were compiled for the importance of the hospital selection factors. The term importance relates to the importance that a respondent places on certain factors when selecting a hospital once the need arises. Out of 18 factors, the most important hospital selection criteria for public hospital customers were "Quality of staff" (mean score = 3.95), "Availability of drugs" (mean score = 3.95), "Affordable charges for medical services" (mean score = 3.86) and "Experience of doctors" (mean score = 3.82)

On the other hand, the most important hospital selection factors for the private hospital customers were "Availability of drugs" (mean score = 3.98), "Qualification of staff" (means scores = 3.95), "Cleanliness/hygiene of hospital" (mean score = 3.77) and "Affordable charges for medical services" (mean score = 3.71).

The least important hospital selection criteria for public hospitals customers were "Proximity of hospital/clinic to my home" (mean score = 2.97), "Friends/ relatives work at the hospital/clinic" (mean score = 3.08) and "Recommendation from family/friends about hospital/clinic" (mean score = 3.32). It's worth noting that two of the least important selection factors for the public hospitals were also the same for the private hospitals. Namely "proximity of hospital/clinic to my home" and "Friends/ relatives works at the hospital/clinic". The other two least important selection factors for the private hospitals were "Personal experience with the hospital/clinic" (mean score = 3.13) and "Ease of accessibility" (mean score = 3.23) (see table 4 and 5)

5.4 Test for the Significant Differences Between Selection Factors for Public and Private Hospital Customers

Independent sample t-tests were conducted on the Hospital selection factors (18 factors) to analyze if there is a significant difference in the hospital selection factors for the public and private hospital customers.

The results presented in table 6 shows that overall, there is no statistically significant difference between public and private hospital customers with respect to the importance they give to the different hospital selection factors. However, the following two selection factors "Personal experience with the hospital/clinic" and "shorter waiting

time/prompt service" showed statistically significant difference between the public and private hospitals customers.

Thus, H1 was accepted

Table 4: Hospital Selection Factors of Public Hospital Customers.

Important factors for hospital selection	N	Mean
1 Proximity of hospital/clinic to my home	115	2.9652
2 Severity of illness	115	3.4522
3 Reputation of hospital/clinic	115	3.5478
4 Affordable charges for medical services	115	3.8609
5 Qualification of staff	115	3.9478
6 Availability of drugs	115	3.9478
7 Personal experience with the hospital/clinic	115	3.5217
8 Friend/relative works at the hospital/clinic	115	3.0789
9 Recommendation from family/friends about hospital/clinic	115	3.3217
10 Hospital has upto date technology/medical equipments	115	3.7043
11 Shorter waiting time/ Prompt service	115	3.6348
12 Experience of doctors	115	3.8174
13 Ease of accessibility	115	3.5130
14 External/internal appearance of hospital/clinic	115	3.6348
15 Courtesy/respect of staff toward patients	115	3.6522
16 Quality of medical services offered at hospital/clinic	115	3.7043
17 Variety of medical services offered at hospital/clinic	115	3.6870
18 Cleanliness/ hygiene of hospital	115	3.7826

Table 5: Hospital Selection Factors of Private Hospital Customers

Important factors for hospital selection	N	Mean
1 Proximity of hospital/clinic to my home	129	3.1085
2 Severity of illness	129	3.6512
3 Reputation of hospital/clinic	129	3.4806
4 Affordable charges for medical services	129	3.7132
5 Qualification of staff	129	3.9380
6 Availability of drugs	129	3.9845
7 Personal experience with the hospital/clinic	129	3.2326
8 Friend/relative works at the hospital/clinic	129	3.1318
9 Recommendation from family/friends about hospital/clinic	129	3.2481
10 Hospital has upto date technology/medical equipments	129	3.5426
11 Shorter waiting time/ Prompt service	129	3.3333
12 Experience of doctors	129	3.6512
13 Ease of accessibility	129	3.2326
14 External/internal appearance of hospital/clinic	129	3.3721
15 Courtesy/respect of staff toward patients	129	3.4186
16 Quality of medical services offered at hospital/clinic	129	3.6744
17 Variety of medical services offered at hospital/clinic	129	3.4264
18 Cleanliness/ hygiene of hospital	129	3.7674

Table 6: Test of significant Difference for Hospital selection factors of Public and Private hospital customers.

