Volume 10, Issue 4, April – 2025
ISSN No:-2456-2165
International Journal of Innovative Science and Research Technology
https://doi.org/10.38124/ijisrt/25apr1952

# Exploring the Experiences of the National Health Insurance Scheme (NHIS) Policyholders on Maternal and Reproductive Health Services in Zambia

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Publication Date: 2025/05/12

**Abstract:**

- ***Background:***

**An essential prerequisite for women's development is better maternal and reproductive health. Since 1991, Zambian governments have made tackling the nation's healthcare issues a top priority. Among the initiatives they have implemented, the National Health Insurance Scheme (NHIS) has been at the top of the list. The National Health Insurance Act No. 2 of 2018 resulted in the creation of the Scheme, which is overseen by the National Health Insurance Management Authority (NHIMA). This study intends to explore the perceptions and experiences of policyholders regarding the effectiveness and challenges surrounding the NHIS in improving maternal and reproductive health services in Zambia.**

- ***Methods:***

**The study employed a phenomenological design using thematic analysis to explore the perceptions and experiences of policyholders regarding the effectiveness and challenges of NHIS in improving maternal and reproductive health services in Zambia. A purposive sample of 69 policyholders was selected for in-depth interviews. Data collection proceeded until saturation was reached, and all interviews were recorded, transcribed, and systematically coded. Thematic analysis was conducted to appreciate perceptions and challenges. Ethical approval and informed consent were obtained to ensure confidentiality and voluntary participation**

- ***Results:***

**Thematic analysis revealed insights into the experiences and perceptions of NHIS policyholders. A significant number of policyholders reported positive experiences regarding increased access to maternal and reproductive health services since the implementation of the NHIS. The insurance scheme has made significant strides in reducing financial barriers, thus enabling more women to seek necessary medical care. However, despite the positive perceptions, the study identified several challenges that hinder the full potential of the NHIS. Key issues included limited coverage, particularly for rural populations, inadequate medical facilities, and a shortage of essential drugs and trained healthcare personnel. Such systemic problems have led to discrepancies in service delivery. While the NHIS has improved access, concerns regarding the quality of care persist. Some beneficiaries reported dissatisfaction with the services received, citing long wait times, lack of essential medical supplies, and inadequate infrastructure in health facilities. The quality of care directly impacts maternal and reproductive health outcomes, highlighting the need for ongoing investments in healthcare infrastructure and workforce training.**

- ***Limitations:***

**A meta-analysis was not feasible due to the qualitative nature of the study, which limited the capacity to quantitatively synthesize the results.**

- ***Conclusions:***

**As Zambia continues to work toward its health objectives, findings suggest that there are positive trends in enhancing access to these essential services. Increasing utilization of maternal health care facilities and improved health outcomes for mothers and newborns have been observed in some regions. However, despite these promising indications, numerous challenges persist that hinder the full realization of equitable and effective care for all women. By addressing these**

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25apr1952

**challenges, the NHIS can strengthen its impact and contribute to better health outcomes for mothers and their children in Zambia.**

***Keywords:*** *Scheme, Maternal and Reproductive Health, Access, Utilisation, Perceptions, Experiences, Policyholder.*

**How to Cite:** Burnwell Mulenga; Tizta Degfie. (2025). Exploring the Experiences of the National Health Insurance Scheme (NHIS) Policyholders on Maternal and Reproductive Health Services in Zambia. *International Journal of Innovative Science and Research Technology*, 10 (4), 3295-3302 https://doi.org/10.38124/ijisrt/25apr1952

## I. INTRODUCTION

Low- and middle-income countries (LMICs) have committed to making progress towards universal health coverage (UHC) as part of the Sustainable Development Goals (SDGs). UHC has been defined by the World Health Organization (WHO) as a state where all people and communities receive the quality health services they need, when they need them, without experiencing financial hardship due to health care costs. Generally, high income countries have attained high levels of service coverage (UHC service coverage index of at least 80 out of 100), however a majority of low- and lower-middle income countries (LLMICs) are still lagging behind (UHC service coverage index of less than 60 out of 100) as of 2022. (Joseph Kazibwe et al, 2024)

