IOSR Journal of Nursing and Health Science (IOSR-JNHS)
e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 13, Issue 4 Ser.4 (July. – August. 2024), PP 09-16
www.iosrjournals.org

Assessment Of Access To The National Health Insurance Scheme Provided Services Among Enrollees At Levy Mwanawasa University Teaching Hospital's Outpatient Department In Lusaka, Zambia.

Wesley Kapaya Mwambazi[1], Mubanga Mpundu[2]
[1]*graduate School Of Business Studies, University Of Zambia, Lusaka, Zambia*
[2]*department Of Economics, University Of Western Cape, Cape Town, South Africa*

Abstract:
Background*: Access to health insurance scheme provided services is crucial for achieving Universal Health Coverage, yet significant barriers, including high costs, inadequate coverage, and systemic inefficiencies, hinder individuals from obtaining necessary healthcare in Zambia. Since its introduction in 2019, Zambia's National Health Insurance Scheme (NHIS) has aimed to provide equitable healthcare to all citizens, but its affordability and accessibility have not been extensively studied.*
Materials and Methods*: Study was conducted at the outpatient department of a third level tertiary hospital in May 2024. Data for this descriptive cross-sectional study were collected through an interviewer-administered questionnaire with semi-structured questions from a systematically sampled group of NHIS enrollees (n=270). A descriptive and thematic analysis was conducted that provided demographic characteristics of respondents and identification of common themes.*
Results*: There was a balanced gender distribution between males (53.7 percent), and females (46.3 percent), with a higher engagement among individuals aged 35 and above (72.6 percent). Most respondents were married (58.9 percent), had tertiary education (58.1 percent), and earned K20,000 or below monthly (93.0 percent), reflecting economic challenges and highlighting the importance of NHIS in providing affordable healthcare. A range of experiences regarding the affordability and accessibility of NHIS provided services were observed, reflecting both positive and negative feedback. Key themes identified included the availability of medical services, drug availability, service delays, technological system issues, challenges in information and communication, equity in service delivery, and gaps in coverage.*
Conclusion: *The findings reveal a mix of positive and negative experiences with NHIS, highlighting both the benefits and the areas needing improvement. Addressing drug shortages, service delays, communication gaps, improved efficiency, staff training, and expanding coverage to rural areas were key issues that needed to be addressed.*
Key Word*: Accessibility; Affordability; Health Insurance; Thematic Analysis.*

Date of submission: 22-07-2024 Date of acceptance: 02-08-2024

I. Introduction

Access to health care remains a significant concern in health, as studies continue to highlight the ongoing obstacles faced by various demographics. Universal Health Coverage (UHC), recognized as a global health priority by the World Health Organization, aims to ensure that all individuals can access necessary health services without encountering financial hardships. This point underscores the importance of enabling individuals to promptly and effectively utilize healthcare services when needed. Existing literature indicates that access is a complex concept that involves the physical availability of services, affordability, and the acceptability of care [1]. Achieving access to high-quality healthcare is vital for realizing UHC and necessitates the elimination of barriers such as geographical distances, high costs, administrative complexities, and cultural impediments that may prevent individuals from seeking or receiving essential care [1].

The literature on healthcare access and NHIS effectiveness reveals several issues across various countries. Key challenges include significant barriers in rural and remote areas, largely due to healthcare worker shortages and transportation issues, as well as socioeconomic disparities that hinder access to advanced medical treatments for lower-income individuals. However, NHIS has generally improved accessibility for poorer households and reduced out-of-pocket expenditures, yet financial burdens persist for some insured families. Sustainability issues arise due to heavy reliance on government subsidies, and systemic inefficiencies and resource

