PATIENTS' SATISFACTION WITH THE QUALITY OF HEALTH CARE SERVICES RENDERED AT HOSPITALS IN THE FRANCES BAARD DISTRICT

OBAKENG W.I. LESEJANE (Student No: **215 11 640)**

A mini-dissertation submitted in partial fulfilment of the requirements for the degree
Master's of Business Administration (MBA) Finance
Graduate School of Business and Government Leadership
North-West University – Mafikeng Campus
Republic of South Africa

Supervisor: Prof Theuns Pelser

Date: December 2016

DECLARATION

I, Obakeng W.I. Lesejane, hereby earnestly declare that this mini-dissertation with the title “Patients’ Satisfaction With The Quality Of Health Care Services Rendered At Hospitals In The Frances Baard District” is my own original work and has been submitted to North-West University, Mafikeng Campus**.** The work done has not been submitted to any other institution of higher education before. All references to other people’s work from prior related studies have been duly acknowledged by means of a comprehensive list of references.

_____ _____

Signature **Date**

ACKNOWLEDGEMENTS

Many thanks to God Almighty for having spared my life to date, for giving me good health, strength and ability to complete this study. To God be the Glory! I would like to dedicate this mini-dissertation to the following good people:

- To my late father, Mr Joseph “Bra Joe” Lesejane for his unconditional love and encouragement in life.
- To my late partner, Wandile, “my chungu”, for your encouragement to further my studies, for your motivation, for believing in me always and for being my pillar of strength. Your unconditional love and support are much appreciated, and that I will cherish forever.
- To my lovely mother and sister, Aus Neo and Lebo, you made me the strong person that I am today.
- To my son, Thoriso, you are the reason I wake up and keep going everyday no matter how hard the going may get. I thank God for you all the time.
- To Tsakane, Mothepane, Reginald, and Heather for all your support through and through especially when times were hard; you always believed that I could make it.
- To Keamogetswe, Kelebogile, Boitshoko, Baas John, Tshepo, Thabiso, Ofentse and Lebo, thank you for all the sleepless nights we had trying to support each other through our common course.
- To Lerato, Tsalano, Maki and all my bosom girlfriends, thank you for your continued love, encouragement and support.
- And lastly, to my supervisor, Prof Pelser much appreciation for all your continued support and guidance. I couldn’t have made it without your patience with me.
- Any errors of omission and commission are entirely mine.

ABSTRACT

The purpose of this study is to evaluate the level of patients' satisfaction with the quality of health-care services provided in hospitals that are in the Frances Baard Region (Northern Cape). The public health institutions have a public statement of patients' rights displayed in their hallways. Patients have come to expect a certain level of service and ask questions when they feel that patient care quality is compromised by lower standards of health services as provided by the health professionals. In this study, simple random sampling was used to obtain participants for the study. Respondents were randomly chosen amongst the total number of patients who attended hospitals in the Frances Baard District. Questionnaires were used to collect data. Quantitative research as alluded to earlier on provides a general picture of a situation and produces results that are across contexts where the importance is on statistical information than individual perceptions. In a proposition to improve on national health care services by hospitals in the Frances Baard District, results of this research may therefore be applied to other health-care districts in Northern Cape, as well as the country as a whole with the overall aim of improving the quality of service offered to patients. Seventy five (75) questionnaires were handed out with a 100% response rate, and 71% of respondents were female and 29% were male. The following aspects were found to be directly linked to the satisfaction levels of patients and related findings of the study were as follows: 66% found waiting times fairly good whilst 34% found it poor. 93% of respondents were happy with privacy during consultation whilst the remaining 7% thought that the privacy was just fair. On evaluation of overall service received, 67% agreed that it was good value for money and would recommend services of that facility to family and friends whereas the remaining 33% disagreed.

GLOSSARY OF TERMS

Healthcare - the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in humans

Primary Healthcare – essential health care made accessible at a cost a country and community can afford, with methods that are practical, scientifically sound and socially acceptable

Tertiary Healthcare - specialized consultative health care, usually for inpatients and on referral from a primary or secondary health professional, in a facility that has personnel and facilities for advanced medical investigation and treatment

District Hospital – a facility at which a range of outpatient and inpatient services are offered. It is open 24 hours a day, seven days a week. The hospital would have between 30 and 200 beds, a 24-hour emergency service and an operating theatre.

Regional Hospital – A facility that provides care requiring the intervention of specialists as well as general medical practitioner services. A general regional hospital should provide and be staffed permanently in the following six basic specialties of surgery, medicine, orthopaedics, paediatrics, obstetrics and gynaecology and psychiatry, **plus** diagnostic radiology and anaesthetics.

Specialised Hospital – There are wide a range of possible specialties that could be focused in a hospital, the two most common being TB and Psychiatry. But they also include spinal injuries, maternity care, heart conditions, infectious diseases and so on. These units may also provide either acute, sub-acute or chronic care or all of those levels of care.

LIST OF TABLES

LIST OF FIGURES

TABLE OF CONTENTS

CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 Introduction

In this day and age, almost every organisation is concerned with satisfying the users of its products or services, whether referred to as clients, customers, consumers or patients. Today's health-care organisations, as well, put more efforts and focus into reducing the costs, improving the quality of care and meeting certain standards through particular guidelines.

Zoller, Lackland and Silverstein (2001) supported the above views by highlighting that as health care becomes more competitive, providers of care and health-service organisations are becoming increasingly concerned about their ability to recruit and retain patients. Customer satisfaction in health care has in recent years gained widespread recognition as a measure of quality. According to Kravitz (2004), this has arisen partly because of the desire for greater involvement of the customer in the health-care process and partly because of the links demonstrated to exist between satisfaction and patient compliance in areas such as appointment keeping, intentions to comply with recommended treatment and medication use.

The South African health-care system has a programme called the Directly Observed Treatment (DOT). The purpose of this programme is to enhance the fight against TB through direct supervision of individual patients to ensure treatment adherence. Basically the programme’s overall aim is to increase the national cure rate of TB.

High-quality clinical outcomes are dependent on compliance which in turn is dependent on patient satisfaction, and the latter has come to be seen as a legitimate health-care goal and a prerequisite of quality care (Newsome & Wright, 2006). This has implied that care cannot be high quality unless the patient is satisfied.

According to Newsome and Wright (2006) the subject of satisfaction has been studied extensively in the fields of sociology, psychology, marketing and healthcare management. They further revealed that a number of studies have been conducted

to find out more about how patients evaluate the care they receive and to develop conceptual models of patient satisfaction.

The purpose of this study was to evaluate the level of patients' satisfaction with the quality of health-care services provided in hospitals that are in the Frances Baard Region (Northern Cape), as well as to determine the relationship amongst patient satisfaction, intent to return and the intent to recommend services.

1.2 Background and context

The Northern Cape is one of the most rural and vast provinces in the country. It has five health districts and 14 hospitals in total. One hospital is a Provincial Tertiary Hospital (provides high level of care by specialist clinicians); another is a Regional Hospital (provides some of the tertiary health-care services on top of basic essential health services); and lastly, the other is a Specialised Hospital (providing TB and mental health services). Then, the rest of the hospitals throughout the Province are District Hospitals (where health-care services are rendered by general clinicians as well as nurses). Two (2) of these higher level hospitals (i.e. Provincial Hospital and Specialised Hospital) are situated in the Frances Baard District. The population in this District is approximately 382,086 out of the provincial population of 1,166,680 (Mid-year Population Estimates, 2014).

This study was completed by the end of October 2016. Two letters were sent to the Northern Cape Department of Health - one to the Head of Department to request permission to conduct the study and the other to the Provincial Health Research Ethics Committee.

The researcher has an Honours degree in Physiotherapy and has conducted health research before towards acquiring the Honours degree. The researcher is also a current employee of the Northern Cape Department of Health. Therefore the chosen environment in which the study was conducted is very familiar to the researcher.

1.3 Problem statement

The human rights culture and the Constitution of the Republic of South Africa has lent a voice to all citizens and patients receiving healthcare in various institutions. Almost all public-health institutions have a public statement of patients' rights displayed in their hallways. Patients have come to expect a certain level of service and ask questions when they feel that their care is compromised by lower standards of care.

There is never a 100% satisfaction of clients with regard to the services that were rendered to them, irrespective of who the service provider was. It is thus important to establish patients' levels of satisfaction with the healthcare received in public institutions. This may lead to the following sub-problems:

- Patients are not completely satisfied with the quality of health-care services they receive.
- There are different perceptions and predictors for patient satisfaction.
- Patients are reluctant to return to the hospital for subsequent care.
- Patients are reluctant to recommend services to the others.
- Patients do not have an interest in new hospital programs and services

1.4 Research objectives

The aim of the study is to identify, describe and determine the quality of health-care services provided in District Hospitals that are in the Frances Baard Region (Northern Cape), South Africa. This study seeks to achieve the following objectives:

1) To establish what percentage of patients is not completely satisfied with the quality of health-care services they receive.
2) To determine the different perceptions and predictors for patient satisfaction.
3) To establish whether patients are willing and intend to return to the hospital for subsequent care.
4) To establish whether patients have intentions to recommend hospital services to others.
5) To determine whether patients have an interest in new hospital programmes and

services.

1.5 Literature survey

The researcher made use of electronic library provided by the North-West University. Journals and articles were retrieved from Emerald and Google Scholar for the purpose of conducting literature review.

The researcher thoroughly went through, critically analysed and compared different studies that have been previously conducted and documented in the last ten years. The researcher then determined the best research methodology to employ for her current study, gather some theoretical framework that guided the researcher to interpret the results and make final recommendations at the end of the study.

1.6 Research questions

This study was guided by the following research question:-

Are patients at District Hospitals in the Frances Baard District satisfied with the quality of health-care services that are rendered to them?

The questions that guided the investigation were:

1) What percentage of patients is not completely satisfied with the quality of health-care services they receive?
2) What are the different perceptions of patient satisfaction?
3) Do patients willingly intend to return to the hospital for subsequent care?
4) Do patients intend to recommend the hospital services to the others?
5) Do patients have interest in new hospital programmes and services?

1.7 Significance of the study

This study is considered important for the following reasons:-

a) By identifying the level of patients' satisfaction with the primary hospital services and the factors that directly relate to the patients' dissatisfaction, the study produced knowledge and understanding that might bring positive change within

the primary healthcare service delivery;

b) The study presents suggestions gathered through interviews and questionnaires on how to improve on health-care service delivery at primary hospitals;
c) The results of the study could also be used to improve on aspects that directly and indirectly relate to the overall patient satisfaction in other District Hospitals that are in the other four health districts of the Northern Cape; and
d) Achievement of the objectives, findings and recommendations of this study will positively contribute to the hospitals' quality assurance and improvement programmes.

1.8 Research design and methodology

A quantitative research design was employed in this study. In this type of research design, social phenomena are examined by the use of numerical measurements and statistical analyses of measurements.

1.8.1 Ethical requirements

- Two letters were written and sent to the Northern Cape Department of Health, one to the Head of Department to request permission to conduct the study and the other to the Provincial Health Research Ethics Committee.
- A covering letter was attached to all questionnaires, explaining the purpose and importance of the study.
- All participants were assured the information provided by them would be kept strictly anonymous and confidential
- The wishes of the patients who did not want to participate in the study were respected.