No	Important factors for hospital selection	t-value
1	Proximity of hospital/clinic to my home	-.887
2	Severity of illness	-1.302
3	Reputation of hospital/clinic	.404
4	Affordable charges for medical services	1.011
5	Qualification of staff	.067
6	Availability of drugs	-.252
7	Personal experience with the hospital/clinic	1.725***
8	Friend/relative works at the hospital/clinic	-.323
9	Recommendation from family/friends about hospital/clinic	.444
10	Hospital has upto date technology/medical equipments	.998
11	Shorter waiting time/ Prompt service	1.684***
12	Experience of doctors	1.015
13	Ease of accessibility	1.527
14	External/internal appearance of hospital/clinic	1.553
15	Courtesy/respect of staff toward patients	1.328
16	Quality of medical services offered at hospital/clinic	.180
17	Variety of medical services offered at hospital/clinic	1.527
18	Cleanliness/ hygiene of hospital	.098

Note: *** denote the rejection of hypothesis respectively at alpha .10 levels

5.5 Statistical Analysis of the SERVQUAL Data

The reliability of the SERVQUAL scale used for this study was tested and the alpha Cronbach's alpha tests showed that the response items were reliable for both expectations (α = 0.9557) and perceptions (α = 0.9376). Construct validity was established by carrying out factor analysis for each item of the SERVQUAL instrument and the analysis resulted in 5 dimensions being extracted for this study. The minimum factor loading was 0.577(see table 7a and 7b).

Table 7(a) : Factor Loading for SERVQUAL Scale

Items	Factor loading score	Items	Factor Loading Score
Tangibility(T)- Expectations		**Tangibility(T)- Perception**	
E1. The hospital will have up to date and well maintained facilities and equipment.	.706	**P1**. XYZ hospital has up to date and well maintained facilities and equipment.	.639
E2. The hospital should have visually appealing facilities and wards	.667	**P2**.XYZ hospital has visually appealing facilities and wards	.713
E3. The doctors and staff should be neat and professional in appearance	.717	**P3**. XYZ hospital doctors and staff are neat and professional in appearance	.677
E4. The hospital should have visually appealing materials associated with the service	.695	**P4**. XYZ hospital has visually appealing materials associated with the service	.757
E5. In general, the hospital will be clean and hygienic	.685	**P5**. XYZ hospital is clean and hygienic	.708
E6. There will be a regular supply of electricity and water at the hospital	.638	**P6**. There is a regular supply of electricity and water at XYZ hospital	.725
Reliability (RL) - Expectations.		**Reliability (RL) –Perception**	
E7. The hospital should provide services as promised	.730	**P7**. XYZ hospital provides services as promised	.603
E8. When the patient has a problem, the hospital will be sympathetic and reassuring.	.640	P8. When the patient has a problem, XYZ hospital is sympathetic and reassuring.	.594
E9. The hospital will carry out services right from the first time	.653	**P9**. XYZ hospital carries out services right from the first time	.621
E10. The hospital should carry out services at the time it promised to do so	.702	**P10**. XYZ hospital carries out services at the time it promised to do so	.715
E11. Doctors are usually available during normal working hours	.712	**P11**. XYZ doctors are usually available during normal working hours	.646
E12. The hospital should always provide error free documents records	.709	**P12**. XYZ hospital provides error free documents records	.669
Responsiveness (RS) – Expectations		**Responsiveness (RS) – Perception**	
E13. Patients will have to pay extra to in order to get proper treatment	.778	**P13**.XYZ Patients need to pay extra to in order to get proper treatment	.690
E14. The hospital should provide services at the time it promised to do so	.656	**P14**. XYZ hospital provides services at the time it promised to do so	.693
E15.Hospital staff should keep patient informed when services will be provided	.712	**P15**. XYZ hospital staff keep patient informed when services will be provided.	.649
E16. The hospital staffs should give prompt services to patients	.634	**P16**. XYZ hospital staffs give prompt services to patients	.653
E17. The hospital staffs should always willing to help patients	.690	**P17**. XYZ hospital staffs are always willing to help patients	.698
E18. Hospital staff should never too busy to respond to patient requests/complaints	.684	**P18. XYZ** hospital staff are never too busy to respond to patient requests/complaints	.631
E19. The attitude of hospital staff should instill confidence in the patient	.748	**P19**. The attitude of XYZ hospital staff instill confidence in the patient	.657
E20. The patient would have to wait a long time for the doctor to arrive	.693	**P20**. The patient has to wait a long time for the XYZ hospital doctor to arrive	.750