scarcity remain critical in LMICs. Socioeconomic disparities in NHIS enrollment and utilization, low awareness about NHISs, and the need for targeted interventions to ensure equitable access are also highlighted. Additionally, the quality and consistency of healthcare services are affected by inadequate training of healthcare staff and inconsistent availability of essential medicines. These findings underscore the need for multifaceted, context-specific solutions to enhance healthcare access and NHIS effectiveness. A study by Chowdhury and Ravi discussed global challenges in healthcare access, particularly in developing countries. The researchers found that healthcare worker shortages and transport barriers hindered access to essential health services, especially in rural areas [2]. Another study by Dawkins et al. provided an overview of factors affecting healthcare access globally, emphasizing disparities between high-income countries and low- and middle-income countries[3]. Dawkins et al. observed that LMICs faced more severe challenges related to resource scarcity and systemic inefficiencies as barriers that required context-specific interventions tailored to the healthcare needs and socio-cultural contexts[3].

In a quest to address access, there has been a resurgence of National Health Insurance Schemes (NHIS) in several developing countries where reliance on tax funding and out-of-pocket payments has historically been high. African countries like Nigeria and Ghana have implemented NHISs since the early 2000s while Zambia's NHIS is relatively new having been introduced in 2019 [4–6]. However, health insurance schemes have existed even longer in some other countries like Laos, China, and Thailand [7,8]. A national health insurance scheme can be viewed as a non-profit government-operated universal insurance system that offers health insurance to either all or a large proportion of the people in a specific country [9]**.** Multiple theories of access to health care have been developed. They include Penchansky and Thomas' access framework which looks at five (5) aspects of access; affordability, accessibility, accommodation, availability, and acceptability [10,11]. This framework guided this research with emphasis on accessibility and affordability.

Problem Statement

In 2019, the Government of the Republic of Zambia introduced the National Health Insurance Scheme, offering quality healthcare services to all Zambians regardless of their social or economic status [6]. The National Health Insurance Management Authority (NHIMA) is a statutory body mandated to manage and operate the NHIS in Zambia[12]. Few studies have assessed access to NHIS-provided services since its implementation in 2019. Despite the efforts of NHIMA to deliver satisfactory healthcare services, there is a lack of comprehensive data on access of NHIS provided services at a tertiary hospital. Previous qualitative feedback suggests mixed experiences regarding affordability, accessibility, and service quality [13]. However, these qualitative insights do not provide a clear, actionable understanding of access and the specific areas needing improvement.

Research Objective

The objective was to assess the accessibility and affordability to NHIS-provided services among NHIS enrollees at the OPD of a government-funded third-level tertiary hospital. Specifically, the study aims to identify specific barriers that affect access.

II. Material And Methods

This cross-sectional study was conducted at the outpatient department of the Levy Mwanawasa University Teaching Hospital. A total 270 NHIS enrollees (both male and females) of aged ≥ 18, years were recruited for this study. Before the conducting the interview, participants completed an informed consent form.

Study Design: Cross-sectional mixed method survey

Study Location: This was at the outpatient department (OPD) of the Levy Mwanawasa University Teaching Hospital (LMUTH) in Lusaka, Zambia.

Study Duration: Four weeks in May 2024.

Sample size: 270 NHIS enrollees.

Sample size calculation: LMUTH was purposefully sampled based on its characteristics as the second-largest government-funded tertiary hospital among the first to be accredited to offer NHIS services in 2019. The population frame (N=4,700) comprised individuals aged 18 or older who had visited the outpatient department (OPD) at LMUTH in Lusaka, Zambia in May 2024 and were enrolled in NHIS. The minimum sample size was determined using Araoye's formula [14] for estimating the minimum sample size when assessing proportions with a population size with certain attributes of interest with a 95% confidence level, an estimated proportion of the population with the attribute of interest at 75%, and a margin of error of 0.5 and since the study population was below 10,000 (i.e. N=4,700), the 'adjusted minimum sample' size was calculated.

