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**Master's Thesis of Public Administration**

**Performance Evaluation of Public  
Health Care Institutions in  
Zimbabwe:**

**Comparing Patient Satisfaction in Harare and  
Bulawayo**

짐바브웨에서의 공공보건의료  
성과 평가에 관한 비교연구:  
하라레와 블라와요의 환자만족도를 중심으로

**August 2017**

**Graduate School of Public Administration  
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#

**Performance Evaluation of Public  
Health Care Institutions in  
Zimbabwe:  
Comparing Patient Satisfaction in Harare and  
Bulawayo**

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**Submitting a master's thesis of Public Administration  
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## **Abstract**

# **Performance Evaluation of Public Healthcare Institutions in Zimbabwe:**

## **Comparing Patient Satisfaction in Harare and Bulawayo**

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The aim of this research is to ascertain the differences in quality of care through the eye of the patient by measuring their satisfaction levels in Harare and Bulawayo. In order to investigate the objectives of this study and answer the research questions, the quantitative research method which focused only on the health system evaluation was used.

The variables of interest were limited to the performance of the service system as result of continued none response to demographic information.

These variables are, the General patient satisfaction (dependent variable), and Technical Quality, Interpersonal Manner, Communication, Financial Aspects, Time Spent with Doctor, and Accessibility (independent variables). This alone was not enough for a comprehensive study; therefore, a study of the resource inputs was done in order to explain the results of the patient satisfaction survey outputs in place of the eliminated demographic information.

The results indicated some level of inequality in the general satisfaction with public healthcare as the survey showed that there were significant differences

between Harare and Bulawayo. The differences were evident from the huge gap in resource inputs for each system and this was reflected in the output from patient satisfaction. The inputs considered for the study are: human resources, financial resources and consumables/ physical resources.

**Keywords:** General patient satisfaction, Technical Quality, Interpersonal Manner, Communication, Financial Aspects, Time Spent with Doctor, and Accessibility human resources, financial resources, physical resources.

**Student ID:** 2015 -24463

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## **Abbreviations**

<b>PSQ-18</b>	Patient Satisfaction Questionnaire Short Form
<b>ZNHS</b>	Zimbabwe National Health Strategy
<b>KRAs</b>	Key Result Areas
<b>PHC</b>	Primary Healthcare
<b>UHC</b>	Universal Health Coverage
<b>GDP</b>	Gross Domestic Product
<b>MoHCC</b>	Ministry of Health and Child Care
<b>GoZ</b>	Government of Zimbabwe

# CHAPTER ONE

## INTRODUCTION

People are better educated and more anxious to assume responsibility for their own wellbeing than previously. The utilization of the web has made the patients more mindful of their sicknesses and how they ought to be overseen. In this way, a large portion of the consumers of healthcare services have higher desires and request a larger amount of precision, unwavering quality, responsiveness, and sympathy than at whatever time before. They are turning out to be more disparaging of the nature of quality of healthcare services they receive (Chifamba, F., 2013; Lim and Nelson, 2000).

The idea of patient satisfaction isn't novel. Patients are one of the principle partners amid the ever-sweeping advanced universe of pharmaceuticals. In spite of the fact that the roles of patients and specialists have stayed settled, the specific circumstances and sceneries have experienced enormous fluctuations overtime. Customarily, no unmistakable limits exist between patient care and patient cure. With the shifting cases of illness, more up to date treatments and patients' discernments, care and cure are presently totally isolate ideas. A patient may never get cured however may feel exceptionally very looked after and the other way around, (Khattak, A., et al., 2012).

An abundance of healthcare literature bolsters the thought that there has remained extraordinary moves in customary "Doctor-Patient" relations. Patient satisfaction formulates a basic part of numerous policy-level decisions. Others contend, there is a looming role inversion in setting of the new worldview of "patient-centered care", (Khattak, 2012)

In the course of recent years, surveys on patient satisfaction have received increased expanding consideration as important and fundamental wellsprings of data for recognizing holes and building up a powerful activity anticipate quality change in healthcare institutions. As of late, the healthcare managers moved toward a market based style of changing patient satisfaction reviews into quality change gadgets aimed at general authoritative execution. In 1996,

assessment of patient satisfaction was obligatory for every French healthcare institution. (Laurent, 2006) led a research at a tertiary training hospital meaning to evaluate the sentiments of clinical personnel toward the impact of in-patient satisfaction studies on the quality enhancement procedure. An ideal result of 94% uncovered that a patient could critic service quality, particularly in its social, ordered, and natural measurements. Determining satisfaction has been as requirement in Germany as of 2005, as a component of quality administration reports, (Rashid, Amina, 2014).

Per reviewed literature, Patients' assessment of care is a sensible instrument to give chance to change, upgrade key basic leadership, decrease cost, live up to patients' desires, outline techniques for successful administration, screen medicinal services execution of wellbeing arrangements and give benchmarking over the healthcare institutions. Because of the appearance of patient-focused care, patients now assume a basic part as accomplices in the change in nature of quality healthcare services (Rashid Al-Abri and Amina Al-Balushi, 2014).

In Zimbabwe, however, regardless of patient satisfaction being one of the deliverables in the healthcare system, little has been done in ascertaining the client satisfaction. Only isolated satisfaction surveys have been carried out in private hospitals and a negligible amount in the public sector. This is a worrying a trend as the government is in no position to determine how well they are serving their clients. Issues of centralized implementation of government policies are of growing concern. This is despite the fact that the healthcare delivery system is on paper, uniformly structured throughout the country. The majority of medical specialists is located in the capital city and vital equipment is also centralized in the capital. For example, the Dialysis machines for Kidney patients are all in the capital. The plight of cancer patients is also worrying as the only chemotherapy machine in the country is also located in the capital. The government is trying to ensure equal access to healthcare and facilities for all but with the current setup, it is difficult to note the achievement of this goal.

This brings to focus the feelings of the public toward the system as they are the recipients of healthcare.

The duty of safeguarding public health is better met by combining public health science with techniques of quality improvement one of which is to improve patient satisfaction. There is developing proof that quality improvement systems can be connected effectively in public health institutions, (Chifamba F., 2013). According to a Zimbabwe Health Services study of 2008, there has been gradual decrease in utilization of public health services. Many patients are seeking healthcare from private and mission hospitals instead of public health institutions.

This comparative study may be an effective means of evaluating performance of healthcare delivery from different cities as perceived by the patients. Equity in healthcare delivery throughout the country being a targeted key result area, the study is focusing on the two largest cities in Zimbabwe. Harare (capital city) and Bulawayo (second capital city) would be expected in theory to have similar if not equal healthcare delivery systems and thus no significant patient satisfaction levels as highlighted in the Health Ministry's policy. The following hypothesis will be tested in this proposed study:

Hypothesis 1: There are no significant difference in mean general satisfaction with public healthcare delivery in Harare and Bulawayo (i.e.  $H_0: u_1 = u_2$  ).

### **1.1 Objectives of the study**

The following are the research objectives of this study:

- To evaluate the general level of satisfaction with quality of healthcare in Harare and Bulawayo.
- To ascertain whether there are healthcare service delivery disparities using satisfaction results.
- To determine the healthcare delivery factors that reflect greater dissatisfaction.
- To determine policy recommendations on improving the quality of healthcare in public health institutions.

## 1.2 Research Questions

The principal aim of this research is to ascertain the differences in quality of care through the eye of the patient by measuring their satisfaction levels in Harare and Bulawayo. This study is expected to bring to light the levels of satisfaction and answer the following questions:

- Are there significant differences in satisfaction with public healthcare delivery in Harare and Bulawayo?
- What is the general level of satisfaction with quality of healthcare at public hospitals in Harare and Bulawayo respectively?
- Which factors significantly influence the general patient's satisfaction with healthcare?

Patient satisfaction is an integral component of the quality of healthcare in three ways:

- Patient satisfaction is a trait of value in essence: without patient satisfaction, there can't be great care.
- Patient satisfaction is a pointer of how the patient has seen the other subjective parts of care and can accordingly be utilized as an intermediary measure for these viewpoints.
- Patient satisfaction is an essential for accomplishing the targets of care as it impacts the patient's penchant to cling to the endorsed regimen, and to take plan of action to proficient care later on.

The patients are fit for assessing the nature of care they get. While doing as such, they focus on all parts of care: instrumental ("science of medicine"), expressive ("art of medicine") and comforts, (Vuori H., 1987).

Patient satisfaction with the healthcare is of critical importance. In this way, it is imperative to recognize shortcomings in frameworks to help change by utilizing the view of the patient. One may use the Patient Satisfaction Survey Short Form (PSQ-18), a compact, approved apparatus that might be connected to different settings, and additionally different interventions. Healthcare is increasingly being scrutinized in today's world where, not only for the quality provided but correspondingly the satisfaction of the recipients. Numerous

healthcare institutions or divisions have experienced harsh criticism because of low patient satisfaction, highlighting that all-encompassing patient care is indispensable, (Thayaparan, A. J., & Mahdi, E., 2013).

# **CHAPTER TWO**

## **LITERATURE REVIEW**

### **2.1 Overview of the Zimbabwean Healthcare System**

The National Health Strategy (NHS, 1997 – 2007) set an agenda to launch the health sector into the new millennium. Perceiving that change in the wellbeing status of the populace would not rely on upon health sectoral activities alone, it looked to pull together all national endeavors which could upgrade health advancement into a promising new period. While the circumstance investigation done around then demonstrated a stressing decrease in health status markers, the positive thinking connected with the beginning of another time gave trust and conviction to change. Additionally, the distinguished shortcomings in the execution of the health framework were assumed to be transitory, with the expectation that the holding limit of the economy to bolster a hearty health framework would make strides.

Despite what might be expected: the difficulties confronting the health sector proceeded and in truth increasingly deteriorated. Amid the second half of implementing the NHS, Zimbabwe went through severely crippling monetary difficulties that spiked in year 2008. The monetary decay brought about a sharp decline in subsidizing for social administrations in genuine terms. This straightforwardly added to an extraordinary crumbling of healthcare infrastructure, drug shortage, loss of experienced healthcare professionals and an exceptional decrease in quality healthcare services accessibility for all.

Lately, the Zimbabwe health sector has been steered by the NHS, “Equity and Quality in Health: A People’s Right” from the year 2009-2013. The fundamental point of the NHS was to advance the health standing of Zimbabweans, and to return the nation on track towards accomplishing MDGs. Regardless of advance made in the greater part of projects and ranges of the technique, a large number of the objectives and focuses of the NHS 2009-2013

were not met. The NHS, 2009-2013 had no M&E framework. A complete M&E plan ought to have been set up yet this was not done.

In 2013 the Ministry of Health and Child Welfare was restructured and rebranded to the Ministry of Health and Childcare with the following Key Result Areas (KRAs):

Enhancing the wellbeing status of the populace, Enhancing the nature of care, and healthcare frameworks fortifying.

The Ministry of Health and Child Care hence devoted to the next values as follows:

- Equity in wellbeing status and human services, Thorough quality administrations, Cost viability (value for money) and productivity, Customer and supplier fulfillment, Straightforwardness and responsibility, Possession and organization in health, Observing and assessing the execution of the health administration to guarantee responsibility and adherence to national measures and approaches, (ZNHS, 2009).

### **2.1.1 Zimbabwe Health Delivery System Structure**

“Zimbabwe’s health service delivery is established at four levels: primary, secondary, tertiary and quaternary. The Primary Healthcare (PHC) is the main vehicle through which healthcare programs are implemented in the country. The primary aspects of the PHC incorporate maternal and infant health administrations; health education; nourishment training and food generation; extended program on vaccination; transferable sicknesses control; water and sanitation; basic medications program; and the arrangement of fundamental and basic preventive and remedial administrations.