Table 7(b): Factor loadings for the SERVQUAL Scale continue

Assurance (AS) - Expectation		Assurance (AS) –Perception	
E21. The patient should feel secure in receiving medical care	.693	P21. The patient feels secure in receiving medical care from XYZ hospital	.590
E22. Hospital staff should always friendly and courteous with patients	.702	P22. XYZ hospital staff are always friendly and courteous with patients	.664
E23. The hospital doctors should have knowledge to answer patient's questions	.716	P23. XYZ hospital doctors have knowledge to answer patient's questions	.577
E24. Patients should not always be treated by nursing staffs rather than doctors	.641	P24. Patients are usually treated by nursing staffs rather than doctors	.581
E25. There should be adequate number of medical staff	.775	P25. There is adequate number of medical staff at XYZ hospital	.708
E26. All patients should be treated equally	.694	P26. All patients are treated equally at XYZ hospital	.690
E27. Hospital bills should be accurate	.637	P27. XYZ hospital bills are accurate	.669
Empathy (EM) – Expectation		**Empathy (EM) – Perception**	
E28. The hospital staff would give patients individualized attention	.691	**P28.** XYZ hospital staff give patients individualized attention	.682
E29. The hospital should provide 24 hour services	.670	P29. XYZ hospital provides 24 hour services	.665
E30. Hospital staff would deal with patients in a caring manner	.670	P30. XYZ hospital staff deal with patients in a caring manner	.733
E31. The hospital would have the patients best interest at heart	.689	P31. XYZ hospital have the patients best interest at heart	.728
E32. The hospital would understand the specific needs of the patients.	.745	P32. XYZ hospital understands the specific needs of the patients.	.735
E33. Most drugs should be available at the hospital pharmacy	.693	P33. Most drugs are available at the XYZ hospital pharmacy	.637
E34. Medical staff should take time to explain procedures in simple terms	.729	P34. Medical staff take time to explain procedures in simple terms at XYZ hospital	.689
E35. The hospital should understand the specific needs of the patients	.693	P35. XYZ hospital understands the specific needs of the patients	.675

Tables 8 presents the mean scores of the dimensions of the SERVQUAL instrument for public and private hospital users.

Table 8(a): The Expectation/Perception Mean Scores of the Dimensions of the SERQUAL scale for Private Hospital Users.

Dimension	N	Mean Expectation	Mean Perception
Tangibles	129	3.5615	2.6596
Reliability	129	3.3280	2.5130
Responsiveness	129	3.4137	2.5888
Assurance	129	3.6171	2.7101
Empathy	129	3.5630	2.7261

Table 8(b): The Expectation/Perception Mean Scores of Dimensions of SERVQUAL Scale for Private Hospital Users

Dimension	N	Mean Expectation	Mean Perception
Tangibles	115	3.5282	2.8560
Reliability	115	3.2979	2.7320
Responsiveness	115	3.3099	2.8856
Assurance	115	3.4922	2.8798
Empathy	115	3.5630	2.8159

Table 8a shows that the customers of the private hospitals have very high expectations for the Assurance dimension (mean = 3.6171), while the Empathy dimension (mean = 3.5630) scored the highest mean for expectations of public hospital customers. With regards to the perceptions, the Empathy dimension (mean = 2.7261) was the highest for the private hospital customers, while the Responsiveness dimension (mean = 2.8856) was the highest for the public hospital customers.

