SERVICE QUALITY AT A MILITARY HOSPITAL

BY

PONCE KOKOU

MINOR DISSERTATION

Submitted in partial fulfilment of the requirements for the degree

MAGISTER COMMERCII

in

BUSINESS MANAGEMENT

in the

FACULTY OF MANAGEMENT

at the

UNIVERSITY OF JOHANNESBURG

Supervisor: Prof Mornay Roberts-Lombard

Co-supervisor: Dr Estelle van Tonder

JANUARY 2014

ABSTRACT

With the raise of competition in the Gabonese health industry and increased costs, most health service providers in Gabon have become under pressure to deliver good service quality. This also relates to the military hospital in Libreville in Gabon striving to provide adequate health services to its patients. The cost for hospitals to attract patients through several means such as providing good service quality has become crucial. Patient loyalty and retention can have an important financial advantage for a hospital, thus it has become essential for hospitals to create a sustaining relationship with their patients. The question of assessing service quality presents itself. This study investigated service quality at a military hospital in Libreville in Gabon. It was the objective of this study to establish if there is a difference in how patients rate doctors and nurses on the service quality dimensions.

This research was quantitative and descriptive in nature. Theory relating to service quality and patient satisfaction was provided. The population for the study consisted of patients who were at least 18 years old, males and females, who have experienced medical services and stayed over at the military hospital for at least one night. A self-administered questionnaire was designed based on the theoretical literature illustrated in the study. The questionnaire assessed various elements that were identified through the literature review. The questionnaire was based on a set of statements linked to the literature theory, and a 7-point Likert scale which enabled respondents to choose from seven different alternatives ranging from strongly disagree to strongly agree. A number of statistical analysis techniques were undertaken to achieve the objectives of the study, such as factor analysis. The conclusion and findings of the research assisted in explaining the objectives of the study and the results of the statistical analysis were found to reject the hypotheses that there is no significant difference in how patients rate the reliability, responsiveness, assurance and empathy of doctors and nurses and to reject the hypothesis that patients do not have a positive perception of the tangible aspects of a military hospital in Libreville, Gabon.In terms of the doctors' services, patients felt a need for more privacy in terms of the confidentiality of their treatment, a need for more individual attention, a need to be heard, and to trust doctors. Therefore such needs could be addressed through improved compassion, communication and understanding of doctors during the diagnosis of the problem. The feeling expressed was that doctors should pay more attention to patients' problems and share with them

their experience. Doctors at the military hospital should develop more work ethic where patients' records and cases should never be discussed with anyone without patients' permission. The military hospital should employ highly trained and qualified doctors to address the trust issue with patients. Lastly, consultation time may need to be reviewed to add some extra time to better address patients' needs during their consultation with doctors.

In terms of the services delivered by nurses towards patients, the latter were of the opinion that there was a need for more individual attention from nurses. Such individual attention could include greater information sharing when a patient is treated, friendlier communication to install greater trust and respect. Such needs could be addressed through improved patience, compassion and understanding by nurses during their dealings with patients. Nurses should also develop more work ethic regarding patients' records, and cases should never be discussed with anyone without their permission. Officials in the hospital should hire highly trained and qualified nurses to address the issue of trust in patients and consultation time may need to be reviewed to add some extra time to better address patients' needs during their dealings with nurses.

DECLARATION

I, the undersigned Ponce Kokou, hereby declare that this dissertation is my own original work. It has not been presented or submitted before for any degree at this or at any other university. Any assistance received in preparing this work has been duly acknowledged in this dissertation. It is submitted in fulfilment of the requirements for the degree of Master of Commerce in Business Management at the University of Johannesburg.

…….. ……

Signature (Day, month, year)

ACKNOWLEDGEMENTS

First, I thank the almighty God, Jesus Christ, for giving me his love, strength, wisdom, courage, determination and inspiration, without which I would never been able to complete this work.

Also, I would like to thank the following people for their involvement to this dissertation:

- My mother and father, Adèle and Paul Kokou in Gabon for their continued love, support and encouragement, during this tough journey. I pray to the Lord Jesus Christ to continue blessing you and to give you many more years and reward you in abundance. Your presence in my life is all I ever wanted. *Merci Papa Paul et Madre pour tout le soutien, l'amour, la tendresse, l'affection et la confiance dont vous m'aviez toujours apporté. Je ne pourrai jamais vous remercier assez. Que le Seigneur Jésus Christ, Dieu tout puissant vous accorde protection, santé, paix, et très longue vie. Sans vous, je n'aurai jamais achevé ce diplôme, vous êtes ma vie, mon cœur, vous représentez tout pour moi.*

- My brothers and sisters Nicaise, Ghislaine, Alain, Wilfried, Maryse, Marina, Nancy, nieces and nephews Fatoumata, Bertrand, Nanou, Celia, Ruby, Sarah for their continued support, prayers, love and guidance during this difficult journey. I pray to the Lord Jesus Christ to continue blessing you and giving you many more years. Thank you for believing in me.

- My supervisors Prof Mornay Roberts-Lombard and Dr Estelle Van Tonder as well as Richard Devey from STATKON for their continued advice, guidance and patience. Thank you for assisting me in overcoming the challenges experienced during this long journey. The road was tough, but you drove me through it. May God almighty bless and reward you abundantly.

DEDICATION

To the Lord Jesus Christ, to the much-loved family in the world, Mr and Ms Kokou, my brothers, sisters, nephews and nieces.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1 : CONTEXTUALISATION OF THE STUDY

1.1 INTRODUCTION

Service quality refers to the ability of a product or a service to satisfy customers' needs. The quality of service provided by an organisation is crucial in the way it can determine the competitiveness of an organisation (Vanniarajan, 2010:1). Service quality and customer satisfaction are two correlated concepts in the services industry and service quality can influence significantly on customers' satisfaction. Customer satisfaction results from the difference between customers' expectations of services and the actual service performance. A customer is satisfied if services match or go beyond his or her expectations and is dissatisfied if service quality does not meet his or her expectations (Naik, 2010:240).

Customer satisfaction is often operationalised by asking customers about their general satisfaction level with services received (Olusoji, 2009:6). In the medical industry, the World Health Organisation policy states that everyone should have the right to enjoy the highest standard of health service quality without any race, religious, political belief, economic or social distinction (WHO, 2007).Patients' views on service quality are vital to enhance superior services that meet their expectations (Olusoji, 2009:17). Unfortunately, individuals seeking medical services in hospitals in Gabon have often been passively receiving health care service. Their views on how they regard service quality have often been disregarded. The health care system in Gabon is mainly provided by the government. As a result, most of the hospitals in the country are mainly public or government hospitals. There are however also private institutions that offer medical services to the population. The majority of the hospitals are located in the main capital city of Libreville where diseases such as tuberculosis, malaria, sleeping disorders, and leprosy can be cured. However, health care services are often inadequate and lacking in other parts of the country. As a result, patients often travel to the main capital to seek better medical care (Health and Safety in Gabon, 2011).

The military hospital in Gabon in contrast, appears to attract and provide good service quality to patients. It is a military owned medical institution, located in the main capital of Libreville. Since its inauguration in 2005, there has been an increased number of patients patronised by the newly established medical care services. The hospital is

equipped with high-tech medical equipment, and managed by a range of qualified medical staff such as general practitioners, specialists, surgeons and nurses. The military hospital has been delivering quality services to the population and attracted lots of patients in recent years (Hôpital d' instructions des armées, 2011).Given the fact that the military hospital in Gabon has been attracting more patients, the study will be comparing the views of patients regarding the service delivery by doctors and nurses at the military hospital in Libreville in Gabon. It is worth to establish a comparison of the service delivery by doctors and nurses, since the investigation may help executives at hospitals as well as at government level to assess and address aspects related to satisfaction or dissatisfaction of patients. In addition, the research intends to promote strategies to enhance satisfaction and services performance in health care systems (Mekoth et al., 2012:16).

This chapter comprises of a background to the research followed by the problem statement and a theoretical overview of the service sector, services marketing in health care, service quality, as well as a view on SERVQUAL as an instrument to measure service quality and patient satisfaction. A literature on research methodology will appear at the end of the chapter.

1.2 BACKGROUND

Gabon has one of the most desirable medical services in central and West Africa. The State is perceived as the main supplier of health services in the country. As a result, most of the medical institutions in the country are owned by the State. There are also private institutions that offer medical services to the inhabitants. There have been a growing number of medical facilities in the region from 1985 to present with the number of medical facilities having increased from 28 in 1985 to 87. In addition, 312 dispensaries and infirmaries were also created. There are 29 medical doctors available for every 100 000 individuals. 90% of the population of Gabon can access medical services offered by the state in contrast to the remaining 10% of the citizens who access medical services offered by private institutions (Health and Safety in Gabon, 2011). Among the 90% of the people who access government hospitals, only 21% can have proper medical services. 69% of the remaining patients are receiving poor or inadequate health care. Most hospitals are located in the main capital city of Libreville

where sicknesses like tuberculosis, malaria, sleeping disorders, and leprosy can be treated. However, health care services are often inadequate and lacking in other regions in the country. As a result, patients often travel to the main capital to seek better medical care (Health and Safety in Gabon, 2011).The US Department of State Travel Advisory (2010) observed that most of the medical facilities in Gabon still remain limited in terms of proper infrastructures, sanitation, medical practices, qualified medical staff and technology. However, these facilities are in general good for daily routine or the basic needs of the population. Most of the population of Gabon remain concentrated in the main city of Libreville where they can easily access medical treatments (Proquest, 2007:1).

The military hospital has been operating since 2005. The facility is situated in Libreville and has been reputed for attracting lots of patients in the region (Hôpital d' instructions des armées, 2011).This phenomenon has raised concerns of why patients have been massively attracted to the military hospital. Should hospitals in Gabon understand the needs of their patients and provide service quality to them, it could be possible to increase their number of patients. Service quality in health care is fundamental for satisfying patients, keeping them and making them loyal (Naik, 2010:239).The importance of service quality should not be neglected. There is a strong relationship between service quality, patient satisfaction and profit. Patients, who are satisfied with services, are more likely to communicate their satisfaction to friends and family. As a result, this can attract a large number of customers and lead to increasing return. Patients often praise hospitals that offer service quality that meets or exceeds their expectations, and they are dissatisfied by those that provide inferior services and patients are more likely to seek medical services that offer better services (Naik, 2010:242).

The military hospital in Libreville in Gabon seems to be a good example of investigation since it has increased its market share in the health care industry in Gabon. Hence, it could be worthwhile to compare the views of patients regarding the service delivery by doctors and nurses at the military hospital in Gabon in order to determine strategies that could be recommended to the other hospitals in the country to improve their service quality and enhance patient satisfaction.

1.3 PROBLEM STATEMENT

The government of Gabon has improved the health care system in the country through the provision of health care infrastructures, and by increasing the number of government hospitals in the country in order to allow more patients to have access to medical care services. However, the military hospital seems to have increased its market share in the health industry. The new hospital has attracted a large number of patients from various parts of the country. There is no clear understanding of why patients have been attracted to the military hospital. During a telephone interview conducted on 6 March 2012, a medical personnel at the military hospital stated that patients seem to have been satisfied with service quality provided in the military hospitals. Moreover, the link between services delivery between doctors and nurses at the military hospital in Gabon and patient satisfaction has not been yet investigated before; hence these two features need to be investigated as the study could offer a way to promoting effectiveness and profitability in medical institutions.

1.4 PURPOSE OF THE STUDY

In health care, service quality can lead to patient satisfaction or dissatisfaction. (Olusoji, 2009:7). Superior services provided in hospitals often result in high levels of satisfaction. Satisfied patients with services are more likely to repeat purchases, to remain loyal and to follow the medical recommendations. In addition, it is worth investigating service quality and patient satisfaction as it can enhance policies to improve services delivery in hospitals (Olusoji, 2009:16-17). Given the importance of service quality and customer satisfaction, the purpose of the study was to assess the service quality of doctors and nurses at a military hospital located in the city of Libreville in Gabon. The investigation attempted to determine if there is a difference in how patients rate doctors and nurses on the service quality dimensions. Insight into these findings could assist in determining whether doctors and nurses varied significantly in terms of their level of contribution to each service quality dimension, and which one of the groups subsequently played the greatest role in the overall service quality provided by the hospital. The study makes a contribution to the medical care industry and the analysis of the empirical data will assist in determining strategies that could be recommended to the other hospitals in Gabon to improve their service quality and enhance their customer satisfaction.

1.5 OBJECTIVES

1.5.1 Primary objective

To establish the perceptions of patients regarding the service quality received from doctors and nurses. More particularly, how they rate doctors and nurses on the service quality dimensions.

1.5.2 Secondary objectives

- To determine how patients rate the *reliability* of doctors and nurses.
- To establish how patients rate the *responsiveness* of doctors and nurses.
- To determine how patients rate the *assurance* of doctors and nurses.
- To establish how patients rate the *empathy* of doctors and nurses.
- To establish if there is a difference in how patients rate doctors and nurses on the service quality dimensions.
- To establish the perception of patients regarding the tangible aspects of a military hospital in Gabon.

1.5.3 Hypotheses

The hypotheses below result from the above objectives:

$H0_1$: There is no significant difference in how patients rate the reliability of doctors and nurses.

HA_1: There is a significant difference in how patients rate the reliability of doctors and nurses.

$H0_2$: There is no significant difference in how patients rate the responsiveness of doctors and nurses.

HA_2: There is a significant difference in how patients rate the responsiveness of doctors and nurses.

$H0_3$: There is no significant difference in how patients rate the assurance of doctors and nurses.

HA3: There is a significant difference in how patients rate the assurance of doctors and nurses.

H04: There is no significant difference in how patients rate the empathy of doctors and nurses.

HA4: There is a significant difference in how patients rate the empathy of doctors and nurses.

H05: Patients do not have a positive perception of the tangible aspects of a military hospital in Libreville, Gabon.

HA5: Patients do have a positive perception of the tangible aspects of a military hospital in Libreville, Gabon.

1.6 SIGNIFICANCE OF THE STUDY

This research takes place in Libreville, in Gabon. This study is immensely significant in various ways to the health care industry, management, and to policy makers in Gabon. Assessing how patients perceive service quality between doctors and nurses in a hospital in Gabon has never been conducted before. The findings and result of this research will highlight a more reliable scientific evaluation of the level of patient satisfaction with service quality provided by doctors and nurses. The study will mainly reveal dimensions of service quality between doctors and nurses that patients believe important. This will offer empirical support for management's strategic decisions in various key areas of their functions.

1.7 LITERATURE REVIEW

1.7.1 Overview of the service sector

The service sector is that section of economic activities that provides intangible goods. It can range from communication, insurance, administrative, electricity generation, banking, retail trades and health care services. Unlike the manufacturing sector, the service sector employs intensive human capital rather than natural capital (Fernandes, 2009:469). In the modern economy, the service sector has grown considerably

compared to other sectors in the world economy. Over two thirds of economic activities in the globe are comprised of services. In European and Asian countries, service sector has considerably increased. The sector encompasses more labour force than any other sector, and this has led to economic growth and a decrease in the poverty level (World Bank, 2006:6).

The World Bank (2008:2) report shows a positive relationship between efficiency in services and economic expansion in most parts of the world. Increasing activities in the service sector have progressively led to enhancing aggregate productivity and efficiency of other sectors in most countries' economies.

1.7.2 Service marketing in health care organisations

Service marketing in the hospital industry refers to the planning, implementation and control of medical services delivery designed to target patients' needs through the use of an effective, price conscious, communication and distribution strategy (Dosen, 2009:205). Services marketing has become the focus point of most health care organisations and hospitals are willing to invest in service marketing. Services that meet patients' expectations often result in a positive word-of-mouth, patient loyalty, hospital profitability and patient satisfaction with medical care (Olusoji, 2009:7).The importance of sustaining a marketing strategy in hospitals has arisen from the rise of rivalry, when there is a growing number of medical institutions in the same region or when resources and customers become scarce, for instance. Another driving force to sustain a marketing strategy is where hospitals spending on services exceed their limited financial support (Dosen, 2009:206).

Because of the limited financial resources in both private and public hospitals, health care executives have ventured to be more interested in services marketing. Services marketing can promote effective partnership between all the associates in the medical network such as patients, potential associates, medical staff and executives. This aspect is vital to the success of an organisation (Zainuddin, Previte & Russell-Bennett, 2011:364). In addition, health care services result from a high level of interactions between medical staff and patients. Therefore, medical professionals should exercise services marketing know-how and their expertise to effectively inform patients and

address their health concerns. This is critical to enhance service quality in health care (Dosen, 2009:206).

Furthermore, patients in the new millennium are well informed about services quality; this has resulted from the expansion of the Internet. Patients can today review, evaluate and compare services from one service provider to another. Hospitals are currently required to improve their services marketing in order to remain competitive (Dosen, 2009:207).

1.7.3 Service quality

Service quality is a complex approach due to its intangible, heterogenic, inseparable and perishable characteristic. Measuring service quality should be closely associated with the user's perceptions and expectations of services provided (Naik, 2010).In health care settings, quality care that meets patient expectations will often lead to satisfaction compared to those that do not (Al Sharif, 2008:2).

Achieving service quality has become a central vision in most health care organisations, since superior services can lead to patient loyalty and retention (Olusoji, 2009:7). Services marketing has become a new tool as it can significantly influence the behaviour of health care services users and improve service quality provided in hospitals (Revere, 2010:39). Most hospitals use the Internet as a services marketing tool for instance to market their services to patients. The latter usually access the Internet to have information about the type of service provided in health care (Revere, 2010:39).The Internet can enable interactions between services providers and patients, who regularly assess and compare quality care in hospitals. Patients can post, suggest or rate service quality performance via the Internet. This has led hospitals to capitalise patients' views and expectations on medical services and to improve quality (Revere, 2010:40).

1.7.4 Service quality and patient satisfaction

Services quality is strongly correlated to patient satisfaction in health care. Superior services often lead to a high degree of patient satisfaction, patients' retention and loyalty (Olusoji, 2009:7). As a result, a positive word-of-mouth is observed as patients will refer the medical facility to friends and family (Kyle, 2010:3).

Kim (2008:6) explained in his research on childbirth that a decline in service quality experienced by women after childbirth in Home Health Agency in the United States, led to a decline in women satisfaction with services provided. This study confirms that the level of services provided in medical care is a predecessor of satisfaction or dissatisfaction. As a result, patient satisfaction with services is regarded as a fundamental condition to adherence and fidelity. Another study showed that patients value services in health care more on functional quality, instead of on technical quality (Yesilada & Direktor, 2010: 963). Technical quality relates to the precision of the medical process that leads to cure, while functional quality refers to the way medical services are administered to patients, such as care. This leads patients to value more interpersonal relationships with medical staff. Functional quality is seen to be positively linked to patients' satisfaction or dissatisfaction with services provided in health care. In this regard, patients often rely more on attitudes such as 'care' of the service provider as an indicator of service quality, rather than the 'curing performance' in health care (Mekoth et al., 2012: 17-18).

Thus, care is regarded to be positively linked to patient satisfaction. Medical doctors often concentrate on providing the correct treatment to patients and they think this is the main concern of patients. As a result, patients' views of services quality may deviate from the services providers'. This may lead to patients' dissatisfaction with services provided, as the latter may usually require more attention and care from physicians (Yesilada & Direktor, 2010: 963).

1.7.5 Measuring service quality using the SERVQUAL instrument

Service delivery in health care has significantly improved in recent years. Competition among health care service providers has forced medical services to review their service delivery systems. Health care policies have shifted towards providing services that satisfy the needs and desires of patients. This new approach emphasises the views and needs of patients in contrast to the former approach that focused on preferences and decisions of medical employees (Desai, 2011: 40).Various studies have indicated a positive relationship between service quality in hospitals, patient satisfaction and loyalty (Olusoji, 2009:7).Quality often leads to patient satisfaction. Satisfied patients are more likely to repeat purchases and remain faithful, which leads to a positive word-of-mouth

and an increase in hospital profitability (Desai, 2011:41). In order to understand satisfaction in health care, researchers have investigated different service quality dimensions considered to influence patient satisfaction (Desai, 2011:40).

They developed the SERVQUAL instrument to evaluate service quality. The model has been used and adapted to a broader range of service industries, including in hospital settings. SERVQUAL is used to assess the gap between patients' perceptions, expectations of services and the actual service performance. (Yesilada & Direktor, 2010:963).The model is composed of 22 pairs of Likert-scale statements built around five service quality elements such as tangibility, reliability, responsiveness, assurance and empathy to evaluate quality in health care (Desai, 2011:42). These service quality dimensions are reviewed by patients and considered to influence patient satisfaction (Desai, 2011: 40).

Tangibility: It encompasses the physical evidence of a service (Holder, 2008:47).This refers to variables ranging from physical environment, biochemistry laboratories, hospital rooms, cleanliness in hospitals, to equipment like scanners, X-rays, tread- mills, computers, appearance and uniforms of medical personnel. Tangibility is crucial in the delivery of services in hospitals as it can reduce the gap between patients' expectations and the actual delivery of service (Holder, 2008:23). It provides a picture of what is inside a hospital and can influence patients' choice when selecting a health service provider (Zeithaml, Bitner & Gremler, 2006:319).Tangibility is viewed to significantly influence patients' satisfaction level with services provided (Rohini, 2006:68).

Reliability: It entails providing regular performance and dependability (Holder, 2008:47). It refers to the ability of medical staff to honour their promises and provide the promised services to patients timely and correctly (Rezaei, Rezaei, Alipour & Salehi, 2011:486). Such services may include casualty, emergency service and prompt treatment for instance (Rohini, 2006:68). Reliability is perceived to influence patients' satisfaction level with care, and constitutes one of the major factors by patients when selecting a medical service provider (Rohini, 2006:68).

Responsiveness: It is an important constituent of service quality dimensions. It refers to the readiness of the medical personnel to assist patients and to offer prompt service (Hernandez et al., 2009:1174). Such services may include patients' admission, discharge, and excellent reception. Patients' satisfaction often results from hospitals where employees are kind, helpful and available to provide quick answers to their

needs. Responsiveness is perceived to have an effect on patients' satisfaction level with services, and is highly regarded to influence their choice with care in hospitals (Rohini, 2006:69).

Assurance: It involves integrity, trustworthiness and credibility of medical personnel. It refers to the ability of medical employees to have patients' best concern at heart (Holder, 2008:47). Assurance leads to providing trust and confidence to the recipient of the service. This may result from expertise of medical personnel like their qualifications, trainings, educational level and their ability to effectively provide services and interact with their patients in hospitals. Assurance is seen to determine patients' choice with services, and to considerably influence their satisfaction level with medical care (Rohini, 2006:69).

Empathy: It refers to the ability of medical staff to provide care, assistance and attention to patients. Physicians should be able to assist patients during the process of care, and should be able to understand their needs, listen to and notify them about their health concerns (Markovic & Raspor, 2010: 197).

As a result, the level of attention and emotional support experienced by patients in health care can impact on their satisfaction level with services. This can in turn influence their choice when selecting a hospital (Rohini, 2006:69).

These five dimensions of quality are known to be linked to patients' satisfaction and to influence their choice when selecting a medical facility in general (Desai, 2011: 41). However, there is no clear understanding of which dimension is mainly influencing patient satisfaction and choice for the selected hospital in this current study.

1.8 RESEARCH METHODOLOGY

In this part, the methodology for the study and the reasoning for selecting a research design are verified. It is crucial to differentiate research design and methodology since the two notions are independent, while still interconnected. However, the relationship between the two concepts is often difficult to establish. Holder (2008:5) notes that a research design is a master plan that indicates how research has to be performed. Research design and research methodology are two distinct dimensions of research, though many people often confuse them (Babbie & Mouton, 2009:74).

The following research design is set in order to achieve the objectives of the study as mentioned in section 1.5:

The research is first build around a literature study to provide a background related to the empirical part of the study. In this section, a fundamental review of related concepts will be performed. A number of research propositions will be carried out from the literature findings. This research was built upon primary and secondary data, and the design is of a quantitative nature. The element to assess in the study is “individuals and individuals’ behaviour. The research was performed using self-administered survey questionnaires by respondents for the research. The questionnaires are based upon the literature study and pretested with a small number of individuals from the sample with attributes comparable to the respondents of the research.

“A population for a research refers to a population group where the study intends to draw conclusions from” (Babbie & Mouton, 2009:100). The population for the intended research include all existing patients of the military hospital in Libreville, Gabon,18 years or older, males and females, who have experienced services at the military hospital for at least one night. These population elements are chosen mainly because during a telephone interview conducted on 4 February 2012, an employee at the military hospital hospital stated that over 80 per cent of patients attending the military hospital were overnight patients. These patients have experienced a wider range of services provided such as quality of hospital rooms, quality of care, quality of medical diagnosis and treatment.

This makes it easy for the researcher to investigate the choice factors for selecting a military hospital in Libreville, Gabon. Therefore, all day patients attending the military hospital will be excluded from the study population. The probability sampling technique was used to choose respondents in the study. Data gathered from the study will be coded and recorded into a statistical software package. Findings will be evaluated using advanced statistical techniques and a number of Tables. The methodology chapter will provide a further view regarding the method, techniques and instruments utilised.

In this study, the following statistical methods were chosen for their suitability to examine the hypotheses in the study. These methods encompass frequency Tables, measurement of the mean, measures of dispersion that comprise standard deviation, and descriptive statistics. The research instrument was verified for its validity and

reliability(Refer to Section 4.2.5.7). All evaluations were performed by the University of Johannesburg's Statistical Consultation Service (STATKON) and calculations were performed using SPSS.

1.9 ETHICAL CONSIDERATIONS

As required in Brizee (2010), the following ethical considerations will be observed by the researcher:

- The researcher should obtain permission from the institution where the study is intended to be done, to conduct his research.
- The researcher should not cause any offence or attempt to hurt respondents in his study. Therefore, he should carefully select questions, in order to avoid any offense to his subjects during interviews.
- The researcher should avoid using his own opinions to influence the interviewees in the study. Therefore, he must remain more objective than subjective.
- Unless with the permission of the interviewee, the researcher should keep the identity of respondents to the research anonymous.

1.10 LIMITATIONS OF THE STUDY

The study will only focus on a sample of 200 patients and can therefore not be seen as representative of all patients attending the military hospital. The study focuses on identifying the variables influencing patient satisfaction at the military hospital in Libreville, Gabon. Therefore the study cannot be seen as representative of services in the entire health care industry. The use of a survey is also a limitation to the study. The respondent responses might be bias and they might deliberately falsify their answers. Future research may include a bigger sample and include other medical facilities in Gabon.

1.11 DIVISION OF THE STUDY

Chapter 1

This chapter provides the introduction and background to the study. The formulation of the research problem, the objectives and the hypotheses of the study will be outlined. Similarly, the purpose and significance of the study, reviewing of the literature, the scope and limitation of the study were presented in this chapter.

Chapter 2

Chapter two describes the state of health care in Africa and in Gabon in particular. In addition, it will discuss health care development strategies in hospitals, and furthermore, focus on how the military hospital has been operating since the facility was established.

Chapter 3

Literature in this chapter will give insight into the aspects of services marketing in organisations and in the health care industry, and how it can benefit organisations through improving services quality that meets customers' expectations and leads to customer satisfaction. This chapter will also discuss service quality in organisations as well as in the health care sector. It will investigate at how quality services can lead to customer satisfaction and profitability. Aspects such tangibility, reliability, responsiveness, assurance and empathy will be discussed.

Chapter 4

In this chapter focus shall be placed on the research methodology and design to be followed to achieve the research objectives. In other words, emphasis will be on the research method, research format, research technique, population, and the sampling methodology which includes sample size, sampling type and sampling technique and data analysis.

Chapter 5

The analysis and interpretation of data will be presented in the chapter. The research finding and interpretation of data will be presented. The results obtained will be compared with the findings of the already published empirical studies and the literature review on which the study is based.

Chapter 6

In this chapter, the researcher will come to conclusions and make recommendations. From the results it will be possible to determine whether the research objectives as stated in the first chapter were achieved, and if the problem statement as described is relevant. Conclusions will be drawn and meaningful recommendations made.

1.12 TERMINOLOGY

Gabon

The country is located in the central part of the African continent with official language French, spoken by the majority of the population. The country shares borders with Equatorial Guinea, the Republic of Congo and Cameroon. The country has a population of around 1 545 255. Most of the population is concentrated in Libreville, the biggest city and the main capital as well (Country Brief Gabon, 2010).

Military hospital

It refers to a medical facility inaugurated in 2005 in Libreville. The main purpose is to offer better health care services to patients. The military hospital is equipped with high quality materials and composed of a range of qualified staff including general practitioners, specialists and nurses. The facility is characterised by various departments including the department of surgery, ophthalmology, radiology, cardiology, endoscopy, angiography and a general medical practice department (Hôpital d' instructions des armées présentation, 2011).

General hospital

It is also known as the Libreville Hospital Centre. It is regarded as one the oldest and best known public hospitals in the country. It was established in Libreville by the government and the main objective of the facility was to provide health care services to a larger number of the population at a lower cost compared to private health care systems.

Service quality

Service quality is a complex approach because of its intangible, heterogenic, inseparable and perishable nature (Naik, 2010). Service quality should be closely associated to the user's perceptions and expectations of the service provided by an organisation that depends on his or her prior expectations of the service. In this regard, services that exceed his expectations will be perceived as outstanding, those that match his expectations will be perceived as satisfactory and those not meeting his expectations will be classified as poor (Al Sharif, 2008:2).

Patient satisfaction

Patient satisfaction refers to a positive attitude towards services provided by a medical facility. Patient satisfaction can be perceived both at a cognitive and emotional angle and linked to prior experiences, expectations and referral from other individuals. It is used to assess the level of service in medical settings, as well as to compare medical programmes. Patient satisfaction evaluation helps to identify which area of service quality needs improvement (Al Sharif, 2008:21).

Tangibility

It encompasses the physical evidence of a service (Holder, 2008:47).This refers to variables ranging from physical environment, biochemistry laboratories, hospital rooms, cleanliness in hospitals, to equipment like scanners, X-rays, treadmills, computers, appearance and uniforms of medical personnel. Tangibility is crucial in the delivery of services in hospitals, as it can reduce the gap between patients' expectations and the actual delivery of service (Holder, 2008: 23). It provides a picture of what is inside a hospital and can influence patients' choice when selecting a health service provider (Zeithaml, Bitner & Gremler, 2006:319). Tangibility is viewed to significantly influence patients' satisfaction level with services provided (Rohini, 2006:68).

Reliability

It entails providing regular performance and dependability (Holder, 2008:47). It refers to the ability of medical staff to honour their promises and provide the promised services to patients timely and correctly (Rezaei et al., 2011:486). Such services may include casualty, emergency service and prompt treatment for instance (Rohini, 2006:68). Reliability is perceived to influence patients' satisfaction level with care, and constitutes one of the major factors by patients when selecting a medical service provider (Rohini, 2006:68).