Subjects & selection method: The population frame comprised individuals aged 18 or older who had visited the outpatient department (OPD) at LMUTH in Lusaka, Zambia in May 2024 and were enrolled in NHIS. To achieve this, the researcher examined the 2023 NHIS hospital records at LMUTH to gather the mean of NHIS patients observed every month, given that the intended data-gathering period was four (4) weeks. Systematic sampling was used to select the participants (n=270) at set intervals at the OPD where all NHIS enrollees had an equal chance of participation.

Inclusion criteria

1. NHIS enrollees have accessed NHIS provided services at the OPD during the month of May 2024 and were willing and able to give informed consent for participation in the study.
2. Either sex
3. Aged ≥ 18 years,

Exclusion criteria

1. Parents/guardians of NHIS beneficiaries below 18 years of age.
2. NHIS enrollees in the inpatient department (IPD).
3. NHIS enrollees requiring emergency care in the OPD.
4. Already interviewed enrollees who came back for review.

Procedure methodology

Data was gathered in the hospital's waiting area following patients' visits to the NHIMA service points using an interviewer-administered questionnaire. The ear nose and throat (ENT), dental, physiotherapy, OPD general, and the main pharmacy are among the busiest clinics where the hospital has NHIMA service points stationed there. The research assistants were purposefully stationed at these service locations to get diverse viewpoints and experiences regarding the services offered by the NHIS.

Statistical analysis

After the data was collected, it was organized, managed, and analyzed using Microsoft Excel, Statistical Package for Social Sciences (SPSS) version 23. The demographic profile of the respondents was determined by analyzing the mean, frequency distribution, and percentage in the descriptive statistics. Thematic analysis was used to interpret qualitative data from interviews. The process involved familiarization, coding, theme identification, theory-building, and report production, with interviews transcribed verbatim and analyzed using NVivo software.

III. Result

Descriptive Analysis

Table no 1 shows the demographic analysis of NHIS service users at LMUTH reveals a balanced gender distribution with a slight male predominance (53.7 percent). Most users were aged 35 and above (72.6 percent), indicating higher engagement among middle-aged and older adults. Most respondents were married (58.9 percent) and possessed tertiary education or higher (58.1 percent), suggesting a possible correlation between education and health insurance utilization. Employment status is nearly equally split between formally employed (50.7%) and not in formal employment (49.3 percent) individuals, reflecting a diverse economic demographic. The vast majority earn K20,000 or below monthly (93.0 percent), highlighting economic challenges and the critical role of NHIS in providing affordable healthcare. With 77.8 percent of respondents being contributing members and 68.9 percent having joined within the last two years, the data indicates a positive reception and recent uptake of NHIS services among the population.

Table no 1: Social Demographic Characteristics of Respondents (n=270).

Respondents Characteristics		Frequency (%)	Cumulative Total
Gender	Male	145 (53.7)	145
	Female	125 (46.3)	270
Age	18-35 years old	74 (27.4)	74
	35 and above	196 (72.6)	270
Marital Status	Married	159 (58.9)	159
	Unmarried	111 (41.1)	270
Highest level of Education	Secondary School and below	113 (41.9)	113
	Tertiary and above	157 (58.1)	270
Employment Status	Formally Employed	137 (50.7)	137
	Not formally employed	133 (49.3)	270
Monthly Income	K20,000 and below	251 (93.0)	251
	K20,001 and above	19 (7.0)	270

NHIS Membership status	Contributing Member	210 (77.8)	210
	Non-contributing member	60 (22.2)	270
Membership duration	2 years and below	186 (68.9)	186
	>2 years	84 (31.1)	270

Thematic Analysis

Results indicated a wide range of experiences generally split between positive and negative experiences with access of NHIS services at the OPD of LMUTH. Specific themes that emerged included availability of medical services, availability of drugs, service delays, systems issues (technology), information and communication, equity in service delivery, and coverage gaps.