The group statistic composed for the overall mean scores for expectations and perceptions for both public and private hospital customers indicated that the total mean

scores for private hospital customers for expectation (mean = 3.5428) was greater than the total expectation score for public hospital users (mean = 3.4383), while the overall mean perception for public hospital customers (mean = 2.6395) was lower than the overall mean perception score (mean = 2.8339) for private hospital customers. This shows that the total mean expectation for customers of both public and private hospitals exceeded their perceptions of services offered.

The group statistics for customers' satisfaction for both public and private hospitals (composed of the overall mean scores for satisfaction for public and private hospitals) showed that the patients in the public hospitals scored a higher overall mean satisfaction (mean = 1.6087) as opposed to the customers of the private hospitals (mean = 1.3411). However, satisfaction scores of both public and private hospital users were below the average score on the scale. This shows that both types of customers are in fact not satisfied with the services offered in both private and public hospitals in Cameroon (see table 9).

Table 9: Overall Mean Patient Satisfaction Scores of Dimensions of the SERVQUAL Scale for Private/Public Hospital

Hospital	N	Mean Satisfaction	Standard deviation
Overall Public Hospital Satisfaction	115	1.6087	.49018
Overall Private Hospital Satisfaction	129	1.3411	.52285

5.6 Test for Significance of Important Variables Between Public and Private Hospital Customers

Independent sample t-tests has been carried out on the SERVQUAL instrument dimensions (5 dimensions) to see if there is a significant difference between the two types of hospital users.

Table 10 takes the SERVQUAL items as the average of its dimensions. The overall scores for all 5 dimensions for both expectations and perceptions were examined. Results show that there is a significant difference in the overall perception scores between the public and private hospital users with respect to the Tangibles (t- test = -1.682), Reliability (t-test = -2.230) and Responsiveness (t-test = -2.709) dimensions at α 0.10, 0.05 and 0.01 respectively. There was no significant difference in the expectation dimensions between the two hospital users.

Thus H2 was rejected.

Table 10(a): Test for Significant Difference in Expectation Mean Scores of Dimensions of SERVQUAL Scale for Public and Private Hospital Users

Expectation SERVQUAL Dimension	t-test	Sig.(2 tailed)
Tangibles	.246	.806
Reliability	.256	.798
Responsiveness	.848	.397
Assurance	.921	.358
Empathy	1.607	.109

Table 10(b): Test for Significant Difference in Perception Mean scores of Dimensions of SERVQUAL Scale for Public and Private Hospital Users

Perception SERVQUAL Dimension	t-test	Sig.(2 tailed)
Tangibles	-1.682***	.094
Reliability	-2.230**	.027
Responsiveness	-2.709*	0.07
Assurance	-1.291	.198
Empathy	-.739	.460

*Note: *, ** and *** denote the rejection of hypothesis respectively at alpha 0.01, 0.05 and 0.10 level*

Table 11 shows the overall satisfaction scores for customers of public and private hospitals. The results show that there is a significant difference between overall patients' satisfaction in public (t-test = 4.110) and private (t-test = 4.125) hospitals.

Thus H3 was rejected.

Table 11: Test for the Significant Difference between Overall Customers Satisfactions for Private/Public Hospitals

Hospital	t-test scores	Sig. (2 tailed)
Overall Public Hospital Satisfaction	4.110*	000
Overall Private Hospital Satisfaction	4.125*	000

*Note: *, ** and *** denote the rejection of hypothesis respectively at alpha 0.01, 0.05 and 0.10 level*

Table 12 shows the results of the Peasrson's correlation analysis which was used to test the direction and the degree of the relationship between overall satisfaction with the hospitals, recommendation of the hospital to others and revisit intentions. The results of this analysis would also show whether the relevant null hypotheses for the study would be accepted or rejected.

The test for overall customer satisfaction and revisit intentions found a positive significant relationship between the two variables with a coefficient of 0.821 at alpha = 0.01.

The test for overall customer satisfaction and positive word of mouth (recommendation to others) found a positive significant relationship between the two variables with a coefficient of 0.721 at alpha = 0.01.

Thus H4 and H5 were rejected.