Quite a bit of the Zimbabwe healthcare service is administered by government (Ministries of Health and Child Welfare, and to a lesser extent through Ministries of Education, Defense, Home Affairs, and Prison services). Government healthcare services are complemented by the private sector, which

includes both private for profit (e.g. industrial clinics, private hospitals, maternity homes and general practitioners) and not-revenue driven private sector (e.g. mission centers and doctor's facilities and Non-Legislative Organizations) health facilities”, (NHIS, 2009).

### **2.1.2 Institutional Arrangements for Equitable Healthcare Delivery**

The Zimbabwe healthcare framework needs to move from the quick recuperation measures to longer term measures for Universal Health Coverage (UHC), which incorporates value in equity, accessibility, and scope. For instance, the essential sources of healthcare financing in Zimbabwe are the government, the family units, employers, and outer funders. The primary wellspring of wellbeing financing as at 2010 was family units (39%), trailed by employers (21%), outside funders (19%), and Government (18%). There is high benefactor reliance for healthcare financing, which on a basic level is not desirable, as it is normally temperamental, unusual, unsustainable, and exceptionally subject to political environment.

This raises worries on the sustainability of healthcare financing foundations and the powerlessness of Governments if external funding is pulled back. Although total health expenditure (public and private) as a percent of GDP was high in 2010 at around 15% (MoHCC, 2013), this did not really imply that the healthcare sector was well financed, however was fairly a result of a low formal GDP because of the financial crisis experienced from 2000 to 2008. Bring down levels of per capita healthcare expenditure demonstrated that healthcare expenditure in the nation is deficient to ensure satisfactory accessibility and quality services. Government expenditure on healthcare as percent of aggregate Government spending plan was under 15% over the period 2009-2013. Out-of-pocket (OOP) installments were high at 50.97%, mirroring the restricted cover by prepayment components and deficient public financing and along these lines presenting the populace to disastrous healthcare expenditures, making obstructions to fair access to medicinal services (ZEPARU, 2013).

The fact that there is political instability in Zimbabwe at the moment has led to the withdrawal of many donors organisations. The few remaining donors are located in the capital Harare creating an imbalance across the country. These donors do not prefer to work through government and sometimes fund directly to selected institutions which has led to some wards in cities like Bulawayo being shut down due to diminishing conditions.

On the other-hand in terms of healthcare personnel, healthcare is conveyed inside and by a progressively sorted out and organized framework. The framework incorporates the creation, appropriation and utilization of health administrations. Inside the framework, there are various significant performers, for example, doctors, medical attendants, paramedics, drug specialists and the pharmaceutical business, insurance agencies, healing facilities and centers, via which remedial and precautionary administrations are regulated, conveyed, and taken. This cluster of players in the healthcare delivery system have some level of monopoly, and control of the technical production knowledge and of administering medicines. Inside this cluster of players, doctors direct and rule the system, from the knowledge production of medical care, dissemination, and, more notably, the consumption of healthcare. By temperance of their instructive foundation, way of life, and salaries, specialists shape part of a cluster of first class individuals in the public eye.

The control of healthcare delivery frameworks by specialists is fortified by state via different bits of enactment, and directions which diverged from just protecting patients to also protecting doctors' interests. For instance, the Health Professions' Council Act sets out the capabilities and experience crucial for the performers in the framework. The specialist's undertaking is made less demanding by the social request which fortifies their standing. There are laws that decide, direct and ensure private medical practice, pharmacies (by method for assembling of medications and their blends), and medical aid societies in which doctors also are represented (Samuel Agere, 1990).

The interests of the doctors have been increasingly protected due to the problem of brain drain. This has created some form of arrogance in that the majority of

the doctors have opened private surgeries where they invest most of their time for private profit instead of being at their place of employment. The patient is the one that feels the pinch of it all and it is important to determine how they are being affected. In order to determine which factors are affecting patients and to what degree, the factors' correlation to general satisfaction will be evaluated. The items to be evaluated will be General Satisfaction, Time Spent with Doctor, Interpersonal Manner, Accessibility and Convenience, Communication, Technical Quality, Financial Aspects.

Hypothesis 2: There is a high correlation between General Satisfaction, Time Spent with Doctor, Interpersonal Manner, Accessibility and Convenience, Communication, Technical Quality, Financial Aspects in Harare and Bulawayo.

## **2.2 Theoretical Literature**

### **2.2.1 What is Quality?**

Quality can be defined as a fitness for use, otherwise a conformance to specification (Crosby, 1980). From its inception, focus on quality had been specifically in the manufacturing sector and less so in the services sector. This is mainly attributed to the intangible nature of services, which cannot be conceptualized or measured as easily as tangible goods. In the turn of the century various studies have brought out the quality domains in the area of healthcare specifically around customers and satisfaction. Quality has thus become an increasingly predominant part of everyday life.

### **2.2.2 The Attributes of Service Quality**

In a 1985 publication by Parasuraman, et al., 10 generic attributes identified or dimensions that determine service quality:

1. **Reliability:** the capacity to give the administration on time, precisely and constantly.
2. **Responsiveness:** the immediacy of administration and eagerness and capacity to bargain adequately with protestations.
3. **Credibility:** the degree to which the administration is accepted and trusted as prove by observations about organization name, notoriety, and attributes of staff.

4. **Competence:** the learning and aptitude of the contact work force and operational bolster staff to play out the administration adequately and the exploration capacity of the organization.
5. **Courtesy:** the politeness, regard, thought and benevolence shown to the customers, thought for a consumer's assets, and perfect and flawless appearance of open contact faculty.
6. **Security:** freedom from hazard and uncertainty in regards to physical wellbeing, money related security, and classification.
7. **Access:** ease of approachability and contact, accessibility, openness, holding up time, advantageous hours of operation, and helpful area of administration office.
8. **Communication:** ensuring that customers are educated about the administration in a dialect that they can comprehend, listening to the clients, clarifying the administration itself, tradeoffs amongst administration and cost, and guaranteeing the customer that an issue will be taken care of.
9. **Tangibles:** physical state of the structures and the environment and the state of hardware, and appearance of staff.
10. **Understanding the customer:** attempting to know the client's needs and particular prerequisites, giving individualized consideration, and perceiving the customary client.

(Ghobadian, 1994) highlights that, the client is there during the administering process of most services in contrast to manufacturing. Meaning perceptions of quality are influenced not just by the product or outcome of the service but the service delivery process as well as the environment in which the service is delivered.

### **2.2.3 Dimensions of Health Service Quality**

The SERVQUAL scale uses five dimensions for measuring service quality, namely: reliability, tangibles, responsiveness, assurance and empathy (Parasuraman, 1988). Reliability largely concerns with service outcomes, while empathy, responsiveness, tangibles, and assurance have more to do with the service process. Although customers critic the reliability and accuracy of the

service, they critic other dimensions as well during service delivery. Though the five dimensions for measuring service quality have been used, other researchers have included some additional dimensions. These dimensions include competence, credibility, communication, and facilities for curing like up-to-date equipment and procedures (Elliot, et al.,1992) as well as mutual respect, dignity and patients' understanding of illness (Tomes and Chee Peng Ng, 1995).

#### **2.2.4 Theoretical Models of Service Quality**

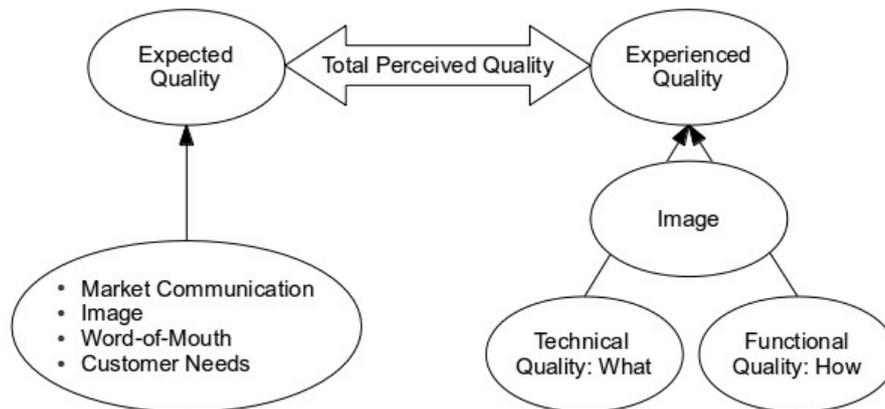
##### **Grönroos' Service Quality Model**

Grönroos (1984) developed the primary service quality model considering the test of qualitative methods measuring perceived service quality. Technical quality, functional quality, and corporate image were used in the model as the dimensions of service quality. Technical quality is about client assessments about the administration of services. Services are characterised by the connection between production and consumption and the technical outcome of this production process is that which the consumer receives as the result of interacting with the service provider. This result is communicated in the specialized nature of the service, which can be surveyed by the client like the specialized measurements of an item. The result of a service procedure does not just intrigue customers, they are likewise keen on how the service is given, they are occupied with the practical nature of the service.

“Functional quality which is more important variable for consumer perceptions and service differentiation than technical quality refers how consumers take the service. Technical quality is interested in what was delivered whereas functional quality is interested in how the service was delivered. The third quality dimension identified by Grönroos is the image of the service provider, which moderates both technical and functional quality to arrive at a perceived level of service. Corporate image has a positive impact on customer perceptions”.

“There are seven major gaps in the service quality in this concept, The model is an extension of Parasuraman *et al.* (1985). The three important gaps, which are more associated with the external customers are Gap1, Gap5 and Gap6; since they have a direct relationship with customers” (ASI Quality Systems, 1992; Curry, 1999; Luk and Layton, 2002).

**Figure: 2.1: Service Quality Model according to Grönroos**



Source: Grönroos, 1990

### **GAP Service Quality Model**

The GAP model was established to show the prominent activities of a service organization that impact on quality perceptions.

#### **Gap1: Customer expectations versus management perceptions**

Resulting from poor communication in marketing and the management fails in perceiving or interpreting actual customer needs.

#### **Gap2: Management perceptions versus service quality specifications**

as resulting from a service provider correctly perceiving customer needs but fails in setting proper performance standards to achieve service quality.

#### **Gap3: Service specifications versus service delivery**

As resulting from a mismatch between personnel quality and job requirements. The personnel could be untrained, incapable or just unwilling to deliver.

**Gap4: Service delivery versus external communication**

as resulting from unfulfilled expectations at servicing due to perceptions created in advertising.

**Gap5: The discrepancy between customer expectations and their perceptions of the service delivered**

as resulting from the influences exerted from the side of the customer and the deficits (gaps) on the part of the service provider. Basically, the customer has a largely misguided interpretation of the service quality on offer.