Since 1991, Zambian governments have made tackling the nation's healthcare issues a top priority. The National Health Insurance Act No. 2 of 2018 resulted in the creation of the Scheme, which is overseen by the National Health Insurance Management Authority (NHIMA). The scheme is being implemented in accordance with the United Nations Sustainable Development Goals (SDGs). One objective centered on "good health and well-being" is SDG 3, which seeks to guarantee healthy lifestyles and advance well-being for people of all ages. SDG 3's Target 3.8 focuses on expanding universal health coverage to the unorganized sector of the economy by incorporating the underprivileged. (NHIMA Strategic Plan, 2023).

Health insurance benefit packages usually include coverage for maternal and child health services. This benefit covers the costs of obstetric and gynecological procedures and newborn and pediatric care as specified in the package, including cesarean and normal deliveries. However, few studies, if any, have evaluated the effect of health insurance on maternal and reproductive health services using a rigorous methodology. (Minister of Health, July, 2024)

All formal sector companies and employees pay a 1% NHI statutory premium on payroll, and 1% of self-employed people disclosed revenues also go toward funding the scheme. No one under 18 or older than 65 years may donate towards the scheme. (Minister of Health**,** July, 2024)

The main objective of the NHIS is to guarantee that all Zambians have access to affordable, high-quality healthcare services. Because out-of-pocket expenses largely prohibit people of marginalized groups from getting high-quality medical care. To shield families from the financial burden of excessive medical bills and to halt the rise in the cost of healthcare services (NHIMA 2021). In line with the above, NHIMA set out to close this gap, as well as expand the use of healthcare services, preserving high standards of healthcare delivery services within the scheme, and distributing healthcare expenses fairly across all socioeconomic groups. By guaranteeing equitable access to high-quality, reasonably priced healthcare as close to the family as feasible, the Zambian government hoped to enhance the delivery of healthcare services.

The researcher observed that since the NHIS was introduced, most studies conducted to assess its impact on maternal and reproductive health access and utilization were conducted in developed nations, with Zambia receiving relatively little attention in this field of study.

Therefore, the purpose of this study is to close this gap by evaluating the effect of the scheme on maternal and reproductive health services by exploring the experiences of policyholders of the NHIS on maternal and reproductive health services in Zambia.

### *A. Research Objective*

To explore the perceptions and experiences of the NHIS policyholders on the maternal and reproductive health services in Zambia.

### *B. Research Questions*

What are the experiences of policyholders regarding the impact of NHIS on maternal and reproductive health services in Zambia?

## II. RESEARCH METHODOLOGY

### *A. Study Design*

This study used a phenomenological design, using thematic analysis to provide an in-depth understanding of the perceptions and experiences of policyholders regarding the effectiveness and challenges of NHIS in improving maternal and reproductive health services in Zambia.

### *B. Study Population and Sampling*

- *Population*

Data was collected directly from policyholders who came to seek maternal and reproductive health services form University Teaching Hospital (UTH), Levy Mwanawasa Hospital (LMH), and Chongwe District Hospital (CDH).

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25apr1952

➢ *Sampling*

A purposive sample size of 69 NHIS policyholders was selected for the study in the highlighted medical facilities.

*C. Data Collection Methods*

In-depth interviews (IDIs) and focus group discussions were conducted with policyholders to explore their perceptions and experiences. All interviews and discussions were recorded, data was sorted, coded, and themes generated.

*D. Data Analysis*

Thematic analysis was done to appreciate common themes related to perceptions and experiences of the policyholders on the effectiveness and challenges of NHIS in improving maternal and reproductive health services in Zambia.

*E. Inclusion and Exclusion Criteria*

➢ *Inclusion Criteria.*

Interviews were only conducted among policyholders who came through to access maternal and reproductive health services at the University Teaching Hospital (UTH), Levy Mwanawasa Hospital (LMH), and Chongwe District Hospital (CDH).

➢ *Exclusion Criteria*

Policyholders who presented with unstable health status were excluded from this study, using vital signs such as blood pressure, pulse, and respiration as parameters. This is in line with the principle of non-maleficence. Insured women who were not present during the time of the study and those who declined to give consent to participate were also excluded.