Positive Experience

General Accessibility: Many survey participants have found NHIMA services readily accessible at healthcare facilities. Users appreciated the overall accessibility of NHIMA services at healthcare facilities, with several noting that the scheme provides comprehensive coverage (save for a few), making healthcare more affordable and reliable. Additionally, some respondents report consistently accessing the necessary services without significant issues, indicating reliability in NHIMA's service delivery.

One of the respondents said: *"…NHIMA is accessible everywhere…in Lusaka whenever you go and to whichever clinic as long as it's accredited to NHIMA you will be able to access NHIMA at any time"*.

Respondents valued NHIMA's coverage of a wide range of services, especially when ordinary government institutions did not provide certain services or medicines.

One respondent commented: *"So far, it has been very accessible, coverage has been okay yeah"*.

Another respondent said: *"As long as you find a signpost written NHIMA, accessing medical services is not a problem"*.

Affordability: Numerous survey participants expressed their satisfaction with NHIMA, emphasizing its affordability and the invaluable support it offers, particularly during medical emergencies. The monthly contributions were deemed reasonable, especially considering the high cost of medications if purchased separately or the cost of some investigations. Several respondents mentioned that NHIMA's coverage enabled them to manage the expenses of costly lenses, drugs, and diagnostic services which would have otherwise been unaffordable due to financial constraints.

One participant stated: *"It's good and affordable. They deduct K35 per month, and today I came for lenses that cost about K1,700..."*

Another NHIS enrollee added: *"They are just right because they helped me get glasses for my eyes, which are expensive."*

Another participant highlighted how NHIMA has been a lifeline, especially for those without a regular income, by ensuring access to essential medical services even without immediate cash.

According to one NHIS enrollee who appreciated the affordability of the NHIS, they said: *"The benefit I have found under NHIMA is that it is very affordable because even if you don't have the cash, they can still attend to you, so it's been helpful in tough situations..."*

Some respondents stated specific, yet different examples of how the NHIS enabled them to access expensive services.

One respondent quoted said:

"I may be required to do a certain investigation for example, a CT scan which will cost probably a couple of thousands…. but under NHIMA I pay close to nothing because it is covered under my NHIMA scheme. So, it's very, very affordable".

Another respondent was quoted as saying:

"My experience with NHIMA has really helped us in terms of this like medicines and tests, you would go for a CT scan they paid for me, and some of the medicines they do pay for me. So, we really appreciate that".

Availability of Medical Services: Some survey participants reported that they have had consistent access to required services without significant issues in some cases. However, there were instances where certain services were not available in the benefits package. Consistently receiving care and medications when needed may indicate the reliability of NHIMA services in some cases.

One participant mentioned:

"I have never really had a situation where for instance, I am referred to go and do an x-ray for example, the way I've come here, I was referred from [clinic name] to come and have an x-ray from here and it is there, it's available…".

Another participant stated: *"So they are pretty accessible. I haven't found any issues although most of the packages or the incentives are unavailable"*.

Negative Feedback

Drug Availability: Many NHIMA-affiliated pharmacies frequently do not have certain medications available, which leads patients to purchase these medicines themselves. Some people believe that NHIMA does not fully cover all necessary medications and treatments, especially the expensive ones, which reduces its overall affordability and effectiveness.

One NHIS enrollee expressed frustration and said: *"When it comes to dispensing drugs, some pharmacies tell you that these are not covered, and there is no proper explanation as to why such drugs are not on NHIMA."*

Another participant lamented and said: *"So when you go to the NHIMA accredited pharmacy they might tell you that this drug is not covered by the insurance and then the procedure of some drugs or the authorization code sometimes it takes too long".*

Another participant contended: *"…I think it's the issue of medicine, the issue of drugs sometimes I will have to move to four or five places…"*

Service Delays: Several survey respondents highlighted prolonged wait times and care delays, which countered the expected expedited services for NHIMA beneficiaries. Delays in processing claims and approvals within the NHIMA system have led to patients frequently experiencing hold-ups in getting approval for medical services and medications, resulting in uncertainty and financial strain. Administrative inefficiencies, such as communication gaps and bureaucratic hurdles in obtaining approvals, play a role in these delays and complicate the overall healthcare experience for NHIMA beneficiaries.