Responsiveness

It is an important constituent of service quality dimensions. It refers to the readiness of the medical personnel to assist patients and to offer prompt service. Such services may include patients' admission, discharge, and excellent reception. Patients' satisfaction often results from hospitals where employees are kind, helpful and available to provide quick answers to their needs. Responsiveness is perceived to have an effect on patients' satisfaction level with services and is highly regarded to influence their choice with care in hospitals (Rohini, 2006:69).

Assurance

It involves integrity, trustworthiness and credibility of medical personnel. It refers to the ability of medical employees to have patients' best concern at heart (Holder, 2008:47). Assurance leads to providing trust and confidence to the recipient of service. This may result from expertise of medical personnel like their qualifications, trainings, educational levels and their ability to effectively provide services and interact with their patients in hospitals. Assurance is seen to determine patients' choice with services, and to considerably influence their satisfaction level with medical care (Rohini, 2006:69).

Empathy

It refers to the ability of medical staff to provide care, assistance and attention to patients. Physicians should be able to assist patients during the process of care, and should be able to understand their needs, listen to and notify them about their health concerns. As a result, the level of attention and emotional support experienced by patients in health care can impact on their satisfaction level with services. This can in turn influence their choice when selecting a hospital (Rohini, 2006:69).

1.13 CONCLUSION

This chapter provided an outline of the study by discussing the background of the research, problem statement, research objectives, hypotheses and a literature review. In addition, a brief discussion of the research methodology and design was included in the chapter. Lastly, ethical considerations, limitations of the study, the division of the research and terminology were presented as well.

Chapter Two concentrates on the research context of the study. It will provide a detailed description of the state of the health industry in Africa and in Gabon in particular. In addition, it will discuss health care development strategies in hospitals, and furthermore, focus on how the military hospital has been operating since the facility was established. A summary will be provided at the end of the chapter.

CHAPTER TWO: THE HEALTH CARE INDUSTRY IN AFRICA AND GABON

2.1 INTRODUCTION

Investigating health industry in Africa and particularly in Gabon is vital to understand the state of health and to promote policies to enhance health services on the entire continent. Superior health services can lead to a higher level of patient satisfaction and retention. This is particularly important since patients satisfied with services are more likely to repeat purchases, to remain loyal and to follow the medical recommendations (Olusoji, 2009:16-17). Exploring health services at the military hospital in Libreville, in Gabon is crucial to determine strategies that could be recommended to the other hospitals in Gabon, as well as hospitals in other African countries to improve their service quality and enhance their patient satisfaction. This chapter explores and analyses the nature of the healthcare system in Africa with a specific focus on the military hospital in Libreville, in Gabon. This research may help hospital executives to determine problems related to poor health services delivery and to address these issues more efficiently.

This chapter consists of six main sections. These are an introduction to the health industry in Gabon and Africa, the relevance of the state of health in Africa to detect issues related to poor health services performance in the continent. Subsequent to this discussion, the chapter also focuses on the health development initiatives in central Africa, the health indicators in Gabon, the organisation of the military hospital in Libreville, Gabon, followed by a conclusion.

2.2 HEALTH CARE STATUS IN AFRICA

African countries such as Cameroon, Democratic Republic of Congo, and Equatorial Guinea have a critical and pathetic health care system that requires attention. Health data for the continent indicates that Africa loses about one out of six children before they reach five, who die from sicknesses that could have been avoided by vaccines. In addition, one pregnant woman dies each two minutes from poor pregnancy and delivery

care in hospitals. This raises concerns about the state of health system in the continent (Health, 2007:19).

Another concern is health care associated infection also known as (HAI), which is one of the major concerns within most African hospitals. HAI is described as an infection arising in a patient during the process of care in a medical institution. Such infection was not diagnosed during the time the patient was admitted in the hospital. This encompasses infections acquired while patients were receiving care. These infections may often manifest after days or even weeks after discharge. Medical employees may usually be affected by these infections as well, caused by multi resistant pathogens. Patients' prolonged hospital stay is often regarded as a risk factor of contracting health care associated infections. This usually results in excessive costs and may sometimes cause patient's death. HAI is a major issue in most African states such as in Republic Democratic of Congo and Gabon, where it affects five to 15 per cent of people admitted in standard wards and as many as 50 per cent of people admitted in intensive care unit (Nejad et al., 2011:757). In developed states such as Germany and the United States, control systems like the German hospital infection surveillance system or the National Healthcare Safety Network of the United States of America, exist to supply reports on the prevalence of health care associated infections on a regular basis. However, in most African countries, such initiative is often taken too lightly or even neglected. Diagnosing HAI remains a difficult task since it involves adequate know-how and resources. In addition, medical staff shortage in most hospitals leads to poor infection control practices, and a lack of related policies, awareness and skilled professionals also increase the magnitude of the problem (Prescott & Kruk, 2012:646).

African states have raised concerns to cooperate in order to restructure the state of their healthcare systems. The New Partnership for African Development (NEPAD) is developed to consolidate health organisations in the continent. It encourages collaboration and communication among health service providers and local societies. Its goal is to alleviate spread of the HIV/Aids pandemic and other challenges affecting the continent (Health, 2007:19).

Most African countries have taken positive steps to improve national health strategies as recommended by the World Health Organisation (WHO). However, only a few of them have recently taken initiatives to revise their healthcare policies, such nations include Burundi, the Central African Republic, Mauritania, Tanzania and Gabon (Health, 2007:19).

2.3 HEALTH DEVELOPMENT INITIATIVES IN CENTRAL AFRICA

A few organisational health institutions have erected in Central Africa to promote partnership, training, economic and health development in member countries of the organisation.

- **The OCEAC**

The OCEAC (Organisation for the fight against endemic diseases in central Africa) was established in 1963 in Yaoundé, the headquarter of the institution. The organisation regroups six central African states such as Gabon, Congo, Central African Republic, Cameroun, Chad and Equatorial Guinea which lately joined the group. The organisation's major priorities are to organise public health strategies and programmes, to take part in education and training program of medical employees as well as to organise research projects carried out by national institutions in member states. In addition, the organisation seeks to share medical knowledge and skills among health service providers in the region and to enhance public health awareness so to improve emergency health responses in member countries of the organisation. The OCEAC is currently involved in several health projects in the central African region such as: The Sub-Regional Program for HIV and AIDS and the Harmonisation Program for Pharmaceutical Policy (Organe exécutif de la CEMAC, 2012).

- **CEMAC**

The CEMAC (Central African Economic and Monetary Community) was established in 1983. It aims to support economic growth, cooperation and to improve living conditions of people in member countries. The organisational main objectives are to create a Central African Common Market and to enhance public health systems in the region. In 2009, CEMAC made a contribution of 23 million Euros with the aid of Germany to fight HIV/Aids spread in Central Africa (Bourgarel, 2010:11).

- **The CAMES**

The CAMES (Conseil Africain et Malgache pour l' Enseignement Supérieur) is perceived as an intergovernmental institution composed of 17 African states. It was established in 1968 to regulate the manner in which health institutions as well as

universities in emerging African states were run. The organisation's objectives are to sustain partnership and communication, to promote a scientific and cultural collaboration, as well as to ensure dissemination of all academic and research publications between member countries. Additionally, health employees and researchers in member states are consistently examined by CAMES before they can be promoted in their workplace (CAMES, 2012).

- **The CIESPAC**

The CIESPAC (Centre Inter- Etats d'Enseignement Supérieur en Santé Publique d' Afrique Centrale) is based in Yaoundé, Cameroon. Its objective is to provide public health teaching to medical employees and executives in member countries. The organisation offers various programmes such as the professional diploma in public health primarily targeted at hospital executives. The course offers advanced management skills to medical managers to transform health systems in the region.An audit regarding the success of these three organisations was presented during the seventh Summit of the Central African region in 2008, in Equatorial Guinea. The results indicated that there was an increase of the availability of medical facilities in the region; the number of hospitals expanded from 6 per cent in 1990 to 11 per cent in 2008 (Bourgarel, 2010:11).

Furthermore, these organisations also enabled scientific and medical research between some regional countries. This resulted in the creation of the Elf Rafa Medical Centre in 2006 in Libreville, in Gabon. The facility was established with the alliance between Gabon and its direct geographic neighbour Cameroon to undertake research in order to tackle the spread of malaria in the region (Programme Economique Régional de la CEMAC, 2009:12). However, despite these improvements, there are still concerns about the quality of medical services in most central African countries. This is because there have been little research on patient satisfaction within medical organisations to pinpoint problems related to poor service performance (Health, 2007:20).

Given these facts, the present research would be necessary to identify and address issues related to poor service quality.

2.4 HEALTH SERVICE QUALITY IN GABON

The health system in Gabon includes: the traditional health sector, and the two major types of service providers namely the civilian public sector which is part of the public health and hygiene ministry, and the private health sector (Bourgarel, 2010:9).In the traditional health sector, health services are often provided by private individuals usually known as 'marabouts'. Traditional health services make use of traditional plants and are practised in most villages within the country (Global Health, 2012).

In the public health sector, health services are usually offered by the state or government. Medical personnel in public hospitals are often employed by the government. The state is the main provider of resources and finances in public hospitals; it ensures control over the delivery of medical care to the people. In the private health sector, medical services are delivered by private entities, different from the government. Private agents have control over resource allocations and finances in private hospitals. Employees in private health care are often employed and remunerated by private units (National Department of Health, 2006).Despite massive transformations in the medical industry to force executives of both private and public hospitals to improve service quality in hospitals, there is still a huge gap between quality service delivered by private and public institutions (Holder, 2008:59). Given the fact that competition has increased in the Gabonese health sector and that health service quality has become crucial to increase market share, this study will focus on health services. It is worth investigating medical services since it may help to develop strategies to enhance health services in hospitals (National Department of Health, 2006).

2.4.1 Public health development initiatives in Gabon

Public health is dominating in Gabon, however, accessibility and availability of proper medical services are mainly found in urban districts compared to rural regions. Hospitals in urban districts are more organised with more resources and technical know-how (Bourgarel, 2010:10). Over 60 per cent of public hospitals and clinics are located in major cities such as Libreville, Port-Gentil and Franceville. These facilities also receive more equipment, as well as human and financial resources from the state. However, small health facilities like Mother and Child Centres, Primary Care Health and Health Medical Centres are usually found in rural regions. They are usually characterised by

lack of drugs and medical equipment availability. In fact over 70 per cent of medical personnel such as physicians, nurses, midwives and pharmacists are located in urban districts' hospitals (National Department of Health, 2006).

To fight the spread of HIV/Aids, tuberculosis, malaria and sexually transmitted diseases (STDs), the government created 17 national health control programmes in both urban and rural districts between 2009 and 2010. The goal is to assess the spread of these infections and to establish an effective vaccination programme of the population. In addition to these efforts made by the government, the Public Health and Hygiene Ministry established the CENAREST (National Centre for Scientific and Technologic Research) programme to promote medical and research training in the industry (Bourgarel, 2010:10).

The CIRMF (International Medical Research Centre of Franceville) is another initiative established in 1979.The programme was made possible by various international agents such as the World Health Organisation (WHO), the Centre de Coopération Internationale en Research Agronomique (CIRAD), the Institut de Recherche pour le Development (IRD), the Pasteur Institute, the American Centre for Disease Control and Prevention (US CDC) and various European, American and Asian universities. The programme aims to investigate factors causing infertility in people in the Central African region. Additionally, CIRMF expanded its research to investigate regional infections like HIV/Aids, trypanosomiasis, malaria and the fatal Ebola and Marburg viruses that severely affected the country lately (Leroy & Gonzalez, 2012:159). The international non-governmental agencies have also taken part in research for diseases in the country. Such organisations include the Wildlife Conservation Society (WCS) and the Zoological Society of London which are investigating co-operatively on diseases affecting great apes (Bourgarel, 2010:10).

2.4.2 Private sector development initiatives in Gabon

Since 2010, various efforts have been made to support private investment initiatives by increasing the number and the size of private organisations. The country is aware that export of oil, its main natural resource, will not be the source for economic expansion eternally. Recent strategies have been made to encourage the development of the private health sector. Private hospitals have been lacking and almost inaccessible over

the years. The reason was that these facilities often lacked proper strategies. As a result, more policies to build collaboration and to attract investors were developed. The aim was to provide more private, ultramodern hospitals to the population (Health, 2007:22). As a result, the country has built relationship agreements with emerging countries like China, India, Morocco and Singapore to boost investment in the private sector including private hospitals and to create more jobs (Gabon, 2011:11).

Despite efforts made since 2009 by the Agence de promotion des investissements privés (APIP) to support private investment, the business prospect in the country has been very slow. This has been caused by corruption, poor governance and the increase in the informal sector (Gabon, 2011:11). Health services in Gabon provide geographic coverage to most regions of the state. The aim is to give people better access to health information and efficient controlling of emerging sicknesses. Though the population of Gabon is dispersed equally between cities and rural areas, accessibility to health services is better in cities compared to rural areas, as more resources and medical infrastructures are located. Though healthcare infrastructures in rural areas are lacking, the state is trying its best to enhance and supply adequate health services to the population residing in these rural areas (Republic of Gabon, 2008: 42).

In Gabon, patients are usually required to pay for the services delivered by medical professionals. Drugs are often costly in the country and are usually not available in rural areas. Medical facilities in rural areas are often badly equipped; patients usually need to go to the closest city to get their medication. Instead of going to a city doctor, some people may rather choose alternative treatment, like going to a local traditional healer instead. In the case of severe medical conditions, people can only be given care in Libreville, the capital city, where proper hospitals, clinics and equipment are accessible. Public hospitals in Gabon are usually not up to international standards, compared to a few private hospitals such as El Rapha or the military hospital in Libreville. As a result, public health facilities generally provide poor medical services to patients in contrast to private ones. There are currently 49 available doctors per 100 000 people in the country; this makes Gabon to be positioned number 9 out of 52 African states in terms of doctor to patient ratio (Global Health, 2012). Private clinics and hospitals are accessible in bigger cities, and they offer a broader range of superior health services. However, these facilities are costly to the population and hospitals generally require immediate cash payment before patients can be treated and/or admitted. People either pay cash for treatment or use a medical cover plan to have access to medical services.

However, two out of three of the people in Gabon live below the poverty line, as a result, only a few people can actually afford access to private health care services (Gabon Poverty and Reduction Strategy Paper, 2012:21).

Malaria is regarded as the major pandemic that affects most people living in the country. HIV/Aids is also perceived as a continuous threat in Gabon. There are frequent occurrences of Ebola virus that strike people living in rural areas. This is usually caused by individuals who maintain close interactions with infected animals. Having a medical insurance plan in Gabon is regarded as one of the best options to tackle accidents, sicknesses and emerging pandemics that can affect the population at any given time. Medical cover policies generally provide customised individual needs to suit individuals, families and groups. In addition, they can provide benefits for inpatient, outpatient, dental, maternity, travel and many more conditions (Global Health: 2012).

Health indicators data reports 500 nurses, 30 general practitioners, 20 laboratory employees, 5 dentists, 5 pharmacists and 10 medical specialists for every 100 000 people. HIV/Aids occurrence rate in adult population (15-49 year-old) is 5.9% which is 0.9% above the average sub-Saharan region. Among the 49 000 of the population living with AIDS, 27000 (15 years and older) are females and 2 300 (0-14years) are children. About 18 000 children in Gabon have lost one or both parents due to HIV/Aids. The occurrence of tuberculosis is 410 per 100 000 individuals, and 41 out of 100 000 of them die of the disease. The occurrence of diabetes among the adult population (20 years and older) is 4.4% which is 1.2% above the average rate on the continent. 158 out of 100 000 people die of cancer and 410 out of 100 000 people have died from heart-related sicknesses (Gabon, 2010:13).

The International Diabetes Federation (2010) reports that over 33 000 people suffered from diabetes and over 600 died from complications caused by the disease in 2010. The occurrence of obesity was 2.3% for men and 15.5% for women. Over 380 000 people contracted malaria and 1 255 individuals died of the disease during the same period. In terms of maternity death rate, the country is still far behind other African countries such as Mauritius for instance. Maternal death rate ratio in Gabon was 470 per 100 000 women giving birth in 2011, in contrast to 24 per 100 000 women in Mauritius. This raises awareness of the World Health Organisation which indicated that the maternal mortality rate in Gabon could decrease by ensuring that pregnant women

and children could have access to adequate health care services. This suggested that providing each woman with skilled care through pregnancy and emergency, this assistance could significantly reduce the rate of women and children mortality in the country (Gabon Poverty and Reduction Strategy Paper, 2012:20).

2.5 IMPLICATIONS OF HEALTH SERVICE QUALITY IN GABON

Service quality in hospitals is described as a service which has the ability to satisfy a patient's needs. Patients' perception of medical services plays a vital role in his or her choice for the medical service provider (Vanniarajan & Arun, 2010:1). The raise of public awareness about service quality has also increased concerns for health service quality in Gabon. As a result, most people are currently seeking hospitals that provide superior care. Since 2003, patients' expectations of quality care have increased at a faster rate. Service quality in hospitals has become part of the governments' main agenda, and it has been enforced by the World Health Organisation. As a result, the government has to ensure that service quality within hospitals in Gabon comply with international standards. This is regarded as a pre-requisite for the local government to be provided with financial assistance by international aid organisations for the building of more hospitals in Gabon. During a telephone interview conducted on 3rd April 2012, a medical personnel at the military hospital stated that improving service quality in hospitals in Gabon has become vital to enhance the credibility of the country's health care system to the world. This in turn may attract more patients locally and internationally.

2.6 HEALTH DEVELOPMENT INITIATIVES IN GABON

Government expenditure on health per capita amounts to $130 per person, which represents 4.5 per cent of the national Gross Domestic Product. This ranks the country third after Seychelles ($382) and Botswana ($135) per person. Unfortunately, this investment has often not been utilised adequately to its full potential. Financial resources have to be properly managed in order to meet the country's health development initiatives. Medical services in the country lack innovations and they can no longer address the needs of the people (Health, 2007:21).

A transformation in the health care industry is required to achieve the four major target initiatives such as raising the number of both private and public hospitals so that the entire population can have access to quality care. This includes enhancing the health of mothers, newborns and children, since healthy mothers are more likely to have healthy babies and healthy children are the future of the country. Access and affordable medicines need to be provided to all people and a universal medical cover based on the European model has to be implemented to the whole Gabonese population. The idea is to increase the number of people's accessibility to proper medical services (Health, 2007:21).

The government of Gabon in collaboration with the French Aid Agency, the African Development Bank and the United Nations Population Funds has sponsored in total 14 hospitals to enhance mothers, newborns and children's health in the country. This initiative is aimed at recruiting more medical experts such as gynaecologists and obstetricians to improve women's health. In addition to this, the local government planned to create more health care infrastructures that include 9 of the local hospitals, 46 health centres and a network of 455 rural health clinics spread around the country by the end of 2020. Since 2007, women and children's health has become one of the major priorities in the country's health system. Enhancing maternal and children's health is a Millennium Development Goal. As a result, that strategy has become a priority in the country since 2007 (World Health Organisation, 2007:22).

Vaccination campaigns against poliomyelitis in infants and tuberculosis were other initiatives undertaken by UNICEF to improve people's living conditions in Gabon. A common problem affecting the adult population was the spread of malaria and gastrointestinal diseases in the country since 2005. In the northern province of Gabon in Woleu-Ntem, over 60 per cent of the patients admitted in hospitals suffered from infections caused by mosquitos. Fever and acute diarrhoea were among other major sicknesses affecting adults and the young population as well. Libreville, the main capital became mostly affected with 8.1 per cent of people affected by fever and diarrhoea. To tackle the spread of the pandemic, a mobile medicine strategy was developed by the government to prevent further spread of these sicknesses. This suggested that more medical professionals would travel around the country to deliver care to outpatients and undertake vaccination drives. These mobile doctors were employed to provide health services coverage in the entire country, including the less populated regions. The major

sicknesses targeted represented poliomyelitis, tuberculosis, diarrhoea, HIV/aids disease and malaria (Health, 2007:21).

An additional strategy was developed by the government to build a university teaching hospital near the main capital of Libreville in 2007. This was done in collaboration with the Japanese medical group, Tokushakai that has a particular interest in building hospitals in developing countries. Cooperation agreements have also been established with countries such as France, Canada and Egypt to provide adequate training and expertise to home-grown medical professionals. This resulted in an increase of 34 per cent of the human resource for the medical sector from 1999 to 2007. Since 2003, a particular attention was given to the training, education, remuneration and a continuing deployment of the medical professionals in the Gabonese Health Care System. In 2007, over 200 medical professionals were recruited from Egypt and Cuba to tackle the personnel shortage in the health care sector (World Health Organisation, 2007:23).

In 2011, the government developed an important strategy to tackle the high cost of medicines in the country. The Turnkey laboratory was established near the main capital of Libreville to tackle malaria and HIV. The project aimed at producing generic pills to the population. Government expenditures to establish the laboratory amounted to approximately 6.5 million euros. Building this facility was part of the country's health care strategy to enable patients at all economic levels to access adequate treatment. The initiative suggested that the newly established laboratory aimed to fill the demands of the people of Gabon, but it could also fill demands of the whole central African region. With a total production of 200 000 drugs every hour, the laboratory may actually be able to supply drugs to all the African states that are part of Central African Economic and Monetary Community (CEMAC) with a global market of 30 million people (Gabon Poverty and Reduction Strategy Paper, 2012:23). The new laboratory provides paracetamol, tuberculosis and anti-malaria drugs which actually encounter no resistance. The initiative was seen as an innovation in the pharmaceuticals industry in the central African region. The facility includes over 30 Gabonese health professionals, and raw materials quality control is conducted at a chemical plant in France (Health, 2007:23).

2.7 THE MILITARY HOSPITAL IN GABON

The idea to establish the military hospital dated back from the late 1970s to early 1980s.The project was inaugurated in 2005, and the facility has been officially operating since 31 December 2007.The initial ideology was to provide medical services merely to the military forces in the country. This idea was later transformed in a way anyone can have access to medical services provided by the medical facility. The military hospital was financed by major international organisations such as the French Collaboration (F.C), regarded as one of the main contributors. The hospital team is a mixture of local and international qualified medical professionals, mostly French nationals. Each department within the hospital is equipped with advanced medical equipment ranging from ultramodern air conditioners, computers, X-ray machines, scanners, audiometric, echo graph, electrocardiograph, radiology, endoscope to echocardiograph machines (Historique, 2010).In addition, five ambulance vehicles and a helicopter are available 24 hours a day and seven days a week to deal with emergencies (Service d'accueil, 2010).

The hospital executive panel is composed of the Chief Medical Director (CMD), who is both a medical specialist and the general director of the hospital, the head of the department of radiology, the head of department of internal medicine and the head of the department of Ear, Nose and Throat as well as medical specialists. There are eight main clinical departments in the military hospital. Each of these departments will be briefly highlighted in the following Tables (Historique, 2010).

Table 2.1: Department of emergency

DEPARTMENT OF EMERGENCY
It works 24 hours a day and seven days a week. An ambulance vehicle and a helicopter are available to patients in case of emergencies. The department delivers a fast and reliable service to patients (Service d'accueil, 2010).The department of emergency is composed of:
A reception This provides excellent services to patients.

A consultation and emergency room This facility is able to deal with all types of emergencies ranging from medical to chirurgical emergencies. It is equipped with modern technologies such as electrocardiographs and echocardiographs to provide assistance to patients in critical conditions (Service d'accueil, 2010).
A temporary admission room Patients can first access the temporary admission room while they wait to be transferred to the emergency room. The room has a total capacity of 10 patients and is divided into two sections to separate male and female patients. The facility is able to provide intensive care services (Service d'accueil, 2010).
A room to disinfect patients In that room patients are cleared from any bacterial transmitted infection before they are moved to the temporary or emergency room (Service d'accueil, 2010).
A surgery room Patients admitted in that facility require an operation (Service d'accueil, 2010). The emergency team is composed of medical experts that shift day and night. This includes general practitioners, specialists, anaesthetists, paramedics and nurses (Service d'accueil, 2010).

Table 2.2: Department of medical analysis

DEPARTMENT OF MEDICAL ANALYSIS
The department of medical analysis includes subunits such as haematology, immunology, bacteriology and mycology.
Haematology This unit includes up-to-date medical equipments to analyse blood composition and to detect any anomalies or sicknesses in blood

(Laboratoire d'analyses médicales, 2010).
Immunology This unit aims at detecting and analysing viral, parasitic and bacterial infections found in blood. The unit addresses three major forms of health issues such as: viral serology (which includes HIV/Aids and hepatitis B and C), parasitic serology (which includes bilharzia and toxoplasmosis) and bacterial serology (that comprises syphilis and chlamydia). In addition, this unit works jointly with the HIV/Aids national programme in the fight against AIDS (Laboratoire d' analyses médicales, 2010).
Bacteriology This section analyses viral and parasitic infections in urine. Additionally, women can also be treated for early signs of breast and womb cancer (Laboratoire d'analyses médicales, 2010).
Mycology This unit includes medical equipment such as advanced microscopes to detect viral and parasitic infections in blood. As a result, patients are often successfully treated and cured from trypanosomes, cryptosporidiosis and other related bacterial infections (Laboratoire d'analyses médicales, 2010).

Table 2.3: A pharmacy

A PHARMACY
A pharmacy is located within the military hospital, and medicines are available to patients after they have been consulted. A range of tablets is available to treat most diseases, and medicine stocks are frequently renewed (Pharmacie hospitalière, 2010).

Table 2.4: Department of internal medicine

DEPARTMENT OF INTERNAL MEDICINE
It includes a head of department, and a team of medical specialists such as dermatologists, cardiologists and nurses. The department of internal medicine also has a programme to provide teachings and trainees to medical students (Médécine interne, 2010). The department includes four main units:
A unit that treats patients suffering from the most common diseases affecting the country such as malaria and yellow fever. The facility has a capacity of 200 people (Médécine interne, 2010).
A unit that treats only patients suffering from heart-related diseases. A team of cardiologists is constantly available to provide intensive care to admitted patients. The unit has a total capacity of 70 people (Medicine interne, 2010).
A unit that monitors the health of patients who are admitted. The unit comprises of echocardiograph and electrocardiograph equipment to assess patients' health (Médécine interne, 2010).
A VIP unit which is only designed for special clients such as heads of states, ministers and other important clients.

Table 2.5: Department of surgery and orthopaedic

DEPARTMENT OF SURGERY AND ORTHOPAEDIC
Patients who require surgery are often admitted in that facility. The department is known to provide surgery of the digestive system as well as urologic, visceral and thoracic surgery. The facility has a maximum capacity of 32 patients (Chirurgie **générale, 2010).**

Table 2.6: Department of ophthalmology

DEPARTMENT OF OPHTALMOLOGY
It includes 3 main units such as: A consultation room which offers eye tests and treatments to patients. The unit includes advanced eye equipment and is known to provide superior services to customers (Ophtalmologie, 2010).
A surgery unit where major eye problems such as cataracts and glaucoms can be removed via surgery (Ophtalmologie, 2010).
An admission room where patients in critical conditions can be admitted. A team of ophthalmologists is available to provide excellent services to patients. The unit has a maximum capacity of 16 patients (Ophtalmologie, 2010).

Table 2.7: Department of Ear Nose and Throat (ENT)

DEPARTMENT OF EAR NOSE AND THROAT (ENT)
This department is divided into two major units: A unit that tracks hearing disorders in patients. The facility includes advanced medical equipment such as audiometers to detect hearing problems in both young and adult patients (Orl & Ccf, 2010).
A unit that treats throat diseases and speech disorders. That section encompasses spectrograph equipment to detect and examine anomalies in the throat and speech of patients. The medical team in that unit comprises general practitioners, paramedics, nurses and specialists who provide daily care and assistance to patients. A surgery room is also available to patients who require a throat operation (Orl & Ccf, 2010).

Table 2.8: Department of radiology

DEPARTMENT OF RADIOLOGY
The radiology department includes: a unit for chest radiology, a unit for bones radiology and an ultrasound room. The facility includes advanced X-ray and scanner equipment and provides superior services to patients (Radiologie et imagérie médicale, 2010).

For the purpose of this study, the focus will be on the Department of internal medicine since during a telephone interview conducted on 4 June 2012 it was regarded as the one receiving the largest number of patients. Patients in that department were also required to stay over in the hospital for at least one night.

Table 2.9: Military hospital

DEPARTMENT OF EMERGENCY
It is operational 24 hours a day and seven days a week. An ambulance vehicle and a helicopter are available to patients in case of emergencies. The department delivers fast and a reliable service to patients. The department of emergency is composed of a reception, a consultation and emergency room, a temporary admission room, a room to disinfect patients and a surgery room (Service d'accueil, 2010).
DEPARTMENT OF MEDICAL ANALYSIS
The department of medical analysis includes subunits such as haematology, immunology, bacteriology and mycology (Laboratoire d'analyse médicales, 2010).
A PHARMACY
A pharmacy is located within the military hospital, and medicines are available to patients after they have been consulted. A range of tablets is available to treat most diseases, and medicines stocks are frequently renewed (Pharmacie hospitalière, 2010).
DEPARTMENT OF INTERNAL MEDICINE
It includes a head of department, and a team of medical specialists such as dermatologists, cardiologists and nurses. The department of internal medicine also has a programme to provide teachings and training to medical students. The department includes four main units: A unit that treats patients suffering from the

most common diseases affecting the country such as malaria and yellow fever; a unit that treats only patients suffering from heart-related diseases, a unit that monitors the health of patients who are admitted, and a VIP unit which is only designed for special clients such as heads of states, ministers and other important clients (Médécine interne, 2010).

DEPARTMENT OF SURGERY AND ORTHOPAEDIC

Patients who require surgery are often admitted in that facility. The department is known to provide surgery of the digestive system as well as urologic, visceral, and thoracic surgery. The facility has a maximum capacity of 32 patients (Chirurgie **générale, 2010).**

DEPARTMENT OF OPHTALMOLOGY

It includes 3 main units such as: A consultation room which offers eye tests and treatments to patients a surgery unit where major eye problems such as cataracts and glaucoms can be removed via surgery, and an admission room where patients in critical conditions can be admitted (Ophtalmologie, 2010).

DEPARTMENT OF EAR NOSE AND THROAT (ENT)

This department is divided into two major units: A unit that tracks hearing disorders in patients and a unit that treats throat diseases and speech disorders (Orl & Ccf, 2010).

DEPARTMENT OF RADIOLOGY

The radiology department includes a unit for chest radiology, a unit for bones radiology and an ultrasound room (Radiologie et imagérie médicale, 2010).

