



https://doi.org/10.24867/FUTURE-BME-2024-019

Original scientific paper

HEALTHCARE SERVICE QUALITY ON PATIENT LOYALTY IN ZAMBIA

Vimal Somaiya¹, Masatoshi Hara² [0000-0002-5975-454X]

Abstract

The Zambian government faces significant challenges in providing adequate healthcare services to its citizens. In response, Zambia has implemented the National Health Policy, which aims to ensure equitable access to high-quality, cost-effective healthcare as close to families as possible. This study investigates the impact of brand image, patient satisfaction, and patient lovalty on the quality of healthcare services in Zambian health facilities. Findings reveal a strong correlation between healthcare service quality and the factors of patient satisfaction, brand image, and patient loyalty. Patients prioritize factors that contribute to a positive healthcare experience, including courteous and attentive medical personnel, efficient service delivery, effective treatment, a clean and hygienic environment, and access to modern technology. Using qualitative analyses, key issues affecting the provision of good healthcare in Zambia are identified in this study, including rising medical costs that burden patients and may delay or prevent them from seeking necessary care, and disparities in access, particularly in rural areas, which create geographic barriers to healthcare services. Also, this study recommends that successful training programs can enhance staff abilities in communication, service delivery, and treatment effectiveness. Building a patient-centered healthcare system in Zambia requires a focus on continuous improvement and frequent feedback. Policymakers can consider a multifaceted strategy to improve affordability, with public-private partnerships being particularly effective for funding critical infrastructure development projects, such as new clinics or upgraded communication networks in remote locations.

Key words: brand image, patient loyalty, patient satisfaction, healthcare service quality, Zambia

¹ Swiss School of Business and Management, Geneva, Switzerland, vim280188@gmail.com

² Swiss School of Business and Management, Geneva, Switzerland, masatoshi.hara@ssbm.ch





1. Introduction

Improving access to high-quality healthcare is crucial for raising global life expectancy and overall living standards. To achieve this, leaders must collaborate to address key issues regarding the planning, funding, and delivery of public health services. Access to quality healthcare is a fundamental human need and advancing health care is vital for reducing poverty and fostering human development (World Bank, 2024). Africa's healthcare sector, despite facing significant challenges and disparities compared to other regions, presents substantial growth opportunities. While South-East and South Asian countries, once behind African nations in health outcomes, have now surpassed them in many indicators, Africa's progress has been slow. As a result, the continent's health outcomes are expected to lag behind global standards for some time (Phiri, 2019).

The Ministry of Health (MOH) is implementing the National Health Strategic Plan to ensure equitable access to affordable, high-quality healthcare close to communities. However, the government recognizes that broader health determinants exist beyond the health sector, committing to fostering healthy lifestyles and well-being through a cross-sectoral approach. The country faces a high burden of infectious diseases alongside a rising prevalence of non-communicable diseases. Structural and social inequalities—such as poverty, inequality, and marginalization—further exacerbate health risks (National Health Strategic Plan, 2022). Despite efforts to reduce HIV, malaria, and maternal and infant mortality, the low-resource health system, high disease burden, and poor infrastructure, particularly in rural areas, continue to pose significant challenges. To effectively address the social determinants of health, all sectors must prioritize health and wellbeing in policy development.

2. Literature Review

Zambia, a landlocked country in Southern Africa, spans 752,612 square kilometers and has a population of approximately 19.6 million, divided into 10 provinces. Lusaka and Copperbelt are predominantly urban, while the other eight provinces are largely rural (ZamStats, 2022). With a rapid population growth rate of 2.7% per year, the population is expected to double within the next 25 years, increasing the demand for jobs, healthcare, and other social services. As public awareness of health rises, Zambia's healthcare industry is expanding, but the country still faces a high burden of communicable diseases alongside a growing prevalence of non-communicable diseases, contributing to elevated mortality rates (MOH, 2024).

Achieving Universal Health Coverage (UHC) is essential for meeting healthrelated targets under Sustainable Development Goal 3 (SDG3), and this is directly tied to the performance of Zambia's health systems. Service quality in healthcare is crucial for patient satisfaction and loyalty. Hospitals must focus on providing highquality services to meet patient expectations, which can encourage repeat use of hospital services (Pai & Chary, 2013). Service quality is measured by the gap





between patients' expectations and their actual experiences (Albert et al., 2005). Brand image also plays a key role in influencing consumer decisions, with a positive brand image being established through consistent value generation and understanding different customer needs (Wu, 2011). Hospitals that build strong brand images are motivated to maintain high service quality, directly impacting patient satisfaction.