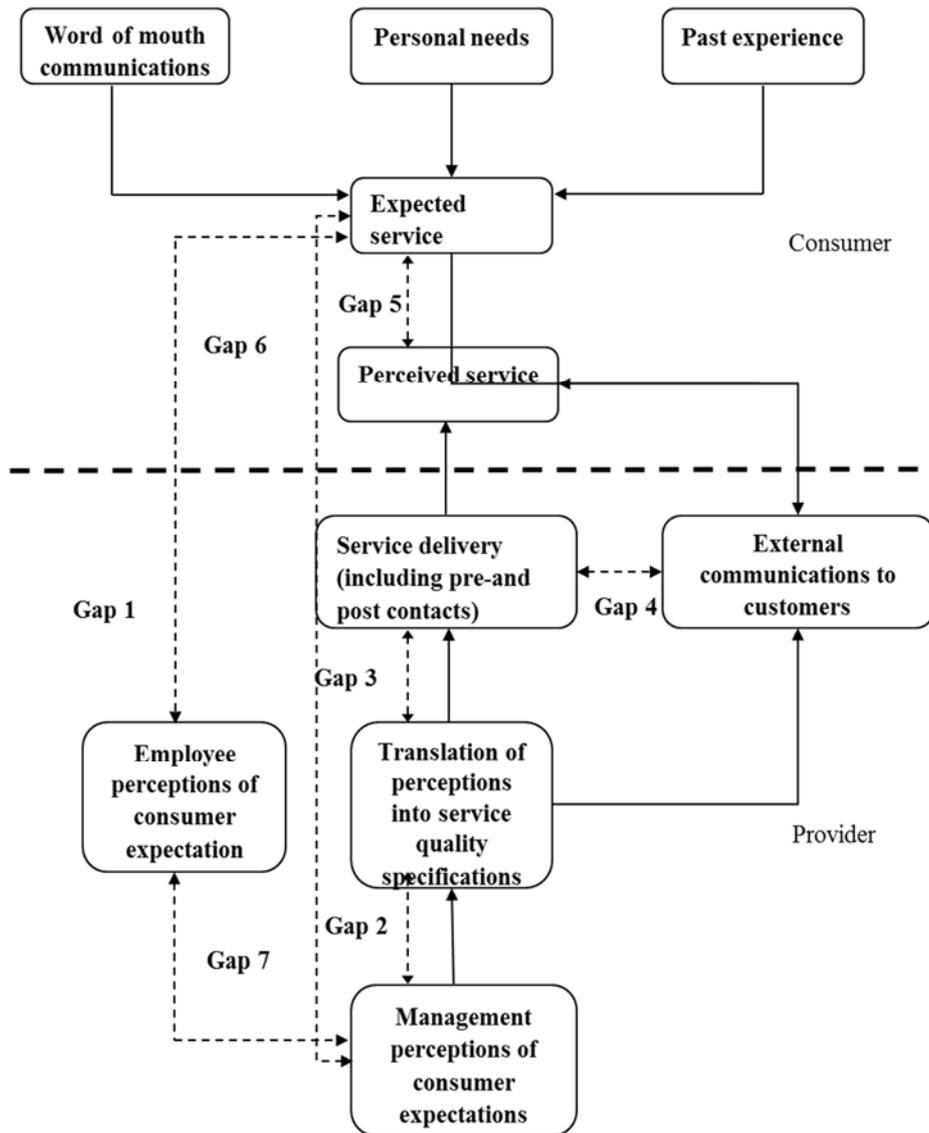
**Gap6: The discrepancy between customer expectations and employees' perceptions**

as resulting from a mismatch in understanding of customer expectations at the entry point service provision.

**Gap7: The discrepancy between employee's perceptions and management perceptions**

as resulting from a mismatch in the understanding of customer expectations between managers and service providers.

**Figure: 2.2: Service Quality Gaps Model (Gap Model)**



Source: Parasuraman, 1985, Curry, 1999, Luk, 2002

**SERVQUAL and SERVPERF**

SERVQUAL and SERVPERF are theoretically multidimensional determinative models. The service quality notion is shaped by its dimensions and does not occur discretely from its dimensions. Perceived service quality is an algebraic construction derived from dimensions, thus service quality and its dimensions are not separate concepts. Criticisms to Parasuraman et al. (1991) led to the modification of SERVQUAL by the revision of the concept of

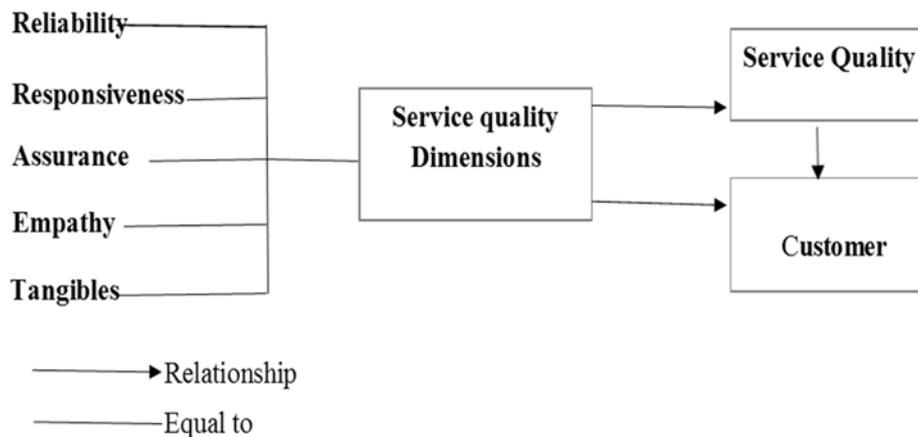
expectations and weighting the dimensions (based on importance scores). The model structure was altered to contain the discrepancy between perceived service and adequate service.

In 1992, Cronin and Taylor developed the SERVPERF model arguing that service quality is a performance-only measure. It has been argued that SERVPERF is shorter, theoretically superior and more indicative of service quality than SERVQUAL. This measure explained more of the variance in an general measure of service quality than SERVQUAL. Moreover, it obtained psychometrically superior assessment of service quality in terms of construct validity and operational efficacy through its performance items (Cronin and Taylor 1992). It was noted that the SERVPERF scale is a more convergent and discriminate valid scale than SERVQUAL in the measurement of service quality (Jain and Gupta, 2004). A number of studies reached the conclusion that performance scores provide better statistical results and explanatory power than gap scores based on various reliability and validity criteria.

#### **2.2.5 The link between Customer Satisfaction and Service Quality.**

“In case customers agree that they are satisfied, giving the clarifications behind satisfaction as service quality; service quality measurement has a critical association with service quality and customer satisfaction, therefore a conclusion could be drawn that service quality has a significant relationship with customer satisfaction and with service quality measurements” (Agbor, 2011).

**Figure 2.3: The relationship between customer satisfaction and Service quality**



**Source: Agbor, 2011**

Customer satisfaction and service quality are vital ideas that organizations should comprehend if they need to stay focused and develop. In the competitive surroundings of today, conveying high quality service is crucial for a sustainable competitive advantage. Customer satisfaction indeed has a constructive outcome on the profitability of an organization. Satisfied customers shape the establishment of any fruitful business as this leads to repeated purchases, positive word of mouth, and brand loyalty.

Customer satisfaction is a consequence having experienced a firm's performance through fulfilled expectations, (Biljana, 2011). According to a 1995 publication by Hokanson, there are numerous factors that impact on customer satisfaction. These comprise of friendly, helpful, knowledgeable, courteous employees, accuracy of billing, timely billing, service quality, competitive pricing, billing clarity, good value, and quick service.

Customer Satisfaction has remained a central idea in marketing publications and an essential objective of all business activities. The primary concern of promotion is to interface with customers by establishing a steady customer relationship to live up to expectations. Thus, managers who consider clients to be the main method for benefit contemplate on traditional pyramid charts with

the president at the top, administration in the center, and forefront individuals and clients at the base, (Biljana, 2011).

The expanding number of service quality- patient satisfaction studies over the past few years indicates that the concept of quality improvement has become more imperative in the service industry year by year. This stresses the importance of patients' views as an essential tool in the processes of monitoring and improving quality of healthcare services. Patients' service quality perceptions are thought to impact patient satisfaction positively, which thus emphatically impacts the patient's choice to pick a particular medicinal services supplier, (Laith, 2011).

“Atkinson found out that cleanliness, security, value for money and courtesy of staff determine customer satisfaction. Knutson revealed that room cleanliness and comfort, convenience of location, prompt service, safety and security, and friendliness of employees are important”, (Knutson, 1988). A study conducted by Akan claimed that the vital factors are the behavior of employees, cleanliness and timeliness, (Akan, 1995).

In a study carried out in Australia, the following aspects of patient experiences were addressed:

- **Waiting time** — The problem is not real holding up times per se but rather patients' evaluation of the riskiness of those holding up times. The experience of having affirmation dates altered could likewise be surveyed.
- **Admission process** — Holding up to be assigned to a ward/bed — again the issue is not genuine holding up times, rather understanding the evaluation of how tricky that holding up was.
- **Communication** — Concentrating on the patient evaluations of the sufficiency of data given on the ailment or remedy, and the degree to which the patient trusted they had chances to make inquiries.
- **Decision making Involvement** — Concentrating on patient evaluations of the sufficiency of their inclusion in the making of basic decision.

**Treated with respect** — perspectives on whether healthcare facility personnel treated patients with affability, regard, good manners as well as thought. These inquiries could be part to concentrate particularly on specialists versus medical attendants. Tolerant appraisals of the degree to which social and religious wishes were regarded could likewise be incorporated.

**Privacy** — Patient appraisals on the degree to which security was regarded.

**Responsiveness of staff** — Most reviews incorporate a patient ordeal address identified with to what extent medical caretakers took to react to an emergency call button. Inquiries concerning accessibility of specialists is incorporated into a few studies

### **Pain Management**

#### **New medicines related information provided**

**Physical environment** — Patient evaluations of quality, cleanliness of facilities, quietness/relaxation, temperature, and amount of sustenance.

**Complaints management** — Patient appraisals of how protestations were taken care of.

**Discharge** — Data gave at release on to how to deal with the patient's condition, (Jim Pearse, 2005).

Vuori has examined about experts who have scrutinized the legitimacy of patient satisfaction measurements inferring that: (a) patients don't procure the logical and specialized information to assess the quality of care, (b) patients' mental and physical circumstance might not permit them to express neutral views, (c) the quick turn of mediations, demonstrative tests and estimations does not permit patients to have an adjusted and objective depiction of what is occurring, (d) experts and patients may have diverse targets and (e) he feeling of value relies on upon social propensities consequently differs starting from one nation to the next, (Gary E. Rosenthal et al, 1997; Vuori, 1987).

In disputing these claims, Vuori states that a number of these contentions have been raised, not out of real sympathy toward the usefulness of the estimation of patient fulfillment, yet out of professional self-interest. They are utilized to

maintain a strategic distance from a reasonable moral basic to include the patients in quality assurance. What's more, there is a reasonable moral objective, especially if the health professionals have a monopoly of the provision of health services, (Vuori, 1987).

Patient Satisfaction can be regarded as a real and coveted result of care. In this sense, it is a characteristic of quality. Essentially, care cannot be of high quality unless the patient is satisfied. Second, understanding satisfaction mirrors the perspectives of the patients on the nature of care, but is not a part of this quality. In this sense, patient satisfaction may be utilized as an intermediary measure or pointer of the quality of care. Third, understanding patient satisfaction fulfillment can be viewed as an essential for achieving the objectives of healthcare, (Vuori, 1987).

Understanding patient satisfaction has arisen as a basic result of medical care due to the expanding accentuation on patient as patrons of health services, (Davies, Ware, 1988). The degree diverse delivery systems satisfy patients is a noteworthy determining factor for fluctuation in the currently very competitive setting. Patient satisfaction is connected to patient devotion to prescriptions, (Sherbourne, et al, 1992), readiness to pursue malpractice litigations, (Vaccarino, 1977), doctor shopping, (Marquis, et al, 1983), and resigning from prepaid healthcare plans, (Ware, Davies, 1983; Grant, 1994).

In the wake of perceiving the significance of patient satisfaction in assessing quality of medical care, Ware and company developed a Patient Satisfaction Questionnaire which consisted of 80 things meant to be applicable in general population study and also be convenient for planning, administration, and evaluation of healthcare services delivery programs, (Ware, Snyder, 1983; Hays, 1994).