1.8.2 Representative sampling

The sampling technique which was employed for this study was a simple stratified sampling technique. The sample consisted of 75 patients, and these were taken from patient categories namely; in-patients admitted to the wards as well as those who consulted as out-patients. The categories are represented as follows:

30 in-patients and 45 out-patients.

1.8.3 Data-collection procedures

Since the methodology was quantitative in nature, structured interviews were used to gather data from the respondents who could not read and write. Only a very few of the questions were unstructured. The questionnaires (structured) were used to collect data from those who could read and write.

1.8.4 Data analysis

A computer-aided statistical analysis, the Statistical Package for the Social Sciences (SPSS), was used. Descriptive statistics were used to present quantitative descriptions as well as to describe basic features of data in this study.

1.9 Limitations of the study

The study was limited to District Hospitals in the Frances Baard District of the Northern Cape. The participants had to be 18 years and above. All patients with mental illnesses were excluded from the study.

1.10 Research layout

This research is presented in five chapters. Chapter 1 provides an overview of the study by introducing the research, dissecting the problem statement and a brief presentation of research methodology used. Chapter 2 provides an extensive literature review of service quality in general and the role service quality plays in provision of quality health-care service. Chapter 3 deals with research methodology, delineating how the quantitative study was carried out. In Chapter 4, item score analysis for Expectations and Perceptions was done under each of the following categories: Tangibles, Reliability, Responsiveness, Assurance and Empathy.

The service gap scores were determined and their statistical significance established. The research project concludes with Chapter 5 which offers a discussion of the findings where each dimension of quality is discussed and relevant recommendations and suggestions for the future research initiatives made. References and Appendix are the last sections where all materials used in the project are listed and a list of tables, graphs and figures used presented respectively.

1.11 Conclusion

The purpose of the study was to evaluate patients' satisfaction with the quality of health care services provided at District Hospitals in the Frances Baard District, as well as to determine the relationship amongst patient satisfaction, intent to return and the intent to recommend services.

As patients' goals and values vary widely, are not predictable on the basis of demographic and disease factors alone, and are subject to change, one way to determine what patients want and whether their needs are being met is to ask them. Structured and some unstructured questionnaires and interviews were used to gather data, which was later analysed through a computer-aided statistical analysis, the Statistical Package for the Social Sciences (SPSS). Interpretation of results and recommendations were documented respectively in the penultimate and final chapters of this study.

CHAPTER 2

OVERVIEW OF THE LITERATURE REVIEW

2.1 Introduction

There are various establishments that operate in the business industry, namely business enterprises, education, healthcare, entertainment, etc., and their survival in this current aggressive global competition depends on customer loyalty to the business. Customer satisfaction and subsequently customer loyalty, both depend on the organization, whether or not it is willing to maintain this relationship with its customers.

According to de Jager and du Plooy (2007), in the past few years, the health-care industry has seen an increasing interest in quality care services, as there are changes in standards of living, which consequently has raised the demand for enhanced medical care services so as to improve lifestyles. Even though there may be service sophistication and vagueness, it is important, when assessing quality of services rendered, to also take into consideration perceptions of the clients other than solely those of the service provider. Quality of service delivered to health customers is a legitimate reality as underlined in the White Paper on the Transformation of Public Service delivery (1997).

The South African public health structure is sometimes criticized as being inadequate and sometimes incompetent, including charges of patients' rights abuse. Batho Pele Principles have since been developed by the government to help control and improve the public health sector situation. For patients, improving the healthcare services quality is of main concern and for health-care institutions to satisfy and retain these patients; it has become even more important to provide improved services to their patients.

According to Bu and Jezewski (2010) health-care providers who understand patients' needs and put patients' rights first can also help to mitigate ways in which advancements in medicine and technology can undermine patients' quality of life and their right to self-determination.

De Jager and du Plooy (2007) stated that the understanding of patients' perceptions on healthcare quality is fundamental, as patients' expectations of service quality inform their decisions to, as well as frequency of using the same service. They established that determining the factors that correlate with satisfying patients is highly imperative so as to realize what it is that patients need and would appreciate more. This would also give guidance to the health sector in areas that need more attention as well as possible improvements.

2.2 Definition of satisfaction

According to Al-Emadi et al. (2009), satisfaction is a psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with a consumer's prior feelings about the consumption experience. Abioye et al. (2010) concur and further define patient satisfaction as the nature of an individual's experience compared with his or her expectations.

2.3 Quality

Quality has been defined by many authors before, but that depends on whose viewpoint as well as within which setting is taken into consideration. Mosadeghrad (2013) defined quality as value, excellence, conformance to specifications, conformance to requirements, and fitness for use and meeting and/or exceeding customers' expectations.

In expansion, Ovretveit (2013) further defined health-care quality as the provision of care that exceeds patient's expectations and achieves the highest possible clinical outcomes within the available resources. Lokachari, Padma and Rajendran (2010) defined quality of health care in another dimension as the production of improved health and satisfaction of a population within the constraints of existing technology, resources, and consumer circumstances.

2.4 Key principles of patient satisfaction

Patient satisfaction research has grown during the last decades to the extent that every health care organisation is concerned with the provision of products and services of excellent quality as defined by the users (Ntani & Papanikolaou, 2008).

They elaborated that as a result, patient satisfaction surveys are widely used in order to identify poor quality care and inform people about quality improvement efforts of provided services. They are also used to increase public confidence in the services and create a sense of accountability.

Alongside the context of mounting consumerism, endeavours to satisfy patients have become crucially important for the entire health-care industry. Satisfaction in providing service has become increasingly used as the measure of a health-care system performance. Satisfaction establishes itself in the delivery, access and consumption of health-care services. The South African health-care industry has remained under tough pressure to decrease costs and increase patients' satisfaction levels.

Sharma, Sharma and Sharma (2011) declared that satisfying patients is a fundamentally sound principle and that an understanding of the nature of satisfaction is desirable if health-care providers are to deliver quality care and succeed in today's rapidly changing business and economic environment.

It can be argued that the satisfaction of patients with regards to healthcare remains related to theories of health-care excellence. Assessing satisfaction of patients with the quality of health-care service received is imperative as it is used to assess factors affecting and influencing them to make use of those services, and perhaps refer services to others. The information gathered is then used to address areas of concern identified (Malangu & Mosane, 2008).

Ahmad and ud Din (2010) indicated that patients' satisfaction is concerned with several factors. For example, they have to be happy with doctors, treatment, medicine and clinical conditions. Likewise, satisfaction of the patients is also affected by their awareness of the health services. Atinga (2011) concurred by emphasising that client satisfaction with quality of care is enhanced when there are opportunities for them to have access to information relating to their condition and treatment.

Patients' feedback is important and therefore required with respect to experiences of services and quality of health care received. Feedback from customers does not only improve knowledge of decision-makers, but also facilitates more improved

prioritization, improved strategic resource allocation and improved value for money. It also serves as a platform for providing better services to citizens (Phaswana-Mafuya, Peltzer & Davids, 2011).

Lokachari et al. (2010) concluded that medicine availability, medical information, staff behaviour and doctor behaviour had significant positive influences on patient satisfaction while waiting time had a negative impact on patient satisfaction. On the other hand, Ferreira, Gomes and Yasin (2011) are of the view that patients' satisfaction can be improved through better utilisation and sharing of existing critical resources within, and among public hospitals. Ntani and Papanikolaou (2008) emphasized that client satisfaction is of fundamental importance as a measure of quality of care because it gives information on the provider's success in meeting those client values and expectations which are matters on which client is the ultimate authority. The measurement of satisfaction is, therefore, an important tool for research, administration and planning.

Glover and Rivers (2008) raised a concern that for decades experts have struggled to formulate a concise, meaningful, and generally applicable description of the quality of health care. According to Arries and Newman (2008), the health sector denotes quality as services that meet certain pre-set criteria often of high standards, which also address and satisfy needs of clients and their service providers.

Arries and Newman (2008) further indicated that amidst the health-care environment, quality service rendering points to thorough and collaborative efforts portrayed by health staff that ensures professionalism, expert conduct and courteousness, including willingness to assist where necessary. The clients in turn appreciate the manner in which services are rendered and it leaves them with good experience.

Broadly health-care service can be broken down into two quality dimensions: technical quality and functional quality (Lokachari et al., 2010; Mosadeghrad, 2013). Rivers and Glover (2008) are of the same view. According to them, for physicians, quality of health generally involves a technical and a physician-patient interaction. Technical quality in the health-care sector is defined primarily on the basis of the technical accuracy of the medical diagnoses and procedures, or the conformance to professional specifications. Functional quality refers to the manner in which the

health-care service is delivered to the patients.

According to Abekah-Nkrumah et al. (2010) an essential step towards quality improvements within the partnership between health workers and patients is the development of a charter which sets out the rights and responsibilities of patients. In this partnership, as patients take on more responsibility for their own health, they also expect their rights to be respected and their views taken into consideration, when making decisions on issues affecting their health.

According to the South African Constitution (1996), all individuals have certain human rights as citizens of this country, and the Government has a legal duty to respect, protect, promote and fulfil those rights. As part of control measures, the National Department of Health, implements the Patient Rights Charter as well as Batho Pele Principles in observing and promoting the people's rights to dignity and privacy.

People's expectations about services tend to be strongly influenced by their own prior experience with a particular service provider or with competing services in the same industry. If they have no relevant prior experience, pre-purchase expectations may be based on factors such as word of mouth, and news stories or the firm's marketing efforts (Owusu-Frimpong et al., 2010).

A study conducted by Atinga et al. (2011) identifies patients' viewpoints on quality to encompass communication, patient-provider relationship, the hospital environment and waiting time. Furthermore, the results of a study conducted by Alasadi and Al Sabbagh (2013) revealed that once patients are satisfied with the quality of medical services provided, they then look for other hotel aspects of the services. The absence of these services may affect patient's perception of quality negatively although they may be satisfied with the core medical service.

For example, a study conducted by Atinga (2011) revealed that poor patient-provider relationship, delays in medical and administrative procedures as well as other operational lapses of hospitals are significant drivers of poor health-care quality. Atinga et al. (2011) emphasized that it is therefore important to continuously examine client satisfaction with quality of care. This is because, unless the patient is satisfied

with the care delivered at reasonable cost and risk of adverse effect minimized, healthcare organizations could face the peril of going out of business.

2.5 Perceptions and predictors for patient satisfaction

South Africa is a diverse state using eleven official languages. The dominance of a spoken language depends on the location and province. A lot of health-care personnel can simply not communicate in more than two languages, which could understandably cause major complications, especially, when it comes to the provision of good quality health care.

Atinga et al. (2011), indicated that many studies on client satisfaction with quality of care often placed emphasis on communication as an important tool in measuring quality care. Schlemmer and Mash (2006) indicated that language barriers are associated with reduced patient satisfaction, fewer return visits and poorer adherence to medication such as antiretroviral therapy.

According to Otani et al. (2012) there is a very strong direct relationship between patients' experience in the physician-patient encounter, patients' satisfaction levels and patients' intent to follow medical advice, as satisfied patients were more likely to adhere to the doctor's advice and thus patients with adherence intent had higher satisfaction levels.