Table 12:Pearson's Correlation Analysis for the Relationship between Satisfaction, Recommendation and Revisit Intentions for Public and Private Hospital Customers

Items	Sig. (2-tailed)	Pearson's correlation Satisfaction	Pearson's correlation Recommendation	Pearson's correlation Revisit Intensions
Satisfaction	000	1	.721**	.821**
Recommendation	000	.721**	1	.763**
Revisit intensions	000	.821**	.763**	1

*** Correlation is significant at the 0.01 level (2- tailed)*

Pearson's Correlation analysis was also used to test for the relationship between overall satisfaction and the demographic variables of age, gender, income level and the various departments patients visited at the hospitals. The results show that there was no significant correlation between the overall satisfaction, the age, gender and income level of patients. However, there was a significant correlation between overall satisfaction and the departments (Correlation coefficient = 0.121, at α = 0.10) patients used at the hospitals. This indicates that patients are satisfied with the services of certain departments within the hospitals.

Table 13 shows the overall SERVQUAL GAP Dimension scores. The t-test results showed there is a significant difference in GAP scores in all dimensions. The GAP scores for empathy (t-test = 12.242) was the highest while the lowest was responsiveness (t-test = 8.848). The overall GAP scores (t-test = 12.516) for all the dimensions was very high. This means that in general, customer perceptions fell short of their expectations.

Thus H6 was rejected.

Table 13: Overall Test for Significant Difference of SERVQUAL GAP Dimensions between Public and Private Hospital Users

Pairs	Dimension	t-test	Sig.(2 tailed)
Pair1	Tangibles Exp – Tangibles Per	11.571	.000
Pair2	Reliability Exp – Reliability Per	10.997	.000
Pair3	Responsiveness Exp – Responsiveness Per	8.848	0.00
Pair4	Assurance Exp – Assurance Per	9.819	.000
Pair5	Empathy Exp – Empathy Per	12.242	.000
Pair6	Total Exp – Total Per	12.516	.000

Chapter 6

CONCLUSION AND POLICY IMPLICATIONS

6.1 Selection Factors

The first objective of this study was to investigate the hospital selection factors patients in the Northwest Region of Cameroon consider when choosing a hospital. Results of the t-test revealed that overall; there is no difference in selection factors for public and private hospital users. The only two selection factors that showed a difference between the two groups were "Personal experience with the hospital/clinic" and "shorter waiting time/prompt service". Hence, we can say that both customer groups do not generally differ with respect to hospital selection factors. Healthcare is important whether you are rich or poor. With the knowledge that doctors have taken the Hippocratic Oath, patients hope for the best. Also, patients have limited choices (if any) to choose from. This is visible in the rural communities mostly served by the mission private hospitals. Secondly, the staff and doctors in public hospitals also work part-time in the private hospitals. One other factor to note is patients have other forms of treatment like self treatment, traditional medicine and treatment by relatives and friends which they can consider and also make use of. A large majority of Cameroonians (who are poor) visit the doctor only when the illness is at the advanced stages. Waiting time has been a source of dissatisfaction among patients (Noor & Phang, 2008). Sick people don't have the luxury or the energy to wait. If you have no choice, you have to wait but in a

situation where you are a paying customer, you don't expect to be kept waiting. Patients are likely to be dissatisfied if their waiting time is close to or above thirty minutes and their zone of tolerance is narrower. As with previous studies, waiting time was also found to be one of the important factors Cameroonian patients consider when choosing a hospital.

6.2 SERVQUAL SCALE

The second objective was to test the dimensionality of SERVQUAL on customers using public and private hospitals in Cameroon and to measure their level of satisfaction with service quality aspects. The results of the factor analysis revealed that all 5 dimensions of tangibles, reliability, responsiveness, assurance and empathy proposed by Parasuraman *et. al* (1988) were confirmed. The results of the analysis showed that the dimensions of the instrument differ between the public and private hospitals customers with respect to perceptions. Perceptions between public and private hospital users differed with respect to the tangibles, reliability and responsiveness dimensions of the SERVQUAL scale. Some factors included in these dimensions included servicecape of hospitals, prompt and timely services, and doctors available during working hours. The perception differences might have come from the difference in the amount of money patients paid for the different hospitals. It is natural for customers of private hospitals to have access to better wards, facilities, equipments and services since they are paying more for these added benefits. With regards to the reliability services, since most of the doctors of public hospitals work part time with the private hospitals, patients of private hospitals while waiting for the doctor to come in from their public duties are being attended to by nurses who lack the knowhow. Hence, the patients in the private hospitals

lack prompt and timely services and delivery of the healthcare service at the time of arrival. The case of mission hospitals is no exception. There are always too many patients with very few staff who lack the experience to manage these patients.