Some respondents expressed their frustration, with one noting that: *"…when certain tests or investigations are ordered, it takes a very long time for them to be approved, leaving the patient waiting and very sick..."*

Another participant mentioned that: *"…sometimes there are long queues, and you have to wait for almost an hour just to be serviced when accessing NHIMA services..."*

System Issues: Technical issues, such as system downtimes, disrupt service delivery, and inconvenience patients. A primary concern is the reliability of internet connectivity, which frequently disrupts operations at NHIMA desks and pharmacies, affecting the timely processing of claims and access to vital information.

One respondent said: *"Then the other one is, the system itself I don't know how it can be improved but the system keeps coming down, they'll tell you, the network is not there"*.

Another respondent contended, "*Most of the time you'll find that the system is down and once the system is down that means you have a challenge you can't be attended to"*.

Another respondent opined that: *"The workers will complain of a slow network and that means that we will spend longer periods trying to access the services…"*.

Information and Awareness: There is a perceived lack of information about NHIMA services, particularly affecting less educated individuals who struggle to understand and navigate the system. There were concerns about the lack of information dissemination by NHIMA staff, leading to confusion and frustration among users.

One respondent mentioned that better communication between doctors and NHIMA staff was essential to avoid prescription issues.

"…there is no proper communication between the doctors and the NHIMA staff because what they'll write from NHIMA the doctor will refuse and also on the prescriptions they'll write something and tell you to go to a pharmacy under NHIMA but they didn't write the drug name properly and they will tell you to go back to the hospital so they can write the medicine you will need and sometimes they write like you are going to buy using cash…"

Equality in Service Delivery: Some respondents feel that NHIMA beneficiaries are not prioritized over regular patients, despite contributing to the scheme. This perceived lack of distinction in service delivery can lead to dissatisfaction among NHIMA members.

One respondent lamented:

"…and sometimes when you go to these government hospitals, they'll treat you like you are poor even though you have NHIMA and even sideline you and that's not good and they need to change that we need to be welcomed properly…"

The interviews also revealed a disparity in the perceived quality of NHIMA services between different facilities. Users reported that private clinics under NHIMA often provided more comprehensive care than government hospitals, which sometimes lacked essential medicines and had longer wait times.

One respondent was quoted as: *"…when you get sick and go to a private clinic under NHIMA they help a lot more and that's where I prefer to go…"*

This discrepancy highlights the need for NHIMA to standardize the quality of care across all its accredited facilities to ensure all users receive equal and timely medical attention.

Coverage Gaps: There are areas, especially rural locations, where NHIMA services are not readily available, and some necessary medications or treatments are not covered.

One respondent lamented:

"…government workers who are working in rural areas, have to travel kilometers to access NHIMA service so sometimes it's at your cost so you look at it what's the benefit of going to follow up a service as yet it's for free and yet you are paying too much for it".

Other respondents were quoted as: *"Sometimes you feel lazy to come all this far so sometimes you just buy the drugs because [name of clinic] has no NHIMA. So, I wish they could introduce NHIMA at local clinics it would help very much".*

"They are accessible but not evenly distributed. You go to some health facilities you are told they are not NHIMA accredited. So that's a challenge you should state someplace from NHIMA where they are available. So, we need to have many health facilities accredited as soon as possible accredited to NHIMA".

Suggestions from Respondents

Participants gave some suggestions on how the NHIS can better meet their expectations. The respondent's suggestions focused on improving accessibility, affordability, efficiency, staff training, drug availability, and infrastructure of NHIMA services. The main points and suggestions they raised were:

Accessibility of Information: They emphasize the need for more accessible information about NHIMA services and coverage conditions for the public. They suggested clearer communication about covered services and conditions would benefit the community.