Wagner et al. (2011) found that patients who described satisfaction with their discharge teaching and overall nursing care were more likely to return to that same facility for other hospitalization needs, which could potentially increase revenues to the hospital. Lokachari et al. (2010) reiterated that, research on quality of service has captured more attention due to the impression that excellent quality leads to improved client satisfaction with added benefits. These benefits include, among others, returning to same provider in future for another consultation, telling other people about the services offered whether or not they are good, prepared to spend more for more or less similar service, etc.

Natalisa and Subroto (1998) further elaborated that even though there are other antecedents to customer satisfaction namely price, situation, personality of the

buyer, the quality of service receives special attention from the service marketers because it is within the control of the service provider. Moreover by improving quality of service, its consequent customer satisfaction could be improved, which may in turn influence the buyer's intention, in this case the patient, to purchase/pay for the service.

Amin and Nasharuddin (2013) highlighted that understanding in-patients' evaluation of hospital service quality performance will improve the existing health-care system outcome and enhance service quality. Consequently, the number of satisfied in-patients increases and patients will continue to visit their hospitals.

Davids et al. (2011) state that patient satisfaction surveys are increasingly being promoted as a means of understanding health care service quality and the demand for these services in developing countries. For instance, surveys:

1) Are simple, fast and cheap to administer;
2) Are critical for developing measures to increase the utilisation of Primary Health Care (PHC) services;
3) Can help to educate medical staff about their achievements as well as their failures, assisting them to be more responsive to their patients' needs;
4) Allow managerial judgment to be exercised from a position of knowledge rather than guesswork in the important task of managing public expectations and resources (Davids et al., 2011).

Cidón et al. (2012) note that health-care centres can use survey results to design and track quality improvement over time, as well as for comparisons between different institutions. Furthermore, the information gained from patient satisfaction surveys is also useful for the accreditation of health-care centres. Papanikolaou and Ntani (2008) mention that patient satisfaction surveys are also used to increase public confidence in the services and create a sense of accountability.

2.6 Research questions

The provision of a high quality of care at health facilities is not a luxury but a necessity (Hulton, Matthews & Stones, 2000). Patient experience is a component of

quality of care, while expectation fulfilment is the consistent factor associated with health-care service satisfaction (Fowler & Patterson, 2013). This research therefore aims to answer the following questions:

1) How large a percentage of patients are not completely satisfied with the quality of health-care services they receive?
2) What are the different perceptions and predictors for patient satisfaction?
3) Do patients willingly intend to return to the hospital for subsequent care?
4) Do patients intend to recommend the hospital services to the others?
5) Do patients have interest in new hospital programmes and services?

2.7 Conclusion

In conclusion, it could be rational to argue that the process of assessing and measuring patient satisfaction are quite challenging. For example, the consistency and validity of numerous tools of satisfaction measurement, the procedures carried out as well as theory of, and patient satisfaction concepts, are among the subjects that have been interestingly deliberated on in previous literature. Nonetheless, even with these operational challenges it is important to centralize the evaluation of patient satisfaction to each of health-care assessment endeavours based on quality determination.

The study of this magnitude has not been conducted in Northern Cape before. This study was limited to 1 out of the 5 Districts, an additional study would therefore be ideal in each District. That is because factors that are unique to the District may affect expectations as well as perceptions of patient satisfaction per location. Socio-economic status as well as ethnic dominance might influence patient perceptions and expectations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology can be defined as the study of methods by which knowledge is gained and aims to give the work plan of research (Rajasekar et al., 2006). Research methodology is not only about research methods used but it also considers the logic behind the methods used in research. Furthermore, it explains why detailed methods or techniques have been used instead of others so that research results are accomplished of being evaluated by the researcher and others (Piekkari, 2009). It is therefore important that the researcher does not only know the research methods used but completely understands the underlying methodology (Bryman et al., 2014).

In this study methodology therefore refers to how research was carried out and its logical sequence. The main aim of the study was to determine the quality of health-care services offered to patients in the Frances Baard District. This was done through the use of SERVQUAL questionnaire to explore the expectations and perceptions of patients in the Frances Baard District on health care service quality.

This chapter commences with an analysis of different research types and justification of the research methods used in this study. It is followed by defining the study population, sampling methods and data-collection methods used in this research as well as justification of the research tool used. It is concluded with a discussion of data-analysis methods used and ethical issues considered.

3.2 Research types

Research is broadly classified into two main classes: 1. Fundamental or basic research and 2. Applied research. Basic research is also known as theoretical research and involves an investigation on basic principles and reasons for occurrence of a particular event or process or phenomenon. Basic research is not concerned with solving any practical problems of immediate interest and findings may not lead to immediate use or application.

Applied research on the other hand involves the use of well-known and accepted principles in solving problems. It is concerned with actual life research and used to find solutions for practical problems which warrants solutions for immediate use (Rajasekar et al., 2006). The basic and applied forms of research can be quantitative or qualitative or even both (Rajasekar et al., 2006).

3.2.1 Quantitative research

Quantitative research is based on the measurement of quantity or amount (Rajasekar et al., 2006). It is suited to theory testing and developing universal statements and it provides a general picture of a situation. Quantitative studies therefore produce results that are normally done across contexts (Schulze, 2003). This type of research involves the use of statistical analysis. This type of research is based on methodological principles of positivism and adheres to the standards of strict sampling and research design (Phophalia, 2010). Quantitative research requires extraction of data in a big volume using standardized methods that include more generalized samples, where the emphasis is on statistical information than individual perceptions (McCusker & Gunaydin, 2014). The study applies this.

3.2.2 Qualitative research

Qualitative research is concerned with qualitative phenomena involving quality. It is descriptive, non-numerical, applies reasoning and uses words. It aims to get the meaning, feeling and describe the situation. It is exploratory and cannot be graphed. It investigates the why and the how of decision-making (Rajasekar et al., 2006).

3.2.3 Research methods used in this study

The rising health-care challenges and persistent poor health-care service problems are not only confined to Frances Baard District, but a nationwide problem. The quality of health service has been found to play an important role in alleviating this problem. Quantitative research method, through the use a validated SERVQUAL questionnaire, was used in this research to gather information on expectations and perceptions of patients on Frances Baard District service quality.

Quantitative research as alluded to earlier on provides a general picture of a

situation and produces results that are across contexts where the importance is on statistical information than individual perceptions. In a proposition to improve on national health care services by hospitals in the Frances Baard District, results of this research may therefore be applied to other health-care districts in the country with an overall aim of improving the quality of service offered to patients.

3.3 Population

A population is a collection or totality of well-defined objects. The observations or entities could be anything like persons, animals, plants and objects (Sachdeva, 2009). In this study the population consisted of all patients attending the Frances Baard Region hospitals in the Northern Cape**.**

3.3.1 Sampling

Sampling is the process of selecting units (e.g. individuals, organisations) from a population of interest. By studying the sample one may objectively generalise the results back to the population (Sachdeva, 2009). There are two types of sampling methods: probability and non-probability sampling. Probability or random sampling gives all members of the population a known chance of being selected for inclusion in the sample. Of the four random sampling techniques, namely simple random sampling, systematic sampling, stratified sampling and cluster or multi-stage sampling, simple random sampling is the ideal choice as it is a perfect random method (Sachdeva, 2009).

In this study simple random sampling was used to obtain participants in the study and respondents were randomly chosen amongst the total number of patients who attended hospitals in the Frances Baard District health-care service. A total of seventy-five questionnaires were handed out and all the questionnaires were collected properly completed. Non-probability sampling procedures are not desirable as they certainly contain sampling biases (Sachdeva, 2009). Non-probability sampling techniques were not used in this study.

3.3.2 Data collection

Data are distinct pieces of information usually formatted in a special way, whereas research data refer to data collected, observed, or created for purposes of analysis to produce original research results. Research data could be in the form of already existing data (secondary data) or new data collected for the specific research problem at hand (primary data) (Bryman & Cramer, 2004).

In this research both primary and secondary data was used. Primary data was gathered from patients through the use of a fifteen-item SERVQUAL questionnaire with pre-determined questions (Parasuraman et al., 1988). Questions covered five dimensions of service quality namely: tangibles, reliability, responsiveness, assurance and empathy. Each dimension had two sets of questions. Secondary data were obtained from databases and search engines on the Internet.

3.3.3 Primary data-collection methods

Depending on the type of research, primary data can be collected from the experimental field or through a survey type of study. Most commonly used methods for primary data collection are observation, interviews, questionnaires and schedule methods (Luo et al., 2013).

- **Observation**

Observation is a planned, carefully and thoughtfully selected method of data collection by watching behaviour, events, or noting physical characteristics.

- **Interviews**

Interviewing is one of the most common methods of data collection. Oral communication is the main theme behind this method.

- **Questionnaire**

Questionnaires are used to gather information in a standardized manner which, when gathered from a representative sample of a distinct population, allows the generalization of the results to the wider population (Rattray & Jones, 2007).

The main objectives of questionnaires are to maximize the number of people answering the questionnaire (response rate) and to obtain accurate relevant information for the survey. To maximize the response rate the following points need to be considered carefully (i) method of questionnaire administration (ii) methods of establishing rapport with respondents and (iii) putting in place mechanisms to remind respondents to respond. Accurate relevant information is obtained by ensuring the questions are well designed, structured and properly laid out (Biggs et al, 2001).

To ensure that a questionnaire is well-designed and crafted to collect information that answers the main research questions, Klopper and Lubbe (2011) propose and highly recommend the use of a problem-research question alignment matrix in developing a research questionnaire.

- **Schedules**

The Schedule method of data collection is similar to the questionnaire, the difference being that in the schedule method the researcher takes the questionnaire to the respondent and the researcher fills in the questionnaire during the interview. This method has the advantage that the respondents can ask questions about what they do not understand during the interview process (Sahu, 2013).

- **Method of primary data collection used in this research**

Data were collected from patients in the Frances Baard Region, Northern Cape through the use of a structured questionnaire. A problem-research question alignment matrix as espoused by Klopper and Lubbe (2011) was used to develop the questionnaire. The SERVQUAL Tool as proposed by Parasuraman et al. (1988) was adapted in this study to collect data. The SERVQUAL instrument has been empirically evaluated in the hospital environment and has been established as a reliable and valid instrument in that setting (Babakus & Mangold, 1992).

- **Questionnaire design and layout**

The questionnaire was divided into four sections. The first section was the introduction which introduced the patient to the researcher, and the study to be carried out and it also obtained consent from the patients to participate in the study.

The second section obtained demographic details of the patient as well as collecting information on the health-care service history of the patients. The third section of the questionnaire explored the expectations of patients and it contained a total of 15 questions covering the five dimensions of service quality as per the SERVQUAL tool (Parasuraman et al., 1988). Each dimension had a set of three questions. The fourth section explored the quality perceptions of health care services rendered in district hospitals throughout the Frances Baard District in the Northern Cape. This section equally contained fifteen questions covering the five quality of health-care service dimensions as per the SERVQUAL tool.

3.4 Research variables, measurement and scaling

In order to perform an analysis, variables have to be quantified, this means assigning values/ numbers to points on a scale. There are four levels of measurement on a continuum of discrete and continuous namely: nominal-scale, ordinal-scale, interval and ratio-scale (Phophalia, 2010).

Nominal Scale: A nominal scale is simply a system of assigning number symbols to events in order to label them. These numbers are not associated with an ordered scale for their order is of no consequence. **Ordinal scale:** In ordinal measurement attributes are rank-ordered. However, the distances between attributes do not have any meaning.