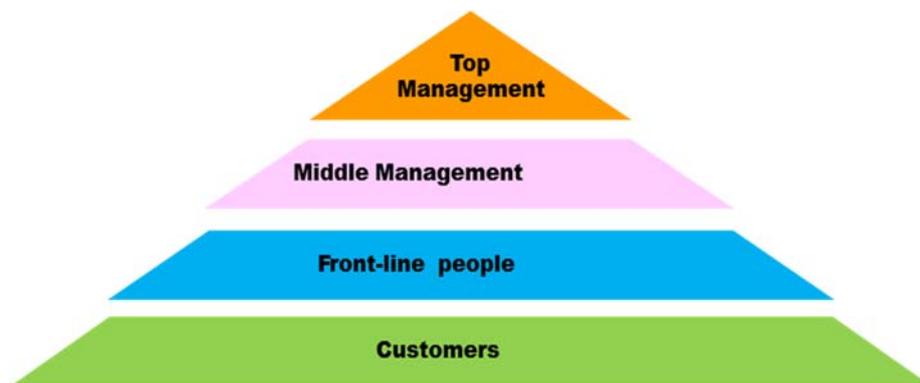
A revision of the initial instrument termed the PSQ- III, consists of 50 items tapping into six facets: technical quality, interpersonal manner, communication, financial aspects of care, time spent with doctor and

accessibility of care, (Ron D. Hays, 1994). The PSQ-III requires a lot of effort by the respondents in terms of time which often is not readily available, therefore Grant N. Marshall and Ron D. Hays carried out a research to minimize this problem. They came up with a shorter form, the PSQ-18 which is a shortened, reliable, and validated version of the PSQ-III, (Ron D. Hays, 1994). The PSQ-18 touches on the same six aspects as the PSQ-III but has a seventh aspect of general satisfaction it covers.

### **2.2.6 Development of Customer Satisfaction in Organizations**

Organizations that claim to be effective transform the outline in Figure 2.4. On top are customers, next as per significance are front-line people who meet, serve, and satisfy customers, under them are middle managers, whose task is to bolster the front-line people so they can serve customers well, and at the base is top management, whose job is to hire and support good middle managers. For client focused associations, consumer loyalty is both a target and a showcasing gadget. Consequently, organizations should be worried about the customer satisfaction level, on account of the web innovation which empowers the brisk spread of awful verbal advertising, and in addition good word of mouth to the rest of the world, (Biljana, 2011).

**Figure 2.4: Traditional Organizational Chart**

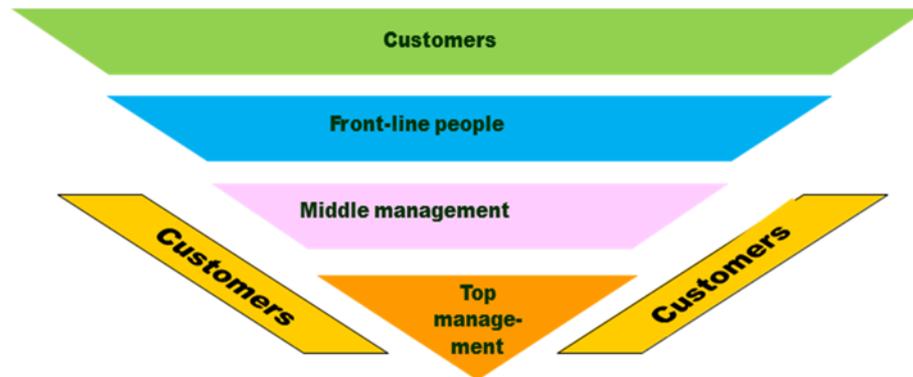


**Source:** Kotler et al. (2000)

In the modern setup of patient-centered care, the modern customer-oriented organization operates comparably by prioritizing customer satisfaction. For this

to be applicable, in patient-centered care, the patient is treated as a customer and their level of satisfaction is a key component in ascertaining quality of care.

**Figure: 2.5: Modern Customer-Oriented Organization Chart**



Source: Kotler et al. (2000)

### 2.2.7 Value and Satisfaction

In marketing terms, an item or offering will be effective in the event that it conveys value and satisfaction to the intended customer. The consumer selects different offerings based on which is perceived to offer the utmost value. Value is a ratio between what the customer receives and what he offers. The customer gets benefits and assumes costs, as shown in this equation:

$$Value = \frac{\text{Benefits}}{\text{Costs}} = \frac{\text{Functional benefits} + \text{emotional benefits}}{\text{Monetary costs} + \text{time costs} + \text{energy costs} + \text{psychic costs}}$$

In light of this condition, an advertiser may expand the value of the customer offering by (1) decreasing costs, (2) raising benefits, (3) raising benefits and lessening costs, (4) bringing down benefits by less than the reduction in costs, or (5) raising benefits by more than the raise in costs. A customer choosing between two value offerings, V1 and V2, will examine the ratio V1/V2. He/She will favor V1 if the ratio is greater than one; or will favor V2 if the ratio is less than one; and will be indifferent if the ratio equals one, (Philip Kotler, 2002).

### 2.2.8 Pre-service Determinants of Satisfaction

**Perceived service Quality:** firstly, is the determining factor of general customer satisfaction, which is the market assessment of previous encounter,

and is anticipated to have an immediate and beneficial outcome on general customer satisfaction.

**Perceived Value:** will be the next determinant of general customer satisfaction, or perceived product quality level with respect to paid cost. Perceived value is a quality measure with respect to cost paid. Despite the fact that cost is frequently vital to the client's first buy, it more often than not has a to some degree lesser effect on satisfaction for recurrent procurements.

**Customer expectation:** is thirdly also a determinant for general satisfaction, measuring the client's expectation of the nature of an organization's services or products on offer. Expectations speak to both earlier utilization encounter, which incorporates some experiential data like promoting and mouth publicity, and a conjecture of the organization's capacity to convey quality later on.

### **2.3 Theories on Patient Satisfaction in Healthcare**

The major patient satisfaction theories were published back in the 1980s with current theories being mostly “reaffirmations” of past theories as highlighted by (Hawthorne, 2006).

- 1) Performance Theory states that, patient satisfaction is not influenced by earlier patient desires by any stretch of the imagination. Genuine execution and the treatment result successfully influence patient satisfaction. Actual performance will overwhelm any emotional response inclinations related to expectation (Oliver, DeSabro, 1998). Higher patient satisfaction may be anticipated to result in better clinical outcomes and lower patient satisfaction is associated with a poor clinical outcome (Oliver, DeSabro, 1998). The theory fundamentally means that, patients have desires, and the satisfaction level is impacted chiefly by the nature of care gave and the results of the care. The patient's pretreatment desires can't in this manner repress the level of patient fulfillment, as it is overcome by the top notch mind offered and a prevalent treatment result.
- 2) Discrepancy and transgression theories of) supported that as patients' medicinal services orientations contrasted and supplier states of care

varied, that if orientations and conditions were consistent then patients were satisfied, otherwise they were dissatisfied, (Fox, 1981).

- 3) Expectation Fulfillment Model predicts encounter that is harmonious with desire will bring about fulfillment and that which contrasts will bring about disappointment. Fulfillment is a build that can for the most part be analyzed in two unmistakable courses: a) as a dependant variable which is dictated by patient and administration qualities, and b) as an autonomous variable which is prescient of resulting conduct. (Linder-Pelz, 1982).
- 4) Determinants and components theory propounded that patient satisfaction was a function of patients' subjective responses to experienced care mediated by their personal preferences and expectations. (Ware et al. 1983).
- 5) Multiple models theory argued that expectations were socially mediated, reflecting the health goals of the patient and the extent to which illness and healthcare violated the patient's personal sense of self. (Fitzpatrick and Hopkins 1983).
- 6) Healthcare quality theory suggested that fulfillment was the main result of the interpersonal procedure of care. He contended that the outflow of fulfillment or disappointment is the patient's judgment on the nature of care in every one of its viewpoints, yet especially in connection to the interpersonal segment of care. (Donabedian, 1980).
- 7) Social-Equity Theory suggests that a patient perceives that his/her treatment outcome is comparatively and fairly the same when compared to that of his/her counterparts, then he/she is supposed to be satisfied. According to (Newsome, & Wright, 1999), people contrast their gains and those of different purchasers and with those of the administration supplier. Patients tend to contrast their treatment outcomes against those experiencing a similar treatment methods for a comparative condition in a similar healthcare setting or some other health services setting. In the event that the other patient had procured better treatment administrations and the result in that patient is

discovered better than that of the other patient, the secondary patients most probably gets disappointed.

#### **2.4 Qualitative Methods of Patient Satisfaction Measurement**

In fruitful estimation strategies, the analyst gathers data by meeting patients, utilizing an assortment of inquiries, to compose or verbally highlight their conclusion of the jolts, their verdicts of qualities and their responses. Such inquiries could incorporate, for instance, either requesting that the dissatisfied patients compose impressions of how well they interacted with the hospital personnel, or indicate two facets of their visit to a healthcare service, which they enjoyed at most or minimally. Lastly, there should be a field at least for overall remarks.

An essential stride relating to this way of researching is the examination of composed or oral remarks. Subsequently, components of complicated particular coding ought to be created for the investigation of information, which will permit thusly the order and arrangement. Regularly quality information might be more valuable than amount, on the grounds that :

- Patients might feel a reduced amount of dedication when not limited to a type of different decisions in multiple choice format. The components of a quantitative research may not be brought out completely to patients so they cannot coordinate. Furthermore, confinements, forced by quantitative scale responses can neglect to embody to the strength and profundity of the patients' health service experience. Interestingly, quality remarks frequently permit patients to better depict their feelings in their very particular specific words.
- Patients might be ready to provide negative input through their particular quality remarks. Many researches show quantitatively large amounts of patient fulfillment with their experience but, similar quality remarks are tended to in numerous ranges, by which the patient was troubled as well. This differentiation is driven by the way that inquiries of subjective research permit patients to express their own judgments of qualities and responses with more prominent precision bringing

about the reaction, "I realize that the nursing staff did what it could, was exceptionally occupied, yet persistently deferred my solution and this irritated me " From one viewpoint disappointment is gotten, yet understanding also. In this way, the utilization of value research questions permits patients to state precisely their opinion, infrequently reducing a damaging remark.

The foremost aim of quality satisfaction research is to deduct analytical data and extra information about the attitudes and sentiments of a set of patients. The essential traits of quality research center on the following:

- a) responses by patients do not exhibit a fixed nature, the results of good research are built, principally, on observation,
- b) the patient sample used is small, but an exhaustive investigation of their conduct is completed,
- c) typically, the generalization of the outcomes is not probable, (Stamatia Ilioudi, et al., 2013).

## **2.5 Quantitative Methods of Patient Satisfaction Measurement**

This is characterized by the estimation of stimulus, verdict, and reactions of patients to their experience of services using numeric representations. Quantitative techniques for determining the degree of patient satisfaction and for the most part take after quality research. This is supported since, as specified, through quality research the areas of sickly health care administrations that need attention through a quantitative investigation of patient satisfaction are taken note of. The quantitative strategy is the most regularly used method for estimating satisfaction level, where reactions are specified by means of a scale. Along these lines, this strategy depends on gathering and investigation of data in numeric form.

Since a lot of study depends on tests considering, the presence of an arbitrary test of fluctuation in the results acquired thus, is unavoidable. On account of this, the aftereffects of performing quantitative research strategies are valuable for finding solutions to inquiries such as "How many?". For instance, the

quantitative technique would respond to a question, for example, What number of patients experiencing surgery are disappointed with the medical care they got postoperatively; ".

By means of a scale of graded responses specified by the questioner, patients are requested to rank aspects of the healthcare services. For example, 1 = very dissatisfied, 3 = uncertain, etc.), a value which is also aggregated to the final score (Stamatia Ilioudi, et al., 2013).