One respondent advised and said:

"I think probably like I said before, we need more information to be accessible to the public on the services that you cater for and the conditions that are covered under NHIMA, so I think that is what the public needs to know and the drugs to be made available, that is the challenge we have experienced but all in all it's a good program".

Another respondent said: *"NHIMA's dissemination of information needs to be better communicated to the public…".*

Affordability: A few respondents, particularly those not in formal employment or dependents, express concerns about the affordability of NHIMA. They requested reductions in costs or options to include dependents like orphans on their NHIMA cards without additional burdens.

One respondent said: *"…for those that are unemployed, they can't afford the K60 every month and there are times when NHIMA doesn't cover all the services and I hope they can be included going forward…"*

Service Efficiency: There are several mentions of improving service efficiency, such as speeding up processes at hospitals, reducing waiting times, and ensuring that required medications are available within hospital premises to avoid inconvenience.

One of the NHIS enrollees said that:

"Maybe the only thing that I can talk of is the issue of efficiency in some clinics, the efficiency is not there and it is something that has to be worked on to improve the services otherwise, everything else is okay".

Staff Attitude and Training: There is a notable concern about staff attitudes towards patients. Respondents suggested that staff, from NHIMA desks and healthcare providers, should undergo better training in communication skills to improve patient care experiences.

One participant suggested and said: *"…the other thing is that the health staff I think should be educated on how to handle their clients…".*

Another participant lamented and suggested: *"I think there is room in terms of health care providers and their empathy towards patients, NHIMA can work with them to try to see how this can be improved…"*

Drug Availability: Many highlighted the issue of some medications not being either covered or stocked under NHIMA despite contributions. They urge NHIMA to ensure a wider range of essential drugs are available to beneficiaries.

One participant suggested and said: *"…no way we are taking money to private pharmacies instead of government pharmacies. So, the government or rather NHIMA should make sure that the accessibility of drugs under NHIMA…"*

Infrastructure and Technology: There are calls for improved infrastructure, including better internet connectivity and possibly introducing online registration to reduce queues and improve service delivery.

One participant said, *"Whether the internet is down or there's no power, they should come up with a backup. That's what I feel".*

Another participant opined that: *"…they can do it online maybe it can also reduce the queues that we are making if we start doing online registration…".*

Coverage Expansion: Respondents advocate for expanding NHIMA services to more rural areas, ensuring that beneficiaries in remote locations access the same healthcare services as those in urban centers.

One participant lamented and said: *"In town, they're quite accessible but in these rural areas, it's quite hard for people to access this NHIMA"*

Another participant opined that: *"In rural areas, we have for example the health personnel, the teachers, and the agricultural officers and there is no NHIMA, they have to be referred to a town where the NHIMA services are offered…".*

Another participant suggested and said:

"On that one, they [NHIMA] are supposed to go also in rural areas, so that even there when the beneficiaries, like myself, if I add on the beneficiaries who are at the village they are supposed to get the medicine under my NHIMA account…".

Sensitization: There is a plea for increased sensitization about NHIMA's benefits and contributions, suggesting outreach programs through churches and community organizations to educate people about the scheme.

One particular respondent suggested and said: *"…sensitization on the NHIMA services and how important it is to one to have the NHIMA scheme…"*.

Another respondent said: *"Maybe there must be more sensitization to the patients or the clients - they should know what should be done. What's not supposed to be done then also the personnel must be sensitized on how to handle patients…"*

Emergency Services: Concerns were raised about emergency services and the need for sufficient human resources and infrastructure to handle emergencies promptly, especially in hospitals with long queues.

One respondent lamented: *"There's no emergency under NHIMA now. You just have to wait. There's no emergency".*

Another respondent said:

"For example, at Levy Mwanawasa Hospital what you need to do is to have more outlets and more human resources when it comes to helping the beneficiaries of NHIMA services because you usually find that the queues are long…, so an event of serious case of an emergency a person might end up dying…".