Interval Scale: In interval measurement the distance between attributes is equal and implies that values do have meaning. For example, the distance from 30 to 40 years is the same as the distance from 70-80 years. The interval between values is interpretable. **Ratio Scale:** Ratio scales have an absolute or true zero of measurement. This means one can construct a meaningful fraction or ratio with a ratio variable.

Likert-type or frequency scales use fixed choice response formats and are designed to measure attitudes or opinions, it is an ordinal scale designed to measure levels of agreement/disagreement (Rattray & Jones, 2007).

The questionnaire used to collect data in this study had 2 sections, i.e. A(biographic

data) and B(core elements). In section B there were two types of scales but both each with five variables. For example, range of opinion from "strongly agree, agree, neutral, disagree and strongly disagree" or "very good, good, fair, poor and very poor".

3.5 Data analysis

Statistical analysis of data enables us to investigate variables, their effect, their relationship and their patterns of involvement in the world. The flexibility provided by data analysis software plays an important role in identifying a suitable software to analyse data, SPSS (Statistical Package for the Social Science) permits incredible flexibility in terms of what a researcher can do with his or her data (Lutabingwa & Auriacombe, 2007). In this study data was analysed by use of a data analysis sofware called Statistical Package for the Social Science (SPSS).

3.6 Research ethics

Research ethics helps prevent research abuses and assists investigators in understanding their responsibilities as ethical fellows. Research ethics emphasizes the humane and sensitive treatment of research participants who may be placed at varying degrees of safety by research procedures. It therefore is important that before any research activity is undertaken, it must pass through an ethical evaluation (Bless et al., 2006).

Ethical clearance to conduct this research was obtained from the Northern Cape Department of Health Services Clearance Board. Permission to conduct research and collect data from patients at the hospitals in the Frances Baard District, an ethical clearance certificate was obtained from the Provincial Health Research Ethics Committee and an ethical clearance certificate from North-West University.

3.7 Conclusion

In this chapter the research design, sampling methods, data collection, analysis and ethical considerations were discussed. The next chapter discusses the research findings in an attempt to answer the research questions of the study.

CHAPTER FOUR

DISCUSSION OF THE RESULTS

4.1 Introduction

In this chapter, the research findings obtained through the use of a standardized SERVQUAL questionnaire are presented. The results aimed at answering the problem and research questions raised in Chapter two were derived from the data collected from patients who attended three (3) District Hospitals within Frances Baard District of Northern Cape.

This research project was conducted to determine the overall patient satisfaction with the quality of health service at District Hospitals in the Frances Baard District. It also determined the expectations and perceptions of patients who attended District Hospitals in the Frances Baard District. By the use of pie charts, bar charts and frequency tables, descriptive statistics were used to present percentages of different variables and demographic data. Correlation coefficients were determined to establish the relationships between variables.

This chapter covers the introduction and all findings from the survey. The chapter commences with an introduction, the response rate, demographics of the respondents, and expectations of patients, satisfaction and perceptions of patients. Then lastly, the recommendations and conclusion are covered.

4.2 Response rate

Response rate of distributed questionnaires is demonstrated in the table below.

Table 4.1: Response rate

Distribution	Feedback	Response rate %
75	75	100

A total of 75 questionnaires were distributed on different days over a period of two weeks. Of the 75 questionnaires given out to patients, all the questionnaires were received back. The response rate was therefore 100% and representative enough to

be used to conclude findings.

4.2.1 Section A: Demographics

In this section, demographics refers to information on the age groups of patients, gender, and level of education achieved, status, employment and booking status.

Figure 4.1: Age groups

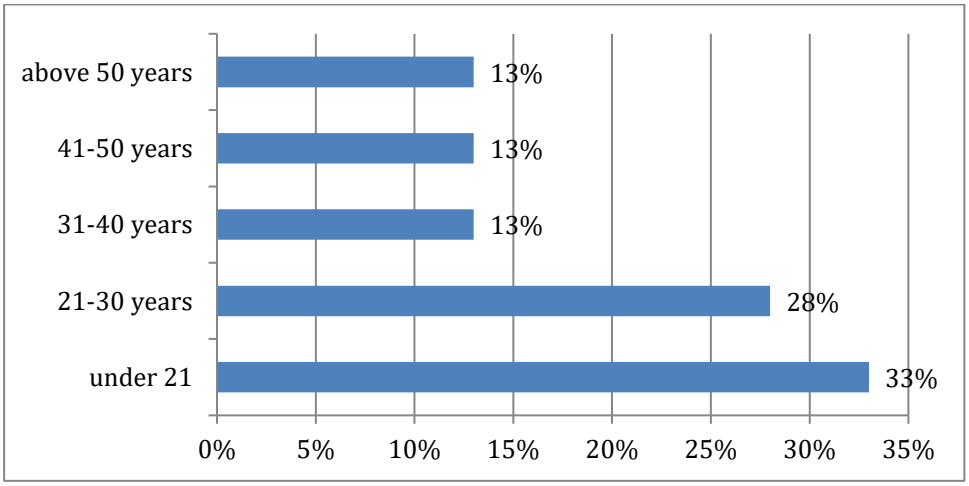

Figure 4.1 indicates that the majority of respondents (33%) were aged under twenty-one, followed by twenty-eight per cent (28%) of respondents aged between twenty-one and thirty years old, 13% of respondents were aged thirty-one to forty years old, another 13% of respondents were aged forty-one to fifty years old and the last of 13% respondents were aged above fifty years. This is an average age group that may have acquired some experience to understand the role of health care and its significance in their decisions at the hospital.

Figure 4.2: Gender

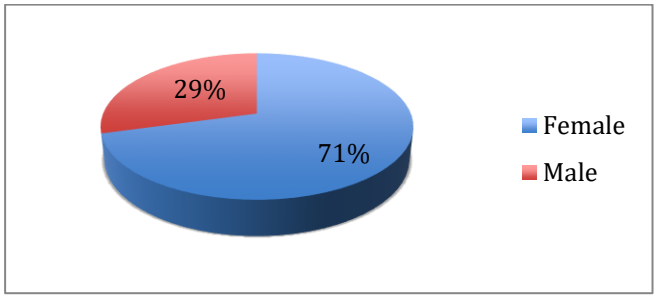

Figure 4.2 indicates that out of a total sample of 75 respondents, 71% were female and 29% were male patients. These figures reflect that the patients are female orientated. There is strong racial and gender bias in the experience of joblessness and Africans, particularly female South Africans. South African females were denied access and had received no recognition on-the-job knowledge (McGrath & Akoojee, 2007). The burden of unemployment falls on the African population because jobs that exist for them are casual, low-wage and are without benefits.

Figure 4.3: Level of education

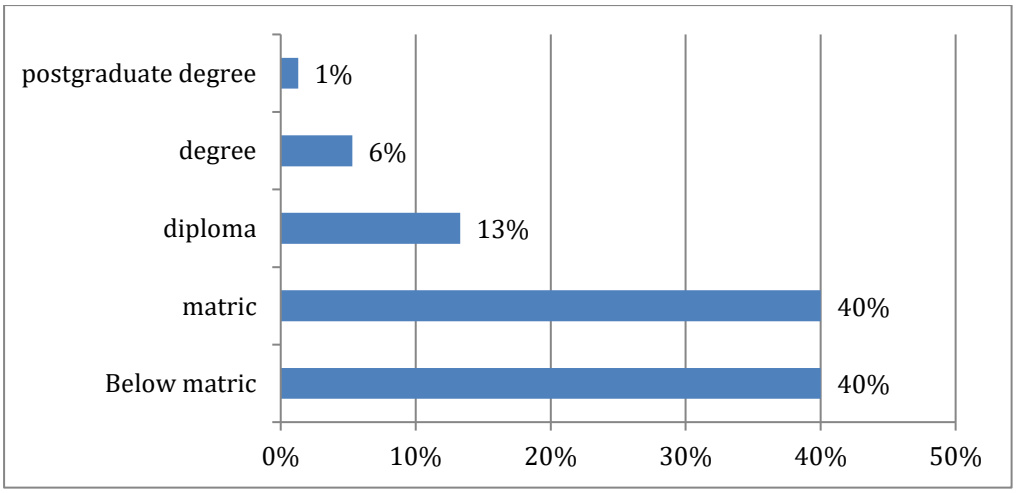

Figure 4.3 indicates that with respect to the respondents' education status, the majority (80%) of the respondents have only matric or no matric at all, 13% of respondents have a diploma, 6% of respondents have a degree and only 1% of respondents have a post-graduate degree. The respondents' educational status is an indicator that should help to improve their education through further studies.

Figure 4.4: Demography

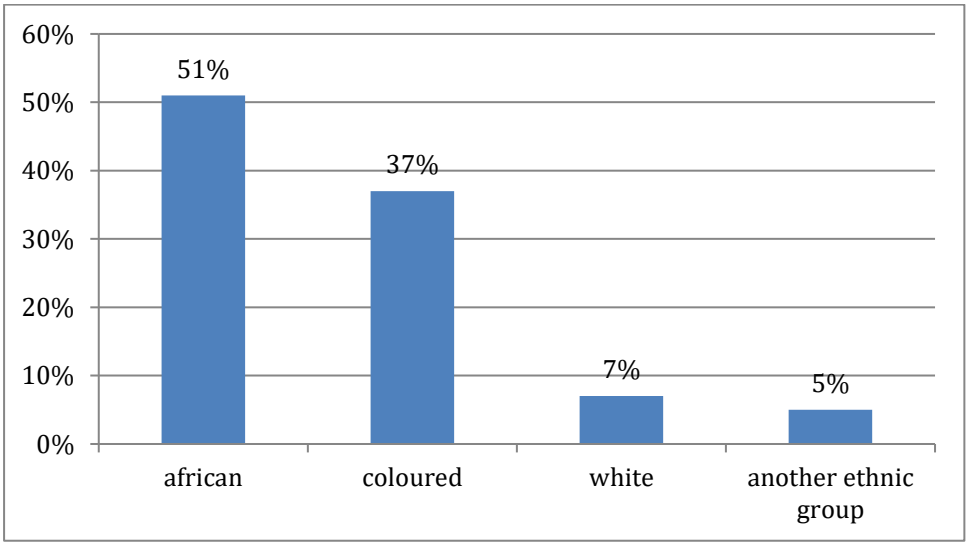

Figure 4.4 shows that the majority of the respondents (51%) were African, 37% of respondents were coloured, 7% of respondents were white and 5% of patients were from another ethnic group.

Figure 4.5: Employment status

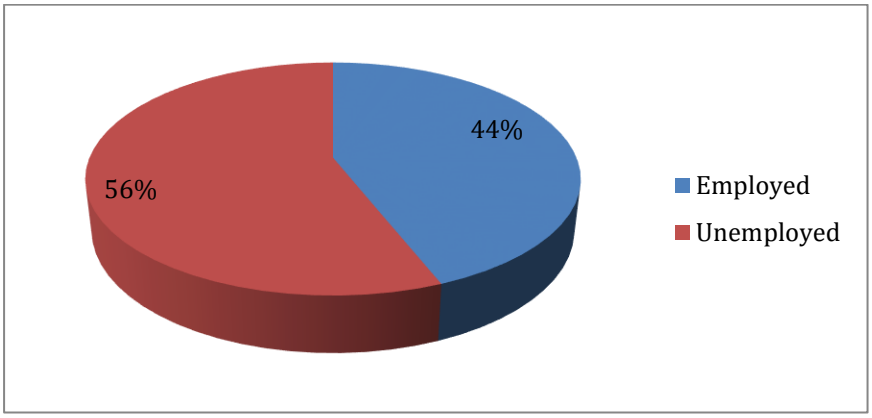

Figure 4.5 shows that the majority of respondents (56%) were unemployed whereas only 44% of respondents were employed.