2.6 CONCLUSION

In this chapter, the focus was to investigate the state of the health industry in Africa and more specifically, in Gabon. The health development initiatives in central Africa were introduced and the relevance of organisational health institutions such as OCEAC, CEMAC, CAMES and the CIESPAC in central Africa was also discussed in details. The chapter discussed the health indicators in Gabon as well as the quality of medical services delivered in the country. This enabled the researcher to assess the strengths and weaknesses of the Gabonese health care system. Following that discussion, a review of the two major health sectors in Gabon, as well as the health developmental

strategies in the public and private sector were also debated in order to improve the quality of health in Gabon. The last part of the chapter provided a discussion of the military hospital in Libreville, in Gabon as well as a conclusion.

The following chapter will put services marketing, service quality and customer satisfaction in perspective and the advantages of implementing these elements to both the customer and the organisation will be discussed. Chapter Three will also discuss the link between expectations, customer satisfaction and service quality.

CHAPTER THREE: SERVICES MARKETING, SERVICE QUALITY AND CUSTOMER SATISFACTION

3.1 INTRODUCTION

The purpose of Chapter Two was to examine and have a deep understanding of the nature of the health system in Africa and more specifically, in Gabon. It provided an [2]overview of health development initiatives in Africa and concluded with a focus on the military hospital in Libreville in Gabon. Chapter Three provides a theoretical discussion of services marketing, service quality and customer satisfaction. It provides a discussion on the definitions, generic elements and importance of services marketing, service quality and customer satisfaction. Additionally, a discussion on the relationship between expectations, customer satisfaction and service quality will be included in the chapter.

In most countries, people have spent more on services than on tangible goods. Service companies have become major contributors in the world economies. They account for more global outputs and provide work for more individuals than any other sector. By the mid 2000s services represented 33% of the world's Gross Domestic Product which is about $ 6 trillions of additional income, down from about 50% in the 1990s. Worldwide services growth is about 3% more than agriculture which is 1.4%, and the manufacturing industry that is 2.3%. As a result, the services sector expanded significantly from 57% in the 1990s to over 68% in the mid 2000s (World Bank Development Indicators, 2012:1). Compared to other sectors in the world, the services sector has become the largest and the fastest growing one. Some of the reasons for such a rapid growth are mainly due to the increase in urbanisation, privatisation and the increase in demand for intermediate and final consumer services. Accessibility of quality services is fundamental for the well-being of people and the economy. Studies revealed that in most advanced economies, the expansion of the primary sector which makes use of natural resources such as agriculture, mining, forestry, oil and gas and the secondary sector that produce manufactured goods such as goods to the automobile industry, was mainly correlated to the growth of services such as bank, trade, commerce, entertainment and insurance services. In most European economies and

the USA, the service sector has accounted for more than two-thirds of these countries' Growth Domestic Product (GDP) (Service Sector Around the World, 2012).

In Africa, despite many challenges such as poverty, sicknesses, high mortality rate among children and HIV/Aids affecting countries like Ethiopia, Somalia and Soudan, the continent's Gross Domestic Product (GDP) rose significantly from the early 2000's to 2011 which amounted to $1.6 trillion. Since the 2000s, real GDP has increased by almost 5% yearly. This represents almost more than twice its pace between the 1980s and 1990s. Africa's growth is mainly due to the primary sector through commodities like oil and minerals. This represented almost 40% of the global GDP. The remaining 60% contribution to the African GDP comes from secondary sources namely industry 32% and services 28%. Since the 2000s, the service sector has grown at a slower pace compared to other sectors in Africa (Leke, Lund, Roxburgh & Van Wamelen, 2010).

The primary sector is perceived as the main source of economic expansion in Gabon, with the export of raw material such as manganese, and timber oil, representing over 43% of the gross domestic product in 2012. The secondary sector such as manufacturing represented 25%, and services such as hotels, transport, information, finance and business services represented over 32% of the country's Gross Domestic Product (Trading Economics, 2012).The country' s real GDP growth has decreased considerably from 8.6% in 2007 to 4.4% in 2012. As a result, since 2009, the state has launched various strategies to improve the country's economy, including boosting the services sector to create more jobs. These measures led to more employments in some services such as the hotel and transport industries. This led to a sharp rise of 7% growth in services over the secondary sector (Gabon Economic Outlook, 2012).

An important approach to assess the structure of a country's economy is to evaluate the share of its three major sectors namely: agriculture, manufacturing and services, to see which sector has the largest total output and employment. Initially, agriculture was perceived as a country's most important developing sector. But with the increase of the per capita income, it weakened, giving rise to the manufacturing sector followed by the rise of the service sector. These two major changes are ascribed to industrialisation and post-industrialisation. All developing economies are expected to follow these stages characterised by shifts in the consumer demand and in labour productivity of the three sectors. Advanced economies such as those in North America, Western Europe and Japan are currently post-industrialising; becoming more focused on services and most developing economies such as those in Africa, Asia and Brazil and are currently

industrialising; becoming more focused on industry. However, data revealed that even in low income countries such as in Kenya, the contribution of the service sector to the country's Gross Domestic Product (GDP) is increasing faster than the other sectors of the economy. For instance, from 2000 to 2010 services growth was about 3.2% compared to manufacturing 1.9% and manufacturing 1.1%. Growth in services represents nearly two third of the world's Gross Domestic Product, which amounts to almost 64% of the global GDP (Service Sector Around the World, 2012).

As the service sector is becoming an important component of most countries' economies, it is projected to grow at a faster rate in the future. Service users are currently exposed to a larger range of services and services are becoming more available to them. Consumers often value services based on the manner that it has been marketed to them and on the benefits these services are providing (Londre, 2010:1). Quality service is perceived as the major cause of customer satisfaction. Hence providing quality service to customers is vital to build long-term relationships with both consumers and the organisation. These relationships can lead to increasing profitability and customer retention (Olusoji, 2009:7).

To be globally competitive, service organisations should develop knowledge and insight into three major aspects of service such as services marketing, service quality and customer satisfaction (Naik, 2010: 242).These aspects are consecutively discussed.

3.2. SERVICES MARKETING

3.2.1 Definition of services marketing

With the rapid growth in the service sector, most service organisations such as insurance, telecommunications and hospitals have recognised the importance of services marketing to promote the value of their services to customers to increase their profitability. Organisations are becoming interested in learning how far this development is reflected within their marketing curriculum. Increasing organisational profit requires a strong coordination between the marketing department and customers to provide customer satisfaction (Verma, 2012:33). The application of services marketing is vital as it will push and persuade customers to purchase services. Hence, the concept is often

connected to terms such as communication, sales and advertisements (Kasper, Helsdingen & Gabbott, 2006:76).

From the discussion provided, the definitions of services marketing can be presented in Table 3.1:

Table 3.1 Definition of services marketing

Definition	References	Descriptions
A	Services Marketing (2012)	Services marketing relates to promoting economic activities to customers. It might involve selling services such as health, telecommunications, insurance, education, air travel, electricity and water to customers.
B	Jupiter (2011)	Services marketing refers to the process of persuading prospective customers to purchase a business service. Services marketing comprises the techniques used in the overall marketing plan of production, pricing, promotion and distribution.
C	Zeithaml & Bitner (2007:22)	Services marketing involves providing services that actually satisfy the needs, wishes, whims and the preferences of present and future customers. To accomplish this mission, an organisation must select a target group and address their needs accordingly.

D	Kasper et al. (2006:76)	Services marketing refers to a set of functions such as communication, advertising, and delivering service value to consumers and for managing customer relationships in order to increase a firm's profitability.

From the definitions provided in Table 3.1, services marketing can be viewed as a subfield of marketing that consists of the marketing of services by an organisation to its customers.

3.2.2 Generic elements of the definition of services marketing

From the definitions provided in Table 3.1, some generic elements of services marketing will now be discussed.

- **Promoting customer satisfaction through the creation, distribution, promotion and pricing of services**

Services marketing is first an instrument for promoting customer satisfaction through the creation, distribution, promotion and pricing of service. It is a continuous process of convincing potential consumers to buy an organisation's services (Jupiter, 2011). The core idea is that for a service organisation to grow, its customers must be satisfied. Happy customers are more likely to return to the organisation to repeat purchases. Customers spend their money to acquire services that must satisfy their needs. Such services must have optimum level of quality, reliability and must be offered to consumers at the right price and advertised effectively to attract them (Fornell, Rust & Dekimpe, 2010:29).With the current global competition, services marketing requirements have considerably changed. As a result, a current effective way to keep customers satisfied, rarely has longevity. For example, old cassette decks no longer satisfy the needs of most music listeners, they have been replaced by compact discs and mp3 music players. They have thus replaced the dominant share of Samsung's range. Therefore, services organisations must constantly assess and address their

customers' services needs and be ready to adjust the marketing of their services accordingly (Grönroos, 2007: 266).

- **A tool for managing, identifying and satisfying customer requirements profitability**

Secondly, services marketing can be seen as a tool for managing, identifying and satisfying customer requirements. It concentrates on the distinctive features of services and how they can be properly managed in order to impact both the consumer behaviour and the entire organisation (Lovelock & Wirtz, 2011:45). Understanding consumers' service needs and anticipating their requirements are fundamental aspects of the marketing of services. Service organisations must be aware of market trends and developments that may have an influence on both consumers' views and the activities of organisations operating in that specific marketplace. These changes can be referred to as social, technological, legal and regulatory changes, as well as political developments and competition in the market. Thus businesses must offer services, with alternative solutions to consumers' specific needs, in line with all trends in the market. The competitive nature of the market must be of a major importance to services marketers. Organisations must make use of their internal resource base to determine which path to take in order to be successful. Therefore, an effective marketing of services will rely on the successful evaluation of customers, the market environment, competition and the company's internal resources (Zeithaml et al., 2006:8).

- **A system that fits the service product to the customer**

Thirdly, services marketing can be regarded as a system which fits the service product to the customer. It is regarded as an activity that identifies the service needs and preferences of a target group and addresses those needs accordingly (Zeithaml & Bitner, 2007:22). For an organisation to address this issue, it must create a marketing strategy where the goal is to identify groups of customers with similar needs and develop services to address those needs. As a result, each population group may then be proposed a specifically tailored service, according to their specific requirements. However, for organisations to effectively propose services to customers, they must focus primarily on the segments of customers they are capable of serving and who will provide satisfactory returns. The limited resources will not allow organisations to target all groups in the market. As a result, service organisations have to select an appropriate

service positioning framework to have a competitive advantage over rivals in the market (Zeithaml et al., 2006:8).

- **Services marketing as a set of tools and activities**

Fourthly, services marketing can be perceived as a set of designed tools, techniques and activities such as pricing, promotion and distribution of services to prospective customers (Savescu, 2011:39).

This constitutes a major part of marketing since it is the one to which consumers are exposed. Marketing of services should not only involve acquiring customers, promotion, pricing, and distribution of services, but also include keeping and building a solid customer relationship (Temesgen, Negi & Ketema, 2010:51). Thus, three major levels of the marketing of services have been identified: recruiting customers, keeping customers and growing customers. Regarding the recruitment of customers, a service organisation will develop activities such as the marketing, delivery and pricing of their service product to persuade prospective customers than the service provided is better than the competitor's one (Jupiter, 2011).

In order to keep customers, an organisation can develop its customer contacts during the service delivery process in a way to impact a customer positively and influence him or her to continuous purchasing. Finally, to grow customers, an organisation has to sustain a real relationship with a customer, where the customer feels emotionally attached to the organisation (Grewal, Chandrashekaran & Citrin, 2010:612).To achieve this, an organisation has to develop a relational approach when proposing its services. During this approach the organisation must show the customer its willingness to take care of him. In addition to providing services, the customer must perceive it to have a satisfactory outcome-related technical and process-related functional quality. If the customer is happy with the perceived services, then he may probably prolong his relationship with the organisation (Grönroos, 2007:270).

3.2.3 The importance of services marketing

Services marketing is fundamental to services organisations; it refers to the promises made and promises kept to consumers. Good marketing of services often results in organisations' development. If organisations are able to innovate their services

marketing, then the socio-economic change will arise at a faster pace (Gilaninia, Almani, Pournaserani & Mousavian, 2011:787). One of the major boosts to services marketing is technological developments. These developments offered opportunities to organisations to market and carry out services in a manner that the consumer's physical presence is no longer a requirement. For example, Internet technologies have enabled customers to access services using their computers. This has significantly improved the traditional way of providing services (Hoffman, Bateson, Wood, & Alaxandra, 2006:15).

The Internet has been used to assist in the service process such as selling, communicating, making payments and conducting market research. It is perceived as a marketing channel where most service interactions can be performed. The Internet has been involved in the service delivery process by offering help-desk services and support services to customers (Grönroos, 2007:283). Another consequence of information technology development is the rise in value-added and service quality. This aspect is merely crucial for organisations which compete by differentiating their products via offering superior service. New technology developments such as ATMs have enhanced services in the financial sector by substituting the traditional bank counters. ATMs are known to providing fast and high quality service to customers (Kasper et al., 2006:325).

High technology services such as e-commerce in general can be perceived as time saving for both the service producer and the customer. Services can be accessed seven days of the week without any requirement for the consumer to go to the service organisation. An additional advantage is the creation of the place utility, where services can be accessed from anywhere, such as by laptop or mobile phone (Kasper et al., 2006:325).Additionally, the use of technological services can provide a competitive advantage in various ways. One of the benefits is the substitution of labour, which can significantly lead to an organisation's cost reductions. This aspect can enable organisations to become more competitive and to increase profitability (Kasper et al., 2006:324).

A final observation revealed that technologies used by service organisations such as banks, hospitals, hotels and communications services may be less polluting to the environment as opposed to technologies used in manufacturing organisations which may have a more harmful effect on the environment (Greenstone & Hanna,

2011:10).It is therefore important to note that although technology development has significantly substituted labour in many service organisations, most organisations such as hospitals still rely heavily on human labour to offer services to patients who feel more comfortable interacting with human beings. In that case the marketing of services relies more on the direct interactions between patients and the medical personnel (Kapoor, Paul & Halder, 2012: 11).

Findings suggested that involving patients in the course of medical care has a significant impact on the medical treatment results. Medical outcomes no longer depend on medical employees' skills only, but may vary depending on the degree of patient participation in the process of care. There is a correlation between patient involvement in the process of care and medical success. In the current millenium, patients are becoming more aware of quality service via the Internet. As a result, they may require superior services in hospitals. This in turn reveals the necessity to foster services marketing in hospitals (Tan, Benbasat & Cenfetelli, 2013: 87-88). Patient satisfaction results from quality in health care through health services marketing where health care institutions can market their offerings to gain more customers and become more competitive. Services marketing has a greater effect on patient behaviour than the costs he or she has to endure in hospitals. As a result, services marketing can portray a positive image of the hospital, which in turn will allow patients to remain more loyal and refer the facility to other individuals. Doctors usually disregard the importance of health services marketing. They usually assume that patient satisfaction merely depends on their technical expertise. As a result, they often underestimate the economic benefits of implementing services marketing in hospitals. Health services are often perceived as a complex mechanism that comprises both the technical abilities of doctors and their ability to market their services to patients (Dosen, 2009:2007).

Rohini (2006:69) indicated that patients' perceptions of service quality are mostly influenced by the ability of medical institutions to market their services. As a result, medical personnel should be able to communicate, support, listen to and notify patients about their health concerns. These service delivery traits are highly rated by patients and display a positive image of the organisation in the mind of a patient. This in turn influences patient choice of health service provider.

3.3 MANAGING ORGANISATIONS IN A SERVICE ENVIRONMENT

In order to manage services effectively, it is vital for services organisations to have an understanding of the different dimensions involved in a service. The distinguishing elements of services are crucial in the design of a proper marketing mix for the service organisation. The identification of these elements was the preoccupation of much earlier research by Hoffman et al., (2006:26) and conceptual development by Kasper et al. (2006:76) of services marketing. The different elements are known as intangibility, inseparability, perishability, heterogeneity, ownership and service culture (Zeithaml et al., 2006:20). All these elements require the involvement of employees in delivering the service and refer to the hidden part of revealing the brand awareness of the organisation (Conradie, 2011:69). Each of the mentioned elements is briefly discussed next.

3.3.1 Different dimensions when managing an organisation in a service environment

- **Intangibility**

Intangibility is the main feature of a service. This implies that a service cannot be seen, smelled and touched (Grobbelaar, 2006:5). Health care services result in actions such as surgery, diagnosis, examination and treatment offered by doctors. These services cannot be seen or touched by the patient, although the latter may be able to see or touch some tangible aspects of the service such as medical equipment (Zeithaml et al., 2006:20). However, the intangible nature of services can present major concerns in a way services are not easy to display or to communicate to customers (Grobbelaar, 2006:6). As a result, customers usually use price as a basis for evaluating service quality (Zeithaml et al., 2006:21).

- **Inseparability**

Inseparability refers to when services are produced and consumed at the same time. Customers generally take part in the course of service delivery and their role is vital in the service production process (Grobbelaar, 2006:7). However, the nature of

interactions between the service provider and the customer can influence the outcome of the service performance. Service providers are often perceived as the service itself. Therefore firms should recognise their important role in service processes (Zeithaml et al., 2006:22).

- **Perishability**

This aspect of service implies that services cannot be inventoried, stored or re-used once they are produced (Grobbelaar, 2006:7). This can present major concerns in the supply and demand for services since service failures cannot be recovered to balance their demand and supply. As a result, service marketers must implement strategies to pick up from service process failures. This forces firms to build more efficient capacities to plan and manage future demand (Kasper et al., 2006:60).

- **Heterogeneity**

Services comprise intangible performance mostly delivered by human being. However, due to the changing nature of people, human performance will frequently vary. As a result, two services cannot be precisely alike. Customers often see the service provider as the service itself and therefore, the service is often perceived as heterogeneous (Grobbelaar, 2006:7).

- **Ownership**

Since services are produced and consumed at the same time, they cannot be owned or exchanged by consumers. As a result, the purchase of a service provides the right to access the service only, and not its ownership. Customers are usually unsure about the outcomes of a purchased service, and also whether the service will or will not adequately satisfy their needs (Conradie, 2011:72). Since services are perishable, they cannot be returned. This suggests that firms should foster a culture of service excellence to ensure that quality service is provided to customers (Kasper et al., 2006:61).

- **Service culture**

Service culture is influenced by the value and culture of an organisation that guides service employee behaviours, which is in turn associated to the organisation's outcomes (Webster & White, 2009:692).Thus, organisational culture is important as it has a large impact on service processes. Given the fact that services are heterogeneous and intangibles, it is not easy for customers to assess the services received as opposed to goods. Customers often take into account other aspects of interaction with service employees such as their behaviour. Employees' behaviour results from an organisational culture (Mosley, 2007).

Service culture usually builds up over time and is relevant when interest in customers is the most critical value in the organisation (Conradie, 2011:72).However, sustaining a service culture in an organisation does not imply that other values are no longer important. Grönroos (2007:418) regards service culture as a culture where providing high-quality service to customers must be the core value of an organisation. As a result, all employees within organisations must be service oriented. This means that service employees must share common values and attitudes so to improve and provide excellent services to customers (Grönroos, 2007:419).

Successful services organisations must have an understanding of the characteristics of services. The distinguishing features of services are important in the design of a proper services marketing mix to address the needs of customers and to remain competitive (Du Plessis, 2010:198). An understanding of the services marketing mix will be provided in the following discussion.

3.3.2 The services marketing mix

Developing a successful marketing plan is vital to maintain a customer orientation. The marketing mix focuses on choosing the right marketing mix elements. It involves combining ideas, concepts and features in order to better address customers' needs in a given market. The marketing mix is composed of four major aspects such as product, price, promotion and place. Unlike the product marketing mix, services marketing is

characterised by three additional elements such as people, process and physical evidence. These aspects constitute a services marketing blueprint design (Conradie, 2011:72).

Each of the elements is briefly described next.

- **Product**

The services marketing product mix is usually intangible, which means it cannot be measured. Education, tourism and the health care industry can be perceived as good examples of services marketing mix. Major characteristics of these service products are that they are heterogeneous, perishable and cannot be owned (Hu, 2011:61). In general, a careful design of a service blueprinting is a prerequisite to define the service product. For example, a fast-food blueprint is vital prior to establishing the fast-food business. The service blueprint will describe how the product referred to as the fast-food business will be (Bhasin, 2011).

- **Place**

Place refers to where the organisation is going to sell its services and where they are going to be implemented (Conradie, 2011:148). For example, a good place to establish a petrol station will be in the urban area. Therefore, an area with low traffic will be regarded as inappropriate for a petrol station. Additionally, a software business will be best suited in a business hub with various organisations around, rather than being isolated in a rural area (Lings & Greenley, 2009:44).

- **Promotion**

Promotion of services is vital for organisations to survive in the competitive world. Services are easily imitated; therefore organisations have to differentiate and distinguish themselves from the rest through their brand. Thus promotion has become a significant component of the services marketing mix (Hu, 2011:61). IT organisations, hospitals, hotels and banks set themselves above the rest by promoting their services to customers (Kasper et al., 2006:465).

- **Pricing**

Service pricing is quite different from product pricing as it takes into account labour, material cost and overhead costs. For instance, a fast-food owner may price his food based on the pleasant ambience the facility may provide to people and the band customers have for the music. Thus, services pricing can be made of all the costs involved to mark up the final service price (Pomering, Noble & Johnson, and 2011:961).

- **People**

People constitute an important constituent of services marketing as they define a service. For instance, nurses and medical people define health services; bank employees will define the type of financial services provided to customers. Thus people employed in services can affect positively or negatively on an organisation (Pomering, Noble & Johnson, 2011:962-963). Various organisations are getting their personnel trained in interpersonal skills and customer service to ensure better service delivery and customer satisfaction. Nowadays, most organisations are getting accreditation in terms of showing that their personnel are better than the rest (Bhasin, 2011).

- **Process**

Process refers to the manner in which service is provided to the final consumer. For examples, two medical services providers: Milpark and Garden City Clinic hospital thrive on their fast service and the reason they can do that is based on their confidence on their processes. Additionally, the demand for their services is such that they have to provide quality service to their patients. Therefore, the service process of an organisation is vital (Prouse, 2011). It is also part of the service blueprint, in which prior to establishing the service, an organisation has to identify what should be the process of the service product reaching the final consumer (Kasper et al., 2006:465).

- **Physical evidence**

Physical evidence refers to the final component in the services marketing mix. Since services are intangible in nature, physical evidence of services is vital to create a better consumer experience with the service provided (Lovelock et al., 2009:24). A patient is more likely to choose a private hospital with air conditioner, excellent patient care, advanced medical equipment and a prompt service delivery system than a government hospital. Thus, physical evidence is crucial in the services marketing mix, since it acts as a service differentiator (Bhasin, 2011).

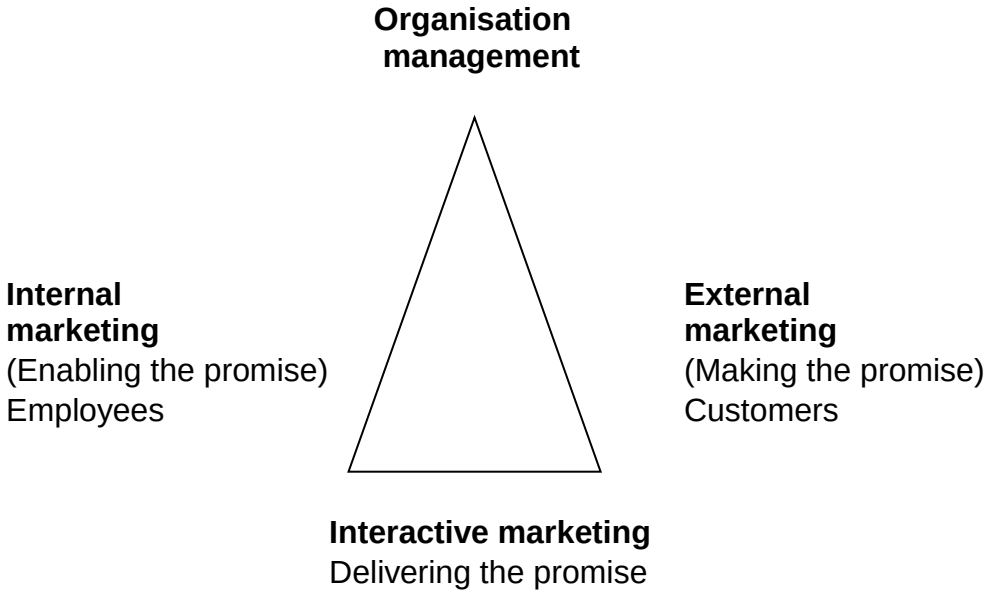
3.4 THE THREE LEGS OF SERVICES MARKETING

Interaction between the consumer and the service provider is vital in services. These human to human interactions form variability in the service provision for every individual consumer (Olusoji, 2009:27). A structure known as the services marketing triangle highlights the value of people in the ability of organisations to ensure that promises are kept and achieved in building relationships. The services marketing triangle helps marketers in dealing with issues such as understanding consumers' needs and expectations of services, enhancing the value of services to consumers, and ensuring that promises made to consumers are kept (Conradie, 2011:76).

3.4.1 The services marketing triangle

Service triangle is a method used by organisations to highlight the importance of employees and organisations in keeping their promises and building a solid customer relationship. The triangle focuses on three major elements namely the organisation's management, customers and employees. Between each of the three elements of the triangle, there are various marketing processes such as external, interactive and internal marketing. These processes have to be conducted properly for service processes to be efficient and to develop and keep solid relationships with the internal and external customers (Angelis, De Lima & Siraliova, 2010:10).

Figure 3.1: Services marketing triangle



Source: Zeithaml et al. (2006:23).

From Figure 3.1, the three legs of the services marketing triangle can be explained as follows:

- **External marketing**

External marketing refers to the service promises made by organisations to customers. It includes service offerings and the way in which they will be carried out. External communication is vital to building customers' expectations, since expectations are influenced by an organisation's direct and indirect marketing message (Kasper et al., 2006:79).Research suggested that many organisations have been investing more in marketing activities such as sales and promotion. This has enabled organisations to obtain and retain customers. However, investing in marketing becomes problematic when the cost associated with promoting a product or service is higher than the profit generated. Thus, it is vital to focus on efficiency and productivity of marketing department within organisations (Grönroos, 2007:267). A successful coordination of internal and external marketing communication can enhance marketing efficiency and ensure higher service delivery to customers (Vrontis, Thrassou & Zin, 2010:26; Zeithaml et al., 2006:496).

For many organisations, the most critical aspects of managing brand image involves coordinating all the external communication channels which send information to potential customers (Lings & Greenley, 2009:44). However, managing all external communication vehicles has become a difficult task. In addition to the traditional methods of communication such as advertising, company website, sales promotion, direct marketing, personal selling proliferation and public relations, new forms of marketing medias such as mobile phones, newspapers, magazines, blogs, Internet, television and radio are currently on the spot. These new medias have made the coordination of the organisation's messages to customers difficult. Therefore, for organisations to attract more customers, marketers have to properly control the timing, creating appeals and placement of all the external communication vehicles (Zeithaml e al., 2006: 497).

- **Internal marketing**

Internal marketing acknowledges the importance of employees in delivering services in organisations. By treating employees like internal customers, businesses can achieve high employee satisfaction and productivity. Satisfied workers are more likely to become more customer-conscious and deliver quality service to external customers (Lings & Greenley, 2009:44). Internal marketing not only regards employees as internal customers, it also encourages them to develop a positive behaviour towards services delivery. Additionally, internal marketing focuses on human resource management where the aim is to recruit, train, mobilise, support, motivate and manage all workers within an organisation. This vision can enable an organisation to improve the service strategy for outside customers and internal employees (Shiu & Yu, 2010:796).

- **Interactive marketing**

Interactive marketing refers to providing excellent services to customers and keeping the promises made to them. Interactive marketing enables contacts between the service provider and the service user. It gives the opportunity topeople and companies to interact directly, irrespective of time and distance (Kasper et al., 2006:79). Interactive marketing communication is that area of marketing which involves a change of an organisations' ideology where customers are perceived as partners. It is a strategy that allows customer to provide immediate feedback by means of various forms of communication such as audio, video text, interactive television and virtual reality (Vlasic & Kesic, 2007:111).

Service quality is an important indicator of effectiveness of both employees and organisations in keeping their customers satisfied (Siddiqui & Sharma, 2010:222). It is fundamental to all three legs discussed, since quality results in increasing satisfaction and performance of all parties involved in services. Service quality is an integral component of both internal and external customers on their evaluation of a service. It is an essential aspect to ensure customer satisfaction (Jun & Cai, 2010: 2006). The concept of service quality will be discussed more comprehensively next.

3.5 SERVICE QUALITY

Service quality is often described as the consumers' perceptions of the service received. It is a subjective impression of the relative inferiority or superiority of a service provider

and its services. Service quality is usually considered comparable to the consumer's attitude with regard to the organisation (Siddiqui & Sharma, 2010:222).

3.5.1 Defining service quality

Achieving customer satisfaction has become a major concern in most service organisations through proving service quality (Irani, 2008:33). A customer's satisfaction level is influenced by his experience with services provided and by comparing that experience with the type of service which was expected. Studies revealed that service quality and customer satisfaction are two major constituents of customers acquisition and retention (Hossain & Leo, 2009:338).

Experts believe that successful organisations are those which remain in the mind of their customers. This can be achievable if they provide excellent services. Thus service quality has become an essential tool to assess organisational performance and to promote customer satisfaction (Rezaei et al., 2011:483).

Various definitions of services quality are presented in Table 3.2:

Table 3.2: Definition of service quality

Definition	References	Descriptions
A	Rezaei et al. (2011:485)	Service quality is the delivery of excellent or superior services relative to customer expectations. There is a positive correlation between service quality and customer satisfaction. As a result, superior service often leads to increase in customer satisfaction.
B	Mohammad and Alhamadani (2011:61)	Service quality is perceived as an intangible economic activity that provides psychological benefits to the customer. It's a type of service provided which meets the external customer's needs.
C	Siddiqui and Sharma	Service quality refers to the

	(2010:222)	service user's assessment of the service he or she has received. It is a relative evaluation of the superiority or inferiority of a service provider and its services, and it determines the customer's overall attitude towards the organisation.
D	Kasper et al. (2006:178)	Service quality refers to the extent to which the service product successfully serves the purpose of the user during the usage. This implies that happy customers are more likely to repeat purchases and remain loyal to the firm.

From the definitions provided in Table 3.2, service quality can be viewed as an evaluation of how well a delivered service matches the customer's expectations.

3.5.2 Generic elements of service quality

From the definitions provided in Table 3.2, some generic elements of services marketing will now be discussed.

- **Service quality as a transcendent-based quality**

According to this approach, service quality is often described based on individual rather than shared experience. This is often perceived as epiphenomenon, where a person can understand what something is, but is not able to describe it. He or she usually makes use of comparison or reference to something (a comparator) (Benlian, Koufaris & Hess, 2012: 88). For instance, a person may say that the service experience of MTN is better than the Vodacom one without being able to tell why. This approach shows that service quality cannot be described accurately, but only through comparison of one service experience to another. It is then referred to as transcendent (Kasper et al., 2006:178).