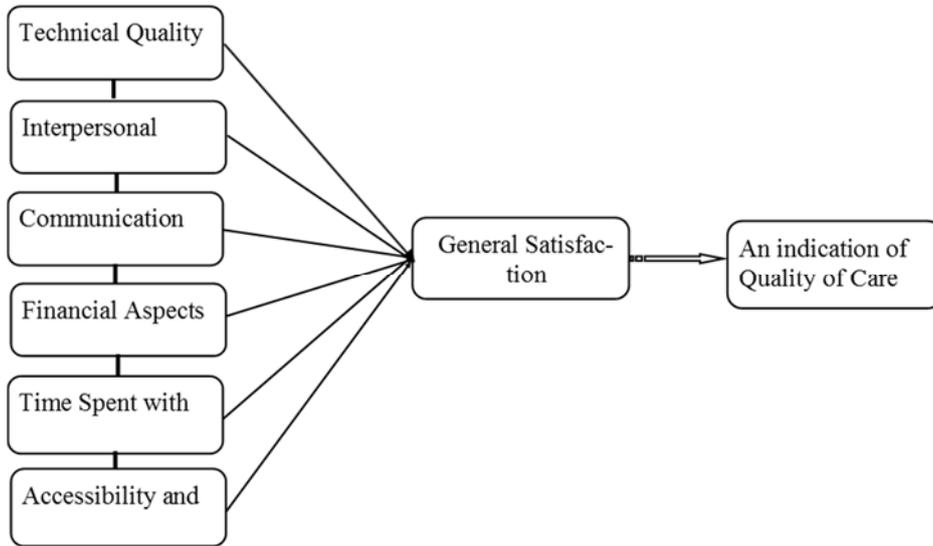
## **2.6 The PSQ-18 short form questionnaire**

A range of questionnaires that can be used to detect areas to improve through assessing patient satisfaction. One example would be the Patient Satisfaction Questionnaire Short Form (PSQ-18), (Marshall, Hays, 1994) which was validated for usage in diverse settings. It was developed through laborious research and was truncated from considerably longer questionnaires, (Ware, Snyder, Wright, 1976 Part A; Ware, Snyder, Wright, 1976 Part B), upholding internal uniformity and reliability of the original PSQ-III, (Marshall, Hays, 1994). Seven aspects of patient satisfaction directed towards doctors were proposed. These being General Satisfaction, Time Spent with Doctor, Interpersonal Manner, Accessibility and Convenience, Communication, Technical Quality, Financial, (Thayaparan, Mahdi, 2013).

## **2.7 Conceptual framework**

The conceptual framework highlighted in Figure 2.6 is an own creation based on Marshall and Hayes' 1994 revision of the Ware original patient satisfaction survey concept.

**Figure 2.6: Framework for patient satisfaction and quality**



# **CHAPTER THREE**

## **RESOURCES FOR HEALTHCARE SERVICE PROVISION AND FUNCTIONAL QUALITY IN HARARE AND BULAWAYO**

This chapter aims to highlight the resources provided for Harare and Bulawayo towards providing healthcare service quality. The provisions referred to here come in three forms i.e. human, financial and consumables/physical resources (Murray, Evans 2003). The aforementioned aspects represent the system inputs for Harare and Bulawayo, the output aspect which is the experience will be analyzed in the following chapter.

### **3.1 Financial resources for healthcare service provision in Harare and Bulawayo**

The government of Zimbabwe has been managing from between 4% and 9% budgetary allocation to the health sector. Most health funding has come from the international community, most notably in the form of donations as opposed to loans. This huge dependence on foreign aid has weakened the healthcare delivery system especially after the economic crisis after the year 2000. Most donors withdrew their aid, leaving the government stranded for resources due to economic sanctions on the country. The government should have made policies that ensure and promote local investment into the health sector instead of relying solely on foreign goodwill. This heavy reliance on donations is the reason the health system has deteriorated quickly.

The following table 3.1 shows the amount of investment in the health sector that the government received.

**Table 3.1: Health projects accepted by the ZIA since 1995**

	Company	Service	Source	Investment US\$	Location
1995	Eleuthra Trading	Optician's Outlet	UK	\$440,000	Harare (Hre)
	PG Smith	Dental technol.	South Africa	\$240,000.00	Hre
	F-H Trading	Dental Service	UK	\$180,000	Hre
	SpecSavers	Optical services	UK	\$580,000.00	Hre
1996	Elizabeth Parker	Reflexology,	UK	\$240,000.00	Hre
	D.I.C	Dental services	Yugoslavia	\$5,000,000.00	Hre
	Universal Health care	Hospital	UK	\$29,200,000.00	Hre
	Little Star	Orthodontic practice	UK	\$280,000.00	Bulawayo
	Mobile Rural Dental Clinic	Dental services	India	\$800,000.00	Mas, Gok & Kw
	Educare Mobile Clinic	Health provisions	South Africa	\$327,600.00	Concession
	The Dental Clinic	Dental services	UK	\$2,400,000.00	Hre
1997	Zinomed	Dental surgeries	Finland	\$3,968,000.00	Hre
	Satyanathan Clinical Services	Health services	India	\$640,000.00	Kadoma
	Zinomed	Dental equipment	Finland	\$992,000.00	Hre
	Cimas/Gambro Haemodialysis	Clinic for kidney	Sweden	\$4,924,600.00	Hre
1998	Mehnaaz Investments	Medical school	South Africa	\$36,363,636.00	Chinhoyi
	Bucahman Medical	Medical equipment	Germany	\$2,482,546.00	Hre
1999	Zimbabwe Medical Admin	Medical Aid Admin	South Africa	\$1,863,636.00	Hre
	Henswick Technical	Medical consultancy	South Africa	\$45,545.00	Hre
	Traditional M W M Clinic	Clinic	USA	\$363,636.00	Hre
2000	Men's Clinic International	Medical/health	South Africa	\$98,182.00	Hre
	Axum Investments	Surgery	Yugoslavia	\$603,909.00	Hre
<b>Total</b>				<b>\$92,033,289.00</b>	

Source: Zimbabwe Investment Centre, 2007

Observing the above table, it can be noted how much of a financial gap exists between Harare and Bulawayo. USD\$53 622 053 and USD\$280 000 respectively was received for service upgrades. This left Bulawayo lagging well behind in service delivery as the city is no equal position to Harare.

A similar trend in financial inequality can be noted in the privatized CIMAS medical aid society, which bought clinics across Zimbabwe investing in in Harare, Bulawayo, Gweru , Mutare, and Chitungwiza since 1995. Table 3.2 shows the estimated setup cost for operations consisting purchase of buildings and working capital.

**Table 3.2: Investments in healthcare facilities by CIMAS, 2001–2004**

	<b>Name of Facility</b>	<b>Location</b>	<b>Estimated Cost (\$US)</b>
<b>2001</b>	Harare Haemo Centre	Harare	\$4,924,600.00
<b>2002</b>	Rowland Square Clinic	Harare	\$666,667.00
<b>2002</b>	Cimas Medical Clinic	Bulawayo	\$565,712.00
<b>2003</b>	Chitungwiza Medical Clinic	Chitungwiza	\$420,121.00
<b>2004</b>	Gweru Healthcare Centre	Gweru	\$316,000.00
<b>2006</b>	Mutare Healthcare Clinic	Mutare	\$486,000.00
<b>Total</b>			\$7,379,100.00

Source: CIMAS, 2001, 2007

There is a huge gap in financial investment for Harare and Bulawayo both in the public and privately owned facilities. This is an unhealthy situation that goes against the developmental imperatives of equality in healthcare delivery across the country. This is especially worrying considering that Harare and Bulawayo are the two largest cities in the country, and if there is so much uneven distribution of finances between them, what more of the smaller towns and rural settings.

### **3.2 Human resources for healthcare service provision in Harare and Bulawayo**

There are three stages of social-economic developments that have molded the Zimbabwean health sector: firstly, there was a period of high public spending from year 1980–1990, secondly, there was liberalization and privatization from year 1990–2000, lastly there is the current economic downturn from year 2000 to present). The current status has led to the extreme weakening of the health sector human capital base as healthcare professionals leave Zimbabwe for more developed countries regionally and abroad. Typically, Zimbabwe loses 20% of its health personnel month-to-month. The range of new graduates from local education establishments is nowhere near sufficient to cover the void left by migrating health experts. Previous reports suggest as much as 75% of health professionals and experts in Bulawayo had migrated (Chikanda, SAMP 2004).

The exodus of health personnel has immensely become a challenge of growing significance in most of the developing world. Migration here refers to the

exodus of health professionals from one health institution to another location, however not essentially implying a country-country move (Ojo, 1990).

The consequence that migration has on nations is correlated to relative requirements and losses of health workers in that nation, the effect being extreme where requirements and losses are both high such as in Zimbabwe, where there is a high vacancy rate in nursing positions. Zimbabwean nurses are actively being recruited to the United States of America, the United Kingdom, New Zealand, and Canada (Mutizwa-Magiza, 1998).

The disadvantage that Bulawayo faces is that it does not only lose medical professionals to other countries but also to Harare itself. The capital has a lot of better paying private practices which attract professionals from Bulawayo, for example the private sector accounts for over 90% of the medical laboratories, with 55% of private medical laboratories located in Harare while the rest are scattered around the country

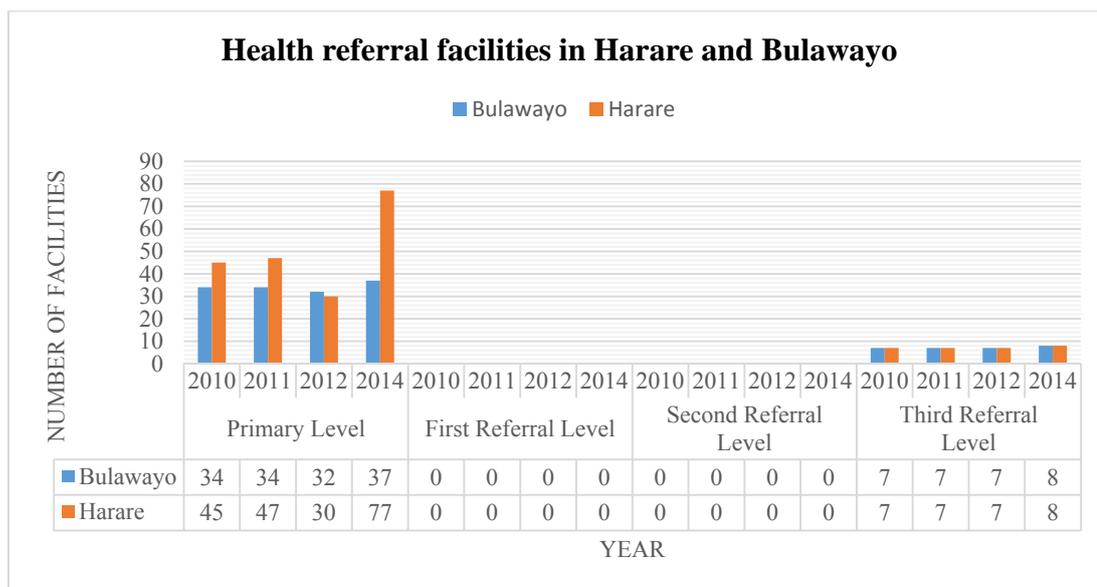
### **3.3 Physical resources for healthcare service provision in Harare and Bulawayo**

In Zimbabwe, public healthcare is administered at four stages: central and specialized hospitals (third referral level); provincial hospitals (second referral level); district and mission hospitals (first referral level); rural health centers, rural hospitals, town clinics, and village health workers (entry level).