4.2.2 Section B: Results of investigation

Figure 4.6: Appointment booking status

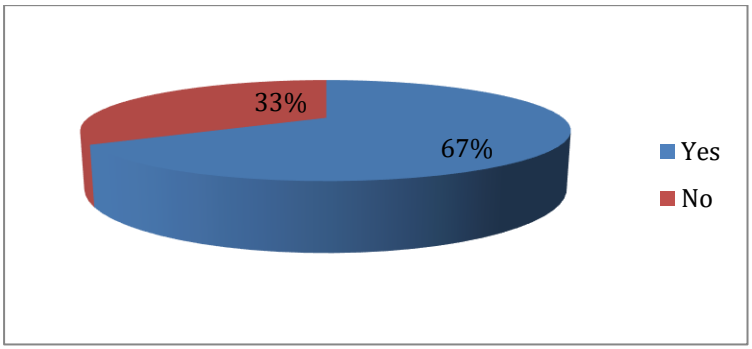

Figure 4.6 shows that majority of respondents (67%) were booked or had secured appointments for consultation, and that only the remainder of 33% of respondents were not booked. Use of care services is currently high in South Africa with over 100% of women utilizing health care since 2006 (Millennium Development Goals Country Report, 2013).

Figure 4.7: What was the reason for your visit to the facility?

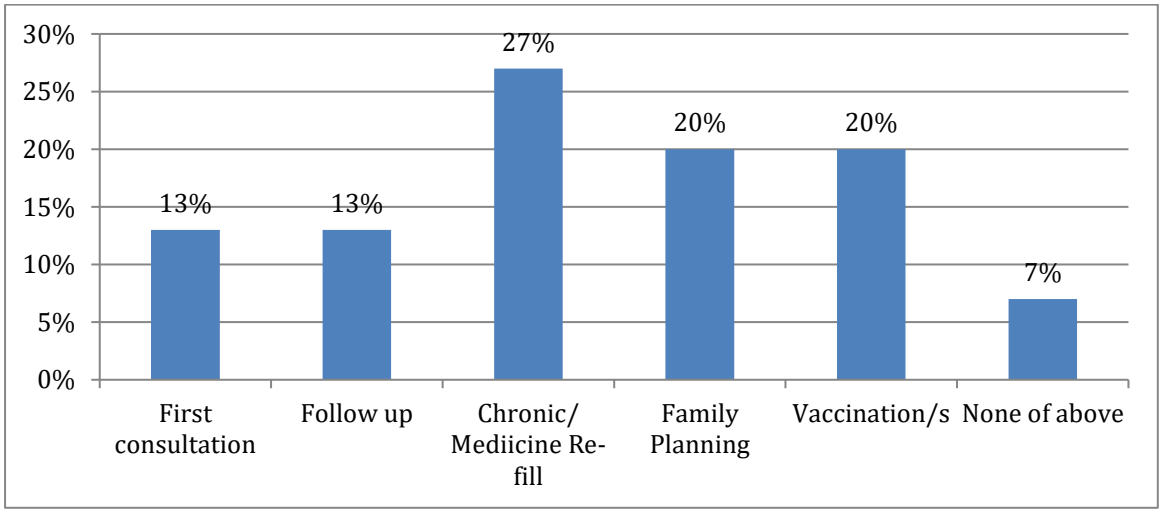

Figure 4.7 clearly indicates that majority of respondents (27%) visited the facility for chronic/medicine re-fills, 13% of respondents visited the facility for their first consultation, 13% of respondents visited the facility for a follow-up, 20% of respondents visited the facility for family planning, another 20% of respondents visited the facility for vaccination/s and 7% of respondents visited the facility for other

personal reasons.

Table 4.2 What were your first impressions upon arrival at this facility?

No.	Item	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Very Poor (%)
1	Directions / Access to reception desk	40	13	13	34	0
2	Friendliness/ Politeness of reception staff	27	13	40	7	13
3	Comfort of the waiting area	27	13	13	40	7
4	Time spent in queue (before reception service)	0	13	53	27	7

Table 4.2 shows that 40% of the respondents found the directions to the reception area very good, 13% respondents found good directions to the reception area, another 13% of respondents found it fair for the directions to the reception area and only 34% of respondents found poor directions to the reception area.

Table 4.2 also shows that the majority of respondents (40%) received fair attention from reception staff, 27% of respondents received very good attention, 13% of respondents received good attention, 7% of respondents received poor attention and lastly 13% of respondents received very poor attention from the reception staff. The above results may suggest that some of the critical factors that inspire provision of quality health services are those of reaction and promptness of staff (Atinga & Baku, 2013).

Respondents expect to be secure and comfortable while within the facilities they visit. Item number 3 of Table 4.2 indicates that the majority of respondents (40%) found the waiting area poor, 7% of respondents found it very poor, 13% of respondents found it fair, 13% of respondents found the comfort of the waiting area

good, whereas 27% of respondents found it very good.

Table 4.2 indicates that the majority of respondents (53%) found the time they spent waiting in the reception queue fair, 13% of respondents found the time to be good. A minority of 7% of respondents found the time they spent waiting in the reception queue very poor and only 27% of respondents found the time poor.

Table 4.3 Facility amenities

No.	Item	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Very Poor (%)
1	General cleanliness of the facility	0	13	47	27	13
2	Condition of bathrooms/ restrooms	0	13	34	40	13
3	Papers/Information/ Educational material (at waiting area)	0	13	47	27	13
4	Access to clean drinking water (waiting area)	20	40	13	27	0

In Table 4.3, it is evident that the majority of respondents (47%) found the cleanliness of the facility to be fair, 13% of respondents found the cleanliness of the facility to be good, 27% of respondents found it to be poor whereas 13% of respondents found the cleanliness of the facility to be very poor.

Table 4.3 also shows that majority of respondents (40%) agreed that the restrooms conditions were poor, 13% of respondents agreed that the restrooms were in a very poor condition, 34% of respondents found the restrooms to be in a fair condition and another 13% of respondents said that the restrooms were in a very poor condition.

Table 4.3 reflects that the majority of respondents (47%) felt that the presentation of papers/ information/ material at the waiting area was fair, 13% of respondents thought that it was good, 27% of respondents said that the presentation of

papers/information/material at the waiting area was poor whereas the remaining 13% of respondents said that the presentation was very poor.

Only 27% of respondents said that access to clean drinking water was poor in the waiting area and 13% of respondents said that access to clean drinking water was fair. The majority (40%) of respondents said that access to clean drinking water in the waiting area was good whereas 20% of respondents said that the access was very good.

Table 4.4 Clinical consultations with a medical practitioner

No.	Item	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Very Poor (%)
1	Language usage and patient-practitioner inter-relations	40	40	20	0	0
2	Level of privacy when undressing for examination	27	66	7	0	0
3	Explanation of presenting condition and prognosis	27	53	13	7	0
4	Explanation of available treatment options	33	44	16	7	0
5	Thoroughness of the practitioner	53	27	20	0	0
6	Adequacy of time (session) spent with the practitioner	7	60	18	15	0
7	Overall care/ service of the practitioner	7	40	27	26	0

Table 4.4 indicates that 40% of respondents noted that the language used by practitioner and how they interacted were good, another 40% of respondents agreed

that they were very good and only 20% of respondents said that the practitioner language used and their inter-relations were fair. Personal attention provided by practitioners allows patients to reveal information on their conditions (Ejigu et al., 2013).

From Table 4.4, it is also evident that the majority of respondents (66%) pointed out that privacy when undressing for an examination was good, 27% of respondents were happy with the privacy when undressing for an examination and said that it was very good whilst only 7% of respondents felt that the privacy was fair.

Table 4.4 indicates that the majority (53%) of respondents agreed that the explanation of presenting condition and prognosis was good, 27% of respondents agreed that it was very good, 13% said that it was fair and only 7% of respondents thought that the explanation of presenting condition and prognosis was poor.

Table 4.4 also indicates that the majority (44%) of respondents agreed that explanation of available treatment options was good, 33% of respondents agreed that it was very good. Other than the 16% of respondents who thought that the explanation of available treatment options was fair, 7% of respondents felt that it was poor.

The majority (53%) of respondents agreed that the thoroughness of the practitioner was very good, 27% of respondents agreed that the thoroughness of the practitioner was good whereas 20% of respondents thought that the thoroughness of the practitioner was fair.

The majority of 60% respondents agreed that adequacy of the time spent with the practitioner was good, and only 7% of respondents said that it was very good. 18% of respondents said that the adequacy of the session time spent with the practitioner was fair and the remaining 15% of respondents thought that it was poor.

Table 4.4 indicates that 40% of respondents found the overall service and care of the practitioner to be good, 7% of respondents indicated that it was very good, 27% of respondents found the overall service and care of the practitioner fair and another 26% of respondents thought that the overall service and care of the practitioner poor.

Table 4.5 General nursing care received

No.	Item	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Very Poor (%)
1	Language usage and patient-nurse inter-relations	13	40	40	7	0
2	Clear explanation of further post-consultation procedures	0	53	40	7	0
3	Clear explanation of after-care given	0	53	40	7	0
4	Consultation time and attention received	0	13	40	40	7

According to Table 4.5, an equal proportion of respondents (40% each) agreed that the practitioner language used with patients was fair and the other said it was good. 13% of respondents said that the practitioner language used with patients was very good and lastly 7% of respondents said that it was poor.

Gelman et al. (2014) emphasize that health-care staff have reasons that discourage patients from attending the facility such as language barriers. The health facility should conveniently provide staff who are fluent in languages to help patients, be available every day of the week as this prevents patients from being turned away or asked to come back another day and a practice which creates a low opportunity for early attendance (Ngxongo, 2011).

Table 4.5 indicates that 53% of respondents agreed that the explanation of further post-consultation procedures was good, 40% of respondents said that the explanation of further post-consultation procedures was fair and only 7% of respondents said that the explanation of further post-consultation procedures was poor.

Table 4.5 shows that 53% of respondents agreed that the explanation of after-care given was good, 40% of respondents said that the explanation of after-care given was fair and a minority of 7% of respondents said that the explanation of after-care given was poor.

From Table 4.5, it is evident that 40% of respondents pointed out that the consultation time and attention received was fair, another 40% of respondents said that it was poor, 13% of respondents agreed that the consultation time and attention received was good whereas 7% of respondents said that it was very poor.

Figure 4.8: The assistance or arrangements in relation to financial queries?