- **Service quality is user-based quality**

This element highlights the degree to which services successfully fit the customer's purpose during usage. From this point of view, service quality is simply determined by the service user and is very subjective, since every customer has a different approach to quality (Bogomolova, 2011:793). The problem is that this approach emphasises merely on perceived quality that is not a very reliable indicator of the actual service quality. This can be costly for an organisation that wants to please all its customers, but at the same time cannot provide different types of services in response to different types of customer services quality requirements. To resolve this problem, service organisations can provide customised services to their customers. Customisations can be used to ensure individualised service quality and can be a low cost strategy for an organisation. An example of customisation is the Inter-continental five star hotel which has a large range of guest rooms and services customised according to each different class of clients (Grönroos, 2007:73).

- **Service quality is value-based approach**

In this approach, quality exceeds users' expectations of service. This simply means that the value-based view regards service quality as a function of customer benefit relative to cost (Rust & Huang, 2012:47). In other words, this approach evaluates service quality as the difference between customers' expenses to acquire the service and the actual satisfaction he or she receives from it. The perceived value of service quality can result from a complex evaluation of both the service and service user's attributes. In this regard service quality can sometimes become ambiguous. In airline travel, all passengers are heading to the same destination at the same time, but the service cost will differ according to the different class of travel. Or, in various states, a customer's bank charges will be higher if he is served by a bank employee rather than if he uses the Internet or an ATM machine (Kasper et al., 2006:178).

3.5.3 The importance of service quality

Service quality is fundamental for organisational success and survival. It is vital in most service organisations. Fostering service quality is a way services organisations can distinguish themselves from competitors and increase their market share. Researches demonstrated that offering service quality can retain customers as well as attracting new ones. The cost of marketing to old customers is significantly reduced compared to if organisations had to market to new customers. Once customers become familiar with the organisation, they develop trust and their level of risk is significantly diminished. This implies that they are more likely to remain faithful to the organisation (Hoffman et al., 2009:400).

Providing quality goods has been a long-time ideology of the good manufacturing industry. It has led to increasing market share, customer satisfaction level and improving a firm's efficiency. The quality perspective in the good manufacturing firms focuses primarily on improving the quality of goods through eliminating defective products. This philosophy is enforced by careful monitoring and verification of all finished goods before they are delivered to the final consumer. The early development of the concept focuses on ensuring quality during the manufacturing procedure so as to limit the number of faulty products to zero. Recent developments regard quality as providing the right product to the right customer and at the right time, hence expanding quality beyond the good itself, and using internal as well as external assessments to evaluate the firm's overall quality (Golder, Mitra & Moorman, 2012:2).

Service organisations have a different quality system framework. Service quality relies on the customer's involvement in the production and quality control process. Additionally, achieving service quality must be a daily continuous effort of all employees involved in the management and production of services (Hoffman et al., 2009:400).

3.5.4 The different elements of service quality

A major concern to assess service quality is to identify what elements customers utilise to evaluate quality. The SERVQUAL model was develop to provide a more comprehensive understanding of service quality. The model highlights five major attributes of service quality such as reliability, assurance, tangibility, empathy and responsiveness that have become dominant in service quality research (Kasper et al.,

2006: 189).These dimensions have been successfully used to assess service quality not only in service industries, but in hospital settings as well (Yesilada & Direktor, 2010).

From the previous discussion, each element of service quality will now be reviewed:

- Reliability: This refers to the ability to provide the service correctly and dependably. In the hospital industry, it is the degree to which the consistency of service promises such as keeping appointment times, completing duties on time and respecting all promises made to patients are met (Basheer, Al-Alak & Alnaser, 2012:157).
- Assurance: This dimension encompasses competence, courtesy, credibility and security. This element involves training of employees to acquire knowledge of the service delivery process and customer relationship. This is a vital aspect to provide excellent services and the perception that the service provider is competent and not going to harm anyone. This can also build trust in the customer's mind (Meng, Summey, Herndon & Kwong, 2009:775).
- Tangibles: This refers to the tangible aspects of service such as the appearance of physical facilities, equipment and personnel. These elements have a significant influence on the perceived service quality. In hospitals for instance, cleanliness of premises, staff appearance, decor, computers and medical equipment can all have a positive or negative impact on the patient's perceptions of service quality (Kasper et al., 2006:189).
- Empathy: This element includes communication, access and understanding. It focuses on the communication aspect between the service provider and the recipient of service. In hospitals, empathy is reflected in the ability of medical personnel to care for their patients (Basheer et al., 2012:157).
- Responsiveness: This refers to the willingness to help customers. Service providers must be willing to respond to individual customer needs such as making sure that customers remain involved and detailing delivery times (Kasper et al., 2006:190).

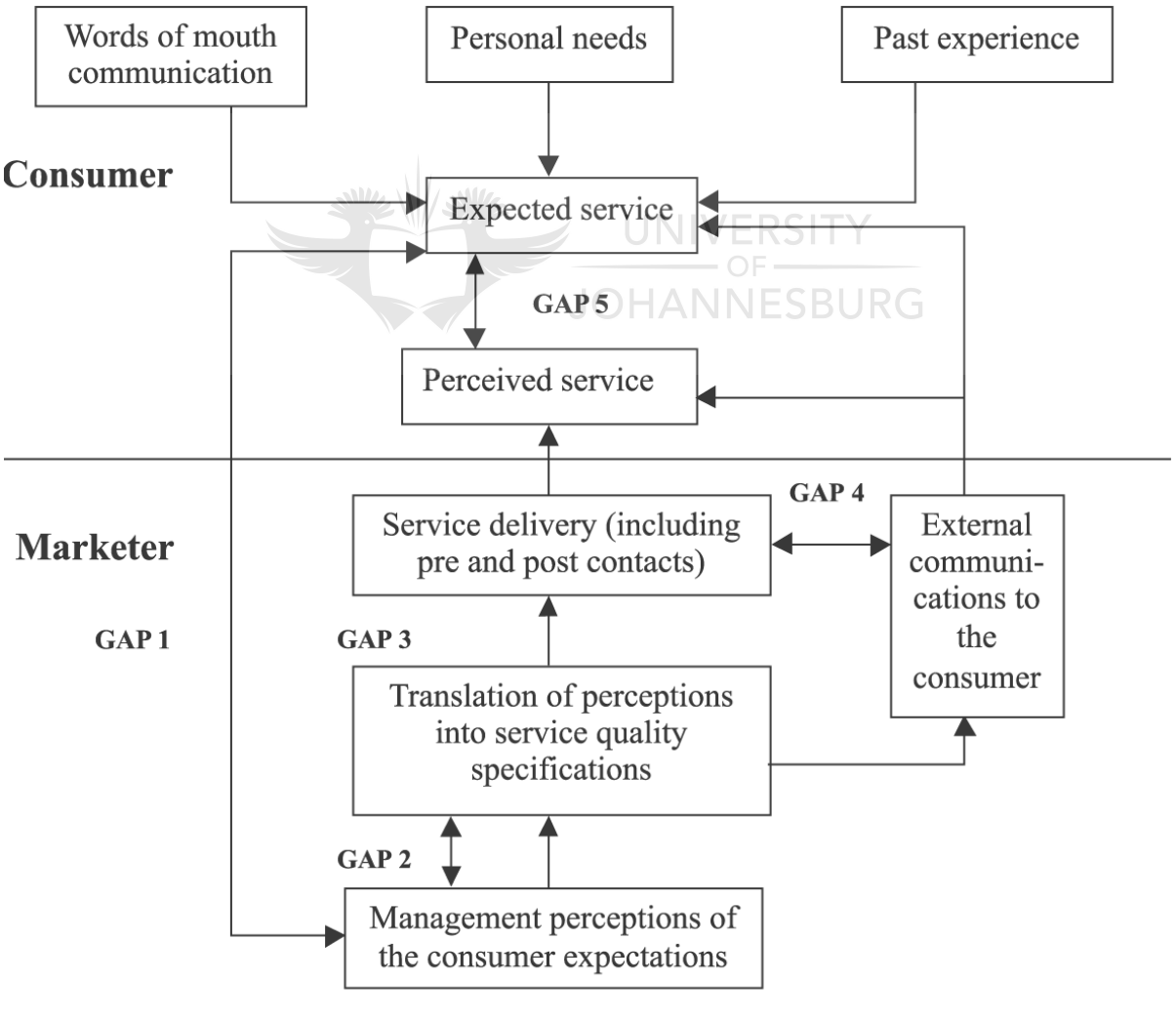
3.5.5 Failure gaps in service quality

It is often difficult to investigate and apply service quality in organisations. Firstly, service quality perceptions rely on the repetitive comparison of the service user's expectations about a specific service. This means that if a service does not repetitively

match the user's expectations, it will be considered as poor, no matter how good the service is. Secondly, contrary to good products where users only assess the final good, service users assess both the process of the service and its effect. A person having a haircut will assess quality based not only on his perceptions of the hairstyle, but also on whether the hairdresser is welcoming and skilled. Studies revealed that service quality is evaluated from gaps between expectations and perceptions on the side of management, employees and service encounters (Hoffman et al., 2009:403).

The following figure provides an overview of the different gaps that may exist in service quality.

Figure 3.2: Service quality gap model



Source: Rajasekhar, Muninarayanappa and Reddy (2009: 220)

- **Gap 1**

It refers to the difference between the customer expectations of service and the management perceptions of the consumer expectations. Often, managers think they know what their customers want, while in fact they are just speculating. In the medical industry, this may lead to the wrong services being offered to patients and dissatisfaction of patients with the service provided. Therefore, minutely detailed knowledge of what patients' needs are will be a prerequisite to close this gap (Holder, 2008:46).

- **Gap 2**

It is the difference between management's perception of customer expectations and the current standards set for service delivery. To close this gap, when setting standards in the hospitals for instance, managers should identify all key aspects of interactions between employees and patients. Detail standards can be written such as the way employees should operate and behave at each level of the hospital (Hoffman et al., 2009:404).

- **Gap 3**

It consists of the difference between the current performance of a service and the standard set by the organisation's management. In the medical industry, this gap results from the willingness of medical staff to offer the service according to specifications. The questions can be asked if medical staff wear their uniform before performing the service, and if they thank the patient when the service is completed (Zeithaml et al., 2006:38).

- **Gap 4**

It is the difference between the promised service of the organisation through its external communication channel and the service that is actually delivered to customers. If an organisation advertises a particular service to customers and that customer receives a different type of service, then the communication gap will widen. To close this gap, managers should work with all departments to make sure that promises made on the advertisements are fulfilled (Kasper et al., 2006:195).

- **Gap 5**

It refers to the difference between what service users expect from a service and the actual perceived service. Customers' expectation is a subjective evaluation of a service. Patients often have different expectations, therefore they make different assessments of the service provided, which can lead to dissatisfaction (Holder, 2008:45).

Service quality is fundamental to every organisation. Organisations that offer better service quality increase demand by increasing customer acquisition, customer retention, and consumer loyalty (Liu & Homburg, 2007). There has been a positive correlation between the service quality provided in organisations and customer satisfaction. This assumption suggests a close relationship between service quality and customer satisfaction (Rust & Huang, 2012:49).The concept of service quality will be discussed more comprehensively next.

3.6 CUSTOMER SATISFACTION

Customer satisfaction is perceived to have an impact on the choices and purchasing behaviour of consumers. Satisfied customers are more likely to increase spending compared to those who are dissatisfied with the service provided. Consequently, satisfied customers can significantly increase an organisation's profit. Evaluating customer satisfaction has become a central philosophy among most organisations (Fornell et al., 2010:29).

3.6.1 Defining customer satisfaction

Customer satisfaction has become a major concern and focus in marketing. Research has shown that satisfaction surveys have been widely used in various organisations to evaluate service quality. Customer satisfaction has an effect on the profitability of nearly every organisation. When customers are satisfied with services, they will more likely tell other individuals. However, a lack of customer satisfaction has a negative effect on the bottom line. Customer satisfaction is an asset that should be monitored and managed just like any physical asset (Bodet & Assolant, 2011:783). Most experts believe that the surest way to success is to make customer happy. Improving satisfaction will result in increased customer loyalty and the financial benefits typically associated with more loyal customers (Forrest et al., 2011: 199).

For service organisations, customer satisfaction assessment has become a major tool to measure organisational performance (Rezaei et al., 2011:483).

Various definitions of customer satisfaction are presented in Table 3.3.

Table 3.3: Definition of customer satisfaction

Definition	References	Descriptions
A	Hill, Roche and Allen (2012:18)	Customer satisfaction is the discrepancy between customer expectations and perceptions of the current service provided.
B	Grigoroudis and Siskos (2012:1)	Satisfaction is regarded as a customer's feeling that he or she is being well treated.
C	Hoffman et al.(2009:369)	Satisfaction is a function of expectations that the customer believes he should receive. Dissatisfaction occurs when the actual outcome is different from the standard expectation.
D	Olusoji (2009:12)	Satisfaction refers to the consumer's fulfilment response. It is the subjective evaluation that a service offers a pleasurable degree of consumption-related fulfilment.

3.6.2 Satisfaction with care between doctors and nurses

In health care settings, research has indicated that patients tend to be more satisfied with nurses care compared to doctors. However, this does not mean that patients

preferred. Patient preferences between doctors and nurses may relate to various aspects determining satisfaction with doctors' services and nurses' services. In general, patient satisfaction may arise from the reliability and responsiveness of doctors in terms of the technical or medical aspect of care compared to nurses. Such aspects may include medical treatment, discussing physical complaints, information about the sicknesses and diagnosis (Laurant et al., 2008:2695). However, patient preference for nursing practitioners often relates to the assurance and empathy of nurses in terms of the amount of attention provided to patients, reassurance, and information about dealing with the disease (Zhang, Liu & Ren, 2013:219).

3.6.3 The generic elements to customer satisfaction

From the definitions provided in Table 3.3, some generic elements of services marketing will be discussed next.

- **Customer satisfaction seen as an expectancy disconfirmation model**

Customers use the disconfirmation paradigm to compare their expectations with their perceptions of service. However, if their expectations coincide with their perceptions, it is said to be confirmed expectations, thus leading to customer satisfaction. If customer expectations differ from perceptions of services, then it is said to be disconfirmed expectations (Cockalo, Djordjevic & Sajfert, 2011:807). There are two categories of disconfirmations: positive and negative disconfirmation (Hoffman et al., 2009:369).

- **Customer satisfaction as a negative disconfirmation**

Negative disconfirmation occurs when the customer perception is lower than what was expected. In that case, it will lead to customer dissatisfaction with the service provided. This may lead to bad word-of-mouth publicity and a decrease in customer loyalty to the organisation (Orsingher, Marzocchi, & Valentini, 2011:731).

- **Customer satisfaction as a positive disconfirmation**

A positive disconfirmation occurs when the customers' perceptions go beyond their expectations of services provided. This results in customer satisfaction. Customers are

more likely to refer the organisation to other individuals and more willing to repeat purchases (Hoffman et al., 2009:369).

3.6.4 Types of customer expectations and the zone of tolerance

Expectations are seen as optimum levels against which present and future service encounters are compared. Expectations of service are often different from present service experience. Research has suggested at least three different categories of expectations such as predicted service, desired service and adequate service (Pradhan & Roy, 2011:79).

Predicted service is a probability expectation which relates to the level of service that service users believe is most likely to encounter. Hospital patients tend to return to the same medical facility over time. Patients become used to dealing with the same medical personnel and, over time, begin to predict certain performance levels. As a result, patient satisfaction evaluations increase by comparing predicted service to perceived service experienced (Grobbelaar, 2006:8). Desired service is an ideal expectation which refers to what service users actually desire, compared with predicted service, which is likely to happen. However, in most cases, desired service leads to higher expectation than predicted service. For instance, a patient desired service would comprise that he receives not only his predicted service, but that the medical staff call him by his first name and warmly greet him as he walks into the medical facility (Hoffman et al., 2009:388).

Adequate service is a minimum tolerable expectation and refers to the level of service a service user is prepared to accept. This type of expectation relies on experiences or norms which develop over time. Most people have received medical services from various different hospitals. Through these experiences, norms develop that patients expect to exist. Therefore, medical services which fall below expected norms will fall below adequate service expectations (Grobbelaar, 2006:8).

Services are known to be heterogeneous, and as a result will differ across employees and service organisations. The degree to which customers are willing to accept these differences is called zone of tolerance, which is the difference between desired service

and adequate service. The zone of tolerance increases and decreases among customers depending on service quality, price and the conditions in which the service is provided. If service provided expands outside the zone of tolerance (at the desired service), then customers are more likely to be happy with the service. On the other hand, if service goes below adequate service, then customers will more likely be dissatisfied with service (Ince & Bowen, 2011:1772).

3.6.5 Factors influencing service expectations

Satisfaction relates to the post-decision assessment of a service. Such assessments lead to repeated choice and thus impact on an organisation's long-term profitability. Satisfaction is closely connected to expectations. Expectations refer to predictions of the future, an emphasis of which can range from broad beliefs to particular product specifications. In other words, expectations refer to the customers' predictions about how they will be able to match their choices when exposed to a different set of choices. A discussion of the factors influencing service expectations are presented below (Diehl & Poynor, 2010: 313).

3.6.5.1 Desired and predicted service

Desired service expectations are built around six major factors influencing service expectations such as personal aspects, customers' personal needs, explicit service promises, word-of-mouth communications and past experience. Personal aspects develop over time and enhance a customer's sensitivity regarding how service should be offered (Tsai, Hsu & Lin, 2011:217). This factor comprises two categories; the customer's derived expectations and personal views of services (Haseki, 2013: 42-43). Derived expectations are obtained from the expectations of other individuals. For example, if your manager requests you to hire someone to perform a specific task in an organisation, your expectations of the one performing the task will most likely be higher compared to if the person was hired on your own initiative. In order to please your manager, your sensitivity to quality service is high. Also, personal views of services refer to customers' sensitivity regarding the way in which services should be provided. This implies that customers often desire to be treated in the way they believe they treat their customers (Heitzler, Asbury & Kusner, 2008:188).Customers' personal needs imply that some customers are more demanding than others in terms of service quality.

For example, some patients may be interested in both acquiring excellent medical services and the quality of the tangible aspects of services such as staff uniforms, medical equipment and toilets. Other individuals may simply be looking for a proper medical service delivery. Thus, managing a service organisation can become quite complex (Mitra & Fay, 2010).

Explicit service promises include the organisation's advertising, personal selling and other forms of communication. In this aspect, customers assess service based on several sources of communication available. Often, the more ambiguous the service, the more customers rely on the organisation's advertising when shaping expectations (Chebat, Sirgy & Grzeskowiak, 2010). If an organisation promotes clean and attracting rooms, customers will expect the rooms to be exactly as advertised. Implicit service promises encompass the tangibles surrounding the service and the price of the service. If the service price rises, customers will expect higher quality service in return. Similarly, if tangibles surrounding a service are lush, then customers will see it as a sign of quality (Hoffman et al., 2009:391).

Word-of-mouth communications are usually entrusted by customers as they believe in information from people who have been through the service experience (Berndt & Brink, 2008:56). This type of information can be provided by family and friends (Kaura & Datta, 2012:66). Past experience is an assessment of service based on a comparison of the actual service encounter, and other encounters with the same provider, other providers in the same industry, and other providers in other industries. Patients evaluate medical service based on their past experience in other hospitals with other medical facilities (Hoffman et al., 2009:391).

3.6.5.2 Adequate service

It refers to the level of service a customer is prepared to accept and is constituted of five factors namely transitory service intensifiers, perceived service alternatives, customer self-perceived service roles, situation factors and predicted service. Transitory service intensifiers are short-term factors which increase the customer sensitivity to service. Patients are usually prepared to wait for their turn to go to the doctor's office. However, in emergency situations they become less patient and expect to receive superior service

in a short period of time. As a result, their level of adequate service rises, and the zone of tolerance narrows (Hill et al., 2012:17).

The level of adequate service can also be influenced by customers' perception of service alternatives. Customers who think that they can receive similar services elsewhere and / or that they can supply the service themselves, have higher expectations of adequate service compared to those who think they cannot obtain similar service elsewhere (Babin & James, 2010). In a self-perceived service role, customers are often seen as part of the service delivery process. As a result, they can influence the outcome of the service. However, when their self-perceived role in service is high or when they believe their role in the service delivery process is important, their expectations of adequate levels of service rise considerably and the zone of tolerance decreases (Siu, Zhang & Yau, 2013:675-676).

In situational factors beyond the control of the service provider, such as if electricity goes out in a restaurant, customers understand that the problem is beyond the control of the restaurant owner, therefore they are likely to be more tolerant. Then, adequate service expectations decrease and the zone of tolerance will increase (Berndt & Brink, 2008:57-58). Predicted service is the level of service that customers predict to receive. It is the last aspect influencing adequate service. It refers to all service promises that organisations make to customers ranging from word-of-mouth communication to advertisements. Taking these aspects into account, customers make judgments according to predicted services and set adequate service expectations accordingly (Berndt & Brink, 2008:56).

3.6.6 The link between expectations, customer satisfaction and service quality

When assessing service experience, customers always make a comparison between three categories of expectations such as predicted service, adequate service and desired service to the perceived service provided. Customer satisfaction is evaluated by comparing predicted service and perceived service. Perceived service adequacy that complies with adequate service and perceived service, and perceived service superiority, that desired service and perceived service, are measures of service quality (Hill et al., 2012:18). Kasper et al. (2006:105) argued that expectations are a major determinant of satisfaction, and expectations may be influenced by various factors such

as cultural, race, gender, education, socioeconomic, geographical, education and age differences. Younger patients are more demanding with regard to service quality provided in hospital settings compared to older patients. Additionally, Olusoji (2009:23) viewed that patients with higher educational level, were more informed with regard to medical service quality and therefore were prone to expect better care compared to those with low educational background.

There is other evidence that expectations may differ according to knowledge and prior experience. This means that expectations are likely to change with accumulating experience (Pradhan & Roy, 2011:79). Zeithaml and Bitner (2007:60), for instance, observed that enhancing quality of medical services raises expectations. From this observation, an increased level of expectations of quality among patients may gradually be associated with a low level of satisfaction.

Other writers such as Youl Ha (2006:137) suggested customer satisfaction as being central to an organisation's profit, and that satisfaction is linked to a customer's perception of service provided and the extent to which these services match the customer's expectations.

Bick, Abratt and Möller (2010:14) noted that there is a direct relationship between customers' expectations, service quality, satisfaction and increase of purchase. Raboka (2006:128) suggested that services that match or go above customers' expectations will result in customer satisfaction, and services that go below customers' expectations will lead to customers' dissatisfaction with services provided. Furthermore, satisfied customers are more likely to remain loyal to the organisation and increase purchase. Youl Ha (2006: 137) observed that customers' choice of services provided can be a complicated mental process and may differ from one period to another. As a result, organisations should continuously measure customers' perceptions of services if they strive to remain competitive.

3.7 CONCLUSION

In this chapter the focus was on the concepts of services marketing, service quality and customer satisfaction in perspective. The definitions, generic elements and importance of services marketing, service quality and customer satisfaction have been highlighted. Additionally, a discussion on the relationship between expectations, customer

satisfaction and service quality has been included in the chapter. Recent studies suggested that organisations have shown major concerns about services marketing, quality and satisfaction. It is evident that improving marketing of services and quality in an organisation may possibly increase the levels of customer loyalty, profits and market share (Olusoji, 2009:7).

Chapter 4 will focus on the methodology used to conduct the survey. A comprehensive focus will be provided on the scope of the study, the sampling method, organisation of the survey, validity and reliability of the questionnaire, the data gathering technique, data analyses, as well as the reliability of the results.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 INTRODUCTION

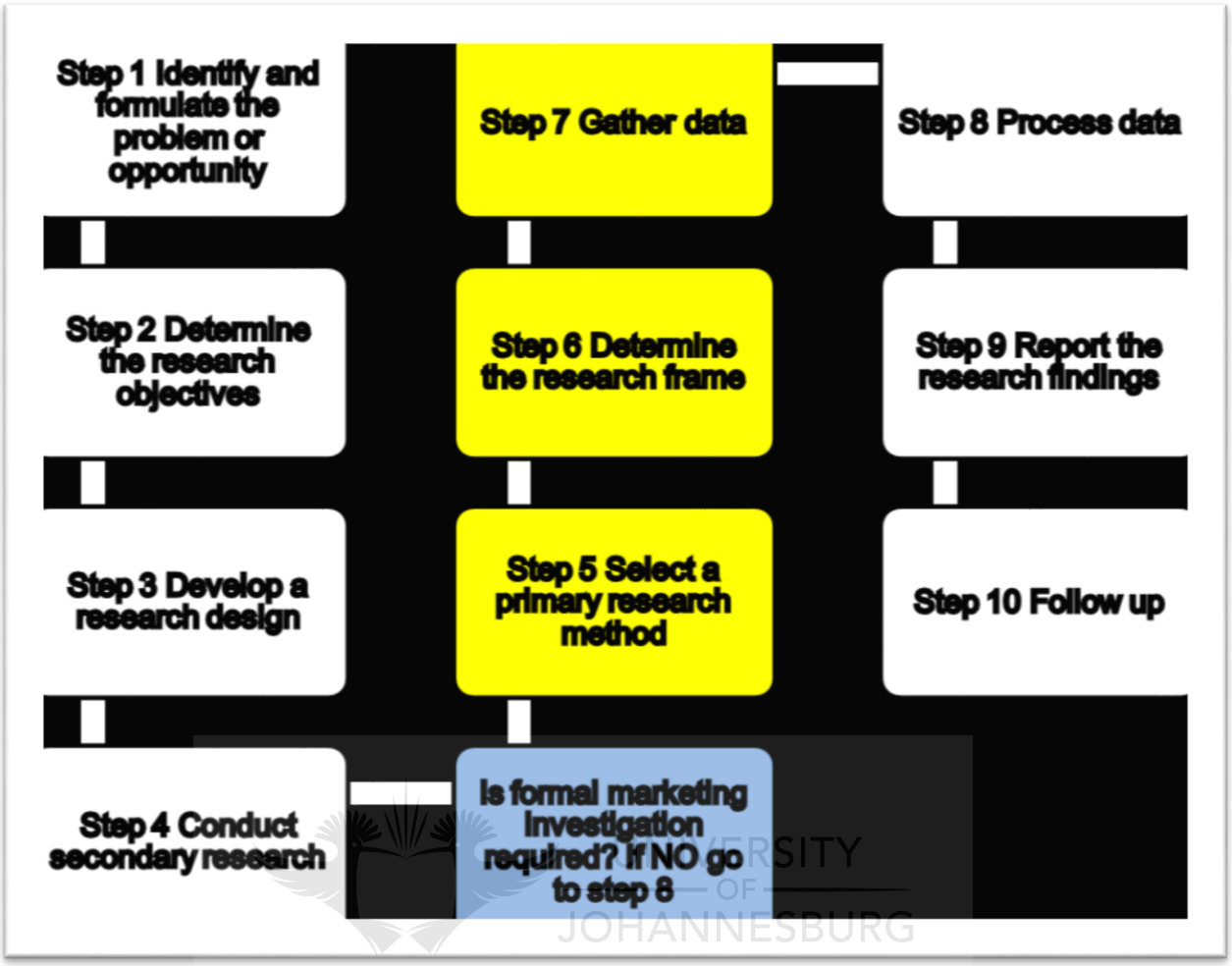
Any business hoping to attract more customers and to keep them happy must focus on service quality. Service quality can be used as a strategy to attract consumers if companies can understand their behaviour. This understanding is made possible through intensive research (Rezaei et al., 2011:483). Research problems involve proper planning to find solutions. Research involves efficient gathering, evaluation and explanation of information for decision-making. This can be done through scientifically accepted methods. Since research is perceived to be time consuming, researchers must be methodical when collecting data that they must evaluate for the research at hand. The analysis and explanation of data depend on the researcher's own experience and his understanding of the subject of interest (Naidoo, 2008:73).

This chapter offers a theoretical illustration of the research process. It emphasises on the population, the chosen sample, the questionnaire design, the method of data gathering, as well as data analysis. The framework of the research is based on the different stages in the research process as illustrated in Figure 4.1.

4.2 THE RESEARCH PROCESS

A proper recognised research process often involves the different stages as illustrated in Figure 4.1. However, it is vital to know the interdependency of each stage involved in the process. This enables better understanding of the various stages in the research process as discussed next.

Figure 4.1: Stages in the research process



Source: Cant, Gerber-Nel and Kotze (2005:39)

4.2.1 Step 1: Identify and formulate the problem or opportunity

The first stage while conducting research is to identify and formulate the problem (Malhotra, 2007:10). The problem statement of this research was conducted in Chapter One, section 1.3, and is repeated for ease of reference.

The government of Gabon has improved the health care system in the country through the provision of health care infrastructures, and by increasing the number of government hospitals in the country in order to allow more patients to have access to medical care services. However, there seems to have been a shift of patients from government health care hospitals to the newly established military hospital. The new facility has attracted a large number of patients from various parts of the country. There is no clear understanding of why patients have shifted towards the military hospital.

During a telephone interview conducted on 6 March 2012, a medical personnel at the military hospital stated that patients seem to have been dissatisfied with services provided in the government hospitals. Moreover, the link between services delivery at the military hospital in Gabon and patient satisfaction has not been yet investigated before. Hence, these two features need to be investigated as the study could offer a way to promoting effectiveness and profitability in medical institutions.

4.2.2 Step 2: Determine the research objectives

This stage involves building a theoretical framework, research questions and hypotheses, and recognising the information required for the research (Malhotra, 2007:10; Hair, Bush & Ortinau, 2006:55). The aim of this study is supported by different aspects as discussed in section 1.5 of Chapter One. Various hypotheses were formulated in section 1.5.3 of Chapter One to help determining the parameters of the research. The primary objective of this research is to establish the perceptions of patients regarding the service quality received from doctors and nurses. More particularly, how they rate doctors and nurses on the service quality dimensions. The secondary objectives aim:

- To determine how patients rate the *reliability* of doctors and nurses.
- To establish how patients rate the *responsiveness* of doctors and nurses.
- To determine how patients rate the *assurance* of doctors and nurses.
- To establish how patients rate the *empathy* of doctors and nurses.
- To establish if there is a difference in how patients rate doctors and nurses on the service quality dimensions.
- To establish the perception of patients regarding the tangible aspects of a military hospital in Gabon.

4.2.3 Step 3: Research design

A research design represents a framework of how a research study has to be conducted. However, one needs to differentiate between two types of research namely, quantitative and qualitative research. Qualitative research concentrates on words, stories, signs, visual representations, observations and interpretations of social facts. Quantitative research makes use of numbers; it aims at explaining some facts with the

use of numbers Holder (2008:5). For the purpose of this research, the researcher made use of a quantitative method.