Patient satisfaction, a key determinant of loyalty, encourages repeat visits to the same healthcare provider, regardless of competitor offerings. Quality care fosters strong bonds between patients and institutions, allowing hospitals to better understand and meet patient expectations. By prioritizing positive experiences and minimizing negative ones, hospitals can enhance overall patient satisfaction (Ajmal et al., 2022).

The National Health Strategic Plan (NHSP) 2022-2026, developed within the broader national and health sector development framework, aims to achieve national health objectives in alignment with Vision 2030. While there has been significant progress in health service delivery and system strengthening, critical gaps remain, particularly in addressing the health needs of women, children, adolescents, and vulnerable populations, which remain major challenges.

2.1 Study Gaps

While a significant body of literature exists on quality assessment in the health sector, limited research has specifically focused on identifying factors that enhance or inhibit healthcare service quality in Zambia. A review of the literature reveals a scarcity of studies that examine the relationships between hospital brand image, patient loyalty, and satisfaction in relation to healthcare service quality. Previous research on patient loyalty has predominantly centered on service performance (Moliner, 2009; Chang et al., 2013). Among these, satisfaction has been consistently identified as the key factor in determining patient loyalty (Moliner, 2009; Chang et al., 2013). This study seeks to address this research gap by empirically investigating patients' perspectives on the quality of medical services in hospitals. Specifically, it explores the associations between patient satisfaction, brand image, and patient loyalty in relation to healthcare service quality. Furthermore, the study identifies inefficiencies within the healthcare system and suggests strategies for improving service quality in Zambia.

2.2 Research Questions

RQ1: In what ways will brand image, patient satisfaction and patient loyalty impact the healthcare service quality in Zambia?

RQ2: What can be the strategies and best practices to improve the healthcare sector in Zambia?





3. Frameworks

Along with the study variables, a description of the frameworks is provided, focusing on how they connect to the research approach and objectives. Figure 1 demonstrates the relationship that the independent variables brand image, patient satisfaction and patient loyalty have on the dependent variable for Research Question 1. The relationships among patient satisfaction, patient loyalty, and brand image on healthcare service quality dimensions will be explored.



Figure 1: Research Framework Source: Somaiya & Hara (2023, p.10)

Meanwhile, Figure 2 below illustrates the research framework which demonstrates the different strategies that are being explored summarizing the common strategies which have been implored and aims to refine them. It aims to reorient healthcare delivery in which patient needs, preferences, and values honored.



Figure 2: Research Framework Source: Authors

4. Methodology

This study employed a qualitative research methodology, which, as described by Mosadeghrad (2014), involves the analysis of primarily verbal data. It focuses on understanding phenomena from the perspectives of participants, seeking to





establish relationships and explain the causes of changes in social facts. One of the key advantages of qualitative research is its ability to provide in-depth insights into the subject being studied.

The population for this study consisted of individuals who had visited a medical institution more than once. The research was conducted in Lusaka, the capital of Zambia, which has a population of 3 million within the country's total population of 19.6 million (ZamStats, 2022). Lusaka was chosen due to its high density and concentration of medical institutions, making it an ideal location to gather diverse perspectives on healthcare. The large population in Lusaka offers a broad range of experiences, making it easier to capture a true picture of patient perspectives, which is essential to the research (Ajmal et al., 2022).

The study gathered both primary and secondary data. Secondary data was sourced from a review of journals, reports, and articles published between 2010 and 2023, which provided a foundation for the qualitative analysis. Primary data was collected through semi-structured questionnaires, which allowed for a more detailed examination of how independent variables affect healthcare service quality. Additionally, open-ended questions and interviews were conducted with both medical staff and patients to obtain valuable insights into strategies for improving the healthcare sector.

The data was analyzed qualitatively using thematic analysis, which helps reduce bias and ensures the reliability of the study (William & Mosner, 2019). Thematic analysis involves grouping data into themes that emerge naturally during the research process, helping to answer the research questions.

5. Results

5.1 Research Question 1

The survey responses overwhelmingly emphasize the critical importance of quality improvement in Zambia's healthcare system in Table 1.