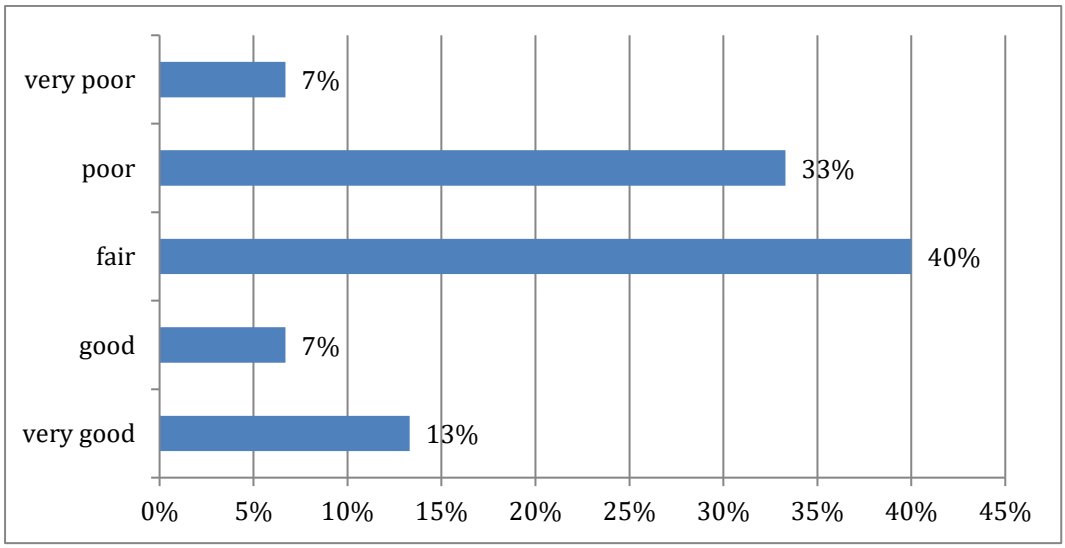

Figure 4.8 reflects that 40% of respondents said that the assistance or arrangements in relation to financial queries was fair, 33% of respondents agreed that the assistance or arrangements in relation to financial queries was poor, 7% of respondents said that the assistance or arrangements were very poor, additional 7% of respondents said that the assistance or arrangements in relation to financial queries was good and only 13% of respondents said that the assistance or arrangements in relation to financial queries was very good.

Figure 4.9: The ease of making financial arrangements

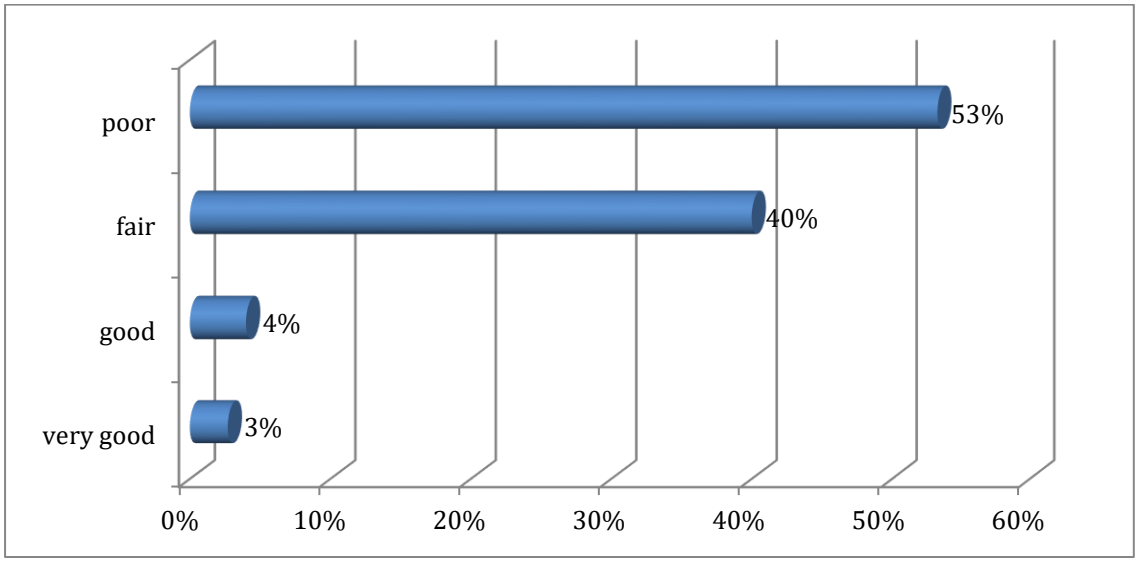

Figure 4.9 depicts that the majority (53%) of respondents said that the ease of making financial arrangements was poor, 40% of respondents thought that it was fair, 4% of respondents agreed that the ease of making financial arrangements was good and only 3% of respondents said that it was very good.

Table 4.6 Overall impression of the visit to the facility

No.	Item	Strongly Agree (%)	Agree (%)	Uncertain (%)	Disagree (%)	Strongly Disagree (%)
1	Medication is available and accessible	**27**	**40**	**13**	**7**	**13**
2	Overall service received was good value for money	**27**	**40**	**0**	**26**	**7**
3	I will make use of this facility in the future	**27**	**40**	**20**	**13**	**0**
4	I would recommend services of this facility to family and friends	**13**	**54**	**20**	**13**	**0**

Table 4.6 indicates that majority of respondents (40%) agreed that medication was available and accessible, 27% of respondents also strongly agreed, 13% of

respondents were uncertain that the medication was available and accessible, 7% of respondents disagreed whereas 13% of respondents strongly disagreed that medication was available and accessible.

Table 4.6 also reflects that 40% of respondents agreed that the overall service received was good value for money, 27% of respondents strongly agreed, 26% of respondents disagreed that the overall service received was good value for money and lastly a minority of 7% of respondents strongly disagreed that the overall service received was good value for money.

From Table 4.6 it is evident that 40% of respondents agreed that they would make use of the same facility in the future, 27% of respondents strongly agreed, 13% of respondents disagreed that they would make use of this facility in the future and 20% of respondents were neutral on whether or not they would make use of this facility in the future.

Table 4.6 reveals that the majority of respondents (54%) agreed and said they would recommend services of the facility to family and friends, 13% also strongly agreed. On the other hand, 13% of respondents disagreed and said that they would not recommend services of this facility to family and friends. Lastly, 20% of respondents were uncertain whether they would or would not recommend services of this facility to family and friends.

4.3 Relationship among certain research variables

The degree of association between any two variables is often measured by a correlation coefficient, and there are several correlation coefficients; however, Pearson correlation coefficient has been the most widely used (Zhou et al., 2015). The degree of correlation can be weak or strong, and it varies from -1 to 1. An r = 0 reflects there is no connection between the two variables at all, while r = 1 means the two variables are perfectly in sync with both moving in the same direction. An r = -1 also means the two variables are in sync but both are moving in opposite directions, however, correlation relationships do not show causation (Claasen et al., 2015). In this research the concentration will be on correlations between -0.5 and +0.5.

There was a positive correlation 0,732 between the variables. All the patients felt they should not be kept waiting unnecessarily. There was a negative correlation of 0.710 between the variables which means as the comfortability decreased the more patients felt the staff did not have adequate knowledge to manage patients.

The majority of patients had a matric certificate, education status had a positive correlation with the demographics of patients -0.732. This meant that the level of education of a patient had no bearing on the number of visits. The majority of the respondents strongly agreed that the cleanliness and comfortability of a facility are important. A strong negative correlation of -0.509 between the above variables was found. The more the patients were dissatisfied with the cleanliness of the facilities most of the patients felt that the hospital facility was not clean and comfortable.

There was a positive correlation of + 0.501 between the explanation of further post-consultation procedures and the medication that is available and accessible. This shows that the patient understood the procedure of their next consultation and increasingly the patients felt comfortable and had certainty about receiving their medication on their follow-up visit.

The correlation between the medication that is available/accessible and family planning was a positive (0.7498). The patients trusted that the medication would be accessible to help them fall pregnant or to prevent a pregnancy. This means that the patients are comfortable with the practitioner’s quality of health care provided according to needs.

The correlation between the explanations of after-care given and access to the reception desk was a negative (-0.567). The patients were not happy with the reception area’s poor directions on access to the facility and the after-care health hours in terms of access to the facility. Therefore, the reception staff should trained be assist patients in this matter.

The correlation between the time spent in the queue before reception service and the explanation of further post-consultation procedures was a high negative -0.941. The patients expected not to be kept waiting unnecessarily, they strongly felt that the hospital staff should focus on assisting patients according to their conditions and the

hours of operation had to be convenient.

The correlation between the level of privacy when undressing for an examination and the conditions of the friendliness/politeness of reception staff was a negative -0.756. The patients expected prompt attention to be secure while within the facility with the caring attitude of the staff. The staff does not have adequate knowledge to manage patients with care and this must be looked into.

The correlation between the patients' first visit to the facility and the general cleanliness of the facility by the hospital was a negative correlation of -0.786 between above variables. This means that the majority of the patients' first visit to the facility was not up to the expectation of cleanliness overall. Furthermore, it is true that management/staff must ensure the general cleanliness/hygiene daily. In the findings most of the patients would refer family or friends to visit the facility for health-care quality services.

4.4 CONCLUSION

Descriptive statistics was used to get the proportion of different variables in percentages, while relationships between variables were determined by correlation coefficients. The findings of this research were presented in three sections, namely demographic details, expectations of patients and perceptions of health care service quality level of hospitals that are in the Frances Baard Region (Northern Cape). To establish any similarities or differences, results obtained were compared to literature.

Through correlation studies this research has been able to identify how variables influence each other either positively or negatively or with no influence at all. Findings of this research have been able to establish the satisfaction levels through expectations and perceptions of patients with respect to the health-care service quality in Frances Baard Region (Northern Cape). These findings are now used to present a conclusion and future recommendations.

The next chapter deals with key results of this study especially with regard to the research problems as identified in Chapter One above. Recommendations then follow, addressed to other district hospitals within the Northern Cape Province,

highlighting areas that need attention so as to improve the quality of health-care services offered to patients. The overall aim would be to reduce patients' health issues and complaints. Further areas of research are also highlighted.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

As indicated in previous chapters, this study involved the assessment of the level of patients' satisfaction with the quality of health care services provided in hospitals that are in the Frances Baard Region (Northern Cape). It seeks to establish service quality expectations of patients as well as highlighting their perceptions of service quality offered by hospitals that are in the Frances Baard Region (Northern Cape). The current persistently high patient mortality rate, despite high booking rates and commendable government efforts in this sector, do justify a need to establish the quality of health-care patients receive.

This chapter intends to consolidate the findings of the research presented in the preceding chapter. A summary of research questions pertaining to the quality of hospitals that are in the Frances Baard Region (Northern Cape) offers to its patients shall be presented by dissecting the expectations and perceptions of these patients. Recommendations in health care service quality shall be presented.

In conclusion, the findings shall be used to develop recommendations to hospitals that are in the Frances Baard Region (Northern Cape), on how to improve on quality service offering to patients. Such recommendations may assist in finding solutions towards lowering of mortality and ill health statistics. Recommendations shall be followed by a conclusion of the study based on the problem statement and the research findings.

5.2 Summary of the study

The aim of the study was to determine the quality of health-care levels received from hospitals that are in the Frances Baard Region (Northern Cape). This was done by determining the expectations and perceptions of patients attending hospitals that are in the Frances Baard Region (Northern Cape). Through correlation studies the research further estimated the impact of these expectations and perceptions on hospitals that are in the Frances Baard Region (Northern Cape), health-service

quality levels.