4.2.3.1 Quantitative research

This research focused on a quantitative study. The motive for choosing a quantitative study is that it is simple to explain the results in simple conclusions. A quantitative study includes gathering primary data from large numbers of respondents with the goal to project the result to a broader population. This research type quantified data using statistical analysis (Zikmund & Babin, 2007:83).

A quantitative method was utilised for the purpose of this research to gather responses from respondents. The quantitative technique is suitable when the population is large and objectivity is extremely important (Rootman, 2006:111). Quantitative data was collected from respondents using self-administered questionnaires.

4.2.3.2 Descriptive research

A descriptive study provides a deep description of the research problem. It aims at finding answers to questions of who, what, when, where and how. Descriptive research focuses on precision, it intends to describe phenomena and requires precise observations, and its research design makes use of valid and reliable observations (Terre Blanche, Durrheim, & Painter, 2006:44-45). In a descriptive study, the researcher is required to possess some prior knowledge of the nature of the problem at hand. However, before undertaking any action towards a problem, the researcher needs conclusive evidence which provides answers to the problem. Hence the objective of descriptive research is to offer an exact image of a marketing environment (Zikmund & Babin, 2007:42-43), such as:

- Demographic information: In that case the study may help to describe certain traits of population groups in a given market.
- Behavioural information: Descriptive research may help describing behaviour patterns of certain population groups.
- Detailed information: Descriptive research offers information on certain elements by answering questions on: when, how, where, why, who.

For the purpose of this study, a descriptive research was selected because descriptive research is best used in a survey investigation. It is ideal for frequencies, average and most statistical calculations and aims at providing an exact description of people, circumstances or events (Du Plessis, 2010:118).

4.2.4 Step 4: Conduct secondary research

Secondary data was obtained from various sources such as journals, books, newspapers and Internet information.

Secondary data was used as part of section 1.7 of Chapter One, Two and Three. All this data was utilised to supplement the findings of the research.

4.2.5 Step 5: Select a primary research method

Primary data may be gathered through experimentation, observations, interviews and written communication. The type of research will eventually influence the choice of data collection. The method may comprise the use of self-administered questionnaires, personal and telephonic interviews that are mainly quantitative by nature (Du Plessis, 2010:118).

4.2.5.1 Data gathering technique

The following section below provides the motives for using self-administered questionnaires to collect primary data. A research can make use of different types of surveys such as personal and executive interviews, mail and telephone surveys. Elements to take into account when choosing a survey method are (Holder, 2008:72):

- The characteristics of the format in which data is gathered;
- The quantity and quality of data which can be gathered using a particular method;
- Control over the sample that differs according to specific categories of surveys;
- The reliability of data which can be gathered with the survey type;
- The speed of the research;
- The cost of the selected type of survey.

The characteristics of the format in which data is collected are adapted from Holder (2008:123-125) and applied to the current research. The reliability of data in the current study is assessed through pre-testing the questionnaire using five patients who have received medical services at the military hospital in Libreville, in Gabon. This was performed in order to determine the time it takes respondents to complete the whole questionnaire, and to spot and correct any problem in the structure of the questionnaire. The self-administered questionnaires are handed out directly to the respondents of the research. This makes the questionnaires easy to administer to all 200 patients and less costly to gather data from respondents compared to other types of surveys techniques.

4.2.5.2 Self-administered questionnaires

Self-administered questionnaires refer to a survey method that enables respondents to fill in a questionnaire. Survey questionnaires can be issued via e-mails, fax, newspapers, Internet or through the place where service is acquired such as a hotel, restaurant and hospital. They can also be handed in personally as part of an intercept survey. Depending on the way the survey is administered, there are a number of sampling framework issues such as who can or cannot be contacted by fax or Internet, or whether there is a sample bias. Benefits of a self-administered survey include anonymity of the respondent in the research that can lead to the acquisition of more honest answers. The questionnaire can also be completed at the convenience of the respondent. Since an interviewer is not required, errors or bias due to interviews is eradicated. The cost of accessing a geographically scattered sample is cheaper for most types of self-administered surveys than personal or telephonic surveys. In the majority of self-administered surveys, there is no influence over who is completing the questionnaire (The Self-Administered Survey, 2012).

In this study, self-administered questionnaires were handed to respondents to complete. The respondents in the study had to be 18 years or older, males and females, who have experienced medical services and stayed over at the military hospital for at least one night. Data was collected over a period of three weeks.

4.2.5.3 Covering letter

The cover letter informs respondents about the goal of the research, it should:

- Encourage respondents to be involved in the study;
- Provide the reasons why respondents have been chosen; and
- Describe the benefits of the research to respondents.

Information provided in the covering letter should influence the respondent's willingness to be involved in the study (Du Plessis, 2010:120). A covering letter was generated by the researcher. It described the goal of the research and guaranteed the confidentiality of all respondents' details and information. A cover letter was issued upon the respondent request.

4.2.5.4 Questionnaire

The questionnaire included self-administered items initially developed in English and translated into French, the main language spoken in the study location. Each translation was verified by professional English and French translators to ensure that the translations were correct. It is the major research instrument used for the investigation. A questionnaire represents an instrument that gathers primary data in survey-based research. It is composed of well-structured written questions and fixed responses alternatives directly linked to the purpose of the study (Van Vuuren, 2011:93). Unlike other forms of surveys, in self-administered questionnaires, researchers do not actually need to be present during the interview. However, they can distribute the questionnaires to respondents who are free to read and complete them at ease (Zikmund & Babin, 2007:143). The benefits of using this instrument are as follows:

- The researcher can gather all completed questionnaires within a particular point in time.
- Any question or point that is not clear to respondents can be explained on the spot.
- The researcher can have the chance to bring in the research topic and encourage respondents to provide their honest responses (Munyaradzi, 2010: 215).
- Distributing questionnaires to a large group of people at the same time appears to be less costly and time consuming than face-to-face interviews.

- However, self-administered questionnaires often require well through and clarity on the written questions in order for respondents to easily understand the questionnaires (Zikmund & Babin, 2007:143).

The survey questionnaire is divided into five major sections: Section A which consists of questions about the respondent's general demographic information, section B that consists of questions related to the respondent's perceptions of services, section C that consists of the tangible aspects of the hospital, section D that relates to the overall perceptions of services quality, and section E which consists of a list of factors that could influence the decision to choose the military hospital. The questionnaire contains 50 questions in total. Section B includes16 statements that measure the items of service quality based on the reliability, responsiveness, assurance and empathy dimension. Section B is in the format of a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) where respondents were given specific limited-alternative responses and asked to select the one closest to their views. A seven-point Likert-type scale is best used when the items in the questionnaire are related to each other, or when the options are in the form of a scale. This type of scale is suitable when a research aims at getting an overall measurement of a particular topic, opinion, or experience and also to gather particular data on contributing factors. Measuring the satisfaction level of a recent service experience is a common use. (Likert Scale, 2012).

The research questionnaire was adapted from the questionnaire used by Holder (2008:124) who previously developed and tested items related to service quality in the hospital industry for their validity and reliability.

4.2.5.5 Questionnaire design

Questionnaires are usually built to capitalise on the importance and precision of data collected, to capitalise on the involvement of all respondents in the study, and to facilitate data gathering and their evaluations. The reasons researchers often use a seven-point Likert-scale are that they lower the development of response bias among respondents, and they assess behaviours, beliefs, views and perceptions. Likert-scale responses are usually not difficult to code and to analyse straight from questionnaires (Du Plessis, 2010:121).

Section A of the questionnaire consists of eight questions related to the socio-demographic details of the respondents. This enables the researcher to assess the socio-demographic background of patients attending the military hospital in Libreville, in Gabon to know if variables such as age, education, and marital status can influence how patients rate doctors and nurses on the service quality dimensions in the military hospital in Libreville, in Gabon. These questions include the following:

1. Gender *(Sèxe)*

2. Age *(Age)*

3. Highest educational level *(Niveau d' éducation)*

4. Marital status *(Statue conjugal)*

5. Employment level *(Forme d' emploi)*

6. Residential area *(Lieu de résidence)*

7. First time patient? *(Est-ce votre première visite dans cet hôpital?)*

8. Were you required to stay over for at least one night? *(Etes-vous obligé de passer au moins une nuit dans cet hôpital?)*

Section B consists of sixteen different statements on experience of service quality based on the dimensions of service quality such as reliability, responsiveness, assurance and empathy. The objective is to compare the views of patients regarding the service delivery by doctors and nurses at the military hospital. The reliability and the empathy dimension had five statements each: the responsiveness, the assurance and tangibility had four statements each. These aspects were adapted from Holder (2008:124). They are discussed next.

(a) Reliability

Items measuring the influence of reliability on satisfaction were adapted from Holder (2008:124) who previously developed and tested items related to the influence of reliability on satisfaction in the hospital industry. Statements related to reliability include items 1 to 4.

The statements read as follows:

The medical doctors/nurses who treated me…:
(Je crois que les médecins /infirmières qui m'ont traité...)

1. Acted in a way that caused me to trust them *(ont suscité en moi une confiance en eux/elles)*
2. Acted in my best interests *(ont agi dans mes intérêts personnels)*
3. Had the ability to examine me properly *(avaient la capacité de m'examiné correctement)*
4. Were always honest with me *(ont été honnêtes envers moi)*

(b) Responsiveness

Items pertaining to the influence of responsiveness on satisfaction were adapted from Holder (2008:124) who previously developed and tested items related to the influence of responsiveness on satisfaction in the hospital industry. Statements related to responsiveness include items 1 to 4.

The statements read as follows:
The medical doctors/nurses who treated me…:
(Je crois que les médecins /infirmières qui m'ont traité...)

1. Informed me of my state of health during consultation *(m'ont informé sur mon état de santé lors de la consultation)*
2. Communicated the prescription of medications for my treatment with me in a manner that I could understand *(ont utilisé un langage qui m'a permis de comprendre les prescriptions médicales pour mon traitement)*
3. Always responded to my queries *(répondaient toujours à mes questions)*
4. Always listened to what I had to say *(faisaient toujours attention à ce que j'avais à dire)*

(c) Assurance

Items pertaining to the influence of assurance on satisfaction were adapted from Holder (2008:124), which include items 1 to 4.

The statements read as follow:
The medical doctors/nurses who treated me…:
(Je crois que les médecins /infirmières qui m'ont traité...)

1. Showed respect and dignity towards me *(m'ont traité avec beaucoup de respect)*
2. Carried out their tasks competently*(m'ont traité avec beaucoup de compétence)*
3. Respected the confidentiality of my treatment *(ont respecté la confidentialité de mon traitement)*
4. Were well trained and qualified *(avaient beaucoup d' expertise)*

(d) Empathy

Items related to the influence of empathy on satisfaction were adapted from Holder (2008:124), which include items 1 to 4.

The statements read as follow:
The medical doctors/nurses who treated me…:
(Je crois que les médecins /infirmières qui m'ont traité...)

1. Provided me with individual attention *(m'ont accordé une attention particulière)*
2. Were concerned about my well-being *(ont montré beaucoup d'intérêts pour mon bien-être)*
3. Understood my specific needs *(ont compris mes besoins personnels*
4. Cared about me *(ont pris soin de moi)*

Section C consists of five different statements on tangibility and items related to the influence of tangibility on perceptions of services which were adapted from Holder (2008:124). The objective is to establish the perception of patients regarding the tangible aspects of the military hospital in Libreville, Gabon. The statements on tangibility read as follow:

Thinking of the military hospital, I believe....
(Je crois que...)

1. The furniture in the military hospital such as beds and chairs was comfortable *(le mobilier de l'hôpital tel que les lits et chaises est confortable)*
2. The interior decoration in the military hospital was aesthetically appealing *(J'ai aimé le décor interne de l'hôpital)*
3. The military hospital had a pleasant atmosphere *(J'ai aimé la sensation atmosphérique de l'hôpital)*
4. The colour scheme at the military hospital was attractive *(les couleurs de l'hôpital étaient attirantes)*
5. The toilet facilities in the military hospital were clean *(Les toilettes étaient propres)*

Section D consists of five different statements on the overall perceptions of the services received from the military hospital. The objective was to assess how patients perceived the overall services received from the military hospital.

The statements on overall perceptions of the services received from the military hospital read as follow:

Thinking of the military hospital, I believe....
(Je crois que...)

1. The overall quality of the administration service at the military hospital was excellent *(le service administratif de l'hôpital était excellent)*
2. The overall service provided by the military hospital was of a high standard *(le service offert par l'hôpital était en général de bonne qualité)*
3. The overall service I received at the military hospital met my expectations *(les services reçus de l'hôpital se rapprochent de ce dont j'espérais recevoir)*
4. I felt good about coming to this military hospital for my treatment *(je me suis bien senti(e) dans cet hôpital)*
5. Overall, the service offering of this hospital was superior to the one offered by government hospitals *(les services offerts dans cet hôpital étaient meilleurs que ceux offerts par les hôpitaux publiques)*

Section E consists of a list of sixteen factors that could influence the decision to select the military hospital. These factors were adapted from Doghaither, Abdelrhman, Saeed and Magzoub (2003:107). The objective was to establish which factor could influence patients' decision to choose the military hospital in Libreville, Gabon.

The statements read as follows:

1. Availability of modern medical equipment *(La présence d'un équipement médical moderne)*
2. Specialised physicians *(Les médecins spécialisés)*
3. Quality of nurses *(La qualité des infirmières)*
4. Availability of medicines *(La disponibilité des médicaments)*
5. Relatives living in the hospital area *(Un membre familial vivant à proximité de l'hôpital)*
6. Hospital near residence *(La proximité de l'hôpital du lieu de résidence)*
7. Ease of getting to hospital location *(L'accès facile à l'hôpital)*
8. Care cost *(Le coût des soins hospitalier)*
9. Patient's past experience *(L'expérience passée du patient)*
10. Competent staff *(La compétence du personnel médical*
11. Know people who went to the hospital *(Connaissiez-vous des personnes ayant fréquenté cet hôpital auparavant ?)*
12. Good reputation in media *(la bonne renommée de l'hôpital)*
13. Hospital cleanliness *(l'hôpital est propre)*
14. Employees are friendly towards patient *(le personnel est amical)*
15. Hospital is well organised *(l'hôpital est bien organisé)*
16. Other? (autres?)

4.2.5.6 Pretesting of the questionnaire

Pretesting a questionnaire is vital to ensure its validity and reliability. It refers to testing the questionnaire using a small number of respondents to spot and eliminate any possible error in the survey design (Malhotra, Hall, Shaw & Oppenheim, 2008:233). Parasuraman, Grewal and Krishnan (2007:303) stated that pretesting is crucial in a way prospective respondents may help identifying any problem in the questionnaire. All

sections of the questionnaire such as question content, sequence, wording, form layout and question complexity should actually be pretested. Additionally, respondents of the small sample must have the same traits as those included in the current study (Aaker et al., 2007:247). The purpose of pretesting is to make sure that questions are clear and easy to understand. Furthermore, pretesting also intends to ensure that questions are extracting the answers required and that any misinterpreted questions are eliminated before the questionnaire is distributed to a larger extent (Munyaradzi, 2010: 222).

The questionnaire was pretested using five patients who had received medical services at the military hospital in Libreville, Gabon. Pretesting a questionnaire refers to using it on a trial basis. Pretesting is important, since it enables knowing that the developed questionnaire is adequate and will fulfil the purpose of the research at hand. Moreover, the gathered data will be appropriate and as correct as possible, the target respondents in the study will participate as fully as possible, and evaluation of data will run smoothly. In this study, the relevance of pretesting was to pinpoint flaws in the questionnaire, and to assess the time needed for a respondent to fill in the entire questionnaire. Pretesting the questionnaire was also used to examine its face and content validity, and to detect and correct problem areas. During the pilot study, issues such as the difficulty of respondents to understand the sentence structures and the difficulty to understand questions were identified. These issues were addressed by obtaining suggestions from respondents for revising questions and the structure of sentences. Once the questionnaire had been pretested, it was then refined for the data to be gathered (Roberts-Lombard, 2006:41).

4.2.5.7 Reliability and validity of the questionnaire

Reliability and validity are important elements to evaluate the trustworthiness of any study. Reliability refers to the extent to which a scale provides the same outcomes if repeated. To determine the reliability of the measurement scale in this study, the internal consistency reliability test was used. It is regarded as an instrument utilised to test the reliability of a measurement scale or homogeneity among the variables being measured (Malhotra, 2009:315; Churchill & Brown, 2007:269; Saunders, Lewis & Thornhill (2007:367). The simplest measure of internal consistency is split-half reliability. The variables on the scale are divided into two halves and the resulting half scores are compared. High similarities between the halves show high internal consistency

(Parasuraman et al., 2007:270). Additionally, internal consistency is also used to evaluate the reliability of a summated Likert-scale where several variables are summated to form a total score. To assess the reliability of the homogeneity of the measurement scale, the Cronbach's alpha was used for this research.

Cronbach's alpha is perceived as the average value of the reliability coefficients one would have for all possible grouping of items when split into two half-tests. The alpha value is the average of all possible split-half coefficients that result from different splitting of the items in the scale. The desired cut-off score for a measurement scale to be reliable is 0.6. Other scores suggest unsatisfactory internal consistency reliability (Munyaradzi, 2010: 215).

Table 4.1 illustrates the Cronbach alpha values for the different variables in the study at hand.

Table 4.1: Reliability statistics (Doctors and Nurses)

CONSTRUCTS	Cronbach's Alpha	
	DOCTORS	NURSES
Reliability	0.809	0.767
Responsiveness	0.735	0.717
Assurance	0.650	0.780
Empathy	0.734	0.666
Cronbach's Alpha		
Tangibility	0.600	

Table 4.1 illustrates that Cronbach's alpha for all five constructs is above the lower limit of acceptability, 0.60. This confirms the reliability of the measurement set for this study. The validity of a scale is the extent to which it is a true representation of the underlying variable it is trying to evaluate. Validity is measured using content validity and construct validity (Parasuraman et al., 2007:269). For the purpose of this study, content validity was used to assess the accuracy of the measurement scale.

Content validity can be evaluated by subjective agreement between experts, that a scale logically seems to accurately measure what it is intended to measure. Another way to ensure content validity is to use a panel of people to assess how well an instrument meets the purpose of the study (Malhotra et al., 2008). In the current study,

content validity was determined by people including statisticians and academics with the expertise for the research at hand. The questionnaire was evaluated and the necessary modifications were noted both in terms of the measurement items and the measurement instrument as a whole. Content validity was evaluated by determining the variables defined and used in previous literature.

4.2.6 Step 6: Determine the research frame

4.2.6.1 The survey area

The research is conducted at the military hospital situated in Libreville in Gabon.

4.2.6.2 The study unit

The study is carried out at the military hospital located in Libreville, Gabon. The research is selected in this city because Libreville is perceived as the capital, the largest and the most populated city of Gabon.

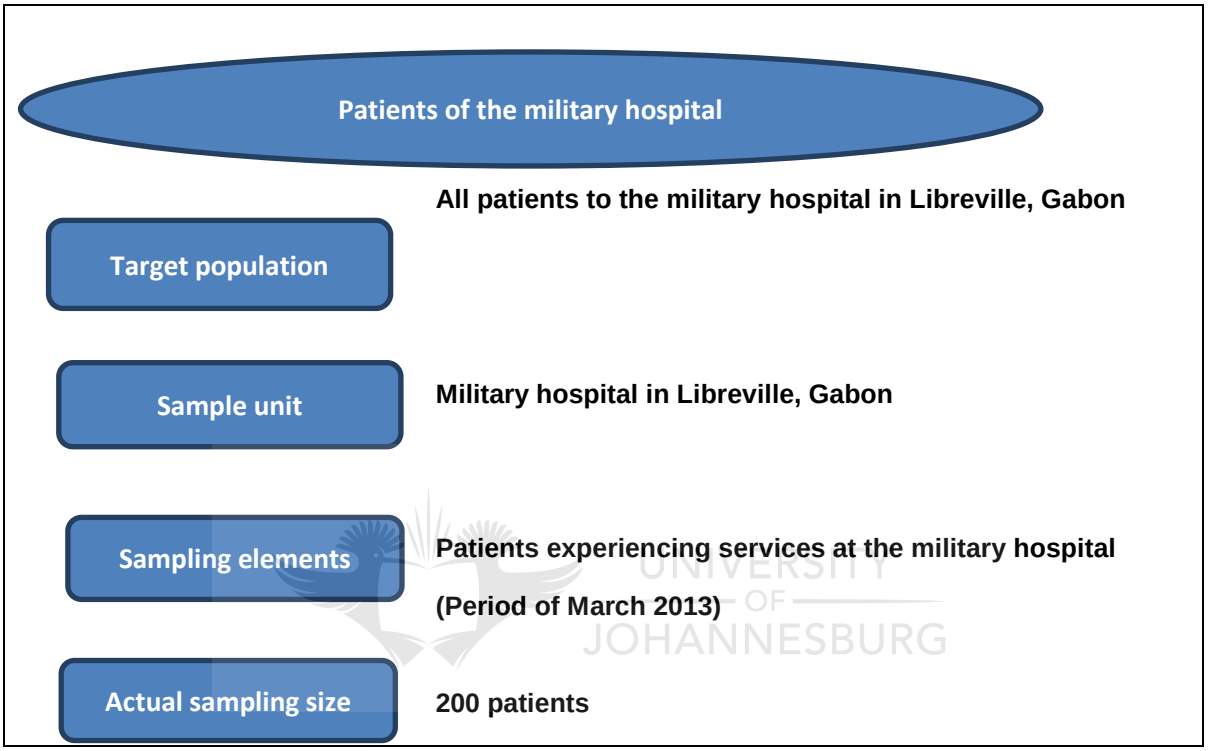
4.2.6.3 Population

The population refers to the broader group from which sampling elements are taken and to which results can be summarised. The population includes all the people which characterize the unit of evaluation. A target population should be defined in very particular terms. This will make the selection of respondents from the population for sampling, simpler (Terre Blanche et al., 2006:133).

Self-administered questionnaires were distributed to all existing patients of the military hospital in Libreville, Gabon, 18 years or older, males and females, who had experienced medical services and stayed over at the military hospital for at least one night. Questionnaires were only given to them once they have been discharged from hospital.

However, individuals who did not experience medical services at the military hospital were excluded from the study. Figure 4.2 provides a sum up of the target population, sample units, sample elements and actual sample size of the study.

Figure 4.2: Target population, sample units, sample elements and actual sample size



Source: Researcher's own construct

The sampling technique used to choose a representative sample for the study was crucial for the research and will be described next.

4.2.6.4 Sampling method

The sampling procedure includes any process using a small number of constituents from the entire population to draw conclusions related to the whole population. A sample is an extract of the broader population. The aim of sampling is to allow researchers to assess some unknown population's traits. There are two major sampling techniques namely probability and non-probability sampling. Non-probability sampling is based upon the researcher's own judgement to choose the sample where he or she chooses what elements to incorporate. Probability sampling takes place when sampling constituents are chosen by chance. All units may not necessarily have the same chance

of being chosen, but the probability of choosing each unit can be specified. Non-probability sampling involves convenience sampling, judgement sampling, quota sampling and snowball sampling. Probability sampling techniques encompass simple random, systematic, stratified and cluster sampling (Rahman & Miazee, 2010:27-28).

In this research, the probability sampling technique was used to choose respondents in the study, since it constitutes the root for all survey research (Parasuraman et al., 2007:340).

4.2.6.5 Probability sampling method

This sampling technique was used in this research. Probability sampling is usually appropriate in survey-based research where one is required to make interferences from the sample about a population to resolve research questions. Probability sampling can be divided into four phases:

- Recognise an appropriate sampling framework based on research objectives;
- Select a proper size of sampling;
- Choose the most suitable sampling method, choose the sample; and
- Verify that the sample is a good representation of the population (Holder, 2008:73).

The probability sampling technique was selected for this research since in this technique, each unit of the population, namely all patients 18 years or older, males and females, experiencing services at the military hospital in Libreville, Gabon had a known, non-zero chance of being incorporated in the sample. Sampling was not conducted at the discretion of the researcher.

4.2.6.6 Sample technique

In this technique, the probability of each unit being chosen from the population is known and is often equivalent to all cases. This indicates that there is a possibility to resolve the research questions by statistically estimating the population traits from the sample (Parasuraman et al., 2007:340).

There are five major methods which can be utilised throughout probability sampling. These are (Zikmund & Babin, 2007:273):

- Simple random sampling: In this sampling method, every unit in the population has a known and same chance of being chosen in the sample. Each unit is chosen independently. Simple random sampling will comprise of putting all the units of the population in a container, and extracting the sample from this.
- Systematic sampling: In this technique, the units of the population are counted from one to the number of units that constitute the sample, Prior to completing systematic sampling, the population size should be divided by the volume of the sample to establish an interval i. The response is rounded off to the closest integer. If the population is 100 000 units and a sample of 1 000 is chosen, then one will divide 100 000 per 1 000 which is 100, to find the interval.
- Stratified sampling: It refers to a two-stage procedure where the population is primarily divided into strata or subgroups. A population stratum is a fragment inside that population which has one or more similar features. These strata must be communally exclusive and jointly complementary. This implies that every unit must be incorporated into only one subgroup. In the next stage, units are chosen from every strata or subgroup through simple random sampling.
- Cluster sampling: With this technique, the population is divided into communally exclusive and jointly complementary clusters, after which some clusters are chosen in the sample. Cluster sampling is opposed to stratified sampling since a variety of clusters must be as similar as possible. The units of all the clusters will thus have the same traits. The supposition is thus made that any of the chosen clusters in the sample will correspond to the clusters which are not chosen in the sample.
- Two and multistage sampling: This method is often utilised to solve issues related to a geographically dispersed population when face-to-face contact is required, but will be too costly. Through that method, a sample is primarily extracted from the population, such as in the metropolitan regions in Gabon. From it, a second sample will be made, as in particular residential zone in a metropolitan region and finally, another sample will be made from that to concentrate only on a particular street in the residential zone.

Both, stratified sampling and simple random sampling were conducted in this research. The motive for choosing that sampling method was that the sampling framework of the research was divided into strata, and the sampling procedure was conducted

independently of each stratum. Stratified samples are perceived to be very efficient, and they enable investigating the interests of particular subgroups inside the population. Stratified random sampling provides better representativeness of the whole population, and also leads to fewer sampling errors, providing more accuracy in estimation (Du Plessis, 2010:140). In stratified sampling, strata should be mutually exclusive and jointly exhaustive in that each population element should be assigned to one and only stratum and no element should be excluded (Malhotra, 2007:327). The Department of Internal Medicine of the military hospital in Libreville in Gabon is divided into four main units, each unit represented an independent stratum.

As there is only one reception in each unit, no further random selection was required. As all the clinical units were not equal in size and did not serve an equal number of patients, a proportionate number of patients who received medical services for at least one night were selected at each unit (stratum). Self-administered questionnaires were distributed to identify patients at each unit. Permission to conduct the study was obtained from the nurse manager of the Department of Internal Medicine of the military hospital in Libreville in Gabon. The patients interviewed at each clinical unit were randomly selected. The study made use of a simple random technique where each population element had not only a known, but an equal chance of being selected (Munyaradzi, 2010:209). If a patient did not want to be involved in the research, the next willing patient was selected, and thereafter, the second patient after each willing one.

4.2.6.7 Sample size

The volume of the sample implies the statistical accuracy of the findings. The size of the sample is a result of alteration in the population parameters and the assumption of quality which is needed by the researcher. In general, bigger samples reduce the likely error in generalising the population. In other words, larger samples are more representative of the population and result in more accurate findings. The volume of the sample can also be decided on the basis of personal judgement and statistical evaluations (Terre Blanche et al., 2006:236).

In the Gabonese health care industry, though some hospitals keep records of their patients, this is expected to be a problem for some medical institutions. The core reason is the durability of the service product sought by patients from hospitals from time to

time. It is difficult to tell when a patient will re-visit and purchase the service at the hospital. Against this background, the following formula will be used to estimate the response rate and the actual sample size needed (Saunders et al., 2007:214):

$$na = (n \times 100) / re\ \%$$

With:
***n*a**= is the current sample size needed

n = is the minimum (or adjusted minimum) sample size

re % = is the estimated response rate expressed as a percentage

This calculation is based on three major aspects namely the level of confidence of the accuracy of the estimate, the margin of error which can be accepted, and the proportion of answers that the researcher expects to have some particular attribute.

Assuming that the researcher knows the level of confidence and the margin of error, it will be easier to have an estimation of the proportion of answers that the researcher expects to receive some particular attribute (Saunders et al., 2007). In general, researchers use a 95% level of confidence, which means that if one selects a sample 100 times, at least 95 of these samples will reflect the true characteristics of the population. The margin of error relates to the precision of the researcher's estimates of the population. The standard deviation, also known as error margin usually used in business and management researches is 5% (Munyaradzi, 2010:211). This means that if 40% of the researcher's sample lies in a certain category, then the estimate for the total population within this same category will be 40% plus or minus 5%. For the purpose of the current study, a 5% margin of error and a 95% confidence level will be used.

Table 4.2 shows the minimum sample sizes for different sizes of the population at a 95% confidence level to provide a good decision model (Saunders et al., 2007:212).

Table 4.2: Minimum sample size estimates

Population	Five per cent (margin of error)
100	44
200	132
300	168
400	196
500	217

Source: Adapted from Munyaradzi (2010:212)

Thus, according to this study, a minimum population frame of 100 patients for the military hospital in Libreville, in Gabon was estimated. This entails that referring to the Table 4.2, the minimum sample which can be expected is 44 respondents.

According to Saunders et al. (2007:215), a 50% response rate was suitable for surveys done through questionnaires. Thus, since the current study uses a questionnaire instrument to gather data, the researcher estimated a 50% response rate.

According to the formula provided above, the expected sample size for this research will be:

$$\boldsymbol{na = (n \times 100) / re\ \%}$$

$$\boldsymbol{na = 100 \times 100 / 50}$$

$$\boldsymbol{na = 200}$$

This entails that the sample size for this study was 200 respondents.

4.2.7 Step 7: Data gathering

Data gathering is the method utilised to gather both primary and secondary data. Primary data was collected and assessed for the study at hand (Munyaradzi, 2010: 214). The measuring element for this research was made through the use of primary data gathered via self-administered survey questionnaires. This implied that self-administered survey questionnaires were distributed to all existing patients of the military hospital in Libreville, Gabon, 18 years or older, males and females, who had experienced services and stayed over at the military hospital for at least one night.

Secondary data refers to data that has been gathered and utilised for previous research (Holder, 2008:72). In this study, the researcher made use of research articles, books, scholar publications, interviews and Internet sources.

4.2.8 Step 8: Data analysis

Quantitative data represents numerical data which can aid in providing responses to research questions. This data can vary from simple calculations such as frequency to more difficult data. To be helpful, the data should be evaluated and interpreted.