The expectations of the patients were not met in either public or private hospitals. It is interesting to note that although there has been growing criticism of quality and interpersonal skills of staff in public hospitals (Andaleeb, 2000; Ghazali, 2002), this is not supported by this study as reflected by the higher mean score (1.6087) of patient satisfaction with public hospitals in Cameroon when compared to that of customers of private hospitals. One possible explanation is that the public hospitals in Cameroon hold the best doctors and nursing staff in the country. Another explanation is that, from the demographic variables, we can see that a large majority of respondents belong to the low income group. They do not have the choice to visit other expensive hospitals and hence must stick to the public hospitals. Noor & Phang (2008) said another reason for patients' satisfaction with public hospitals is the fact that they are reluctant to express their true feelings for fear of antagonizing the service providers and experiencing even worse services in the future. Also the "generosity factor", that is the tendency of patients to give excellent ratings may be present. Yet in our study, the mean scores for customer satisfaction of both groups was lower than the 2.5 midpoint and this shows that customers in both the public and private sectors are not satisfied. Customers of the public hospitals tend to be slightly better off than those of the private sector.

The study found that there was no significant difference in the expectations of patients in public and private hospitals. We must note that overall, the expectation of the patients

for both public and private hospitals were very low. The total overall expectations for the public hospitals were higher (mean score = 3.5428) for the 5 dimensions of the SERVQUAL scale than their private counterparts (mean score = 3.4383). The low expectations in general for hospitals can be related to the fact that patients don't trust the services of the hospitals. Due to the low income of customers, the mismanagement of resources by top officials and other economic conditions, the government doesn't have enough resources to invest in the healthcare sector. Thus, patients who are fully aware of these problems are not expecting anything higher from this sector. Even in the private sectors, those who can afford good quality care believe that the best of care is obtained overseas rather than from private healthcare providers in Cameroon. There has also been cases where patients became worse in terms of their health, when they visited private hospitals (interview with some of the patients, relatives and the death of a renowned artist who had been in the care of a private hospital confirmed this). There is also a growing emergence of natural herbal clinics all over the country that are promising the patients excellent services and results that they cannot get from the mainstream healthcare sector.

Perceptions differ for the public and private hospitals users in the dimensions of tangibles, reliability and responsiveness. The overall perceptions scores were lower for both groups of hospitals. The overall perception scores were higher for public hospitals (mean = 2.8339) than their private counterparts. Though the income level of the population is low, the public hospitals with limited resources and equipment strive to satisfy their patients with the quality of care they offer. Improvements in the economic situation of the country can lead to improved services of public hospitals in the country.

On the other hand, the private hospitals with good tangible facilities should try to concentrate some of their resources in training quality staff and doctors. In order to have a greater market share, since the patients are ready to pay for the services, they should improve their level of care offered to these customers.

Overall, there were significant differences in gap scores in all dimensions of the service quality scale. Customer expectations exceeded their perceptions in general. This once again points to the fact that there is room for improvement in all sections of the hospitals including the private hospitals. Managers and administrators of hospitals should work hard to improve the tangibles of the hospitals to the satisfaction of the patients since the first encounter is important. Management of hospitals should be committed in their duties which are going to improve on the roles of nurses and doctors. The hospitals should also encourage training programs for their staff and doctors to improve their skills and human relation techniques. Motivating the nurses and the medical staff is a strong factor that needs to be focused on especially since empathy and responsiveness are very important for the patients.