A precise referral arrangement is in place; however, it has become lengthier and costly as patients are referred from one level to the next deprived of a guarantee that they will access the suitable service. Theoretically, a referral system requires patients to present themselves first at the facilities at entry level then progressively be referred upstream as per requirement. However, government admits that, in practice the system functions poorly as people sidestep their local referral facilities thus putting a strain on larger establishments, particularly the central hospitals (Sanders, 1990).

Table 3.3 below shows the health referral facilities in Harare and Bulawayo. The number of facilities did not change much from 2010-2014 for Harare and Bulawayo. The only spike is seen in 2014 where the number of primary level referral centers increase from 30 to 77 while Bulawayo just increases from 32 to 37. This could be a sign that more is being done in Harare to ensure access to primary level facilities than in Bulawayo.

**Figure 3.1: Health referral facilities in Harare and Bulawayo**



Source: ZNHP , 2010-2014

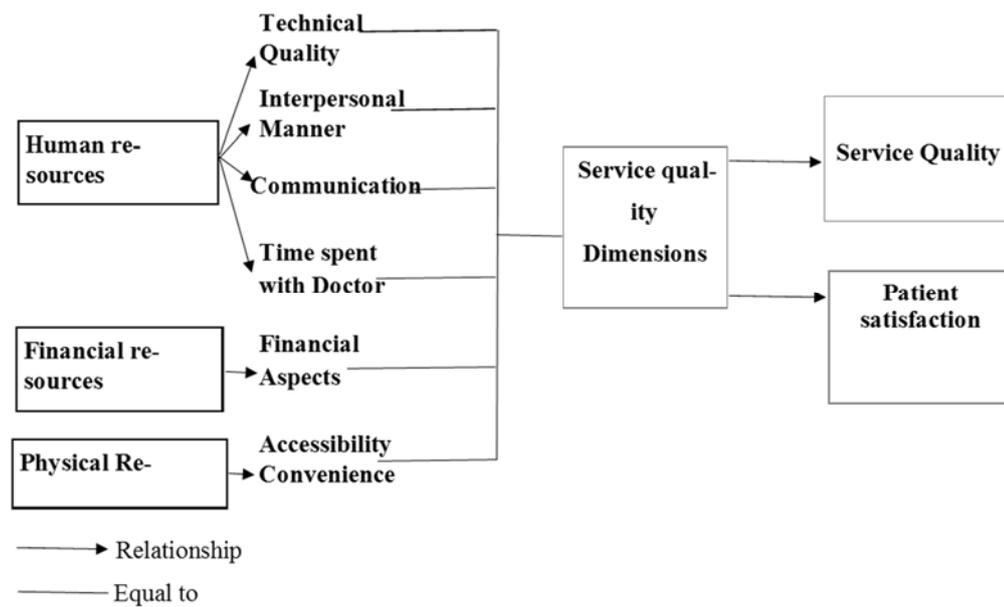
Key:

1. Primary Level = Clinics and Rural health centers
2. First Referral Level = District mission and rural hospitals
3. Second Referral Level = Provincial hospitals
4. Third Referral Level = Central hospitals and infectious diseases

Reverting back to table 3.1, it is notable that, Harare is in a possibly better position than Bulawayo in terms of the amount of funding it has received from donors for specific projects. This indicates that the consumables and physical resources that are available for the public health system of Harare and are at a better standing than of Bulawayo. The health system of Harare is also better complemented by the privatized centers which have invested more in Harare than in Bulawayo as shown in table 3.2.

Having discussed the three resource forms i.e. human, financial and consumables/ physical resources available for Harare and Bulawayo towards providing healthcare service quality, it has been noted that there is a visible mismatch. The resource input inequality indicates that there is high likelihood of a resultant output mismatch between Harare and Bulawayo. The proceeding chapter will focus on the different outputs for the two cities through the eye of the patient. The patient satisfaction with each system becomes an important proxy for measuring quality. A test to determine if the differences are significant enough to raise concern will be carried out. Hopefully the findings will complement those found in this chapter. The following figure shows the framework I generated and used for this study incorporating the resource inputs and the service quality output using patient satisfaction.

**Figure 3.2: The relationship between Resources and Healthcare outputs.**



## **CHAPTER FOUR**

### **METHODOLOGY, DESIGN AND SAMPLING**

This chapter defines the examination strategy that was utilized in the study, the populace that was focused for the study and how the sample space was acquired is likewise depicted. The research apparatus, their outline and method of delivery are tended to.

#### **4.1 Research Design**

This research identifies the factors that lead to why patients are satisfied or dissatisfied with quality of health services. In order to investigate the objectives of this study and answer the research questions, the quantitative research method which focused only on the health system evaluation was employed. This narrow focus weakened the study drastically as other study variables could not be incorporated into the research. Political uncertainty and fear played a major role in deterring the majority of the respondents from providing important demographic information. During this study, the government was in the process of enacting a Computer and Cyber Crime Bill into Law.

If passed into law, the Computer and Cyber Crime Bill would empower the government to demand the source of information of any content considered to be violating the law. Similar legislation has been used in the past to harass government critics as well as privately-owned media through trumped up criminal cases that never stick in the courts (The Standard/2016/08/21).

This time the government was a lot more determined to ensure that any negative image portrayed of the government in any online media was punishable by law. As a result of this, respondents rejected the study in the fear of incriminating themselves if the results of it are not desirable. A compromise was reached to design the study without the personal information but focus only on the system experience in Harare and Bulawayo and relating that to a study of the respective system resource inputs. A study of the resource inputs was done in order to explain the results of the patient satisfaction survey outputs in place of the eliminated demographic information.

## **4.2 Population and Sampling**

The respondents were randomly selected from the general population aged 18 years and above in the two cities through the use of email and smartphone applications. The questionnaire was simplified enough to be accessed online through a mobile phone and be completed within 3-4 minutes. A number of contacts were selected to also distribute the questionnaire in the selected cities of study.

## **4.3 Research Instruments**

This study utilized a self-administered PSQ-18 short form questionnaire of the PSQ-III together with the PSQ-18 subscale for scoring the respondents. Since this is a comparative analysis of two different cities, Bulawayo and Harare, the PSQ-18 forms will be distributed randomly between the cities. According to the world population review, 2016, Harare, has 1.56 million people and Bulawayo has 703,000 people. This is approximately a 2:1 ratio respectively. The respondent ratio was expected to reflect the difference in population.

So as to control for passive reacting, the instrument entails both decidedly worded and contrarily worded things. Respondents will show their emotions about the healthcare services utilizing reactions given on a 5-point scale ranging from strongly agree to strongly disagree, (Grant and Hayes, 1994).

In terms of the variables of interest, demographic variables like age, sex, ethnicity, education, marital status, and socioeconomic status were taken into consideration due to challenges highlighted in the limitations. The variables of interest shall be limited to the performance of the service system. These variables are, the general Patient Satisfaction Score variable, Technical Quality, Interpersonal Manner, Communication, Financial Aspects, Time Spent with Doctor, and Accessibility. This approach is theoretically backed by the Performance Theory.

#### **4.4 Data Collection Procedure**

The chosen method of administering the survey was a self-administered questionnaire distributed using online media such as emails and mobile phone communication apps with the help of various colleagues. With time, it was noted that online media was not as effective, the survey had to be supplemented by face to face interaction. Respondents had reservations about using online media and had a lot of questions that took a lot of time to respond to. Therefore, the use of one-on-one administration of the questionnaire put a face to the survey and eased the suspicions and tension.

#### **4.5 Measures**

The PSQ-18 produces distinct scores for the seven different subscales: General Satisfaction (Items 3 and 17); Time Spent with Doctor (Items 12 and 15); Interpersonal Manner (Items 10 and 11); Accessibility and Convenience (Items 8, 9, 16, and 18); Communication (Items 1 and 13); Technical Quality (Items 2, 4, 6, and 14); Financial Aspects (Items 5 and 7).

Some items are phrased so that agreement echoes satisfaction with healthcare, while others are phrased so agreement echoes healthcare dissatisfaction. Every item must be scored so that high scores reflect satisfaction. After item scoring, items within the same subscale should be averaged together to create the 7 subscales.

Participants show just how they feel about the healthcare they experienced generally without reference to a particular time or appointment. Replies to each question are specified on a 5-point Likert scale extending from strongly agree to strongly disagree (Grant, Hayes, 1994).

Blank Items (missing data) left by respondents must be discounted when computing scale scores.

#### **4.6 Limitations**

The survey was conducted only in Harare and Bulawayo, thus, the results may not necessarily be generalized to the whole country. Furthermore, sample size was small due to lack of adequate manpower, time and resources. A lot of other serious setbacks were faced during the pilot phase as respondents refused to

provide personal information namely socio-demographics (gender, age, and marital status) and socio-economics (household income, employment status, education level, type of residence, general health perception, and purpose of visit to clinic). Most respondents took the survey as some kind of political trap refusing to give information they considered personal as it coincided political unrest in the country. This therefore limited the study to extrinsic aspects of patient satisfaction. Extrinsic factors that influence patient satisfaction are those pertaining to the healthcare institution itself, namely healthcare setting, accessibility, personnel in the setting, insurance plans that the organization identifies, cost of treatment, treatment quality, services offered, etc. Any aspect of the health institution that may affect patient satisfaction.

#### **4.7 Data Analysis**

The Statistical Analysis System (SAS) was used to analyze the data collected. Independent Sample T-test was applied to check for the significance of mean difference in general satisfaction among the public respondents in Harare and Bulawayo. For each of the results, correlation analysis was used to view all the statistically significant correlations with the general satisfaction looking at the survey questions that are most correlated with general satisfaction.

From a statistical perspective, Correlation cannot determine cause and effect but can indicate the strength of statistical relationships. It cannot indicate which of those items is influencing the other item. (And in some cases, there could even be a third, unmeasured factor that is the real cause of the observed correlation between two survey items). Correlation was used to find out what matters most to patients by correlating survey items with general satisfaction.

## CHAPTER FIVE

### ANALYSIS AND PRESENTATION OF SURVEY RESULTS

This chapter presents the data from a total of 106 respondents, 64 from Harare and 52 from Bulawayo. Data is presented in sections. The first section presents summary statistics for the survey results separately looking at Harare and Bulawayo. The second section presents data on the correlation between general satisfaction and the other satisfaction factors for each city. The third section presents data on the test for significance of mean differences in general satisfaction between the Harare and Bulawayo.

#### 5.1 Presentation of Summary Statistics: Harare and Bulawayo

Table 5.1 shows the summary statistics of the variables in the data collected from Harare. Financial aspects as shown, provided the least satisfaction to the patients. This shows that patients are not happy with what they pay for healthcare service. However interpersonal manner and communication reflect the highest average levels in satisfaction of 3.57813 and 3.43750 respectively, which is highly commendable. In general, all the aspects measured above average levels of satisfaction except for the financial aspects which performed below average.

**Table: 5.1 : Harare Summary Statistics of satisfaction survey**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Sum</b>	<b>Label</b>
<b>General Satisfaction</b>	64	2.98438	0.92139	191.00000	GS
<b>Technical Quality</b>	64	2.85547	0.76740	182.75000	TQ
<b>Interpersonal Manner</b>	64	3.57813	0.80287	229.00000	IM
<b>Communication</b>	64	3.43750	0.76376	220.00000	Com
<b>Financial Aspects</b>	64	2.47656	0.87027	158.50000	FA
<b>Time spent with Doctor</b>	64	2.82031	0.81828	180.50000	Time

**Accessibility and Convenience** 64 2.87109 0.75854 183.75000 AC

The following table shows the summary statistics of the variables in the data collected from Bulawayo. Financial aspects just as in the case of Harare, provided the least satisfaction to the patients. Interpersonal manner and communication still reflect the highest levels of total satisfaction way above average. As for the general satisfaction, Bulawayo has a very average level of satisfaction when compared to that of Harare. All the aspects measured above average levels of satisfaction except for the financial aspects which performed below average.