Quantitative analysis methods can help in this procedure. These vary from building simple diagrams which describe the frequency of occurrence through creating statistical relationships among variables, to more difficult statistical modelling. It is important to make sure that the data analysis technique matches the research paradigm and design. Analysing data starts once data has been gathered. Through the analysis step, various interrelated processes are undertaken to review and re-organise data. The stages of data analysis involve editing, coding, processing and statistical analysis of the data (Terre Blanche et al., 2006:86). To achieve the objective of this study and to test the hypotheses, SPSS 17.0 for Windows was used to evaluate data. These different constituents of data analysis are reviewed in the following sections.

4.2.8.1 Editing of data

Editing is undertaken to ensure that data is prepared for coding and moved to data storage. It is a procedure for verifying and correcting the data for omissions, consistency and reliability. Through editing, questionnaires and the raw data are verified for errors made by either the researcher or the respondent. The main purpose of editing is to make sure that the data is correct, consistent with the objective of the questions, uniformly entered, completed and organised to make coding and tabulation easier (Du Plessis, 2010:143).

4.2.8.2 Coding of data

Coding is the procedure for giving a code or a number to every possible answer to a specific question. The aim of coding is to convert the respondents' responses to survey questions into codes which can be examined and put into a statistical analysis software package. Precoding can be utilised if the researcher is aware of what the answer categories will be before gathering data. In this way, once the questionnaire has been built and the organised answers have been determined, coding develops into a routine procedure (Du Plessis, 2010:143).

4.2.8.3 Processing and statistical analysis of data

Various techniques can be used to analyse and interpret quantitative data. Quantitative data relates to numeric data that the researcher can use to address the research question. However, a proper selection of the quantitative technique is a prerequisite to ensure that data analyses techniques correctly address the research question (Du Plessis, 2010:141). Once data has been gathered, and is ready to be analysed, the researcher has to perform some basic statistical analyses in order to prepare data such as data editing, coding and the statistically adjustment of data (Aaker, 2006:432-434).

- Data editing: The purpose of editing data is to spot any errors that appeared in the answers. Such errors may have been caused by the researcher's own error, lack of clarity, contradictions and ineligible respondents. The researcher may usually return to the study field, address the missing values or remove unsatisfactory respondents as a way to address these errors.

- Coding: When all the answers are entered into a computer file, statistical software will be used to analyse information. However, before this process occurs, the data has to be verified in terms of any errors which may have occurred during the process of entering the data. Once the data is verified, statistical adjustments to the data can be performed.

- Statistical adjustments: Various adjustments to the data are performed to make them ready for data analysis. Such improvement may be perceived as weighting, dummy variables, scale transformation and re-specification (Van Vuuren, 2011:110-111).

The following exact statistical procedures were selected for their suitability to test the research hypotheses of the study. These procedures include descriptive statistics such as frequency Tables and measurement of the mean, as well as measures of dispersion including the standard deviation. Finally, the paired sample t-test was used to accept or reject the stated hypotheses. The Statistical Consultation Service of the University of Johannesburg (STATKON) conducted the analyses. All calculations were done by means of SPSS.

4.3 RALIABILITY OF THE RESULTS

Surveys provide fast, cheap and efficient ways of collecting information about the population. However, when making use of surveys, the researcher should reduce the frequent errors found in surveys via defining the population properly, making sure that the sample corresponds to the population, and choosing respondents who are available and able to collaborate in the study. The respondents should also understand the questions and the researcher should properly understand and fill in the respondents' responses (Du Plessis, 2010:144). The manner in which the researcher dealt with frequent errors is reviewed next:

4.3.1 Sampling errors

A sample error arises every time the results of the sample diverge from the values of the population. The phenomenon arises at the time the investigator shows no concern when the sample is drawn (Du Plessis, 2010:144). In this research, a sample of 200 respondents chosen from all patients 18 years or older, males and females who had experienced services and stayed over at the military hospital in Libreville, Gabon for at least one night, was used to reduce sampling error.

4.3.2 Response errors

This type of errors arises at the time respondents lie or do not lie intentionally. These errors also happen when the researcher influences the answers from respondents by highlighting some fact, or when the researcher makes errors by ticking the incorrect response (Terre Blanche et al., 2006:152-153). Response errors were reduced by building Likert-type statements on the questionnaire from related theory and pre-testing the questionnaire to respondents in the population.

4.3.3 Non-response errors

Non-response errors arise at the time the results of the respondents in the research differ from what the outcomes would have been if all the respondents initially chosen, had contributed in the research. Respondents may not be willing to take part in the research for lack of time or for lack of interest (Du Plessis, 2010:144).

The chosen sample for this research was ideal to ensure representativeness, and the use of self-administered questionnaires increased the answer rate as respondents were more willing to take part in the study. Respondents who refused to cooperate were simply replaced by contacting other adult patients having experienced medical services at the military hospital in Libreville, Gabon for at least one night to ensure that a total of 200 respondents were interviewed.

4.4 CONCLUSION

Research methodology was the concern of this chapter. The chapter dealt with the scope of the survey, the sampling technique, and the way the survey was organised. The chapter focused on the method of collecting data, the reasons for choosing the self-administered questionnaire and the value of a covering letter. Editing, coding, data analysis, the statistical evaluation of data and the reliability of the results were also addressed in this chapter. The chapter highlighted the errors that could influence the validity of the results and the methods that were employed to reduce them. The next chapter will analyse the research findings and will focus on the answers of the respondents to the statements in the questionnaire.

CHAPTER FIVE: DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

Chapter four dealt with the research process and the approach which was developed for the empirical study. The population, data gathering, sampling and the questionnaire design were also discussed.

This chapter focuses on analysing and interpreting the results gathered from the empirical findings. The raw data gathered from the survey questionnaire must go through preliminary assessment before it can be analysed. The quality of the results deduced from the statistical techniques and their subsequent interpretation relies merely on how well the data is prepared and transformed into a form suitable for analysis (Kumar, Petersen, & Leone, 2007: 437). Data analysis refers to analysing the gathered data and translating it into results. When data analysis and interpretation are not well conducted, the research fails to attain what it is intended to measure (Du Plessis, 2010:146).

Descriptive statistics encompassing Tables and more advanced statistics were utilised to analyse the data which successfully portrays the relations and trends which were apparent in the study. STATKON helped with the coding and processing of data which was gathered through the use of questionnaires.

5.2 MEASUREMENT OF OBJECTIVES AND HYPOTHESES

The primary objective of the study as identified in section 1.5.1 of Chapter 1 is to establish how patients rate doctors and nurses on the service quality dimensions. Olusoji (2009:7) noted that investigating service delivery by doctors and nurses and customer satisfaction is vital, as these variables can influence the loyalty which patients have towards a hospital. He also argued that a strong correlation exists between services provided by doctors and nurses, patient loyalty and profitability for hospitals. It is perceived from this declaration that a good understanding of the services provided by doctors and nurses that influence patient loyalty, is required to enhance services and profitability at the military hospital in Libreville in Gabon. To give effect to the study at

hand, the following secondary objectives were deduced (refer to section 1.5.2 in Chapter 1):

- To determine how patients rate the *reliability* of doctors and nurses.
- To establish how patients rate the *responsiveness* of doctors and nurses.
- To determine how patients rate the *assurance* of doctors and nurses.
- To establish how patients rate the *empathy* of doctors and nurses.
- To establish if there is a difference in how patients rate doctors and nurses on the service quality dimensions.
- To establish the perception of patients regarding the tangible aspects of a military hospital in Gabon.

The following hypotheses as seen in Chapter 1 section 1.5.3 were compiled to assist in meeting the secondary objectives of the study. These hypotheses will be tested for both expected and experience of services provided by doctors and nurses:

H01: There is no significant difference in how patients rate the reliability of doctors and nurses.

H02: There is no significant difference in how patients rate the responsiveness of doctors and nurses.

H03: There is no significant difference in how patients rate the assurance of doctors and nurses.

H04: There is no significant difference in how patients rate the empathy of doctors and nurses.

H05: Patients do not have a positive perception of the tangible aspects of a military hospital in Gabon.

5.3 RESEARCH INSTRUMENT AND RESPONSE STATISTICS

The study was conducted at the military hospital in Libreville in Gabon in March 2013 for a period of three weeks. Table 5.1 illustrates a summary of the number of respondents approached, as well as the response rate which was obtained.

Table 5.1: Respondents' approaches and response rate

Total number of respondents approached to fill in the self-administered questionnaire	200
Respondent refusal	0
Response rate	100%
Usable questionnaires	200
Usable response rate	100%

A number of 200 respondents were included in the study. This was done via using the sampling frame criteria that depicted that only patients who were at least 18 years of age, males and females, who had experienced medical services and stayed over at the military hospital for at least one night, qualified to participate in the study. As indicated Table 5.1, the 200 people who were asked to participate in the study matched the sampling frame. This gave a response rate of 100%. A total of 200 self-administered questionnaires were received from the four units of the Department of Internal Medicine of the military hospital which include; 50 questionnaires received from the unit that treats malaria and yellow fever, 50 questionnaires received from the heart diseases unit, 50 questionnaires received from the unit that monitors patients' health, and 50 questionnaires received from the VIP unit.

5.4 DISCUSSION OF THE RESEARCH FINDINGS

The core of this section is to analyse and interpret the data that was gathered from respondents who visited the military hospital in Libreville in Gabon for three weeks during the period of March 2013, and met the criteria of being part of the study. Results are presented form section A to E where each section will be presented and discussed. As a result, the discussion of the findings will be based upon meeting the primary and secondary research objectives of this current study.

5.4.1 Section A - Demographics

The purpose of this section is to provide the demographic profile of the respondents in the study (refer to section A of the questionnaire). Gender, age, education level, marital status, employment level, residential area, the patient's first visit to the hospital and the

question based on knowing if the patient had been required to stay at the military hospital in Libreville in Gabon, will be discussed under the demographic section.

Table 5.2 illustrates the frequencies of the demographic information that was assessed in the study.

Table 5.2: Frequency of selected demographic variables of the sample

	Gender	
Variable	Frequency	Percentage
Male	147	74
Female	53	26
Total	200	100
	Age	
Variable	Frequency	Percentage
18 - 28	34	17
29 - 38	26	13
39 - 49	76	38
50 - 60	40	20
70 and above	24	12
Total	200	100
	Highest education level	
Variable	Frequency	Percentage
No formal education	24	12
Primary education	6	3
Secondary education	59	30
Tertiary education	109	55
Total	198	99
Missing system	2	1
Total	200	100
	Marital status	
Variable	Frequency	Percentage
Single	30	15
Married	127	64
Divorced	19	10
Widowed	20	10
Cohabitant	1	1
Total	197	99
Missing system	3	1
Total	200	100
	Employment level	
Variable	Frequency	Percentage

Employed full-time	125	63
Employed part-time	14	7
Self-employed in formal sector	21	11
Self-employed informal sector	14	7
Unemployed	2	1
Student	5	3
Pensioner (old age)	19	10
Total	200	100
	Residential area	
Variable	Frequency	Percentage
In Libreville	129	64
Outside of Libreville	71	36
Total	200	100

From Table 5.2, the results indicated that 147 (74%) of the respondents were males and 53 (26%) were females. The higher presence of males in the hospital may be due to the fact since it is a military hospital, males may have felt more attracted to this hospital compared to females. Over one third (38%) of the patients were aged between 39 and 49 years old. This large frequency of patients aged between 39 and 49 years old may be explained by the fact that there are probably more people in this age category living around the military hospital area than any other age group. With regard to the level of education, the majority of respondents (55%) indicated that they have a tertiary education. This high frequency of tertiary educated people attending the hospital may be due to the fact that more educated people may have more knowledge and concerns about their health issues. As a result, this may have caused them to increasingly visit the hospitals compared to the less educated patients. With regard to employment level, more than half (63%) of the patients indicated that they were employed full-time, this could be due to the fact that the hospital is located in the capital city which has the highest concentration of economic activities. As a result, most patients attending the hospital and living in the capital would be likely to be employed. Among the respondents in the study, almost two-thirds (64%) who visited the hospital, indicated living in Libreville. This could be explained by the proximity of the hospital to their place of residence.

Main finding 1 (MF1) - There were more male respondents in the study than females.

Main finding 2 (MF2) – Over one third (38 %) of the respondents were aged between 39 and 50 years.

Main finding 3 (MF3) – A larger number of respondents in the study (54.5%) have a tertiary education.

Main finding 4 (MF4) –The majority of respondents (63%) were employed full-time

Main finding 5 (MF5) – The majority of the respondents in the study (64%) lived in Libreville.

Table 5.3 Frequency of the number of visits to the hospital and duration of the visit

Frequency of visits	Frequency	Percentage
First visit	162	81.9
Previous visit(s)	37	18.6
Total	199	100
Duration of stay	**Frequency**	**Percentage**
Stayed over for at least one night	200	100

From Table 5.3, the results indicated that 81, 9% of patients attending the military hospital claimed that it was their first visit to this hospital. Furthermore, all patients attending the hospital were required to stay over for at least one night, since the study included only patients visiting the military hospital and who stayed over for at least one night.

Main finding 6 (MF6) – 81 % of the respondents claimed that it was their first time to visit the military hospital in Libreville, Gabon.

Main finding 7 (MF7) – 100 % of the respondents claimed that they were required to stay at the military hospital in Libreville in Gabon for at least one night.

5.4.2 Section B: Perception of services provided by doctors and nurses

This section (referring to section B in the questionnaire) aims at providing the patients' perception of the services provided by doctors and nurses respectively at the military hospital in Libreville, Gabon. Their perception of services provided by doctors and nurses was based on four dimensions of service quality, namely reliability, responsiveness, assurance and empathy. The purpose of the analysis in this section is to assist in addressing research objectives 1-4. **Tables only reflect response options where actual responses were recorded.**

5.4.2.1 Patient perception of services provided by doctors and nurses

The following discussion below is based on the statements in section B of the questionnaire, which aim to provide more clarity on the opinion of patients regarding the service delivery of doctors and nurses based on the dimensions reliability, responsiveness, assurance and empathy.

- **Reliability (Doctors and Nurses)**

The purpose of this discussion is to address secondary objective 1:

"To determine how patients rate the reliability of doctors and nurses."

- **Doctors' reliability**

Table 5.4 indicates the patients' perception of services provided by doctors with regard to the doctors' reliability.

Table 5.4: Patients' perception of doctors' reliability

Doctors	Disagree	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Had the ability to examine me properly		1	0.5	16.5	52.5	29.5	100	6.09	0.751
Were always honest with me	0.5		1	24.5	50	24	100	5.96	0.778
Acted in my best interests		0.5	1.5	22.5	60	15.5	100	5.89	0.689
Acted in a way that caused me to trust them	0.5	1.	0.5	33.5	53	11.5	100	5.72	0.751

Table 5.4 illustrates that the majority of respondents, in terms of answering statements B1 – B4, agreed that they were satisfied with their interactions with doctors with regard to the doctors' reliability. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patient's experience of the services provided by doctors. The mean is defined as the sum of a set of values divided by their numbers. It is an approximate measure of central location for metric data (interval and ratio data) only. The process is summarised in the following formula (Tustin, Ligthelm, Martins & Van Wyk, 2005: 638):

$$\overline{x} = \frac{\Sigma x}{n}$$

MF8: The mean response for statements B3 (6.09) (Had the ability to examine me properly) and B4 (5.96) (Were always honest with me) has the highest means which indicates that patients were most satisfied with the doctors' ability to examine them properly and to be honest with them in terms of their medical assessment.

MF9: The mean response for statements B2 (5.89) (Acted in my best interest) and B1 (5.72) (Acted in a way that caused me to trust them) rated the lowest mean. Despite the two statements having the lowest means, patients were still of the opinion that doctors did act in their best interests and in a manner that caused them to trust them. However, patients indicated that there was room for

improvement in these two aspects of the reliability of doctors. Such room for improvement could be through improved compassion and understanding during the diagnoses of the problem.

- **Nurses' reliability**

Table 5.5 indicates the patients' perception of services provided by nurses with regard to the nurses' reliability.

Table 5.5: Patients' perception of nurses' reliability

Nurses	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Were always honest with me	12	64.5	23.5	100	6.12	0.586
Had the ability to examine me properly	19	66.5	14.5	100	5.96	0.578
Acted in my best interests	19	69.5	11.5	100	5.93	0.549
Acted in a way that caused me to trust them	22	71	7	100	5.85	0.519

Table 5.5 indicates that the majority of respondents, in terms of answering statements B1 – B4, agreed that they were satisfied with their interactions with nurses in terms of the reliability of nurses. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by nurses.

MF10: The mean response for statements B4 (6.12) (Were always honest with me), B3 (5.96) (Had the ability to examine me properly) has the highest means which indicates that patients were most satisfied with these aspects of the reliability of nurses. Patients indicated that nurses were honest with them and they had the ability to examine them properly.

MF11: The mean response for statement B2 (5.93) (Acted in my best interests) and B1 (5.85) (Acted in a way that caused me to trust them) rated the lowest mean. Despite the two statements having the lowest means, patients were still of the opinion that nurses did act in a manner that caused patients to trust them and delivered a service in their best interests. However, it was their view that such a service could have been improved.

➢ Responsiveness (Doctors and Nurses)

The purpose of this discussion is to address secondary objective 2:

"To determine how patients rate the responsiveness of doctors and nurses."

- **Doctors' responsiveness**

Table 5.6 indicates the patients' perception of services provided by doctors with regard to the doctors' responsiveness.

Table 5.6: Patients' perception of doctors' responsiveness

Doctors	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Communicated the prescription of medications for my treatment with me in a manner that I could understand	0.5	23	38	38	100	6.14	0.783
Always responded to my queries		18	56	26	100	6.08	0.660
Informed me of my state of health during consultation	0.5	24	59	16	100	5.91	0.643
Always listened to what I had to say	1	30	53	16	100	5.84	0.690

Table 5.6 indicates that the majority of respondents, in terms of answering statements B5 – B8, agreed that they were satisfied with their interactions with doctors regarding the responsiveness of the latter towards patients. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by doctors.

MF12: The mean response for statements B6 (6.14) (Communicated the prescription of medications for my treatment with me in a manner that I could understand) and B7 (6.08) (Always responded to my queries) has the highest means which indicates that patients were most satisfied with these aspects of the responsiveness of doctors. The doctors communicated the prescription of medications for their treatment in a manner they could understand. In addition, respondents indicated that doctors always responded to their queries and informed them of their state of health during consultation.

MF13: The mean response for statements B5 (5.89) (Informed me of my state of health during consultation and) and B8 (5.72) (Always listened to what I had to say) rated the lowest mean. Despite the two statements having the lower means, patients were still of the opinion that doctors do listen to their opinions. However, patients indicated that there was room for improvement in these two aspects of the responsiveness of doctors. Such room for improvement could be through improved communication during the diagnoses of the problem. The feeling was that doctors had to develop more patience and understanding with patients whilst diagnosing the patient.

- **Nurses' responsiveness**

Table 5.7 indicates the patients' perception of services provided by nurses with regards to the nurses' responsiveness.

Table 5.7: Patients' perception of nurses' responsiveness

Nurses	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Always listened to what I had to say		15.5	60	24.5	100	6.09	0.628
Communicated the prescription of medications for my treatment with me in a manner that I could understand		13	64.5	22.5	100	6.1	0.590
Always responded to my queries		16	68.5	15.5	100	6	0.563
Informed me of my state of health during consultation	1	16.5	70.5	12	100	5.94	0.568

Table 5.7 indicates that the majority of respondents, in terms of answering statements B5 – B8, agreed that they were satisfied with their interactions with nurses in terms of their responsiveness. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by nurses.

MF14: The mean response for statements B8 (6.09) (Always listened to what I had to say), B6 (6.1) (Communicated the prescription of medications for my treatment with me in a manner that I could understand) has the highest means which

indicates that patients were most satisfied with these aspects regarding the responsiveness of nurses. Respondents indicated that nurses always listened to what patients had to say and communicated the prescription of medications for their treatment in a manner that they could understand.

MF15: The mean response for statements B7 (6.0) (Always responded to my queries) and B5 (5.94) (Informed me of my state of health during consultation) was the lowest. Despite the two statements having the lowest means, patients were still of the opinion that nurses informed them of their state of health during consultation and always responded to their queries. However, this aspect of responsiveness could have been improved.

➢ **Assurance (Doctors and Nurses)**

The purpose of this discussion is to address secondary objective 3:

"To determine how patients rate the assurance of doctors and nurses."

- **Doctors' assurance**

Table 5.8 indicates the patients' perception of services provided by doctors with regards to the doctors' assurance.

Table 5.8: Patients' perception of doctors' assurance

Doctors	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Were well trained and qualified	0.5	5.5	12.5	70	11.5	100	5.87	0.699
Showed respect and dignity towards me		1.5	19.5	70	8.5	100	5.86	0.567
Carried out their tasks competently		2	20.5	69	8.5	100	5.84	0.588
Respected the confidentiality of my treatment		4.5	30	49	16.5	100	5.78	0.773

Table 5.8 indicates that the majority of respondents, in terms of answering statements B9 – B12, agreed that they were satisfied with their interactions with doctors with regard to the assurance that doctors provided to patients. The responses have been arranged

from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by doctors.

MF16: The mean response for statements B12 (5.87) (Were well trained and qualified), B9 (5.86) (Showed respect and dignity towards me) and B10 (5.84) (Carried out tasks competently) has the highest means which indicates that patients were most satisfied with these aspects of the assurance of doctors. The doctors were well trained and qualified; they showed respect and dignity towards patients, and carried out their tasks competently.

MF17: The mean response for statement B11 (5.78) (Respected the confidentiality of my treatment) rated the lowest mean. Patients were of the opinion that doctors respected the confidentiality of their treatment. However, this could have been improved.

MF18: Patients were of the opinion that doctors were successful in creating assurance, however they were less successful in achieving assurance than achieving reliability and responsiveness as recorded by the lower mean scores in the assurance dimension compared to the mean scores in the reliability and responsiveness dimensions of doctors' services.

- **Nurses' assurance**

Table 5.9 indicates the patients' perception of services provided by nurses with regard to the nurses' assurance.

Table 5.9: Patients' perception of nurses' assurance

Nurses	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Respected the confidentiality of my treatment	1.5	10.6	33.3	54.5	100	6.41	0.74
Carried out their tasks competently	1.5	10.6	39.9	48	100	6.34	0.729
Were well trained and qualified	2	8.1	49	40.9	100	6.29	0.7
Showed respect and dignity towards me		12.1	58.6	29.3	100	6.17	0.622

Table 5.9 indicates that the majority of respondents, in terms of answering statements B9 – B12, agreed that they were satisfied with their interactions with nurses in terms of their assurance. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by nurses.

MF19: The mean response for statements B11 (6.41) (Respected the confidentiality of my treatment), B10 (6.34) (Carried out their tasks competently) and B12 (6.29) (Were well trained) has the highest means which indicates that patients were most satisfied with these aspects regarding the assurance of nurses. Respondents indicated that nurses respected the confidentiality of their treatment, they carried out their tasks competently, and were well trained and qualified

MF20: The mean response for statement B9 (6.17) (Showed respect and dignity towards me) was the lowest in terms of the assurance perception of nurses by patients. Despite the statement having the lowest mean, patients were of the opinion that nurses do show respect and dignity towards them. However, this aspect of assurance could have been improved.

- **Empathy (Doctors and Nurses)**

The purpose of this discussion is to address secondary objective 4:

"To determine how patients rate the empathy of doctors and nurses."

- **Doctors' empathy**

Table 5.10 indicates the patients' perception of services provided by doctors with regards to the doctors' empathy.

Table 5.10: Patients' perception of doctors' empathy

Doctors	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Were concerned about my well-being	2	15.5	57.5	25	100	6.06	0.696
Cared about me	2	12	74	12	100	5.96	0.566
Provided me with individual attention	1	17	72.5	9.5	100	5.91	0.545
Understood my specific needs	2	25	53.5	19	100	5.90	0.719

Table 5.10 indicates that the majority of respondents, in terms of answering statements B13 – B16, agreed that they were satisfied with their interactions with doctors in terms of the empathy that doctors had towards them. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by doctors.

MF21: The mean response for statements B14 (6.06) (Were concerned about my well-being), B16 (5.96) (Cared about me) has the highest means which indicates that patients were most satisfied with these aspects of the empathy of doctors. Patients responded that doctors showed real concern for their well-being, and that they cared about them as individuals.

MF22: The mean response for statement B13 (5.91) (Provided me with individual attention) and B15 (5.90) (Understood my specific needs) rated the lowest means. Despite the two statements having the lowest means, patients were of the opinion that doctors did provide them with individual attention and understood their specific needs. However, they indicated that there was room for improvement.

MF23: Considering the mean results discussed, patients were of the opinion that doctors were successful in achieving reliability, responsiveness, assurance and empathy.

- **Nurses' empathy**

Table 5.11 indicates the patients' perception of services provided by nurses with regard to the nurses' empathy.

Table 5.11: Patients' perception of nurses' empathy

Nurses	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Were concerned about my well-being		2	18	80	100	6.78	0.461
Understood my specific needs	0.5	2	24.5	73	100	6.7	0.530
Cared about me		2	28.5	69.5	100	6.68	0.511
Provided me with individual attention		4	34.5	61.5	100	6.58	0.571

Table 5.11 indicates that the majority of respondents, in terms of answering statements B13 – B16, agreed that they were satisfied with their interactions with nurses in terms of their empathy. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' experience of services provided by nurses.

MF24: The mean response for statements B11 (6.78) (Were concerned about my well-being), B15 (6.70) (Understood my specific needs) and B16 (6.68) (Cared about me) has the highest means which indicates that patients were most satisfied with these aspects regarding the empathy of nurses. Respondents indicated that nurses were concerned about their well-being; they understood their specific needs, and cared about them.

MF25: The mean response for statement B13 (6.58) (Provided me with individual attention) was the lowest in terms of the empathy perception of nurses by patients. Despite the statement having the lowest mean, patients were of the opinion that nurses provided them with individual attention, but that this aspect of empathy could have been improved.

5.4.2.2 Comparing patient perception of services delivered by doctors and nurses

The following discussion is based on the statements in section B of the questionnaire. The aim of the discussion is to provide more clarity on the differences of opinion of patients regarding the service delivery by doctors and nurses based on the four

dimensions of service quality (reliability, responsiveness, assurance and empathy). It will furthermore aim to address objective 5, namely:

"To establish if there is a difference in how patients rate doctors and nurses on the service quality dimensions"

The paired sample t-test was used to establish whether significant differences exist in how patients rate the service delivery of doctors and nurses based on the four dimensions of service quality.

- **Reliability**

Reliability statistics for doctors and nurses compared by means

Table 5.12: Overall mean scores, standard deviations and p-value for the reliability of doctors and nurses

Category	Overall Mean	Standard Deviation	Significance (2-tailed)
Doctors	5.912	.5924	.238
Nurses	5.961	.4283	

MF26: Patients were of the opinion that nurses were overall more successful in achieving reliability compared to doctors as recorded by the higher mean scores obtained for the reliability statements relating to nurses (refer to Table 5.12). The research at hand relies on a 95% level of confidence, therefore a p-value equal or less than 0.05 implies that the results are not subject to change according to the paired sample t-test. Hence a value smaller than 0.05 indicates a significant difference between how patients perceive the reliability of doctors and nurses. Therefore, considering a p-value of 0.238, patients do not perceive the reliability of doctors and nurses significantly differently.

- **Responsiveness**

Responsiveness statistics for doctors and nurses compared by means

Table 5.13: Overall mean scores, standard deviations and p-value for the responsiveness of doctors and nurses

Category	Overall Mean	Standard Deviation	Significance (2-tailed)
Doctors	5.992	.5196	.350
Nurses	6.028	.4320	

MF27: Patients were of the opinion that nurses were overall more successful in achieving responsiveness compared to doctors as recorded by the higher mean scores obtained for the responsiveness statements relating to nurses (refer to Tables 5.13). The research at hand relies on a 95% level of confidence, therefore a p-value equal or less than 0.05 implies that the results are not subject to change according to the paired sample t-test. Hence, a value smaller than 0.05 indicates a significant difference between how patients perceive the responsiveness of doctors and nurses. Therefore, considering a p-value of 0.350, patients do not perceive the responsiveness of doctors and nurses as being significantly different.

- **Assurance**

Assurance statistics for doctors and nurses compared by means

Table 5.14: Overall mean scores, standard deviations and p-values for the assurance of doctors and nurses

Category	Overall Mean	Standard Deviation	Significance (2-tailed)
Doctors	5.835	.4624	.000
Nurses	6.303	.5429	

MF28: Patients were of the opinion that nurses were overall more successful in achieving assurance compared to doctors as recorded by the higher mean scores obtained for the assurance statements relating to nurses (refer to Table 5.14). The research at hand relies on a 95% level of confidence, therefore a p-value equal or less than 0.05 implies that the results are not subject to change according to the

paired sample t-test. Hence, a value smaller than 0.05 indicates a significant difference between how patients perceive the assurance of doctors and nurses. Therefore, considering a p-value of 0.000, patients do perceive the assurance provided by doctors and nurses as significantly different.

- **Empathy**

Empathy statistics for doctors and nurses compared by means

Table 5.15: Overall mean scores, standard deviations and p-values for the empathy of doctors and nurses

Category	Overall Mean	Standard Deviation	Significance (2-tailed)
Doctors	5.953	.4742	.000
Nurses	6.303	.5429	

MF29: Patients were of the opinion that nurses were overall more successful in achieving empathy compared to doctors as recorded by the higher mean scores obtained for the assurance statements relating to nurses (refer to Tables 5.15). The research at hand relies on a 95% level of confidence, therefore a p-value equal or less than 0.05 implies that the results are not subject to change according to the paired sample t-test. Hence, a value smaller than 0.05 indicates a significant difference between how patients perceive the empathy of doctors and nurses. Therefore, considering a p-value of 0.000, patients do perceive the empathy provided by doctors and nurses as significantly different.

5.4.3 Section C: Perceptions of patients towards the tangibility dimension of the hospital

This section (referring to section C in the questionnaire)aims at providing the patients' perception regarding the tangible aspects of a military hospital in Gabon. Five statements were used to measure patient opinion on the tangibility dimension of service quality. The results of this section will assist in addressing research objective 6, namely:

"To establish the perception of patients regarding the tangible aspects of a military hospital in Gabon"

Please note that Table 5.16 only reflect response options where actual responses were recorded.

The results are discussed in Table 5.16.