6.3 Satisfaction, loyalty and words of mouth relationship

The results from the Pearson's Correlation analysis indicated that there is a positive relationship between patient satisfaction, loyalty (repurchase intentions) and positive word of mouth. Boshoff & Gray (2004) state that if a private hospital sets itself the goal of enhancing loyalty of patients, the service quality efforts should be focused on the empathetic behavior of its nursing staff. From the time of consultation to treatment, hospitalization and discharge, the employees should demonstrate that they care about

their patients and do everything to gain the patients' confidence in the hospital and ensure that the patient feels safe though out his stay in the hospital. Since families and friends are closer and believe in each other, a satisfied patient would be fast in encouraging other sick family members and friends to visit the same hospital and probably see the same doctor or nurse if possible. Patients also prefer to stick to the same hospital and same doctor because they have an already established relationship and the level of trust is higher. Even in a situation where the doctor is transferred to another hospital or region in Cameroon, it is normal see the patient travel long distances to meet the same practitioner. If patients experience the nursing staff as cheerful, kind, caring and courteous as well as highly skilled and prompt in service, then they are more likely to return to the same hospital should the need arise.

In our study, we found tangibles as one of the dimensions that differ for customers perceptions. Tangibles are a quality dimensions that has proved relatively unimportant in many service other quality studies. However, it's not the case in the hospital environment. Perceptions of neatness of wards and buildings, the décor and the appearance of the nursing staff will influence whether a patient will return to a hospital or not.

There was also a positive relationship between customer satisfaction and the different departments' patients visit at the hospitals. This may indicate that some departments are working harder to satisfy their patients and may be providing better contact services and even equipment. The hospitals should try to encourage exemplary staff to keep up with the good work and increase their motivation by either providing some sort of financial

benefits or recognition/promotion within the working sector. The administration should also try to train the other workers and encourage them to share ideas to improve the services they offer.

6.4 Policy Implications

There are several implications of the current study. The study indicates the existence of a service gap in the healthcare sector in Cameroon. Since a healthy man is a wealthy man in the African continent, this gap if left unabridged will result in overall dissatisfaction and economic and political problems in the future. Strategies could be broadly devised to counter the current dissatisfaction that exists in the healthcare sector, particularly in the private sector where customer's are paying premium amounts for the service.

Long-term strategies should focus on the government's plan to invest more resources into the healthcare sector, organize educational campaigns for health in order to sensitize the population on the advantages of hospital care and visiting fully qualified doctors. Furthermore, the government should reduce the level of taxes and operational costs for hospitals as well as other medical paramedics in the country. This will go a long way to bring healthcare facilities closer to the population.

From a co-existence perspective, the Cameroon government should continue its policy to build modern hospitals in a joint partnership with other nations like the case of China (currently building hospitals in Cameroon). The Cameroon government should encourage partnership with the missionary investors in the healthcare sector.

The second perspective from which managerial action and strategies could be developed is based on effective management of resources that are allocated to the healthcare sector,

organizing training and development workshops for the doctors and staff. Providing motivation and recognition schemes for the best doctors and medical staff will prevent them from moving abroad.

On the private healthcare sector, they should try to remember patients have the resources to buy medical services elsewhere and hence for long term sustainability, they should improve the level of service they offer. Firstly, they should avoid focusing solely on tangibles and focus more on the reliability, responsiveness and empathy dimensions of the service they offer to patients. Sponsoring some of their medical staff for further studies and training abroad and acquisition of new technology may also help to improve services.

6.5 Limitations and Further Research Implications

There are several limitations to our study. The first is the fact that the study was limited to a particular geographic region (Northwest region, just one of the 10 regions in the country) in Cameroon. Future studies should cover the other 9 regions of the country in order to make comparisons between different areas and to get a more comprehensive picture of the healthcare sector in the country. Secondly, due to time constraints, a limited number of questionnaires were distributed. In future studies, larger numbers of questionnaires with short and brief questions should be used. To proceed, this region of the country is made up mostly of low income citizens. Future studies should try to diversify the sample group in terms of income levels. The age group should be equally diversified in the future studies. The older generation could be targeted but one must remember that the average life expectancy stands at 53 years (Wikipedia, 2009). It would also be interesting to replicate this study in other African nations. It would be

interesting to see if different nations in Africa, whose people are suffering from poor governance, endemic diseases and poverty consider service quality of healthcare providers as an important indicator when choosing a hospital.

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APPENDIX

Sample Questionnaire