Factor	Description	Impact	
Brand Image			
Brand Reputation	Well-known brands perceived as offering good service and trustworthy	Major factor for many	
Positive Word-of- Mouth	Recommendations from past patients	Increases trust and comfort level	
Familiarity	Preference for known brands over unknown ones	Reduces anxiety about seeking medical care	
Cost	Financial limitations may prioritize affordability over brand	Some prioritize affordability	
Service Availability	Choosing a hospital with the necessary service	May be more important than brand for some	
Patient Loyalty			

Table 1: Summary of Study Results for RQ1





Factor	Description	Impact		
Positive Prior	Kind staff, efficient service,	Most important factor for		
Experience	effective treatment	return visits		
High-Quality Care	Modern facilities, up-to-date	Contributes to trust and		
	equipment	positive perception		
Specific Services	Facility catering to specific needs	Important for some		
Offered				
Convenience	Easy access, short waiting times	Improves patient experience		
Patient Satisfaction				
Cultural	Understanding and respecting	Increases trust and willingness		
Sensitivity	diverse backgrounds	to participate in treatment		
Open	Improves trust and outlook on	Feeling heard, respected, and		
Communication	recovery	informed		
Efficient Service	Timely diagnoses, proper	Leads to shorter stays, faster		
Delivery	medication, clear instructions	recovery, and fewer errors		

Source: Authors

At the core of healthcare lies patient well-being, and quality improvement initiatives are essential for better health outcomes. By implementing evidencebased practices and protocols, healthcare providers can deliver treatments that are proven to be effective, resulting in higher recovery rates and improved overall health. A key aspect of quality improvement is minimizing errors and enhancing safety measures, as fewer errors lead to safer care and better patient outcomes.

Survey participants highlighted the connection between brand recognition and the perceived quality of care. Many respondents believed that well-known hospitals are likely to have strong reputations, built on consistently delivering highquality service. Positive word-of-mouth plays a crucial role, as a hospital with a recognized brand often benefits from favorable experiences shared by former patients.

The survey also identified key factors influencing a patient's decision to return to a healthcare provider. A positive prior experience was the most significant factor driving repeat visits. Efficient service delivery—ranging from registration to treatment—not only reduces patient stress but also makes patients feel that their time is valued. Most importantly, receiving effective treatment that addresses their health concerns fosters a sense of confidence in the facility's capabilities, encouraging future visits.

In healthcare, service quality is more than a matter of courtesy—it serves as a foundation for a patient's journey toward recovery and overall well-being.

5.2 Research Question 2

The study responses highlight potential solutions to address challenges and build a stronger healthcare system in Zambia, as shown in Table 2.





Challenges	Impact	Solutions
Rising healthcare	Financial burden preventing	Invest in preventative care to mitigate
costs	access to essential services	chronic diseases and potentially reduce
		overall healthcare costs.
Disparities in	Uneven distribution of	Invest in infrastructure (clinics,
access to care	resources leading to limited	hospitals) in underserved areas and
	access for remote & low-	leverage telemedicine/mobile health
	income areas	clinics to bridge geographical gaps.
Integration	Difficulty integrating new	Adopt user friendly systems to allow
challenges	technologies due to	more users to operate the information
	interoperability, data security,	systems seamlessly.
	and equitable access concerns	
Lack of qualified	Workforce shortage, especially	Invest in training programs to increase
healthcare	in rural areas, leading to long	healthcare workers and incentivize
workers	wait times and potentially	them to work in rural areas
	compromised care quality	(scholarships, loan forgiveness).
Limited	Shortage of doctors, nurses,	Invest in infrastructure (clinics,
infrastructure	and medical equipment,	hospitals) and medical equipment,
and resources	particularly in rural areas	especially in rural areas.
Financial	Challenges ensuring healthcare	Implement policies to improve
accessibility	affordability for all Zambians	healthcare affordability (e.g., financial
		mechanisms, social safety nets).

Source: Authors

One key recommendation is the construction of more clinics and hospitals, particularly in underserved rural areas, to improve access to care. This investment in infrastructure would ensure essential medical services are brought closer to the populations most in need. Additionally, investing in training programs to increase the number of qualified healthcare workers, particularly with a focus on deploying them to rural areas, is critical for addressing the healthcare workforce shortage.

Technology also plays a pivotal role in overcoming geographical barriers by connecting patients in remote areas with qualified healthcare providers through telemedicine and other digital health solutions. Building strong partnerships between governments, healthcare providers, NGOs, and other stakeholders is essential for developing sustainable solutions to the challenges faced by Zambia's healthcare system.

The responses highlight key workplace conditions essential for reliable service delivery, patient safety, and quality care. Ensuring a safe environment for both patients and healthcare professionals involves strict safety protocols, infection control, and regular equipment maintenance.

Effective leadership, committed to good governance and regulatory compliance, is essential for the success of the healthcare system. Strong leadership fosters accountability, continuous quality improvement, and adherence to ethical standards. Access to well-maintained, up-to-date equipment and adequate resources is vital for healthcare professionals to perform accurate diagnoses, provide necessary treatments, and deliver high-quality care.