IV. Discussion

The findings from this study provide valuable insights into the experiences and perceptions of NHIS beneficiaries regarding the affordability and accessibility of healthcare services at the OPD of LMUTH. The positive feedback regarding the affordability of NHIS services underscores the scheme's success in reducing out-of-pocket expenditures for medical care, particularly in emergencies and for costly medications and diagnostic services. This is consistent with previous studies that have shown the effectiveness of health insurance schemes in mitigating financial barriers to healthcare access [15–17].

However, the study also identified significant challenges that need to be addressed to enhance the effectiveness of the NHIS. The issues of drug availability and service delays were prominent concerns among respondents. These challenges are indicative of systemic inefficiencies within the healthcare delivery system, which align with the findings of other studies that have reported similar barriers in different contexts [2,3,18]. Addressing these issues requires targeted interventions to improve supply chain management and administrative processes within the NHIS framework.

The concerns about system issues, particularly related to technology and internet connectivity, highlight the need for infrastructure improvements. Reliable technology systems are crucial for the efficient processing of claims and the smooth operation of NHIS services. Other studies have noted similar challenges, emphasizing the importance of robust technological infrastructure in healthcare service delivery [8].

The feedback on information and communication gaps points to a need for better public awareness and understanding of NHIS services. Effective communication strategies and educational programs are essential to ensure that beneficiaries are well-informed about their coverage and how to navigate the NHIS system. This aligns with the recommendations of previous research, which has highlighted the importance of health and financial literacy in improving healthcare access [7,19,20].

Equity in service delivery was another significant theme, with some respondents feeling that NHIS beneficiaries were not prioritized over regular patients. This perception of inequity can undermine the trust and satisfaction of beneficiaries. Ensuring equitable access to healthcare services is a critical goal of health insurance schemes, as highlighted by studies comparing different NHIS implementations [4,5,21].

Finally, the coverage gaps, particularly in rural areas, emphasize the need for expanding NHIS services to underserved regions. Access to healthcare should be uniformly distributed to ensure that all beneficiaries, regardless of location, can receive timely and adequate medical care. This finding was in line with global challenges in healthcare accessibility, particularly in developing countries, where rural areas often face significant barriers to healthcare access [18,21–24].

Study Limitations

The study identified several limitations, including self-report bias and systematic sampling which might not fully capture the population's diversity. Additionally, the cross-sectional design limits causal inferences, and its single-site design potentially reduces its generalizability to other regions, especially rural areas. Furthermore, the study's focus on outpatient services excludes insights from inpatient or specialized services.

V. Conclusion

The study revealed a diverse range of experiences concerning the accessibility and affordability of NHIS services at the OPD of LMUTH. Positive feedback highlighted the accessibility and affordability of medical services, with participants appreciating the cost savings on medications and diagnostic services, and the general availability of NHIMA services at healthcare facilities. Conversely, negative feedback focused on issues such as drug availability, service delays, system issues, information and communication gaps, equity in service delivery, and coverage gaps, with participants suggesting improvements in service efficiency, staff training, drug availability, infrastructure, and expansion of coverage to rural areas. While the NHIS has made notable strides in improving healthcare affordability and access, some areas still require attention to optimize its effectiveness. Addressing the identified challenges through targeted interventions can enhance the overall experience of beneficiaries and ensure that the NHIS fulfills its mandate of providing equitable access to comprehensive healthcare.

Future research should continue to explore these issues, particularly in the context of socioeconomic and insurance status, to develop more effective strategies for improving healthcare access and outcomes. Furthermore, longitudinal and multi-site research should be conducted to comprehensively understand the accessibility and affordability of NHIS services in Zambia.

Acknowledgment

I extend my heartfelt thanks to Professor Mpundu Mubanga, the management and staff at LMUTH, and all the research participants for their invaluable assistance and support.