Patient mortality is considered a primary indicator of a geographical area's overall health status and quality of life. The South African department has, among others, made commendable steps in reducing patient mortality by improving access to anti-retroviral, vaccines and provision of free health care. Despite these interventions the mortality rates remain high. In a bid to establish possible reasons underlying high mortality levels, this study aimed at establishing the quality of health care levels that patients received at hospitals that are in the Frances Baard Region (Northern Cape).

This study was conducted at hospitals that are in the Frances Baard Region (Northern Cape). SERVQUAL-based Questionnaires designed to answer the research questions were used to collect data. A total of 75 questionnaires were randomly distributed over a three-week period among patients and 75 questionnaires were properly completed and returned back. The SPSS package was used to analyse the data and descriptive and correlations studies were done.

This study revealed that the booking status of patients attending hospitals in the Frances Baard Region (Northern Cape), is high, most of these patients are single, and the majority of them have acquired at least a matric qualification.

Most of the patients expressed concerns about the expectations from hospitals in regards to health care service level quality. Patients raised the need for responsive services, most of the patients indicated a desire not to be kept waiting unnecessarily and to be to be managed promptly according to their needs. The request for assurance through being attended to politely in a secure environment was equally raised. The patients' perceptions of hospitals that are in the Frances Baard Region (Northern Cape), health-care service quality were equally high in areas of tangibles, reliability and empathy. Mixed responses were obtained on the convenience of operating hours.

5.3 Research Questions

Conclusions on research questions are presented in this section. Health-care service quality level expectations of patients affect aspects such as word of mouth

communication and what patients hear from others (Nyongesa et al., 2014). This section presents a discussion on expectations raised by patients who visited the hospitals that are in the Frances Baard Region.

5.3.1 How much percentage of patients is not completely satisfied with the quality of health care services they receive?

Most of the patients were satisfied (30%) with the quality of health-care services provided by the district hospitals that are in the Frances Baard Region (Northern Cape). Further research is required by the district hospitals that are in the Frances Baard Region (Northern Cape) on this matter to prevent loss of patients. The management, the board of directors and the clinical practitioners should apply their clinical knowledge and experience to meet the expectations of the patients (Li & Benton, 1996). Future research could examine the relationships of measures of satisfaction, anticipation of future interaction, customer loyalty, repeat purchases, word-of-mouth and service quality rating (DeMoranville & Bienstock, 2003).

5.3.2 What are the different perceptions and predictors for patient satisfaction?

Most of the patients feel the doctors and nursing staff have adequate knowledge to manage their conditions. This finding indicates that a few patients do not feel assured and safe in the hands of the hospital. Janakiraman and Ecker (2010) also isolated empathy as an important quality measure in maternity services. In this study the more staff promptly attended to patients according to their needs the more patients felt staff had adequate knowledge to manage them.

The majority of patients simply agreed to each of the expectations and a smaller percentage were uncertain. This finding may possibly mean that patients have adjusted expectations of the public health-care system since the high volumes of patients overwhelm service providers.

The desire not to be kept waiting unnecessarily increased with age, this finding where older patients felt should not be kept waiting unnecessarily indicates as patients become older the more they feel they are at risk from complications. The

majority of patients expected prompt attention from maternity staff, and the more patients expect promptness the more they feel they should not be kept waiting unnecessarily. This finding further emphasises the importance of responsiveness in health-care service quality level provisioning.

5.3.3 Do patients willingly intend to return to the hospital for subsequent care?

Most of the patients indicated they expected the reception staff to be polite and courteous to patients. Responses to the above sub-research questions indicate the importance of assurance in provision of services. The finding indicates that patients expect to be handled with courtesy, and to be managed by health-care professionals who communicate confidence to their patients. Courteous and respectful and caring staff create comfortable environments that promote patients to discuss their problems with service providers (Nyongesa et al., 2014).

This finding is further supported by Ejigu et al. (2013) who maintain that staff should not only offer comfortable environments but they must offer privacy if women or men are to open up on their problems. On the contrary, the majority of patients emphasized the necessity to feel secure while in the hospital and there was no relationship at all with staff showing a caring attitude towards patients. This finding may therefore indicate that the provision of comfortable secure environment does not necessarily mean that the staff have a caring empathetic attitude.

5.3.4 Do patients intend to recommend the hospital services to the others?

Hill and McCrory (1997) note that patients' perceptions of service quality are likely to influence their decisions concerning which hospital to attend, especially if they are in a position to choose. The following section offers a discussion and conclusions on the perceptions of patients on health-care service quality.

5.3.5 Do patients have an interest in new hospital programmes and services?

Most of the patients agreed that hospitals have adequate equipment and were noted as clean and comfortable by some patients. The findings also indicate that the material/pamphlets/information at the reception area were poorly advertised due to the lack of management overall.

The appearance, friendliness of the reception staff, practitioners and the physical facilities did not satisfy most of the patients. These findings are in keeping with the findings of Ejigu et al. (2013) when they also found that comfortable waiting rooms and clean toilets were among reasons associated with patient satisfaction. Holder and Berndt (2011) state that tangibles are the cues in service quality provisioning and thus they are important cues used to evaluate expected service before and satisfaction after receiving the service.

The hospitals that are in the Frances Baard Region treat patients from surrounding district hospitals. The findings indicate the commitment by hospital management to resource the relevant equipment that will enable handling of complicated cases. The presence of modern equipment in all departments is an important source of security among patients in the event of complications (Goberna-Tricas et al., 2011).

The presence of noticeably poor equipment in the department had a negative relationship with patients believing all staff had capacity to offer prompt services. The positive association of modern equipment and prompt services is an indication that as technology improves, efficiency inevitably follows suit.

5.4 Recommendations

Taking into consideration the findings of this research and literature reviewed, five recommendations are proposed. These recommendations are directed to Mafikeng Provincial Hospital, the Provincial Health Department and the National health department at large. The researcher has identified the following recommendations as gaps in quality of service received for the patients that affects their satisfaction.

5.4.1 Training of healthcare staff on health-care service quality levels

The researcher recommends that health-care personnel must undergo in-service training in service quality. This training will assist in ensuring service providers are able to meet or exceed the expectations of their patients. This will in turn result in satisfied and overtly satisfied patients. The Hospital as well as the Provincial Health Office can champion the training of health-care professionals. Improvements in overall quality of services provided to patients can only be realized by continuous training.

5.4.2 Implementing communication channels and systems between health-care providers and patients

Communication is a very important tool in the shaping of service quality outlooks. The researcher therefore recommends that hospitals that are in the Frances Baard Region put in place a system that ensures that patients are informed about procedures, hospital protocols and any special events or developments that may impact on the quality of service to de delivered.

In this research patients indicated they did not expect to be kept waiting unnecessarily and there are events or developments that may result in the hospital services commencing late or having an early closure and these matters must be communicated to patients. Due to the high volumes of patients seeking help from the public sector against a background of a constrained budget, it is important that patients be made aware of these challenges. The researcher therefore recommends that the district hospitals that are in the Frances Baard Region must have a public address system installed for announcements. The departments in the hospital must have visible signage and appoint a dedicated person who assists with ushering patients and ensure that patients are assisted accordingly.

5.4.3 Retaining doctors and nursing staff that have a passion for patients

Staff appointed to work in district hospitals must have a strong passion and liking for patients daily. Because of poor health-care quality levels in the public sector the management perception must show that all medical doctors are trained, irrespective

of their interest or expertise. Therefore, this often results in personnel being deployed in disciplines they are not enthusiastic about and naturally this results in poor performance resulting in poor quality outcomes.

Health-care personnel should deliver their best to their patients, show empathy and a caring attitude to their patients and work to perform services right the first time. Health-care quality levels are defined by qualifications, but service providers must have a passion for patients.

5.4.4 Managerial resource allocation to invest in tangibles

The district hospitals in the Frances Baard Region should invest in the tangibles of adequate equipment and services to be provided. Therefore, characteristics of tangibles such as cleanliness, comfort, neatness and professional appearance of staff need to be emphasized. In this research through correlation studies tangibles arose as concern of other quality attributes by the patients. Because patients resultantly expected prompt services from doctors and nurses. The cleanliness and comfortability of the department made patients feel that the hospital had the ability to assist patients according to their needs. Therefore, investment in one attribute of quality will naturally produce positive results in other health-care service quality attributes.

5.5 Conclusion

This research sought to assess the health-care quality level of hospitals that are in the Frances Baard Region (Northern Cape), through determining service quality expectations and perceptions of patients. The research found that patients have high responsive expectations from the reception staff. Furthermore, the patients also expressed a high desire to be treated politely and courteously by staff and the deprived to feel secure while using the facilities of the department. Patient perceptions of hospitals that are in the Frances Baard Region (Northern Cape) health-care service quality on Tangibles, Reliability, Empathy and Assurance were overall high. Patients generally expressed satisfaction about all of the above attributes of health-care service quality. Mixed responses were, however, obtained on the convenience of undressing for an examination and the ability of maternity staff

to perform services right the first time.

The findings of this study have provided information on important health-care service level of quality attributes patients value most. It also managed to assess patient perceptions of the overall health-care service quality. Findings of this study have added to the body of knowledge on the level of health-care service quality and have also provided a platform for a number of recommendations on how managers and staff can improve on health-care service quality levels to curtail mortality rates.

Although this study was confined to hospitals in the Frances Baard Region (Northern Cape), the findings may be extrapolated to many districts of other hospitals in the province and the nation at large. Other medical disciplines like medicine and surgery also stand to benefit from these findings. This study therefore makes a significant contribution to how healthcare in hospitals can become better in terms of the quality of health-care levels of service on offer to patients.

6 REFERENCES

Abekah-Nkrumah, G., Manu, A., Atinga, R.A. (2010). Assessing the implementation of Ghana's Patient Charter. *Health Education*, 110 (3),169 – 185.

Abebe, F., Birhanu, D., Awoke, W., & Ejigu, T. (2013). Assessment of knowledge and utilization of the partograph among health professionals in Amhara region, Ethiopia. *Science*, *2*(2), 1-17.

Ahmad, I. & ud Din, S. (2010), Patients' satisfaction from the health care services, Gomal *Journal of Medical Sciences*, 8 (1),,95-97.

Alasadi, R. & Al Sabbagh, H. (2013). Quality care perceptions in private Syrian hospitals. *Education, Business and Society: Contemporary Middle Eastern Issues* 6 (2), 76-86.

Al-Emadi, N., Falamarzi, S., Al-Kuwari, M.G. & Al-Ansari, A. (2009). Patients' satisfaction with primary health care services in Qatar. *Middle East Journal of Family Medicine,* 7 (9), 4-9.

Amin, M. & Nasharuddin, S.Z. (2013). Hospital service quality and its effects on patient satisfaction and behavioural intention. *Clinical Governance: An International Journal,* 18 (3), 238-254.

Arries, E.J. & Newman, O. (2008). Outpatients' Experience of Quality Service Delivery at a Teaching Hospital in Gauteng: Research*. Health SA Gesondheid,* 13 (1), 41-54.

Atinga, R.A. (2011). Healthcare quality under the National Health Insurance Scheme in Ghana. *International Journal of Quality & Reliability Management,* 29 (2), 144-161.

Atinga, R.A. & Baku, A.A. (2013). Determinants of antenatal care quality in Ghana. *International Journal of Social Economics, 40* (10), 852-865.