Table 5.16: Tangible aspects

Tangibility	Neutral	Agree somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
The toilet facilities in the hospital were clean	0.5	2	69.5	28	100	6.25	.509
The colour scheme at the hospital was attractive	0.5	3	71	25.5	100	6.22	.510
The hospital had a pleasant atmosphere	0.5	12.5	59.5	27.5	100	6.14	.634
The interior decoration at the hospital was aesthetically appealing	0.5	18	60	21	100	6.01	.675
The furniture at the hospital such as beds and chairs was comfortable	11.5	7.5	65	16	100	5.86	.823

Table 5.16 indicates that the majority of respondents agreed that they were satisfied with the tangible aspects of the military hospital. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' perceptions of the tangible aspects.

MF 30: The mean response for statements C1 (6.25), C2 (6.22), C3 (6.14) has the highest means which indicates that patients were most satisfied with these aspects of the tangible aspects. Respondents indicated that the toilet facilities in the hospital were clean; the colour scheme at the hospital was attractive, and the military hospital had a pleasant atmosphere

MF 31: The mean response for statements C4 (6.01) and C5 (5.86) rated the lowest mean. Despite the two statements having the lowest means, patients were still of the opinion that the interior decoration at the hospital was aesthetically appealing and the furniture at the hospital such as beds and chairs was comfortable. However, patients indicated that there was room for improvement in these two aspects of the tangible aspects. Such room for improvement could be through changing the furniture and the interior decoration at the hospital on a regular basis.

Table 5.17: Overall mean scores and standard deviations for the tangibility dimension of service quality as rated by the respondents

Category	Overall Mean	Standard Deviation
Tangibility	6.0538	.49929

MF32: Patients were overall satisfied with the tangible aspects of the hospital in Libreville, Gabon as recorded by the high mean scores obtained for the tangibility statements relating to the hospital (refer to Table 5.17).

5.4.4 Section D: Overall perception of services

This section (referring to section D in the questionnaire)aims at providing the patients' overall perception of services provided at a military hospital in Gabon. Five statements were used to measure patients' overall perception of services. The results are discussed in Table 5.18. **Tables only reflect response options where actual responses were recorded.**

Table 5.18: Overall perception of services

Overall perception of services	Neutral	Agree Somewhat	Agree	Strongly agree	Total	Mean	Standard deviation
Overall, the service offering of this military hospital was superior to the one offered by governments hospitals		1.5	78.5	20	100	6.19	0.426

The overall service provided by the military hospital was of a high standard		18	46.5	35	100	6.18	0.712
I felt good about coming to this military hospital for my treatment		15	57	28	100	6.13	0.644
The overall quality of the administration service at the military hospital was excellent	0.5	17	62	20.5	100	6.03	0.630
The overall service I received at the military hospital met my expectations	10.5	7.5	54.0	28	100	6	0.883

Table 5.18 indicates that the majority of respondents agreed that they were satisfied with the overall services provided at the military hospital. The responses have been arranged from most important to least important in terms of the mean of each response, with reference to the patients' overall perceptions of services provided at the military hospital.

MF 33: The mean response for statements D5 (6.19), D2 (6.18), D4 (6.13) has the highest means which indicates that patients were most satisfied with these aspects of the overall perception of services provided. Respondents indicated that overall, the service offering of this military hospital was superior to that offered by government hospitals. The overall service provided by the military hospital was of a high standard and they felt good about coming to this military hospital for their treatment.

MF 34: The mean response for statements D3 (6.03) and D1 (6) rated the lowest mean. Despite the two statements having the lowest means, patients were still of the opinion that the overall quality of the administration service at the military hospital was excellent and the overall service they received at the military hospital met their expectations. However, patients indicated that there was room for improvement in these two aspects of the overall perception of services provided. Such room for improvement could be through improved administration, and doctors' and nurses' services delivery.

Table 5.19: Overall means score and standard deviation for the overall perception of service delivery as rated by the respondents

Category	Overall Mean	Standard Deviation
Overall perception of service delivery	6.281	2.506

MF32: Patients were overall satisfied with the tangible aspects of the hospital in Libreville, Gabon as recorded by the high mean score obtained for the tangibility statements relating to the hospital (refer to Table 5.19).

5.4.5 Section E: Factors that could influence the choice for the military hospital

This section (referring to section E in the questionnaire) aims at providing a list of factors that could influence patients' choice for the military hospital in Gabon. Sixteen statements were used to determine the influential factors for selecting the military hospital. The results are discussed in Table 5.20.

Table 5.20: Influential factors

Factors	Not at all important	Low importance	Neutral	Moderately important	Extremely important	Total	Mean	Standard deviation
Availability of medicines		0.5	0.5	11.5	87.5	100	4.86	0.402
Specialised physicians			1.5	12	86.5	100	4.85	0.398
Availability of modern medical equipment			1.5	13.5	85	100	4.84	0.411
Hospital cleanliness		0.5	2	12	85.5	100	4.83	0.464

Employees are friendly towards patients				18	82	100	4.82	0.385
Hospital is well organised			1.5	21.5	77	100	4.76	0.465
Quality of nurses			1	22	77	100	4.76	0.451
Other				25	75	100	4.75	0.500
Ease of getting to hospital location		0.5	2.5	18.5	78.5	100	4.75	0.519
Competent staff		11.5	2.5	14	72	100	4.47	0.997
Good reputation in media	2	7.5	13.5	23	54	100	4.2	1.060
Care cost		6.5	13	37.5	43	100	4.17	0.892
Patients' past experience	1.5	10.1	22.2	35.9	30.3	100	3.83	1.021
Hospital near residence	1	10.5	23.5	37.5	27.5	100	3.8	0.992
Know people who went to the hospital	1.5	11.5	30.5	29	27.5	100	3.7	1.043
Relatives living in the hospital area	2.5	18.5	7	56.5	15.5	100	3.64	1.032

Table 5.20 indicates that the majority of respondents agreed that their choice for the military hospital was influenced by a number of factors. The responses have been arranged from most important to least important in terms of mean of each response, with reference to a list of factors that could influence patients' choice for the military hospital in Gabon.

MF 35: The mean response for statements E1 (4.86), E2 (4.85), E3 (4.84), E4 (4.83), E5 (4.82), E6 (4.76), E7 (4.76), E8 (4.75) and E9 (4.75) has the highest means which indicates that these factors, E1 (4.86), E2 (4.85), E3 (4.84), E4 (4.83), E5 (4.82), E6 (4.76), E7 (4.76), E8 (4.75) and E9 (4.75) had more influence in patients' choice for the military hospital.

MF 36: The mean response for statements E10 (4.47), E11 (4.2) and E12 (4.17) rated the lowest mean which indicates that these factors, E10 (4.47), E11 (4.2) and E12 (4.17) had less influence on patients choice for the military hospital.

5.5 ACCEPTANCE OR REJECTION OF HYPOHESES

The hypotheses developed in Chapter 1 will now be dealt with (refer to section 1.5.3).

$H0_1$: There is no significant difference in how patients rate the reliability of doctors and nurses.

HA_1: There is a significant difference in how patients rate the reliability of doctors and nurses.

$H0_2$: There is no significant difference in how patients rate the responsiveness of doctors and nurses.

HA_2: There is a significant difference in how patients rate the responsiveness of doctors and nurses

$H0_3$: There is no significant difference in how patients rate the assurance of doctors and nurses.

HA_3: There is a significant difference in how patients rate the assurance of doctors and nurses.

$H0_4$: There is no significant difference in how patients rate the empathy of doctors and nurses.

HA_4: There is a significant difference in how patients rate the empathy of doctors and nurses.

$H0_5$: Patients do not have a positive perception of the tangible aspects of a military hospital in Libreville, Gabon.

HA_5: Patients do have a positive perception of the tangible aspects of a military hospital in Libreville, Gabon.

The following hypotheses: $H0_1$, which states that there is no significant difference in how patients rate the reliability of doctors and nurses, $H0_2$, which states that there is no significant difference in how patients rate the responsiveness of doctors and nurses, and the following alternative hypotheses HA_3, which states that there is a significant difference in how patients rate the assurance of doctors and nurses, HA_4, which states that there is a significant difference in how patients rate the empathy of doctors and nurses, HA_5, which states that patients do have a positive perception of the tangible aspects of a military hospital in Libreville, Gabon are therefore accepted.

The following alternative hypothesis: HA_1, which states that there is a significant difference in how patients rate the reliability of doctors and nurses, HA_2, which states that there is a significant difference in how patients rate the responsiveness of doctors and nurses, and the following null hypotheses $H0_3$, which states that there is not a significant difference in how patients rate the assurance of doctors and nurses, $H0_4$, which states that there is not a significant difference in how patients rate the empathy of doctors and nurses, and the $H0_5$, which states that patients do not have a positive perception of the tangible aspects of the military hospital in Libreville, Gabon are therefore rejected.

5.6 MEASUREMENT OF THE OBJECTIVES

The purpose of this research was to assess the service quality of doctors and nurses at the military hospital in Libreville (refer to section 1.4). The objectives of the study were

assessed empirically via a survey questionnaire. Section A of the questionnaire collected the demographic details of respondents. Section B gathered information on patients' experience of services of doctors and nurses based on the four dimensions of service quality namely reliability, responsiveness, assurance and empathy. Section C gathered information on patients' perceptions of the tangibility aspects and overall service quality. Section D tested the overall perception of patients regarding the service delivery at the military hospital in Libreville, Gabon. Section E gathered information on factors that could influence patients' decision to select the military hospital in Libreville, Gabon. The objectives of this study were assessed by concentrating on the following aspects:

- A comprehensive literature review was provided on the nature of the service sector, service quality and patient satisfaction, the elements of service quality, and how they influence patient satisfaction.
- The empirical study tested the hypothesis that there is no difference in how patients rate the reliability of doctors and nurses.
- The empirical study tested the hypothesis that there is no difference in how patients rate the responsiveness of doctors and nurses.
- The empirical study tested the hypothesis that there is no difference in how patients rate the assurance of doctors and nurses.
- The empirical study tested the hypothesis that there is no difference in how patients rate the empathy of doctors and nurses.
- The empirical study tested the hypothesis that patients do not have a positive perception of the tangible aspects of a military hospital in Gabon.

5.7 CONCLUSION

The objective of this research was to establish if there is a difference in how patients rate doctors and nurses on the service quality dimensions. Chapter five covered the analysis and interpretation of the results of the data gathered from the survey questionnaires that were completed by the respondents in the study. The major findings in the research were that there is no significant difference in how patients rate the reliability and responsiveness of doctors and nurses, there is a significant difference in how patients rate the assurance and empathy of doctors and nurses and patients do have a positive perception of the tangible aspects of the military hospital. Therefore,

$H0_1$, $H0_2$, HA_3, HA_4 and HA_5 were accepted. The next chapter will focus on the conclusions related to this research.

CHAPTER SIX: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Chapter five dealt with the research results which were gathered from the empirical exploration, as well as the major findings. The goal of Chapter Six is to make a number of conclusions, implications and recommendations from Chapter Five and the entire study.

The primary objective of this research as seen in Chapter 1 (refer to 1.5.1), was to establish how patients rate doctors and nurses on the service quality dimensions at a military hospital in Libreville, Gabon.

Secondary objectives were also made in Chapter 1 (refer to 1.5.2) in order to complement the primary objective. The secondary objectives will again be introduced in section 6.2 and will deal with the relevant major findings from this research. Each secondary objective will be discussed followed by a discussion on the implications and recommendations. Chapter Six will end with a discussion on the limitations and recommendations for more research to be undertaken.

6.2 MAIN CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS OF THE STUDY

In this research, one major aspect was investigated which was to establish how patients rate doctors and nurses on the service quality dimensions. This aspect constituted the core within in which the secondary objectives as illustrated in Chapter 1.5.2 were established. This chapter will be based on a discussion of the main conclusions, implications and recommendations of the findings of each secondary objective.

6.2.1 Perceptions of patients regarding the four service quality dimensions investigated in this study

The secondary objectives of this study related to perceptions of patients regarding the four service quality dimensions, were determined as follows:

- To determine how patients rate the *reliability* of doctors and nurses.
- To establish how patients rate the *responsiveness* of doctors and nurses.
- To determine how patients rate the *assurance* of doctors and nurses.
- To establish how patients rate the *empathy* of doctors and nurses.

The following hypotheses resulted from the above secondary objectives:

H01: There is no significant difference in how patients rate the reliability of doctors and nurses.

H02: There is no significant difference in how patients rate the responsiveness of doctors and nurses.

H03: There is no significant difference in how patients rate the assurance of doctors and nurses.

H04: There is no significant difference in how patients rate the empathy of doctors and nurses.

H05: Patients do not have a positive perception of the tangible aspects of a military hospital in Gabon.

The major findings in terms of patients' perceptions regarding the reliability, responsiveness, assurance and empathy of doctors and nurses were as follows:

- There is no significant difference in how patients rate the reliability of doctors and nurses.
- There is no significant difference in how patients rate the responsiveness of doctors and nurses.
- There is a significant difference in how patients rate the assurance of doctors and

nurses.

- There is a significant difference in how patients rate the empathy of doctors and nurses.

The major findings derived from the empirical research phase in terms of patients perceptions of service delivery of doctors relating to the four dimensions of service quality are indicated next:

In terms of reliability, it is clear from the results obtained that the majority of respondents were satisfied with their interactions with doctors with regard to the doctors' reliability. Patients indicated that they were most satisfied with the doctors' ability to examine them properly and to be honest with them in terms of their medical assessment. Patients were however of the opinion that there was room for improvement in the way doctors acted in their best interests, and in the way that caused them to trust them. Such room for improvement could be through improved compassion and understanding during the diagnoses of the problem. Such an improvement could enhance their satisfaction level with the reliability of doctors.

In terms of responsiveness, the results indicated that the majority of respondents were satisfied with their experience of doctors' responsiveness. Respondents indicated that they were most satisfied with the way doctors communicated the prescription of medications for their treatment in a manner they could understand and the fact that they always responded to their queries. Patients were however of the opinion that doctors could listen to them more, and inform them of their state of health during consultation. Such room for improvement could be through improved communication during the diagnoses of the problem. The feeling was that doctors had to develop more patience and understanding with patients whilst diagnosing the patient.

In terms of assurance, it was evident that the majority of respondents were satisfied with the dealings they had had with doctors with regard to the doctors' assurance. Respondents indicated that they were most satisfied with the doctors' trainings and qualifications, the way they carried out tasks competently and the respect and dignity they as patients received from doctors. Respondents were however of the opinion that doctors could show more respect in terms of the confidentiality of treatment. Such an improvement could be through improved work ethic in the hospital, where patients' records and cases should never be discussed with anyone without the patients'

permission. Patients also indicated that doctors were less successful in achieving assurance than achieving reliability and responsiveness as recorded by the lower mean scores in the assurance dimension, compared to the mean scores in the reliability and responsiveness dimension of doctors' services.

In terms of empathy, the results indicated that the majority of patients were satisfied with the dealings they had had with doctors with regard to the doctors' empathy. Patients indicated that that they were most satisfied with the doctors' concerns about their well-being and the way they cared for them. Patients were however of the opinion that doctors could understand their specific needs better and provide them with more individual attention. Such an improvement could be made through improved communication during the dealings with patients. The feeling experienced and expressed was that doctors have to pay more attention to patients' problems and share with them their experience. Patients also illustrated that doctors were successful in achieving reliability, responsiveness, assurance and empathy. Especially considering that the mean results for all four dimensions were all high.

The major findings derived from the empirical research phase in terms of patients' experience of service delivery of nurses relating to the four dimensions of service quality, are subsequently indicated.

In terms of reliability, it is clear from the results obtained that the majority of respondents were satisfied with their interactions with nurses with regard to their reliability. Patients indicated that they were most satisfied with the honesty of nurses and their ability to examine them properly. Patients were however of the opinion that there was room for improvement in the way nurses acted in their best interests, and how such action resulted in a trust patients have towards nurses. Such improvements could be through improved compassion and understanding during the diagnoses of the problem. Such an improvement could also enhance their satisfaction level with the reliability of nurses.

In terms of responsiveness, the results indicated that the majority of respondents were satisfied with their experience of nurses' responsiveness. Respondents indicated that they were most satisfied with the fact that nurses always listened to what they had to say and communicated the prescription of medications for their treatment in a manner that they could understand. Patients were however of the opinion that nurses could inform them more about their state of health during consultation and respond more to

their queries. Such room for improvement could be through improved communication during the diagnoses of the problem. The feeling was that nurses had to develop more patience and understanding with patients whilst diagnosing the patient.

In terms of assurance, it was evident that the majority of respondents were satisfied with the dealings they had had with nurses with regard to the nurses' assurance. Respondents indicated that they were most satisfied with the fact that nurses respected the confidentiality of their treatment, the fact that they carried out their tasks competently, and were well trained and qualified. Respondents were however of the opinion that nurses could show more respect and dignity towards them. Such an improvement could be through improved work ethic in the hospital where patients could be treated with more respect.

In terms of empathy, the results indicated that the majority of patients were satisfied with the dealings they had had with nurses with regard to the nurses' empathy. Patients indicated that that they were most satisfied with the nurses' concerns about their well-being, the way they cared for them, and the fact that they understood their specific needs. Patients were however of the opinion that nurses could provide them with more individual attention. Such an improvement could be made through improved communication during the dealings with patients. The opinion of patients was that nurses have to pay more attention to patients' problems and share with them their experience.

Main conclusions

- The majority of patients were satisfied with their interactions with doctors regarding their reliability, responsiveness, assurance and empathy.
- The majority of patients were satisfied with their interactions with nurses regarding their reliability, responsiveness, assurance and empathy.
- Nurses were overall more successful in achieving reliability, responsiveness, assurance and empathy compared to doctors.
- In terms of perceptions of the actual service delivery of doctors on the service dimension, patients indicated that doctors were more successful in achieving responsiveness and empathy compared to reliability and assurance.
- In terms of perceptions of the actual service delivery of nurses on the service dimension, patients indicated that nurses were more successful in achieving empathy and assurance compared to responsiveness and reliability.

- In terms of the comparison between perceptions of actual service delivery of doctors and nurses on the service dimension, patients indicated that nurses were overall more successful in achieving empathy, assurance, responsiveness and reliability compared to doctors.

Implications

Executives at the military hospital need to implement service quality programmes to educate medical personnel about the importance of service quality in health care for patient retention and loyalty.

Recommendations

Patient satisfaction is perceived as a vital aspect for the military hospital. Not only to satisfy patient needs, but to increase patient loyalty. Patient loyalty is an essential aspect in terms of increasing market share and profitability. The recommendations for this section are based on the results of the empirical findings in terms of patients' rating of doctors and nurses on the service quality dimensions.

In terms of the doctors' services, patients felt a need for more privacy in terms of the confidentiality of their treatment, a need for more individual attention, a need to be heard, and to trust doctors. Therefore, such needs could be addressed through improved compassion, communication and understanding of doctors during the diagnoses of the problem. The feeling was expressed that doctors should pay more attention to patients' problems and share with them their experience. Doctors at the military hospital should develop more work ethic where patients' records and cases should never be discussed with anyone without patients' permission. The military hospital should employ highly trained and qualified doctors to address the trust issue in patients. Lastly, consultation time may need to be reviewed to add some extra time to better address patients' needs during their consultation with doctors.

In terms of the nurses' services, patients felt a need for more trust towards nurses, a need for more information, for more respect and for more individual attention. Such needs could be addressed through improved patience, compassion, communication and understanding of nurses during their dealings with patients. Nurses should develop more work ethic where patients' records and cases should never be discussed with anyone without their permission. Officials in the hospital should hire highly trained and

qualified nurses to address the issue of trust in patients and consultation time may need to be reviewed to add some extra time to better address patients' needs during their dealings with nurses. Other hospitals could enhance the reliability, responsiveness, assurance and empathy of their doctors and nurses based on the above recommendations.

6.3 PATIENTS' PERCEPTIONS REGARDING THE TANGIBLE ASPECTS AT A SPECIFIC MILITARY HOSPITAL

The secondary objective related to patients' perceptions regarding the tangible aspects at a military hospital was illustrated as followed:

- To establish the perception of patients regarding the tangible aspects of a military hospital in Gabon.

The following hypothesis below resulted from the above-mentioned secondary objective:

H_{05}: Patients do not have a positive perception of the tangible aspects of a military hospital in Gabon.

The major findings in terms of patients' perceptions regarding the tangible aspects were as follows:

Patients have a positive perception of the tangible aspects of a military hospital.

The tangible aspect of service quality is crucial in the delivery of services in hospitals as it can reduce the gap between patients' expectations and the actual delivery of service. It provides a picture of what is inside a hospital and can influence patients' choice when selecting a health service provider. Tangible aspects of service are viewed to significantly influence patients' satisfaction level with services provided.

In addition to the main findings from the literature review, the findings from the empirical study indicated that patients had a positive perception of the tangible aspects of a military hospital. The empirical results confirmed that the tangible aspect significantly influenced patient satisfaction.

Main conclusion

The majority of patients indicated that they had a positive perception of the tangible aspects of a military hospital.

Implication

The military hospital needs to maintain or improve the tangible aspects of services provided, in order to create a higher level of patient retention and loyalty.

Recommendations

It was concluded from the literature review that the tangible aspect of services needs to be maintained and improved in order to ensure patient satisfaction. The empirical results indicated some aspects that can be improved, and this will form the basis for the recommendations. Patients indicated that the interior decoration at the hospital and the furniture at the hospital such as beds and chairs needed to be improved. Such improvement could be through changing the furniture and the interior decoration at the hospital on a regular basis. Other hospitals could enhance the tangible aspects of their service through changing their equipment on a regular basis.

6.4 OVERALL PERCEPTION OF SERVICES AND FACTORS THAT COULD INFLUENCE THE CHOICE OF A MILITARY HOSPITAL

Both the overall perception of the military hospital and the factors that could influence the choice of a military hospital will guide the management of the hospital in terms of areas of continued focus and improvement. The patients indicated that they were content with the overall service provided by the hospital and that they felt good about coming to the hospital. Patients furthermore indicated that the quality of the doctors and nurses working at the hospital, as well as the availability of modern medical equipment, influenced their decision to visit the hospital.

Main conclusion

The majority of patients indicated that overall, the service offering of the military hospital was superior to the one offered by government hospitals.

Implication

The military hospital would need to maintain or improve its current levels of service delivery to patients in order to create a higher level of patient retention and loyalty.

Recommendation

It will be to the benefit of the military hospital if management enhanced the quality of service delivery by the administrative staff of the hospital. A strategy to enhance such service delivery is to invest more capital in the training of administrative staff in areas such as people skills (towards patients specifically), service delivery through the use of technology, telephone communication skills, friendliness towards patients (i,e. customer care), as well as knowledge regarding the administrative processes and systems of the hospital. Furthermore, more robust recruitment practices must be put in place to ensure that the most skilled and qualified individuals are recruited for administrative positions, specifically. This will enhance the service delivery levels of the administrative staff at the hospital, and the satisfaction levels of patients, since they are interacting with more knowledgeable and competent employees in administration, but also experience and communicate the overall image and reputation of the hospital in the community.

6.5 LIMITATIONS OF THIS STUDY

This study was exposed to various limitations like any other research. However, future investigations on this type of research will be able to generate new thoughts and provide a deeper understanding of service quality in hospitals. The limitations in this study are outlined.

6.5.1 Limitations based on the literature review

The literature review in this study indicated the major constituents of service quality such as reliability, responsiveness, assurance, empathy and tangibility and an understanding of the relationships between service quality, customer satisfaction, loyalty and profitability. However, new literatures may be necessary to provide deeper assessments of services delivered by doctors and nurses respectively on each of their service quality dimension.

6.5.2 Limitations of the empirical phase of study

The research was done on service quality at the military hospital in Libreville in Gabon and is specific to the hospital in question. Thus the study is limited to that particular hospital and it cannot be applied to the entire industry as the population chosen for the study was limited to the said hospital only.

- Sampling is a problem, as there is no sample which can allow the researcher to make forecasts of the entire population. In this current study, a total of 200 respondents completed the survey questionnaires.
- The sample only included patients who were at least 18 years, males and females, who had experienced medical services and stayed over at the military hospital for at least one night. Thus the study did not involve all patients and it is not possible to make forecasts for all patients of the military hospital in Libreville in Gabon.

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

The current study only assessed service quality at the military hospital in Libreville in Gabon, thus it cannot be utilised for the entire health care industry. A future study may be done to investigate service quality for the entire industry and include multiple healthcare practices.

6.7 CONCLUDING REMARKS

Both the primary and secondary objectives formulated for this study were addressed based on the conclusions, implications and recommendations in this research. It is therefore concluded that the findings of this research help to understand service quality in a military hospital setting.

REFERENCES

Aaker, K. (2006). *Marketing Research,* 9th edition. California: Wiley.

Aaker, D.A., Kumar, V., Day, G.S., Lawley, M. & Stewart, D. (2007). *Marketing Research,* 2nd edition, Milton, Qld: John Wiley & Sons, Australia, Ltd.

Al Sharif, B. F. T. (2008). *Patients' satisfaction with hospital services at Nablus District, Westbank Palestine* . Master's Thesis, University of Palestine.

Angelis, J., De Lima, E.P. & Siraliova, J. (2010). Service experiences: business and management implications. *Current Issues of Business,* 5:6-23. Available from EBSCOHost: Business Source Premier: http://search.global.epnet.com. (Accessed 9 August 2010).

Babbie, E. & Mouton, J. (2009).*The practice of social research*.1st edition. Cape Town: Oxford University Press.

Babin, B.J. & James, K.W. (2010). A brief retrospective and introspective on value. *European Business Review*, Vol.*22*, pp. 471–478.

Basheer, A., Al-Alak, A. & Alnaser, A.S.M. (2012). Assessing the Relationship Between Higher Education Service Quality Dimensions and Student Satisfaction. *Australian Journal of Basic and Applied Sciences*, Vol.6 (2012), pp. 156-164.

Benlian, A., Koufaris, M. & Hess, T. (2012). Service Quality in Software-as-a-Service: Developing the SaaS-Qual Measure and Examining Its Role in usage Continuance. *Journal of Management Information Systems*, Vol. 28, pp. 85-126.

Berndt, A. & Brink, A. (2008). *Relationship marketing and customer relationship management and customer service*. Landsdowne: Juta.

Bhasin, H. (2011). *Services marketing mix*. Available from:http://www.marketing91.com/service-marketing-mix/ . (Accessed July 2012).

Bick, G., Abratt, R. & Möller, D. (2010). Customer service expectations in retail banking in Africa. *South African Journal of Business Management*, Vol. 41, (2010), pp.13 – 28.

Bodet, G. & Assolant, L. B. (2011). Consumer Loyalty in Sport Spectatorship Services: The Relationships with Consumer Satisfaction and Team Identification. *Psychology and Marketing*, Vol. 28(8), pp. 781–802.

Bogomolova, S. (2011). Service quality perceptions of solely loyal customers. *International Journal of Market Research,* Vol. 53, pp.793-810.

Bourgarel, M. (2010). Emerging viral threats in Gabon: health capacities and response to the risk of emerging zoonotic diseases in Central Africa. *Emerging. Health Threats Journal, Vol.3 (*2010), pp.1-112.

Brizee, A. (2010). *Specialising in Rhetoric and Composition, Professional writing, and Public Rhetorics.* Doctoral Thesis, Perdue University.

CAMES (Conseil Africain et Malgache pour l' Enseignement Supérieur). (2012). Available from : http://www.guninetwork.org/guni.network/institutional-members/strathmore-university-1. (Accessed July 2012).

Cant, M., Gerber-Nel, C. & Kotze, T. (2005). *Marketing Research*. 2nd edition.Claremont: New Africa Books.

CENAREST. (2011). *Les editions du CENAREST*. Available from : http://www.editions.cenarestgabon.com/. (Accessed July 2012).

Chebat, J. C., Sirgy, M. J. & Grzeskowiak, S. (2010). How can shopping mall management best capture mall image? *Journal of Business Research,* Vol.63, pp. 735–740.

Chirurgie générale. (2010). *Hôpital d'instructions des armées.* Available from : http://hia-obo.org/fr/serviceschirurgicaux.php. (Accessed 2012).

Churchill, G.A. & Brown, T.J. (2007). *Basic Marketing Research.* 6th edition. Ohio: Thomson South-Western.

Cockalo, D., Djordjevic, D. & Sajfert, Z. (2011). Elements of the model for customer satisfaction: Serbian economy research. *Total Quality Management*, Vol. 22, pp. 807–832.

Conradie, E. S. (2011).*The influence of internal marketing elements on the brand awareness of car rental customers in South Africa*. Doctoral Thesis, University of Johannesburg.

Country Brief Gabon. (2010). *Estandards forum Financial Standards Foundation.* Available from: www.estandardsforum.org (Accessed 12 July 2011).

Desai, V.V. (2011). Case Study: Patient satisfaction and service quality dimensions. *Journal of Advance Management,* Vol. 4 (5) May (2011), pp. 1-78.

Diehl, K. & Poynor, C. (2010). Great Expectations?! Assortment Size, Expectations and Satisfaction. *Journal of Marketing Research,* Vol. XLVII (2010), pp.312-322.

Doghaither, H.A.I., Abdelrhman, B.M., Saeed, A.A., Magzoub, M.E.M.A. (2003). Factors influencing patient choice of hospitals in Riyadh, Saudi Arabia. *The Journal of the Royal Society for the Promotion of Health,* 123(2):105-109.

Dosen, D. O. (2009). Perceptions among Croatian surgeons of services marketing application to healthcare organisations. *Journal of Health Services Marketing*, Vol. 21 (2009), pp.203-218.

Du Plessis, L. (2010). *Customer relationship management and its influence on customer loyalty at Liberty Life in South Africa*. Unpublished Master's Thesis, University of Johannesburg.

Fernandes, A.M. (2009). Structure and performance of the service sector in transition Economies. *The European Bank for Reconstruction and Development Journal,* Vol.2 (2009), pp.400-500.

Fornell, C., Rust, R.T. & Dekimpe, M.G. (2010). The Effect of Customer Satisfaction on Consumer Spending Growth. *Journal of Marketing Research,* Vol. XLVII, pp 28–35.

Forrest, V., Morgeson, L., Mithas, S., Timothy, L., Keiningham, A. & Aksoy, L. (2011). An investigation of the cross-national determinants of customer satisfaction. *Journal of Marketing Sciences,* Vol. 39 (2011), pp.198–215.

Gabon. (2010). Health indicators. *Country Brief Review*, Vol.3 (2010), pp.1-13.

Gabon. (2011). African renaissance outlook. *UNDP, UNECA Review Paper,* Vol.3 (2011), pp.1-55.

Gabon Economic Outlook. (2012). Available from: www.africaneeconomicoutlook. org/en/countries/central-africa/gabon/(Accessed 2012).

Gabon Poverty and Reduction Strategy Paper. (2012). Women and children first. *World Health Organisation Review, Vol.3 (2012), pp.2-99.*

Gilaninia, S., Almani, A.M., Pournaserani, A. & Mousavian, S.J. (2011). Relationship Marketing: A New Approach to Marketing in the Third Millennium. *Australian Journal of Basic and Applied Sciences*, Vol. 5(5), pp.787-799.