➢ *Ethical Considerations*

The study was conducted in accordance with ethical guidelines and received the necessary approvals from National Health Research Authority (NHRA), the University of Lusaka Ethical Committee, and the institutions of interest, namely the University Teaching Hospital (UTH), Ndola Teaching Hospital (NTH), and Chongwe District Hospital (CDH).

A confidentiality guarantee was provided to the respondents after the study's goals had been explained in detail. Participants were informed that taking part in the survey was completely voluntary and time was given to read through the consent form before signing it to attest to their willingness to participate in the study. Refusing to sign resulted in the immediate replacement of the individual in the sample.

## III. RESULTS

*A. Data Analysis and Tabulation*

➢ *Demographic and Socioeconomic Information*

This section presents the demographic and socioeconomic characteristics of the 69 policyholders who participated in the study. Descriptive statistics are used to summarize the data, and tables are included to enhance clarity.

Table 1 Demographic Characteristics of Policyholder

| VARIABLE | FREQ. (N) | PERCENT (%) |
|---|---|---|
| Gender | | |
| Female | 56 | 81.16 |
| Male | 13 | 18.84 |
| | 69 | 100 |
| Age | | |
| 20 to 30 | 8 | 11.59 |
| 30 to 40 | 48 | 69.57 |
| 40 to 50 | 12 | 17.39 |
| 41 Years | 1 | 1.45 |
| | 69 | 100 |
| Marital Status | | |
| Married | 61 | 88.41 |
| Single | 8 | 11.59 |
| | 69 | 100 |
| Area of Residence | | |
| Rural Area | 16 | 23.19 |
| Urban | 53 | 76.81 |
| | 69 | 100 |
| Number of Children | | |
| 1 to 3 children | 54 | 78.26 |
| More than three children | 9 | 13.04 |
| None | 6 | 8.7 |
| | 69 | 100 |
| Level of Education | | |

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25apr1952

| | | |
|---|---|---|
| None | 1 | 1.45 |
| Secondary | 2 | 2.9 |
| Tertiary | 66 | 95.65 |
| | 69 | 100 |
| Occupation | | |
| Non-Professional | 2 | 2.9 |
| Professional | 67 | 97.1 |
| | 69 | 100 |

*B. Gender*

A significant proportion, 81% of all participants, were female, while 19% were male; this is in line with the fact that women are directly affected by maternal and reproductive services as compared to men, who in most cases only render support.

*C. Age*

Only 12% of respondents were between the ages of 20 and 30, while over half (70%) fell within the 30 to 40 age range, which represents the demographic most likely to seek maternal and reproductive services. Additionally, (17%) of respondents were aged 40 to 50, and only (1%) were over 50 years old.

*D. Marital Status*

Regarding marital status, it's noteworthy that a significant majority of respondents, specifically (88%), identified as married. This dominant figure suggests that maternal and reproductive health services were mostly utilized by married couples. Meanwhile only 12% of respondents were identified as single.

*E. Area of Residence*

23% of respondents came from rural area while 76% came from the urban area, this difference suggests that there's more utilization of the scheme in the urban area as compared to the rural area.

*F. Number of Children*

78% of all respondents hard 1 to 3 children, 13% hard more than three children while 9% hard none. Suggesting that respondents with 1 to 3 children used more of the maternal and reproductive health scheme

*G. Level of Education*

95% of respondents had attained tertiary education. This indicates a very strong correlation between higher education and participation in the scheme. 3% had attained secondary education. This shows a very low percentage of people with secondary education utilizing the scheme.1% had no education at all. This is a very small number, but it highlights the extreme disparity.

➢ *Occupation*

More than half (97%) of respondents were professionally employed. This indicates a strong penetration of the scheme within the professional demographic. Only 3% of respondents were non-professional. This suggests a very limited reach of the scheme among this group. The results may also be attributed to the scheme being highly promoted among the professionals, unlike the nonprofessionals.