Atinga, R.A., Abekah-Nkrumah, G. & Domfeh, K.A. (2011). Managing healthcare quality in Ghana: A necessity of patient satisfaction. *International Journal of Health*

Care Quality Assurance, 24 (7), 548–563.

Babakus, E. & Mangold, W.G. (1992). Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health Services Research*, *26* (6), 767.

Bamidele, A. R, Hoque, M. E. & van der Heever, H. (2011). Patient satisfaction with the quality of care in a primary health care setting in Botswana. *SA Family Practice,* 53 (2), 170-175.

Batho Pele Handbook. (2007). *Health Care Quality Assurance,* 25 (2),106-117.

Biggs, J., Kember, D. & Leung, D. Y. (2001). The revised two-factor study process questionnaire: R-SPQ-2F. *British Journal of Educational Psychology, 71*(1), 133-149.

Björkman, A., & Piekkari, R. (2009). Language and foreign subsidiary control: An empirical test. *Journal of International Management, 15* (1), 105-117.

Bless, C., Higson-Smith, C. & Kagee, A. (2006). *Fundamentals of social research methods: An African perspective*. Cape Town: Juta & Company Ltd.

Bryman, A. & Cramer, D. (2004). Constructing variables. *Handbook of data analysis*, 17-34.

Cidón, E. U., Martín, F. C., Villaizán, M.H. & Lara, F. L. (2012). A pilot study of satisfaction in oncology nursing care: An indirect predictor of quality of care. *International journal of health care quality assurance, 25* (2), 106-117.

Claassen, J., Hirsch, L.J., Kreiter, K.T., Du, E.Y., Connolly, E.S., Emerson, R.G. & Mayer, S.A. (2004). Quantitative continuous EEG for detecting delayed cerebral ischemia in patients with poor-grade subarachnoid hemorrhage. *Clinical Neurophysiology*, *115* (12), 2699-2710.

Constitution of the Republic of South Africa, (1996).

De Jager, J. & du Plooy, T. (2007). *Measuring tangibility and assurance as determinants of service quality for public health care in South Africa*. Department of Marketing, Tshwane University of Technology, Pretoria.

DeMoranville, C.W. & Bienstock, C.C. (2003). Question order effects in measuring service quality. *International Journal of Research in Marketing, 20* (3), 217-231.

Ferreira, J., Gomes, C. & Yasin, M. (2011)."Improving patients' satisfaction through more effective utilization of operating rooms resources: An informational-based perspective, Clinical Governance. *An International Journal,* 16 (4), 291–307.

Fowler, G. & Patterson, D. (2013). Use of maternity surveys in improving the care experience-A review of the evidence. *British Journal of Midwifery, 21* (6).

Gelman, A., Carlin, J. B., Stern, H. S. & Rubin, D. B. (2014). *Bayesian data analysis* (Vol. 2). Boca Raton, FL, USA: Chapman & Hall/CRC.

Glick, P. (2009). How reliable are surveys of client satisfaction with healthcare services? Evidence from matched facility and household data in Madagascar. *Social Science & Medicine,* 68 (2), 368-379.

Goberna-Tricas, J., Banús-Giménez, M. R., Palacio-Tauste, A. & Linares-Sancho, S. (2011). Satisfaction with pregnancy and birth services: the quality of maternity care services as experienced by women. *Midwifery, 27*(6), e231-e237.

Guidelines for Good Practice in the Health Care Professions: National Patients' Rights Charter, Booklet 3, Pretoria, May 2008

Hill, F.M. & McCrory, M. L. (1997). An attempt to measure service quality at a Belfast maternity hospital: some methodological issues and some results. *Total Quality Management, 8*(5), 229-242.

Holder, M. & Berndt, A. (2011). The effect of changes in service scape and service quality perceptions in a maternity unit. *International Journal of Health Care Quality Assurance, 24*(5), 389-405.

Hulton, L., Matthews, Z. & Stones, R.W. (2000). *A framework for the evaluation of quality of care in maternity services*.

Janakiraman, V. & Ecker, J. (2010). Quality in obstetric care: measuring what matters. *Obstetrics & Gynecology*, *116* (3), 728-732.

Klopper, R. & Lubbe, S. (2011). Using matrix analysis to achieve traction, coherence, progression and closure in problem-solution oriented research. *Alternation*, *18*(2), 386-403.

Kravitz, R. (2004), *Patient Satisfaction with Health Care: Critical Outcome or Trivial Pursuit?* http://healthcare.isixsigma.com/library/content/c061122a.asp

Kuteyi, E.A., Bello, I.S., Olaleye, T.M., Ayeni, I.O. & Amedi, M.I. (2010). Determinants of patient satisfaction with physician interaction. *SA Family Practice,* 52 (6), 557-562.

Li, L.X. & Benton, W.C. (1996). Performance measurement criteria in health care organizations: Review and future research directions. *European Journal of Operational Research,* 93, 449-468.

Lumadi, T.G. & Buch, E. (2011). *Patients' satisfaction with midwifery services in a regional hospital and its referring clinics in the Limpopo Province of South Africa.*

Lutabingwa, J. & Auriacombe, C.J. (2007). Data analysis in quantitative research. *Journal of Public Administration: Special Issue, 42*(6), 528-548.

Luo, P.G., Sahu, S., Yang, S.T., Sonkar, S.K., Wang, J., Wang, H., LeCroy, G.E., Cao, L. & Sun, Y.P. 2013. Carbon “quantum” dots for optical bioimaging. *Journal of Materials Chemistry B, 1* (16), 2116-2127.

Magoro, M. T., Hoque, M. E. & van der Heever, H. (2012). ART patients' satisfaction level regarding comprehensive HIV and AIDS care management and antiretroviral treatment programme in Pretoria. *South African Journal, Epidemiology Infections, 2*7 (2), 71-75.

Malangu, N. & Mosane, T. (2008). HIV- positive patients' satisfaction with service provided by a public hospital in Pretoria, South Africa. *SA Family Practice*, 50 (2).

Malangu, N. and Mosane, T., 2008. Letter: HIV-Positive Patients' Satisfaction with Service Provided by a Public Hospital in Pretoria. *South African Family Practice*, *50*(2).

McCusker, K. & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, *30*(7), 537-542.

McGrath, S. & Akoojee, S. (2007). Education and skills for development in South Africa: Reflections on the accelerated and shared growth initiative for South Africa. *International Journal of Educational Development, 27*(4), 421-434.

Mid-year Population Estimates (2014). Statistics South Africa

Mosadeghrad, A.M. (2013). Healthcare Service Quality: Towards A Broad Definition. *International Journal of Health Care Quality Assurance,* 26(3), 203-219.

National Department of Health. (2007). A Policy on Quality in Health Care for South Africa. Pretoria.

Newsome, P.R.H. & Wright, G.H. (2006). *Patient Management: A review of patient satisfaction: Concepts of satisfaction.* Retrieved: March 16, 2011, from http://healthcare.isixsigma.com/library/content/c 061122a.asp

NCDOH - Northern Cape Department of Health. (2015). 5-Year Strategic Plan 2015/16 – 2019/20. South Africa.

Ngxongo, T.S.P. (2011). *Factors influencing successful implementation of basic ante natal care programme in primary health care clinics in eThekwini district, KwaZulu-Natal* (Doctoral Thesis, Durban University of Technology).

Otani, K., Waterman, B. & Dunagan, W.C. (2012). Patient Satisfaction: How Patient Health Conditions Influence Their Satisfaction. *Journal of Healthcare Management*, 57(4), 276-292.

Owusu-Frimpong, N., Nwankwo, S. & Dason, B. (2010). Measuring service quality and patient satisfaction with access to public and private healthcare delivery. *International Journal of Public Sector Management,* 23(3), 203-220.

Padma, P., Rajendran, C. & Lokachari, P. S. (2010). Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants. *Benchmarking*. *An International Journal,* 17(6), 807-841.

Papanikolaou, V. & Ntani, S. (2008), Addressing the paradoxes of satisfaction with hospital care. *International Journal of Health Care Quality Assurance,* 21(6), 548-561.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). Servqual. *Journal of retailing, 64* (1), 12-40.

Peter, N., Munialo, C. & Nyongesa, S. (2014). Policy Development towards an Optimization Framework for E-Learning in Developing Countries: A Case of Private Universities in Kenya. *Journal of Computer Science and Information Technology,* 2 (2), 31-148.

Phaswana-Mafuya, N., Peltzer, K. & Davids, A.S. (2011). Patients' perceptions of primary health care services in the Eastern Cape, South Africa. *African Journal for Physical, Health Education, Recreation and Dance,* 7 (3), 502-516.

Phophalia, A. K. (2010). *Modern research methodology: New trends and techniques*. Paradise Publishers.

Puri, N., Gupta, A., Aggarwal, A. K. & Kaushal, V. (2012). Outpatient satisfaction and quality of health care in North Indian medical institute. *International Journal of Health Care Quality Assurance,* 25 (8), 682–697.

Qu, H., Platonova, E.A., Kennedy, K.N. & Shewchuk, R. M. (2011). Primary Care Patient Satisfaction Segmentation. *International Journal of Health Care Quality Assurance,* 24 (7), 564-576.

Rajasekar, A., Wan, M., Moore, R. & Schroeder, W. (2006). A prototype rule-based distributed data management system. In *HPDC workshop on Next Generation Distributed Data Management,* 102.

Rattray, J. & Jones, M.C. (2007). Essential elements of questionnaire design and development. *Journal of Clinical Nursing, 16* (2), 234-243.

Rivers, P.A. & Glover, S.H. (2008). Health care competition, strategic mission, and patient satisfaction: research model and propositions. *Journal of Health Organization*

and Management, 22 (6), 627-641.

Sachdeva, J.K. (2009). *Business research methodology*. Himalaya Publishing House.

Schlemmer, A. & Mash, B. (2006). The effects of a language barrier in a South African district Hospital. *South African Medical Journal,* 96(10), 1084-1087.

Schulze, S. (2003). Views on the combination of quantitative and qualitative research approaches.

Sharma, R., Sharma, M. & Sharma, R.K. (2011). The patient satisfaction study in a multispecialty tertiary level hospital, PGIMER, Chandigarh, India. *Leadership in Health Services,* 24(1), 64-73.

Statistics South Africa. (2013). Millennium Development Goals. Country Report 2013.

Wagner, D.L., Bear, M. & Davidson, N.S. (2011). Measuring Patient Satisfaction With Postpartum Teaching Methods Used by Nurses Within the Interaction Model of Client Health Behavior. *Research and Theory for Nursing Practice,* 25, (3), 176-190.

White Paper on the Transformation of Public Service. South Africa. (1997). Constitution of the Republic of South Africa, Act 108 of 1996.

Zhou, X., Wang, S., Xu, W., Ji, G., Phillips, P., Sun, P. & Zhang, Y. (2015). Detection of pathological brain in MRI scanning based on wavelet-entropy and naive bayes classifier. In *International Conference on Bioinformatics and Biomedical Engineering* (pp. 201-209). Springer International Publishing.

Zoller, T., Lackland, P. & Silverstein, S.E. (2001). *Evaluating Health Service Performance.* March 16, 2011, from http://healthcare.isixsigma.com/library/content/c061122a.asp.