Furthermore, the accessibility and convenience aspect is worryingly low reflecting a possibility that patients in Bulawayo feel they cannot access medical assistance with ease as and when required.

**Table: 5.2: Bulawayo Summary Statistics of satisfaction survey**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Sum</b>	<b>Label</b>
<b>General Satisfaction</b>	52	2.51923	0.63371	131.00000	GS
<b>Technical Quality</b>	52	2.69231	0.70644	140.00000	TQ
<b>Interpersonal Manner</b>	52	3.94231	0.65420	205.00000	IM
<b>Communication</b>	52	3.87500	0.62525	201.50000	Com
<b>Financial Aspects</b>	52	2.29808	0.84749	119.50000	FA
<b>Time spent with Doctor</b>	52	2.98077	0.60197	155.00000	Time
<b>Accessibility and Convenience</b>	52	2.56731	0.59019	133.50000	AC

## **5.2 Presentation of Correlation Results: Harare and Bulawayo**

Table 5.3 shows the Pearson correlation matrix for patient satisfaction in Harare. The main correlation of interest is that of general satisfaction relative to the other aspects. General satisfaction for those who responded to the survey in

Harare was highly correlated to Technical quality, Time spent with doctor and accessibility and convenience with a Pearson’s correlation coefficient  $r=0.66$ ,  $r=0.50$  and  $r=0.59$  respectively,  $p<0.0001$ . We accept null hypothesis 2 and conclude that there is a high correlation between General Satisfaction and Technical Quality, Time Spent with Doctor, Accessibility and Convenience in Harare. The results also showed that General satisfaction for those who responded to the survey in Harare was lowly correlated to Interpersonal Manner, Communication, and Financial Aspects with a Pearson’s correlation coefficient  $r=0.39$ ,  $r=0.45$ ,  $r=0.33$ . We reject null hypothesis 2 for the alternative and conclude that there is a low correlation between General Satisfaction and Interpersonal Manner, Communication, and Financial Aspects in Harare.

**Table: 5.3: Pearson Correlation Coefficients for Harare**

	<b>GS</b>	<b>TQ</b>	<b>IM</b>	<b>Com</b>	<b>FA</b>	<b>Time</b>	<b>AC</b>
<b>GS</b>	1	0.66461	0.38791	0.44971	0.32616	0.50149	0.58756
		<.0001	0.0015	0.0002	0.0085	<.0001	<.0001
<b>TQ</b>		1	0.56286	0.7054	0.38107	0.55517	0.48388
			<.0001	<.0001	0.0019	<.0001	<.0001
<b>IM</b>			1	0.51933	0.26959	0.37204	0.29699
				<.0001	0.0312	0.0025	0.0172
<b>Com</b>				1	0.35597	0.35002	0.29753
					0.0039	0.0046	0.017
<b>FA</b>					1	0.26704	0.35603
						0.0329	0.0039
<b>Time</b>						1	0.49912
							<.0001
<b>AC</b>							1

The following table shows the Pearson correlation matrix for patient satisfaction in Bulawayo. General satisfaction for those who responded to the survey in Harare was highly correlated to Technical Quality, and Accessibility and Convenience with a Pearson’s correlation coefficient  $r=0.53$ ,  $r=0.74$ , respectively,  $p<0.0001$ . We accept null hypothesis 2 and conclude that there is a high correlation between General Satisfaction and Technical Quality, and Accessibility and Convenience in Bulawayo. General satisfaction for those who

responded to the survey in Harare was lowly correlated to Interpersonal Manner, Communication, Financial Aspects, and Time spent with doctor representing a Pearson's correlation coefficient  $r=-0.23$ ,  $r=0.08$ ,  $r=0.39$ ,  $r=0.48$ . There is however a strange outcome in the correlation between General satisfaction and Interpersonal Manner where there is a low inverse correlation. We therefore reject null hypothesis 2 for the alternative and conclude that there is a low correlation between General Satisfaction and Interpersonal Manner, Communication, Financial Aspects, and Time Spent with Doctor in Bulawayo.

**Table: 5.4: Pearson Correlation Coefficients for Bulawayo**

	GS	TQ	IM	Com	FA	Time	AC
<b>GS</b>	1	0.52812	-0.2338	0.08042	0.39073	0.47644	0.737
		<.0001	0.0953	0.5709	0.0042	0.0004	<.0001
<b>TQ</b>		1	0.47527	0.39398	0.49189	0.57369	0.53857
			0.0004	0.0039	0.0002	<.0001	<.0001
<b>IM</b>			1	0.61719	0.02278	0.08426	-0.1929
				<.0001	0.8726	0.5526	0.1707
<b>Com</b>				1	0.00694	0.04558	-0.1295
					0.9611	0.7483	0.3601
<b>FA</b>					1	0.31893	0.48833
						0.0212	0.0002
<b>Time</b>						1	0.73499
							<.0001
<b>AC</b>							1

### 5.3 Presentation of ttest Results: Group test statistic for the equality between Harare and Bulawayo

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicated evidence of a significant mean difference in general satisfaction between Harare and Bulawayo ( $t = -3.09$  and  $p = 0.0025$  for the pooled test,  $t = -3.21$  and  $p = 0.0017$  for the Satterthwaite test). The equality of variances test also indicated a significant difference in the two variances ( $F=2.11$ ,  $p=0.0065$ ). Note that this test assumes that the observations in both data sets are normally distributed. Tables 5.1 and 5.2 showed that in general patients in Harare are more satisfied than those in Bulawayo furthermore the study of the resource inputs in Harare and Bulawayo

indicated a general bias towards Harare. This is confirmed by the output results in Table 5.5 proving that there are general significantly different effects to the general output due to the uneven distribution of resources.

**Table 5.5: Group test statistic for the equality of variances for General Satisfaction**

Method	Variances	DF	t Value	Pr >  t
Pooled	Equal	114	-3.09	0.0025
Satterthwaite	Unequal	111.17	-3.21	0.0017

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	63	51	2.11	0.0065

The above findings give clear evidence of the outcomes of chapter 3. There was strong evidence of uneven input into the health systems of Harare and Bulawayo and without output evidence, it would have been difficult to give a conclusive statement on the two cities.

**Variable: Technical Quality**

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicated no evidence of a significant mean difference in Technical Quality between Harare and Bulawayo ( $t = -1.18$  and  $p = 0.2405$  for the pooled test,  $t = -1.19$  and  $p = 0.2366$  for the Satterthwaite test). The equality of variances test does not indicate a significant difference in the two variances ( $F = 1.18$ ,  $p = 0.5437$ ).

Despite having Human resource input challenges as shown in chapter 3, patients in Bulawayo showed more satisfaction with the Technical quality they experienced than was the case for Harare patients. The ttest in Table 5.6 indicated that the differences were not significant enough.

**Table 5.6: Group test statistic for the equality of variances for Technical Quality**

Method	Variances	DF	t Value	Pr >  t
Pooled	Equal	114	-1.18	0.2405
Satterthwaite	Unequal	112.19	-1.19	0.2366

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	63	51	1.18	0.5437

**Variable: Interpersonal Manner**

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicate a presence of evidence of a significant mean difference in Interpersonal Manner between Harare and Bulawayo ( $t = 2.64$  and  $p = 0.0096$  for the pooled test,  $t = 2.69$  and  $p = 0.0082$  for the Satterthwaite test). The equality of variances test however did not indicate a significant difference in the two variances ( $F^* = 1.51$ ,  $p = 0.1322$ ). Tables 5.1 and 5.2 showed that in general patients in Harare are more satisfied with the Interpersonal Manner than those in Bulawayo regardless of Human resource input challenges. Table 5.7 proves that there are general significantly different levels of Interpersonal Manner in favor of Bulawayo even under uneven distribution of resources.

**Table 5.7: Group test statistic for the equality of variances for Interpersonal Manner**

Method	Variances	DF	t Value	Pr >  t
Pooled	Equal	114	2.64	0.0096
Satterthwaite	Unequal	114	2.69	0.0082

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
<b>Folded F</b>	63	51	1.51	0.1322

**Variable: Communication**

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicated evidence of a significant mean difference in Communication between Harare and Bulawayo ( $t = 3.32$  and  $p = 0.0012$  for the pooled test,  $t = 3.39$  and  $p = 0.0010$  for the Satterthwaite test). The equality of variances test did not indicate a significant difference in the two variances ( $F = 1.49$ ,  $p = 0.1412$ ). Tables 5.1 and 5.2 showed that patients in Harare are more satisfied than those in Bulawayo in terms of Communication. The output results in Table 5.8 indicate that there are general Communication levels are significantly different.

**Table 5.8: Group test statistic for the equality of variances for Communication**

Method	Variances	DF	t Value	Pr >  t
<b>Pooled</b>	Equal	114	3.32	0.0012
<b>Satterthwaite</b>	Unequal	113.99	3.39	0.0010

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
<b>Folded F</b>	63	51	1.49	0.1412

**Variable: Financial Aspects**

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicated no evidence of a significant mean difference in Financial Aspects between Harare and Bulawayo ( $t = -1.11$  and  $p = 0.2687$  for the pooled test,  $t = -1.11$  and  $p = 0.2675$  for the Satterthwaite test).

The equality of variances test did not indicate a significant difference in the two variances ( $F'=1.05$ ,  $p=0.8503$ ). Tables 5.1 and 5.2 showed that in general patients in Harare are more satisfied with the Financial Aspects than those in Bulawayo. This is not surprising when one looks at the study of the financial resource inputs which are biased towards. Patients in Bulawayo are justified to feel that they are paying more for less. The surprising thing to note however, is the output results in Table 5.9 indicating that there are no significant differences in financial aspects.

**Table 5.9: Group test statistic for the equality of variances for Financial Aspects**

Method	Variances	DF	t Value	Pr >  t
Pooled	Equal	114	-1.11	0.2687
Satterthwaite	Unequal	110.29	-1.11	0.2675

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	63	51	1.05	0.8503

**Variable: Time spent with Doctor**

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicated evidence of a significant mean difference in Time spent with Doctor between Harare and Bulawayo ( $t = 1.18$  and  $p = 0.2412$  for the pooled test,  $t = 1.22$  and  $p = 0.2268$  for the Satterthwaite test). The equality of variances test did indicate a significant difference in the two variances ( $F'=1.85$ ,  $p=0.0248$ ). Tables 5.1 and 5.2 showed that in general patients in Bulawayo are more satisfied with the time they spend with the doctor than those in Harare. This is very unexpected considering the general bias towards Harare in terms of Human resource inputs. Furthermore, Table 5.10

shows that there are general significant differences despite the expected Human resource shortage for Bulawayo.

**Table 5.10: Group test statistic for the equality of variances for Time spent with Doctor**

Method	Variances	DF	t Value	Pr >  t
Pooled	Equal	114	1.18	0.2412
Satterthwaite	Unequal	112.97	1.22	0.2268

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	63	51	1.85	0.0248

**Variable: Accessibility and Convenience**

A group test statistic for the equality of means was reported for both equal and unequal variances. Both tests indicated evidence of a significant mean difference in Accessibility and Convenience between Harare and Bulawayo ( $t = -2.36$  and  $p = 0.0198$  for the pooled test,  $t = -2.43$  and  $p = 0.0169$  for the Satterthwaite test). The equality of variances test did not indicate a significant difference in the two variances ( $F^2=1.65$ ,  $p=0.0656$ ). Tables 5.1 and 5.2 showed that in general patients in Harare are more satisfied with the Accessibility and Convenience of public health facilities than those in Bulawayo furthermore the study of the physical resource inputs in Harare and Bulawayo indicated a general bias towards Harare. This is confirmed by the output results in Table 5.11 proving that there are general significantly different effects to the output due to the uneven distribution of resources.