- *Thematic Analysis*

In this section, data collection was conducted through in-depth interviews, which provided rich, qualitative insights into the participants' perspectives. After gathering the interview responses, a thematic analysis was employed to analyze the data systematically.

The first step in the thematic analysis process was initial coding. During this phase, I carefully examined each response to identify key phrases and notable ideas that emerged from the interviews. I moved on to the theme refinement stage. In this step, the focus was on reviewing the clustered codes to define and clarify the major themes that arose from the data.

This thematic analysis not only highlighted the shared experiences of the participants but also uncovered unique variations in their responses, offering a deeper understanding of the topic under investigation. The findings will serve as a foundation for further discussion and interpretation in subsequent sections of the research.

Table 2 Key themes of the perception and experiences of policyholders

| S/n | Quote From Responses | Code | Theme |
|---|---|---|---|
| 1. | No prescribed medicine. I have to buy most of the important drugs from my pocket. | Drug availability | Low stocks of essential medicines |
| 2. | Long queues, the whole system is not up to date. Waiting time is terrible | Waiting time | Long waiting time |
| 3. | The nurse/Doctor Ratio is bad | Staff Availability | Very low staff levels |

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25apr1952

| | | | |
|---|---|---|---|
| 4. | There is lack of equipment for important investigations to be carried out. | Equipment availability | Medical equipment |
| 5. | Inadequate postnatal space/beds | Infrastructure | Inadequate infrastructure |

➢ *Drug availability*

A good number of policyholders reported a significant lack of essential medications in hospitals, particularly with regard to specialized medicines. This concern extends to pharmacies accredited by the National Health Insurance Management Authority (NHIMA), where the scarcity of these vital drugs has been observed. A respondent stated as follows;

*"I rarely access my blood pressure drugs as it is always out of stock.Pharmacies seem to prefer attending to cash patients and hence, I end up buying my treatment from my pocket"*

➢ *Waiting time*

Policyholders expressed concerns regarding the long queues in the maternal and reproductive health departments while trying to access services provided by the national health insurance scheme. Many patients found themselves waiting for extended periods, which led to a decline in overall satisfaction with the service they received. A respondent stated that;

*"Since the implementation of the scheme, we spend more time on the waiting bay, up to 5 hours before we are seen"*

➢ *Staff Availability*

Policyholders reported a low number of health workers in hospitals, which poses serious challenges to the doctor and or nurse-patient ratio. This deficiency has raised alarm among respondents, who are worried about the implications for patient care and overall health outcomes.

➢ *Equipment availability*

Respondents expressed significant concerns regarding the absence of modern technology and advanced equipment that could facilitate rapid diagnosis and enhance effective patient management. They noted that the lack of innovative tools hinders healthcare providers' ability to assess patient conditions swiftly, leading to delays in treatment and potential adverse outcomes.

*"There have been very low numbers of dependable Equipment for prompt diagnosis since the implementation of the NHIS."*

➢ *Service availability*

Respondents indicated that they experienced extremely low levels of service availability at the maternal and reproductive health department. The limited availability of services could be due to various factors such as staffing shortages, inadequate resources, or logistical challenges within the department.

## IV. DISCUSSION

The findings from this study on the experiences of policyholders of the National Health Insurance Scheme (NHIS) in Zambia reveal several critical insights into the effectiveness and challenges of the scheme in enhancing maternal and reproductive health services.

*A. Perceptions on Effectiveness:*

A significant number of policyholders reported positive experiences regarding increased access to maternal and reproductive health services since the implementation of the NHIS. The insurance scheme has made significant strides in reducing financial barriers, thus enabling more women to seek necessary medical care regarding reproductive health as well as during pregnancy. The coverage for obstetric and gynecological procedures, including both cesarean and normal deliveries, has been particularly beneficial in ensuring that women receive timely and appropriate care.

## V. PERCEPTION ON CHALLENGES

Despite the positive perceptions, the study uncovered various challenges as perceived by policyholders that hinder the full potential of the NHIS. Key issues included limited coverage, particularly for rural populations, inadequate medical facilities, and a shortage of trained healthcare personnel. Such systemic problems have led to discrepancies in service delivery, particularly between urban and rural health facilities, complicating the goal of equitable access to healthcare.