Lastly, ensuring manageable workloads for healthcare workers is necessary to prevent burnout and promote a culture of safety. This can be achieved through proper staffing, efficient workflow design, and appropriate task delegation.

6. Discussion

This study provided a comprehensive analysis of the complex relationship between patient experience, healthcare service quality, and the Zambian healthcare system. First, the findings emphasize the critical role of patient-centered care. A system that prioritizes open communication, treats patients with dignity and respect, and demonstrates empathy fosters trust and leads to better health outcomes. Second, the research underscores the importance of brand image. Positive patient experiences help build a strong brand reputation, which attracts new patients and fosters loyalty.

Training healthcare workers to stay current with the latest evidence-based practices and treatment protocols is also crucial. This, combined with clean, well-maintained facilities and modern technology, enhances patient interactions, reduces frustration, and builds trust between patients and providers.

Affordability should not be a barrier to essential healthcare in Zambia. Policymakers can adopt a multi-pronged approach to improve healthcare affordability. One solution is the implementation of government-subsidized health insurance plans to serve as a safety net, particularly for low-income citizens. Additionally, targeted programs can be developed for vulnerable populations such as children, pregnant women, and the elderly.

By addressing key areas—affordability, accessibility, infrastructure, workforce development, preventative care, and quality control—Zambia can strengthen its healthcare system, ensuring it is more robust and equitable for all its citizens.

7. Conclusions

This study on healthcare service quality in Zambia highlights key factors influencing patient choice and satisfaction. The findings stress the importance of a patient-centered approach that not only emphasizes clinical expertise but also fosters clear communication, respectful interactions, and cultural sensitivity. A positive brand reputation, built on prior positive experiences, emerged as a crucial factor for patients, underscoring the need for healthcare facilities to invest in building trust and consistently delivering high-quality care.

However, the study also reveals significant challenges impeding the full potential of Zambia's healthcare system. Rising medical costs, unequal access to care, and a shortage of qualified personnel present substantial obstacles to achieving equitable healthcare for all Zambians. These challenges are further compounded by inadequate infrastructure and resource constraints. The proposed solutions provide a strategic roadmap for overcoming these barriers and advancing the healthcare system towards greater equity and efficiency.





Acknowledgments

We sincerely acknowledge the participants for our interviews from Zambia.

REFERENCES

- [1] Ajmal, A., & Risal, M. (2022). Brand Image, Service Quality And Patient Satisfaction On Patient Loyalty. *Jurnal Mantik*, 6(1), 280–285.
- [2] Alberti, H., Boudriga, N., & Nabli, M. (2005). Factors affecting the quality of diabetes care in primary health care centers in Tunis. *Diabetes Research and Clinical Practice*, *68*(3), 237–243. doi.org/10.1016/j.diabres.2004.09.016.
- [3] Mosadeghrad, A. M. (2014). Factors Affecting Medical Service Quality. *Iranian Journal Public Health*, 43(2), 210–220. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4450689/
- [4] Ministry of Health Zambia. (2022). 2022-2026 National Health Strategic Plan. https://x.gd/Ety1s
- [5] Pai, Y, P., & Chary, S. T. (2013). Dimensions of hospital service quality: a critical review, perspective of patients from global studies. *International Journal of Health Care Quality Assurance 26(4)*, 308–340. doi/10.1108/09526861311319555.
- [6] Phiri, J. (2019). *Human development index and foreign direct investment: An analysis of developmental policies and economic trends in Zambia* [Master's thesis, Marmara Universitesi, Turkey].
- [7] Somaiya, V., & Hara, M. (2023). Perceived Healthcare Service Quality and Brand Image on Patients' Loyalty in Zambia. *Global Journal of Business and Integral Security*. https://www.gbis.ch/index.php/gbis/article/view/272
- [8] Williams, M., & Moser, T. (2019). The Art of Coding and Thematic Exploration in Qualitative Research. *International Management Review*, 15, 45. https://x.gd/oiMJj
- [9] Wu, C-C. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, *5*(12), 4873-4882. doi: 10.5897/AJBM10.1347.
- [10] World Bank Zambia. (2024). Zambia Overview: Development news, research, data. https://www.worldbank.org/en/country/zambia/overview
- [11] Zambia Statistics. (2022). 2022 Census Zambia Statistics Agency. zamstats.gov.zm.



© 2024 Authors. Published by the University of Novi Sad, Faculty of Technical Sciences, Department of Industrial Engineering and Management. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/).