**Table 5.11: Group test statistic for the equality of variances for Accessibility and Convenience**

<b>Method</b>	<b>Variances</b>	<b>DF</b>	<b>t Value</b>	<b>Pr &gt;  t </b>
<b>Pooled</b>	Equal	114	-2.36	0.0198
<b>Satterthwaite</b>	Unequal	113.81	-2.43	0.0169

<b>Equality of Variances</b>				
<b>Method</b>	<b>Num DF</b>	<b>Den DF</b>	<b>F Value</b>	<b>Pr &gt; F</b>
<b>Folded F</b>	63	51	1.65	0.0656

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION, AND RECOMMENDATIONS**

This chapter presents summary of the findings, conclusions and recommendations based on findings. The study sought to investigate the satisfaction levels of patients with healthcare in Harare and Bulawayo, and to ascertain if there is a significant difference in mean general satisfaction with public healthcare delivery between the two major cities taking into account the resource input aspects for each system

#### **6.1 Summary and Conclusions:**

This study was expected to answer the following questions:

- Are there significant differences in satisfaction with public healthcare delivery in Harare and Bulawayo?
- What is the general level of satisfaction with quality of healthcare provided at public hospitals in Harare and Bulawayo respectively?
- Which factors significantly influence the general patient's satisfaction with healthcare?

The summary statistics for both Harare and Bulawayo revealed similar satisfaction results for financial aspects although Bulawayo was slightly higher. On the 5-point Likert scale both cities scored below the 2.5 average score meaning that patients are not totally satisfied with the amount of money they have to pay to access healthcare services in public hospitals with no significant differences. The general general satisfaction for Harare at close to 3points was better than that of Bulawayo which scored an average level of general satisfaction. This indicates that for the respondents who completed the survey, Harare patients are generally more satisfied with the care they receive than those from Bulawayo. Looking at the results of Interpersonal Manner, Communication and Time spent with doctor, Bulawayo exhibited higher satisfaction score for each satisfaction aspect. This indicates a possibility that Medical personnel in Bulawayo relate better with their patients than those in Harare.

The Technical Quality found is Harare slightly out-scored that of Bulawayo but however the Accessibility and Convenience show a bigger gap in satisfaction indicating that patients in Harare have better access to public healthcare facilities than those found in Bulawayo.

The survey managed to determine that the highest correlation  $r=0.66$ , exists between Technical Quality and General Satisfaction for the respondents in Harare. These results indicate that what matters most to Harare patients in determining their satisfaction is the Technical Quality aspect of the service they receive. The Accessibility and Convenience of the public healthcare facilities as indicated by the results is the second most important factor in determining the patient satisfaction.

Time spent with the doctor also had a high correlation to General Satisfaction, however the other factor had low correlation to General Satisfaction. The unexpected relationship existed between Financial aspects and General Satisfaction. Results showed that finances did not matter as much to the patients in determining satisfaction levels. It can be assumed that as long as the patients in Harare can access care with requisite quality when need arises, they do not mind the cost.

The correlation results from the respondents in Bulawayo, unlike those in Harare Accessibility and Convenience with  $r=0.74$ , is what matters most to patients in determining General Satisfaction. The high correlation is not surprising due to the problems that have been facing the major government hospital in the Bulawayo, Mpilo Hospital. Most of the wards have been closed due to crumbling infrastructure and outdated equipment. This has even affected the maternity wards, parts of which had to be closed for some period meaning that one cannot access care easily when they need it. Technical Quality also had a high correlation to General Satisfaction as expected but however it is surprising that Interpersonal Manner and Communication both had no correlation to General Satisfaction with  $r= -0.23375$ ,  $p=0.0953$ ;  $r=0.08042$ ,  $p=0.5709$ . Financial aspects had a weak correlation to General Satisfaction

$r=0.48$  indicating that if the patients can access the care they need then they are willing to pay the costs.

Equity in healthcare delivery throughout Zimbabwe is a major key result area for Government through the Ministry responsible for health and its public health delivery institutions. It is therefore important that whichever area of the country you go to receive care, you get similar if not equal standards. The survey tested for evidence of a significant mean difference in general satisfaction between Harare and Bulawayo. Due to the drive for equitably satisfactory healthcare delivery, a significant difference was not expected. However, the test revealed results contrary to the desired outcome but consistent with differences in resource input. There were indeed significant mean differences in general satisfaction with healthcare between Harare and Bulawayo. Equality only seems to be on paper but when it comes to implementation, there is a challenge. Linking the resource inputs into each system to the output (system outcomes from satisfaction survey) reveals a consistent story. It is easy to note that the low satisfaction levels and the significant differences between Harare and Bulawayo are a result of unequal distribution of resources. The liberalization in the healthcare sector between 1990–2000 led to an evolution of processes considered to be more lucrative, thus leading to a spread of private healthcare facilities that are largely tariff paying and urban, particularly in Harare, out of the reach of the majority of the population. The government did not control this very well and the resultant inequality is catastrophic.

In relating all this to the resource inputs, it can be noted that Bulawayo is disadvantaged in away. This has not deterred the few Doctors available to the system from performing their duties with distinction. Patients in Bulawayo rated higher satisfaction, in terms of Interpersonal Manner, Communication and Time spent with Doctor than in Harare. This is commendable considering the expected pressures due to limited resources.

Resources play a very important part in the health care system, needless to say, Harare has received a lot of specialized investments into new and in already

established facilities. This has thus accounted for Harare's better Accessibility and Accountability rating with the difference to Bulawayo being found to be very significant. The differences in Technical Quality, though found not to be significant still exist and could be attributed to the Harare system attracting the best available doctors more than the Bulawayo system has managed to do.

## **6.2 Recommendations: Possible suggestions to Policy makers.**

The Government of Zimbabwe (GoZ) has the huge task to ensure equality in health care service delivery. This can only be achieved if focus is turned towards ensuring an equitable allocation of resources i.e. Human resources, Financial resources and Physical resources. There is need for a continuous needs assessment for all health care systems in the country in order to allocate resources equitably based on needs balancing. This however may not be easy especially in a system that relies heavily on donor funding and private investments. The owners of the financial resources usually have more power in influencing where their funding is directed.

The test results from this survey show that there is an urgent need for those responsible for public sector hospitals to continue to work hard to upgrade the quality of healthcare service and begin a process of development and modernization. Of late there has been a rapid increase in the number of private surgeries, some of which are even better equipped than public hospitals. This has made it easy for doctors to redirect patients to their private practices for financial benefits which the public institutions could be getting but are in no position to compete. Public health services depend on the presence of good basic infrastructure as it is the foundation for planning, delivering, evaluating, and improving public health. There is a strong need for more investment in improving healthcare facilities to satisfactory standards so that public institutions remain competitive.

As the results of the survey show, Technical Quality is of great importance to patients, this reflects that there are some trust issues that need to be addressed. Upgrading health personnel especially focusing on greater patient trust in the provider through good patient-provider communication, one of the important

elements of quality service. This can be achieved through the introduction of mandatory communication and interpersonal skills training for all medical personnel. This coupled with improved infrastructure has the potential to improve patient satisfaction and trust issues.

There is a need for a periodic active review of quality dimensions by government through the application of quality measurements in order to be in a position to control levels of quality, patient satisfaction and modify errors to maintain sustainable health quality. Due to the survey results showing signs of inequality as evidenced by the significant differences in general satisfaction, there is need to address this issue. Carrying out a fuller future research which entails more factors will give a clearer picture of the specific inequality issues.

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**APPENDIX**  
**SHORT-FORM PATIENT SATISFACTION**  
**QUESTIONNAIRE (PSQ-18)**

**These next questions are about how you feel about healthcare you have received from public facilities.**

		<b>Strongly Agree</b>	<b>Agree</b>	<b>Uncertain</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
1	Doctors are good at explaining the reason for medical tests.....	1	2	3	4	5
2	I think my doctor's office has everything needed to provide complete medical care.....	1	2	3	4	5
3	The medical care I have been receiving is just about perfect.....	1	2	3	4	5
4	Sometimes doctors make me wonder if their diagnosis is correct.....	1	2	3	4	5
5	I feel confident that I can get the medical care I need without being setback financially.....	1	2	3	4	5
6	When I go for medical care, they are careful to check everything when treating and examining me.....	1	2	3	4	5
7	I have to pay for more of my medical care than I can afford.....	1	2	3	4	5
8	I have easy access to medical specialists I need.....	1	2	3	4	5
9	Where I get medical care, people have to wait too long for emergency treatment.....	1	2	3	4	5
10	Doctors act too businesslike and impersonal toward me.....	1	2	3	4	5

11	My doctors treat me in a very friendly and courteous manner.....	1	2	3	4	5
12	Those who provide my medical care sometimes hurry too much when they treat me.....	1	2	3	4	5
13	Doctors sometimes ignore what I tell them.....	1	2	3	4	5
14	I have some doubts about the ability of the doctors who treat me.....	1	2	3	4	5
15	Doctors usually spend plenty of time with me.....	1	2	3	4	5
16	I find it hard to get an appointment for medical care right away.....	1	2	3	4	5
17	I am dissatisfied with some things about the medical care I receive.....	1	2	3	4	5
18	I am able to get medical care whenever I need it.....	1	2	3	4	5

**Table 1: Scoring Items**

Item Number	Original Response Value	Score Value
1,2,3,5,6,8,11,15,18	1	5
	2	4
	3	3
	4	2
	5	1
4,7,9,10,12,13,14,16,17	1	1
	2	2
	3	3
	4	4
	5	5

**Table 2: Creating Scale Scores**

Scale	Average These Items
General Satisfaction	3,17
Technical Quality	2,4,6,14
Interpersonal Manner	10,11
Communication	1,13
Financial Aspects	5,7
Time Spent with Doctor	12,15
Accessibility and Convenience	8,9,16,18

# 짐바브웨에서의 공공보건의료 성과 평가에 관한 비교연구:

하라레와 블라와요의 환자만족도를 중심으로

**Cain Bure**

서울대학교 행정대학원

글로벌행정전공

이 연구의 목적은 하라레와 블라와요의 환자만족도 조사를 통해 환자의 시각에서 공공보건의료의 질적 차이를 확인하는 것이다. 이러한 연구 목적을 달성하고, 연구문제에 답하기 위해 공공보건의료 평가에 초점을 둔 양적 연구를 수행하였다.

인구학적인 변수에 관해서는 무응답자의 빈도수가 높다는 점을 고려하여 서비스 체계의 성과에 초점을 두고 연구를 수행하였다. 전반적인 환자만족도를 종속변수로 하였고, 기술적 질, 태도, 소통, 재정, 의사와의 접촉시간, 접근성을 독립변수로 하였다. 또한 이러한 변수가 포괄적인 연구를 위해서는 부족하다는 약점을 감안하여 생략된 인구학적인 변수 대신에 투입자원 변수를 고려하였다.

연구결과, 전반적인 환자만족도를 통해 공공의료복지 서비스에는 불평등한 요소가 포함되어 있음을 확인하였다. 하라레와 블라와요 사이에는 유의미한 차이가 발견되었다. 각 지역의 자원 투자에는 큰 격차가 있었고, 이것이 환자만족도 차이의 원인이 되었다. 연구에 포함된 자원은 인적 자원, 재정적 자원, 물리적 자원이었다.

**주요어:** 환자만족도, 질, 인적 자원, 재정적 자원, 물리적 자원

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