While the NHIS has improved access, concerns regarding the quality of care persist. Some policyholders reported dissatisfaction with the services received, citing long wait times, lack of essential medical supplies, and inadequate infrastructure in health facilities. The quality of care directly impacts maternal and reproductive health outcomes, highlighting the need for ongoing investments in healthcare infrastructure and workforce training.

Another significant finding was the lack of awareness regarding the benefits of NHIS among potential beneficiaries. Many women, particularly in rural areas, were not fully informed about their entitlements or the processes involved in utilizing the insurance. Increasing awareness through targeted educational campaigns could enhance the scheme's impact and encourage higher utilization rates. Based on the findings, several recommendations have emerged to strengthen the NHIS:

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25apr1952

## VI. RECOMMENDATIONS

*A. Expand Coverage:*

To improve maternal and reproductive health outcomes nationwide, it is crucial to implement NHIS policy revisions aimed at extending healthcare coverage to underserved populations, especially in rural areas. Many women in these regions face significant barriers in accessing essential health services due to geographical isolation, lack of healthcare facilities, and limited financial resources.

*B. Private sector involvement*

Incorporating the private sector in the National Health Insurance Scheme (NHIS) policy review is essential for several reasons; private institutions have firsthand experience dealing with the challenges and complexities of implementing health insurance policies. By including their perspectives, we can gain valuable insights into how the scheme operates in real-world settings, which will help make the NHIS more effective and responsive to the needs of all stakeholders.

*C. Improve Infrastructure:*

Investment in healthcare infrastructure and technology is crucial to improve service delivery. This includes enhancing physical facilities, ensuring supply chain efficiency for medical supplies, and addressing staffing shortages. There is a need to invest in modern equipment to enhance the quality of service under the National Health Insurance Scheme.

*D. Improve technology:*

Investing in modern equipment is crucial for enhancing the quality of service provided under the National Health Insurance Scheme. Upgrading medical technology not only ensures that healthcare providers are equipped with the latest tools but also significantly impacts patient access to appropriate treatment options. Advanced diagnostic and therapeutic equipment, and healthcare facilities will improve efficiency and accuracy in diagnosing illnesses, leading to timely and effective interventions.

*E. Education Campaigns:*

Conducting comprehensive awareness campaigns via different platforms to educate beneficiaries about their health insurance rights and usage can empower more women to utilize the services available to them and ultimately reduce morbidity and mortality rates.

*F. Monitoring and Evaluation:*

Establishing a robust monitoring and evaluation (M&E) framework is a critical step in enhancing the overall effectiveness of the National Health Insurance Scheme (NHIS). This framework serves as a systematic approach to assess the performance of the NHIS, ensuring that all aspects of service delivery are scrutinized and optimized for better outcomes.

A strong M&E framework will enable the identification of gaps in service delivery. By collecting and analyzing data regularly, stakeholders can pinpoint specific areas where the NHIS may be falling short. This could include delays in claims processing, inadequate access to certain medical services, or disparities in coverage among different demographic groups. Understanding these gaps is crucial for making informed decisions that can lead to targeted improvements.

## VII. CONCLUSION

The National Health Insurance Scheme (NHIS) in Zambia was established with the goal of providing accessible and high-quality maternal and reproductive health services to all women in the country. This initiative recognizes the critical importance of maternal health as a key component of overall public health and development. As Zambia continues to work toward its health objectives, initial findings suggest that there are positive trends in enhancing access to these essential services. Increasing utilization of maternal health care facilities and improved health outcomes for mothers and newborns have been observed in some regions.

However, despite these promising indications, numerous challenges persist that hinder the full realization of equitable and effective care for all women. These challenges can range from issues related to inadequate healthcare infrastructure and limited financial resources to gaps in community awareness and cultural barriers that affect women's willingness to seek care.

To overcome these obstacles, ongoing research is crucial. It will help identify specific barriers faced by different populations and inform the development of tailored interventions. By prioritizing these actions, the NHIS can strengthen its impact and contribute to better health outcomes for mothers and their children in Zambia.

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