Global Health. (2012). *Gabon healthcare system*. Available from: http://www.globalsu rance.com/resources/gabon/ (Accessed July 2012).

Golder, P.N., Mitra, D. & Moorman, C. (2012). What Is Quality? An Integrative Framework of Processes and States. *Journal of Marketing,* Vol. 76, pp. 1–23.

Greenstone, M. & Hanna, R. (2011). Environmental regulations, air and water pollution, and infant mortality in India. *Economics Report*, Vol. 1 (2011), pp.1-48.

Grewal, R. Chandrashekaran, M. & Citrin, A.V. (2010). Customer Satisfaction Heterogeneity and Shareholder Value. *Journal of Marketing Research,* Vol. XLVII, pp.612–626.

Grigoroudis, E. & Siskos, Y. (2012). *Methods for measuring and implementing service quality.* New York: McGraw Hill Education.

Grobbelaar, S.F. (2006). *Measuring the impact of perceived quality of service and price amongst restaurant customers in Johannesburg*. Master's Thesis, University of Johannesburg.

Grönroos, C. (2007). *Service management and marketing: Customer management in service competition.*3rd edition. England: John Wiley and Sons Ltd.

Hair, J., Bush, R. & Ortinau, D. (2006). *Marketing research within a changing environment.* 3rd edition. New York: McGraw-Hill Irwin.

Haseki, M.I. (2013). Customer expectations in mall restaurants: A case study. *International Journal of Business and Society,* Vol. 14, pp. 41 – 60.

Health*. (2007).* A healthy future*. Gabon Spring Review,* Vol.2 (2007), pp.1-88.

Health and Safety in Gabon. (2011). Available from:http://www.spainexchange.com/guide/GA-health.htmd (Accessed 26 July 2011).

Heitzler, C. D., Asbury, L. D. & Kusner, S. L. (2008). Bringing "play" to life: The use of experiential marketing in the VERB campaign. *American Journal of Preventive Medicine,* Vol.*34* (6), pp. 188-193.

Hernandez, R.M.S., Tur, V.M., Peiro, J.M. & Ramos., J. (2009). Testing a hierarchical and integrated model of quality in the service sector: Functional, relational, and tangible dimensions. *Total Quality Management*, Vol. 20, pp. 1173–1188.

Hill, N., Roche, G. & Allen, R. (2012). *Customer experience through the customer's eyes.* London: Cogent Publisher.

Historique. (2010). *Hôpital d'instructions des armées*. Available from: http://hia-obo.org/fr/historique.php (Accessed 2012).

Hoffman, D., Bateson, J.E.G., Wood, E. & Alexandra, J. K. (2006). *Services marketing concepts, strategies and cases.* United Kingdom: South-Western Cengage EMEA.

Hoffman, K. D., Bateson, J.E.G., Wood., E.H. & Kenyon, A.K. (2009). *Services marketing: Concepts, strategies and cases*. London: South-Western Cengage Publisher.

Holder, S. M. (2008). *Changes in physical evidence and the perception of service quality of patients in a hospital facility*. Master's Thesis, University of Johannesburg.

Hôpital d' instructions des armées. (2011). *Présentation*. Available from: http://hia-obo.org/Pr%C3%A9sentation-42.html (Accessed 25 July 2011).

Hossain, M. & Leo, S. (2009). Customer perception on service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, Vol.2 (4) (2009), pp.338-350.

Hu, Y.J. (2011). How brand equity, marketing mix strategy and service quality affect customer loyalty: The case of retail chain stores in Taiwan. *The International Journal of Organizational Innovation*, Vol. 4, Number 1, pp.59-74.

Ince, T. & Bowen, D. (2011). Consumer satisfaction and services: insights from dive tourism. *The Service Industries Journal*, Vol. 31(2008) ,pp. 1769–1792.

International Diabetes Federation. (2010). *Country Summary Table for 2010*. Available from: http://www.diabetesatlas.org/map (Accessed in 2012).

Irani, F. (2008). Client satisfaction management in public companies. *Journal of Marketing*, Vol. 63 (2008), pp. 33-44.

Jun, M. & Cai, S. (2010). Examining the relationships between internal service quality and its dimensions, and internal customer satisfaction. *Total Quality Management Journal,* Vol.21 (2010), pp.205-223.

Jupiter, E. (2011). *Marketing services definition*. Available from: http://www.ehow.com/facts_6784044_marketing-service-definition.html (Accessed 2012).

Kapoor, R., Paul, J. & Halder, B. (2012). *Services marketing: Concepts and practices.* New Delhi: McGraw Hill Education.

Kasper, H., Helsdingen, P.V. & Gabbott, M. (2006). *Services marketing management: A strategic perspective*. 2nd edition. England: John Wiley and Sons, LTD.

Kaura, V. & Datta, S.K. (2012). Impact of Service Quality on Satisfaction and Loyalty: Case of Two Public Sector Banks. *Journal of Management*, pp.65-76.

Kim, Y.K. (2008). A study on medical services quality and its influence upon value of care and patient satisfaction: A Focus upon outpatients in a large-sized hospital. *Total Quality Management,* Vol. 19 (2008), pp. 1–1171.

Kumar, V., Petersen, J.A. & Leone, R.P. (2007). How valuable is word-of-mouth? *Harvard Business Review,* 85(10):139-147.

Kyle, G. T. (2010). The effect of service quality on customer loyalty within the context of ski resorts. *Journal of Park and Recreation Administration*, Vol.18 (2010), pp. 3-4.

Laboratoire d'analyse médicales. (2010). *Hôpital d'instructions des armées*. Available from :http://hia-obo.org/fr/laboratoireanalysesmedicales.php (Accessed 2012).

Laurant, M.G.H., Hermens, R.P.M.G., Braspenning, J.C.C., Akkermans, R.P., Sibbald, B. & Grol, R.P.T.M. (2008). An overview of patients' preference for, and satisfaction with, care provided by general practitioners and nurse practitioners. *Journal of Clinical Nursing,* Vol.17, pp. 2690–2698.

Leke, A., Lund, S., Roxburgh, C. & Van Wamelen, A. (2010). *What is driving Africa's growth*. Available from: www.mckinsey.com/insights/economic_studies/whats_africa growth

Leroy, E. & Gonzalez, J.P. (2012). Filovirus research in Gabon and equatorial Africa: the experience of a research center in the heart of Africa. *Journal of Health,* 4(9):159-604.

Likert Scale. (2012). *Likert Scale – What is it? When to Use it? How to Analyze it?* Available from: http: //www.surveygizmo.com/survey-blog/likert-scale-what-is-it-how-to-analyze-it-and-when-to-use-it/ (Accessed November 2012).

Lings, I.N. & Greenley, G.E. (2009). The impact of internal and external market orientations on firm performance. *Journal of Strategic Marketing*, Vol.17 (1), pp.41-53.

Liu, X. & Homburg, C. (2007). Neglected Outcomes of Customer Satisfaction. *Journal of Marketing*, Vol. 71 (2007), pp .133–49.

Londre, L.S. (2010). Marketing, the Marketing Mix (4Ps), and the Nine Ps. *Journal of Marketing*, Vol.3 (2010), pp.1-100.

Lovelock, C., Wirtz, J. & Chew, P. (2009). *Essentials of Services Marketing.* New York: Prentice Hall.

Lovelock, C. & Wirtz, J. (2011). *Services Marketing: People, Technology, Strategy.* Upper Saddle River. New Jersey: Prentice Hall.

Malhotra, N.K. (2007). *Marketing research an applied orientation.* New Jersey: Pear-son Prentice Hall.

Malhotra, N.K. (2009). *Basic Marketing Research – A Decision-Making Approach*.3rd edition. Upper Saddle River, New Jersey: Pearson Education.

Malhotra, N.K., Hall, J., Shaw, M. & Oppenheim, P.P. (2008). *Essentials of Marketing Research – An Applied Orientation.* 2nd edition. New South Wales: Pearson Education Australia.

Markovic, S. & Raspor, S. (2010). Measuring perceived service quality using Serv-qual: A Case Study of the Croatian Hotel Industry. *Journal of Management,* Vol. 5, pp.195-209.

Médecine interne. (2010).*Hôpital d'instructions des armées*. Available from: http://hia-obo.org/fr/medecineinterne.php (Accessed 2012).

Mekoth, N., George, P.B., Dalvi, V., Rajanala, N. & Nizomadinov, K. (2012). Service Quality in the Public Sector Hospitals: A Study in India, *Hospital Topics*, Vol.90, pp.16-22.

Meng, J.G., Summey, J.H., Herndon, N.C. & Kwong, K.K. (2009). Some retail service quality expectations of Chinese shoppers. *International Journal of Market Research,* Vol. 51 (2009), pp. 773-796.

Mitra, D. & Fay, S. (2010). Managing service expectations in online markets: A signalling theory of e-tailer pricing and empirical tests. *Journal of Retailing,* Vol. *86* (2), pp. 184-199.

Mohammad, A.A.S. & Alhamadani, S.Y.M. (2011). Service quality perspectives and customer satisfaction in commercial banks working in Jordan. *Middle Eastern Finance and Economics Journal,* Vol 14 (2011), pp.60-72.

Mosley, R. W. (2007). Customer experience, organisational culture and the employer brand. *Journal of Brand Management*, Vol.15 (2007), pp.123–134.

Munyaradzi, W.N. (2010). *The mediating role of customer relationship management on customer retention at selected motor vehicle dealership in the Buffalo City Municipality*. Master's Thesis, University of Fore Hare, South Africa.

Naidoo, L.P. (2008). *Internal marketing in a customer service centre.* Unpublished Master's dissertation. Johannesburg: University of Johannesburg.

Naik, K.C.N. (2010). Service Quality (Servqual) and its Effect on Customer Satisfaction in Retailing. *European Journal of Social Sciences,* Vol.16 (2010), pp.1-600.

National Department of Health. (2006).Health Facility Definitions. *Journal of Health Science,* Vol.2 (2006), pp.1-7.

Nejad, S.B., Allegranzi, B., Syed, S.B., Ellis, B. & Pittet, D. (2011). Health-care-associated infection in Africa: a systematic review. *Bulletin of World Health Organisations,* Vol.89 (2011), pp.757–765.

Olusoji, D. (2009). *Perception and patient satisfaction: A case study of Olabisi Onabanjo University Teaching Hospital Sagamu, Nigeria*. MBA Thesis, Blekinge Institute of Technology, Nigeria.

Ophtalmologie. (2010). *Hôpital d'instructions des armées*. Available from: http://hia-obo.org/fr/ophtalmologie.php (Accessed 2012).

Organe exécutif de la CEMAC. (2012). Available from: http://www.oceac.org/details.php?ref=main&rubrq=23&id=40 (Accessed 21 July 2012).

Orl & Ccf. (2010). *Hôpital d'instructions des armées*. Available: http://hia-obo.org/fr/orl-ccf.php (Accessed 2012).

Orsingher, C., Marzocchi, G.L. & Valentini, S. (2011). Consumer (Goal) Satisfaction: A Means-Ends Chain Approach. *Psychology and Marketing Journal*, Vol. 28(7), pp.730–748.

Parasuraman, A., Grewal, D. & Krishnan, R. (2007). *Marketing Research.* 2nd edition. New Jersey: Houghton Mifflin Company.

Pharmacie hospitalière. (2010). *Hôpital d'instructions des armées*. Available from: http://hia- obo.org/fr/pharmaciehospitaliere-sterilisation.php (Accessed 2012).

Pomering, A., Noble, G. & Johnson, L. (2011). Conceptualising a contemporary marketing mix for sustainable tourism. *Journal of Sustainable Tourism*, Vol. 19(8), pp.953-969.

Pradhan, S. & Roy, S. (2011). Determinants of Satisfaction and Loyalty in Apparel Retailing. *Journal of Marketing,* Vol. 5, pp.78-88.

Prescott, M.R. & Kruk, M.E. (2012). The Role of Health Systems and Policies in Promoting Safe Delivery in Low- and Middle- Income Countries: A Multilevel Analysis. *American Journal of Public Health*, Vol.102 (2012), pp.645 to 650.

Programme Economique Régional de la CEMAC. (2009). Vers une économie intégrée et émergente : Programme économique régionale. *Journal de l'Organisation Mondial de la Santé,* Vol.1 (2009), pp.1-30.

Proquest. (2007). Gabonese Republic. *UN Development Programme, Human Development Report,* Vol.2 (2007), pp.1-4.

Prouse, S. (2011). Verbal communication with the author on 17 March. Johannesburg (Notes in possession of author).

Raboka, H.M. (2006). Determinants of customer satisfaction and service quality: The case of Romanian public services. *Transylvanian Review of Administrative Sciences,* Vol.16 (2006), pp.124-135.

Radiologie et imagérie médicale. (2010). *Hôpital d'instructions des armées.* Available from: http://hia-obo.org/fr/Radiologieimageriemedicale.php (Accessed 2012).

Rahman, M. & Miazee, H. (2010). *E-Service Quality and Customer Satisfaction: A Study of Online Customers in Bangladesh*. Master's Thesis, Mid Sweden University.

Rajasekhar, M., Muninarayanappa, M. & Reddy, S.V.S. (2009). The GAP model analysis of service quality in Indian higher education. *Asia –Pacific Journal of Social Sciences*, Vol.1 (2009), pp. 214-229.

Republic of Gabon. (2008). Project completion report health services development. *African Development Bank Review*, Vol.1 (2008), pp. 1-57.

Revere, L. (2010). How healthcare organisations use the internet to market quality achievements. *Journal of Healthcare Management,* Vol.3 (2010), pp.1-114.

Rezaei, M.D., Rezaei, H.K., Alipour, H. & Salehi, S.K. (2011). Service quality, client satisfaction and client personality in the public companies. *Australian Journal of Basic and Applied Sciences*, Vol.5 (2011), pp.483-491.

Roberts-Lombard, M. (2006). *Verhoudingsbemarking by reisagentskappe in die Wes-Kaapprovinsie.* Doctoral Thesis, Potchefstroom: Noordwes-Universiteit.

Rohini, R.(2006). Service quality in Bangalor hospitals: An Empirical study. *Journal of Services Research,* Vol.6 (2006), pp. 1-113.

Rootman, C. (2006). *The influence of customer relationship management on the service quality of banks.* Unpublished Master's dissertation. Port Elizabeth: Nelson Mandela Metropolitan University.

Rust, R.T. & Huang, M.H. (2012). Optimizing Service Productivity. *Journal of Marketing,* Vol. 76.pp. 47-66.

Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students.* 4th edition.London. Pitman Publishing.

Savescu, R.F. (2011). Marketing mix in microcredit organisations. *Review of Management and Economic Engineering,* Vol. 10 Issue 3, p39-44.

Service d'accueil. (2010).*Hôpital d'instructions des armées*. Available from: http://hia-obo.org/fr/accueil-des-urgences.php (Accessed 2012).

Services Marketing. (2012). Available from: http://pdfworld.net/download.php?id=422806 (Accessed July 2012).

Service Sector Around the World. (2012). Available from: http://shodhganga.inflibnet.ac.in/bitstream/10603/3077/9/09_chapter%201.pdf (Accessed July 2012).

Shiu, Y.M. & Yu, T.W. (2010). Internal marketing, organisational culture, job satisfaction, and organisational performance in non-life insurance. *The Service Industries Journal,* Vol. 30 (2010), pp. 793–809.

Siddiqui, M.H. & Sharma, T.G. (2010). Analyzing customer satisfaction with service quality in life insurance services. *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 18(2010), pp 221 – 238.

Siu, N.Y.M., Zhang, T.J.F. & Yau, C.Y.J. (2013). The Roles of Justice and Customer Satisfaction in Customer Retention: A Lesson from Service Recovery. *Journal of Business Ethics*, Vol. 114, pp.675–686.

Tan, C.W., Benbasat, I. & Cenfetelli, R.T. (2013). IT-Mediated customer service content and delivery in electronic governments: An empirical investigation of the antecedents of service quality. *MIS Quarterly,* Vol. 37, pp. 77-109.

Temesgen, Z., Negi, R. & Ketema, E. (2010). An Assessment of the Marketing Strategy for Mobile Services of Ethiopian Telecommunication Corporation. *Services Marketing Quarterly*, Vol. 2, pp. 31:50–71.

Terre Blanche, M., Durrheim, K. & Painter, D. (2006). *Research in practice.* 2nd edition. Cape Town: University of Cape Town Press.

The Self-Administered Survey. (2012). Available from: http://www.htm.uoguelph.ca/MJResearch/ResearchProcess/SelfAdministered.htm (Accessed August 2012).

Trading Economics. (2012). *Value added, annual percentage growth in Gabon*. Available from: http://www.tradingeconomics.com/gabon/services-etc—value-added-annual-percent-growth-wb-data.html (Accessed 2012).

Tsai, W.H., Hsu, W. & Lin, T.W. (2011). New financial service development for banks in Taiwan based on customer needs and expectations. *The Service Industries Journal,* Vol. 31, pp. 215–236.

Tustin, D.H., Ligthelm, A.A., Martins, J.H. & Van Wyk, H. (2005). *Marketing Research in Practice.* Pretoria: Unisa Press.

US Department of State Travel Advisory. (2010).*Travel Advisory for Gabon.* Available from: http://travel.state.gov/travel/cis_pa_tw/cis/cis_1120.html(Accessed 25 July 2011).

Vanniarajan, T. & Arun, B. (2010). Service quality in health care centres: An empirical study. *Global Management Review*, Vol. 4 (2010), pp. 1-16.

Van Vuuren, T. (2011). Customer loyalty in an optometric practice: A case study perspective. Master's thesis, University of Johannesburg.

Verma, H.V. (2012). *Services marketing: Text and Cases*.2nd edition. Dorling Kindersley (India): Pearson Education in South Asia.

Vlasic, G. & Kesic, T. (2007). Analysis of Consumers' Attitudes toward Interactivity and Relationship Personalization as Contemporary Developments in Interactive Marketing Communication. *Journal of Marketing Communications,* Vol.13 (2007), pp.109–129.

Vrontis, D., Thrassou, A. & Zin, R.M. (2010). Internal marketing as an agent of change - implementing a new human resource information system for Malaysian Airlines. *Journal of General Management, Vol*. 36 (2010), pp.1-90.

Webster, C. & White, A. (2009). Exploring the national and organizational culture within service firms. *Journal of the Academic Marketing Sciences*, Vol. 38 (2010),pp. 38:691.

World Bank. (2006). From Disintegration to Reintegration: Eastern Europe and the Former Soviet Union in International Trade. *Global Economic Development Review*, Vol.3 (2006), pp.1-7.

World Bank. (2008). Unleashing Prosperity: Productivity Growth in Eastern Europe and the Former Soviet Union*. Global Economic Development Review,* Vol.6 (2008), pp. 2-10.

World Health Organisation. (2007). *The right to Health*. Available from: http://www.who.int/mediacentre/factsheets/fs323/en/.

World Health Organisation. (2007). Survey on migration of health workers in the African region. *Health Care Review*, Vol.2 (2007), pp. 19-23.

World Bank Development Indicators. (2012). Development indicators. *Social Sciences Report,* Vol. 6 (2012), pp. 1-8.

Yesilada, F. & Direktor, E. (2010). Health care service quality: A comparison of public and private hospitals. *African Journal of Business Management*, Vol. 4(6) (2010), pp. 962-971.

Youl Ha, H. (2006). An integrative model of consumer satisfaction in the context of e-services. *International Journal of Consumer Studies*, Vol.30 (2006), pp.137–149.

Zainuddin, N., Previte, J. & Russell-Bennett, R. (2011). A social marketing approach to value creation in a well-women's health service. *Journal of Marketing Management,* Vol. 27, pp. 361–385.

Zeithaml, V.A. & Bitner, M.J. (2007). *Services Marketing. Integrating Customer Focus Across the Firm.* New edition. New York: McGraw-Hill/Irwin.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. (2006). *Services marketing: Integrating customer focus across the firm.* Singapore: McGraw-Hill.

Zhang, L., Liu, B. & Ren, H. (2013). The personality profile of excellent nurses in China: The 16PF. *Journal of Health,* Vol.43, pp.219-224.

Zikmund, W.G. & Babin, B.J. (2007). *Essentials of marketing research.* 3rd edition. Mason: Thomson South-Western.

APPENDIX A: COVERING LETTER

Comparing service quality of doctors and nurses at a military hospital

Dear respondent,

This questionnaire is built to obtain answers from you regarding your perceptions and expectations of the quality of services offered by doctors and nurses at the military hospital. This research will be used as part of my studies with the University of Johannesburg.

This survey will remain confidential and anonymous and request your honest answers.

Please feel free to answer at your own choice with an X (cross) in the appropriate box where applicable.

This survey will take no longer than 10 minutes to complete.

Thank you for your time in completing this questionnaire.

Comparer la qualité des services offerts par les médecins et le personnel infirmier dans un hôpital militaire

Ce questionnaire est conçu pour obtenir des réponses auprès de vous au sujet de vos perceptions et attentes de la qualité des services offerts par les médecins et le personnel infirmier à l'hôpital militaire.

Cette recherche sera utilisée dans le cadre de mes études à l'Université de Johannesburg.
Cette enquête restera confidentielle et anonyme.

Veuillez indiquer par un X dans le cadre réservé à votre réponse.

Ce formulaire ne vous prendra pas plus de 10 minutes à compléter

Ponce Kokou

Student

Prof Roberts-Lombard, Mornay and
Dr Estelle Van Tonder
Research supervisors
Department of Marketing Management
University of Johannesburg
Tel: 011 559 3031

APPENDIX B: QUESTIONNAIRE

Screening question: *(Question de vérification)*

Have you received services from the military hospital?
(Haviez-vous reçu des services de l'hôpital militaire?)

Yes *(oui)*	
No *(non)*	

Section A : Demographic profile*(Profile démographique)*

1. Gender*(sèxe):*

Male *(masculin)*	1
Female *(féminin)*	2

2. Age *(age):*

18 – 28	1
29 – 38	2
39 – 49	3
50 – 60	4
70 and above *(plus de 70)*	5

3. Highest educational level *(niveau d'éducation):*

No formal education *(aucune éducation)*	1
Primary education *(niveau primaire)*	2
Secondary education *(niveau secondaire)*	3
Tertiary education *(éducation supérieure*	4

4. Marital status *(statue conjugal):*

Single *(célibataire)*	1
Married *(marié(e)*	2
Divorced *(divorcé(e)*	3
Widowed *(veuf(ve)*	4
Cohabitant*(cohabitant)*	5

5. Employment level *(forme d' emploi):*

Employed full-time *(employé à temps plein)*	1
Employed part-time *(employé à temps partiel)*	2
Self-employed in formal sector*(employé à titre personnel dans le secteur formel)*	3
Self-employed in informal sector *(employé à titre personnel dans le secteur informel)*	4
Unemployed *(sans emploi)*	5
Student *(étudient)*	6

Pension (old age) *(retraité)*	7

6. Residential area *(lieu de résidence?):*

In Libreville *(dans la commune de Libreville)*	1
Outside of Libreville *(hors de la commune de Libreville)*	2

7. First time patient? *(est-ce votre première visite dans cet hôpital?) :*

Yes *(oui)*	1
No *(non)*	2

8. Required to stay over for at least one night? *(Etes-vous obligé de passer au moins une nuit dans cet hôpital?) :*

Yes *(oui)*	1
No *(non)*	2

Section B: Below are list of points describing your PERCEPTIONS of the military hospital services *(Ci-dessous se trouve la liste des éléments décrivant vos PERCEPTIONS des services offerts à l'hôpital militaire)*

Please indicate your level of agreement with an X, using the following scale:

1=Strongly disagree, 2=Disagree, 3=Disagree somewhat, 4=Neutral, 5= Agree somewhat, 6= Agree, 7= Strongly agree

(Veuillez indiquez votre niveau de satisfaction par un X, en utilisant l'échelle ci-dessous)

1= Très en désaccord, 2= En désaccord, 3= Un peu en désaccord, 4= Neutre, 5= Un peu d'accord, 6=D'accord, 7=Très d'accord)

I believe the medical doctors /nurses who treated me…
(Je crois que les médecins / infirmières qui m'ont traité...)

Doctors*(Médecins)*							**RELIABILITY*(FIABILITE)***	**Nurses*(Infirmières)***						
1	2	3	4	5	6	7	acted in a way that caused me to trust them *(ont agi d'une manière que j' ai développé une confiance en eux/elles)*	1	2	3	4	5	6	7
							acted in my best interests *(ont agi dans mes intérêts personnels)*							
							had the ability to examine me properly *(avaient la capacité de m'examiné correctement)*							
							were always honest with me							

							(ont été honnêtes envers moi)								
1	2	3	4	5	6	7	**RESPONSIVENESS*(REACTIVITE)***	1	2	3	4	5	6	7
							informed me of my state of health during consultation *(m'ont informé de mon état de santé lors de la consultation)*								
							Communicated the prescription of medications for my treatment with me in a manner that I could understand *(ont communiqué avec moi de manière à ce que je comprenne les prescriptions médicales pour mon traitement)*								
							always responded to my queries *(répondaient toujours à mes questions)*								
							always listened to what I had to say *(faisaient toujours attention à ce que j'avais à dire)*								
1	2	3	4	5	6	7	**ASSURANCE*(ASSURANCE)***	1	2	3	4	5	6	7
							showed respect and dignity towards me *(m'ont traité avec beaucoup de respect)*								
							carried out their tasks competently *(m'ont traité avec beaucoup de compétence)*								
							respected the confidentiality of my treatment *(ont respecté la confidentialité de mon traitement)*								
							were well trained and qualified *(avaient beaucoup d'expertise)*								
1	2	3	4	5	6	7	**EMPATHY *(EMPATHIE)***	1	2	3	4	5	6	7
							provided me with individual attention *(m'ont accordé une attention particulière)*								
							were concerned about my well-being *(m'ont montré beaucoup d'intérêts pour mon bien-être)*								
							understood my specific needs *(ont compris mes besoins personnels)*								
							cared about me *(ont pris soin de moi)*								

Section C: Tangibility statements *(Affirmations générales)*

Please indicate your level of agreement with an X, using the following scale:

1=Strongly disagree, 2=Disagree, 3=Disagree somewhat, 4=Neutral, 5= Agree somewhat, 6= Agree, 7= Strongly agree

(Veuillez indiquez votre niveau de satisfaction par un X, en utilisant l'échelle ci-dessous

1= Très en désaccord, 2= En désaccord, 3= Un peu en désaccord, 4= Neutre, 5= Un peu d'accord, 6=D'accord, 7=Très d'accord)

I believe…
(Je crois que...)

TANGIBILITY*(Aspect tangibles)*	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The furniture at the hospital such as beds and chairs was comfortable *(le mobilier de l'hôpital tel que les lits et chaises était confortable).*							
The interior decoration at the hospital was aesthetically appealing *(J'ai aimé le décor interne de l'hôpital).*							
The hospital had a pleasant atmosphere *(J'ai aimé la sensation atmosphérique de l'hôpital)*							
The colour scheme at the hospital was attractive *(les couleurs de l'hôpital étaient attirantes)*							
The toilet facilities in the hospital were clean *(Les toilettes étaient propres)*							

Section D: Overall perceptions of the services received from the hospital *(Vos perceptions générales des services reçus de l'hôpital)*

Using the scale provided, please indicate with an X, your overall perceptions of services received the hospital

1=Strongly disagree, 2=Disagree, 3=Disagree somewhat, 4=Neutral, 5= Agree somewhat, 6= Agree, 7= Strongly agree

(Veuillez indiquez par un X en utilisant l'échelle ci-dessous, vos perceptions générales de la qualité des services reçus)

1= Très en désaccord, 2= En désaccord, 3= Un peu en désaccord, 4= Neutre, 5= Un peu d'accord, 6=D'accord, 7=Très d'accord

I believe…
(Je crois que...)

	1	2	3	4	5	6	7
The overall quality of the administration service at the hospital was excellent *(le service administratif de l'hôpital était excellent)*							
The overall service provided by the hospital was of a high standard *(le service offert par l'hôpital était en général de grande qualité)*							
The overall service I received at the hospital met my expectations *(les services reçus de l'hôpital ont coïncidé avec mes espérances)*							
I felt good about coming to this hospital for my treatment *(je me suis bien senti(e) dans cet hôpital)*							
Overall, the service offering of this hospital was superior to the one offered by government's hospitals *(les services offerts dans cet hôpital étaient meilleurs que ceux offerts par les hôpitaux publiques)*							

Section E: Below are a list of factors which could influence your decision to choose this hospital *(En dessous, se trouve la liste des facteurs qui pourraient influencer votre décision de choisir cet hôpital)*

Using the scale provided, please indicate with an X, how influential these factors were in your decision to choose this hospital

1=Not at all important, 2=Low importance, 3=Neutral, 4=Moderately important, 5=Extremely important

(Veuillez indiquer par un X, l'importance des facteurs ci-dessous dans votre choix pour cet hôpital

1=Pas du tout important, 2= Peu d'importance, 3= Neutre, 4= D'importance modérée, 5= Extrêmement important),

	1	2	3	4	5
Availability of modern medical equipment *(La présence d'un équipement médical moderne)*					
Specialised physicians *(Les médecins spécialisés)*					
Quality of nurses					

(La qualité des infirmières)					
Availability of medicines *(La disponibilité des medicaments)*					
Relatives living in the hospital area *(Un membre familial vivant à proximité de l'hôpital)*					
Hospital near residence *(La proximité de l'hôpital du lieu de résidence)*					
Ease of getting to hospital location *(L'accès facile à l'hôpital)*					
Care cost *(Le coût des soins hospitalier)*					
Patient's past experience *(L'expérience passée du patient)*					
Competent staff *(La compétence du personnel médical)*					
Know people who went to the hospital *(Connaissiez-vous des personnes ayant fréquenté cet hôpital auparavant ?)*					
Good reputation in media *(la bonne renommée de l'hôpital)*					
Hospital cleanliness *(l'hôpital est propre)*					
Employees are friendly towards patient *(le personnel est amical)*					
Hospital is well organised *(l'hôpital est bien organisé)*					
Other *(autres)*					

Thank you

APPENDIX C: CONFIRMATION OF LANGUAGE EDITING

Elsabeth Marnitz

10TH January 2014

TO WHOM IT MAY CONCERN

I, ELSABETH MARNITZ, hereby declare that the MINOR DISSERTATION submitted in partial fulfilment of the requirements for the degree MAGISTER COMMERCII in BUSINESS MANAGEMENT at the UNIVERSITY OF JOHANNESBRUG of **PONCE KOKOU** with the title

SERVICE QUALITY AT A MILITARY HOSPITAL

has been language edited by me.

_____

ELSABETH MARNITZ

720004392 (University of Johannesburg)

Cell: 083 501 1545