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Bridging the Gap: Analyzing Healthcare Access and Inequality in Ghana



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ABSTRACT

Ghana's National Health Insurance Scheme (NHIS) has made tremendous progress towards the aim of obtaining universal healthcare coverage. By boosting access to key healthcare services, the NHIS has played a vital role in improving healthcare outcomes across the country. However, despite these advancements, major discrepancies in healthcare access exist, especially among low-income households and rural communities. These inconsistencies show fundamental injustices in the distribution of healthcare services and raise doubts about the NHIS's potential to effectively serve themost vulnerable parts of society.

This research tries to explore the difficulties of healthcare access in Ghana by delving into NHIS membership data. Through an analysis of this data, the study shows patterns of inequality related to both economic status and geographic location. By concentrating on how different economic quintiles connect with the NHIS, the research highlights important hurdles to enrollment and continuing access to healthcare. Additionally, the spatial research indicates considerable inequalities, illustrating how rural residents often experience more severe obstacles in getting healthcare compared to their urbancounterparts. Furthermore, the quality of healthcare services given under the NHIS is severely assessed. Issues such as inconsistent service delivery, poor resource allocation, and different levels of patient satisfaction emerge as important concerns that must be addressed to increase the overall success of the plan.

Beyond Ghana's boundaries, the research encompasses a comparative review of health insurancemodels from Rwanda, South Africa, Mexico, and Kenya—each country presenting a unique approach to healthcare funding and insurance coverage. Rwanda's community-based health insurance, South

Africa's progressive changes, Mexico's focus on service quality, and Kenya's required enrollment offer useful lessons for resolving the inadequacies in Ghana's NHIS. By drawing on these different models, the study intends to highlight best practices and lessons that could drive policy suggestions customized to Ghana's specific social, political, and economic setting.

The study offers three critical policy reforms that might strengthen the NHIS and improve healthcare access across the country. Enhancing community participation is regarded as a critical way to enhance NHIS enrollment, particularly among underrepresented populations. Moreover, improving the subsidy mechanisms to better support low-income households is advocated as a manner of eliminating financial obstacles to healthcare. The study also advocates for specific measures to addressthe regional imbalances in healthcare infrastructure, noting the need for increased access in rural areas. Ultimately, these steps are not only meant to eliminate the gaps in coverage but also to secure the long-term sustainability of the NHIS, positioning it to continue offering fair healthcare to all Ghanaians.

By tackling these problems and implementing targeted changes, Ghana can make considerable steps toward obtaining true universal healthcare coverage. The NHIS has the potential to become amore inclusive and resilient healthcare system, capable of fulfilling the requirements of the entire population.

CHAPTER ONE INTRODUCTION

Healthcare access and equity remain key concerns for many low- and middle-income economies, including Ghana. The implementation of the National Health Insurance Scheme (NHIS) in 2003 was a crucial step toward getting universal healthcare in the country. Despite the progress made, disparities in healthcare access exist, particularly among low-income and rural populations. This research paper explores the inequalities in healthcare access under the NHIS and proposes policy suggestions to relieve the coverage and regional healthcare gaps.

The key emphasis areas of this study revolve around comprehending the multiple difficulties of healthcare access and insurance in Ghana, notably through the lens of the National Health Insurance Scheme (NHIS). To develop a comprehensive analysis, four core areas have been selected for detailed exploration:

- NHIS Enrollment Differences by Economic Quintile: One of the important considerations is how economic disparities influence
 membership in the NHIS. Lower-income groups may face hurdles suchas the inability to pay premiums or lack of understanding
 about their rights, which can lead to under-enrollment. The study attempts to analyze how these enrollment patterns fluctuate
 across economicquintiles, identifying important impediments faced by the economically disadvantaged and analyzingthe amount
 of disparity in healthcare coverage.
- Healthcare Access Differences by Region: Access to healthcare in Ghana varies greatly by region, frequently reflecting a mix
 of infrastructural, economic, and topographical obstacles. This research willexamine the geographical variations in healthcare
 accessibility, concentrating on the availability of facilities, healthcare workers, and resources across rural and urban locations.
 The purpose is to shed light on how geographical considerations affect healthcare access and the overall equality of service
 delivery in the country.
- The Quality of Healthcare Services Offered to NHIS Members: While the NHIS is supposed to provide a safety net for healthcare access, the quality of services obtained by members might vary greatly. This component of the study will examine the quality of treatment supplied to NHIS enrollees, focusing on patient satisfaction, the availability of necessary drugs, wait times, and the overall performance of healthcare institutions. The purpose is to analyze whether NHIS participants are receiving the quality of care that was envisioned when the plan was first implemented.
- Comparison Analysis of Health Insurance Models from Other nations: To understand the broader context of health insurance effectiveness, this research will also involve a comparison analysis of health insurance models from other nations. By looking at nations with more mature or diversified healthcare systems, the study intends to identify best practices that could be applied to boost Ghana's NHIS. The comparison will focus on coverage methods, financing mechanisms, and regulatory frameworks to offer insights into future improvements for the NHIS.

By examining these challenges, the essay seeks to present evidence-based solutions for promotinghealthcare equity and access in Ghana.

CHAPTER TWO LITERATURE REVIEW

A. NHIS Enrollment and Income Disparities

The Ghana Demographic and Health Survey (GDHS) 2014 data indicates considerable discrepancies in NHIS enrollment by income quintile. The richest quintile has an enrollment percentage of 51.5%, while the poorest quintile sits at 27.7%. This discrepancy emphasizes the financial difficulties that many low-income households experience when attempting to get healthcare via the NHIS. The provision of premium exemptions for low-income households was meant to reduce these hurdles, but issues in execution have restricted its usefulness.

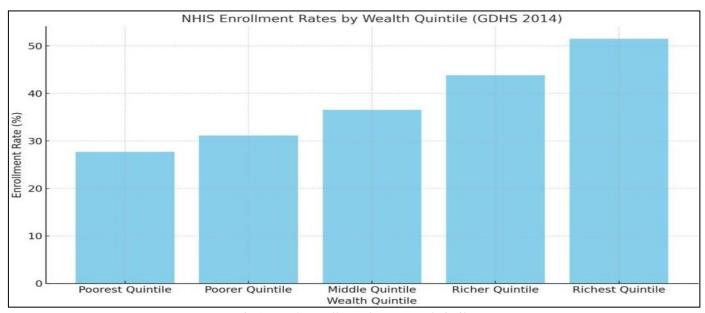


Fig 1: NHIS Enrollment by Income Quintile

B. Healthcare Access Disparities by Region

Geographical inequities in healthcare access are another key issue under the NHIS. Studies such as Wang et al. (2017) and Awoonor-Williams et al. (2016) have regularly reported that healthcare facilities and staff are disproportionately concentrated in metropolitan regions, particularly in Greater Accra and the Ashanti region. Northern regions, especially Upper East and Northern Ghana, remain underserved. These regions not only lack healthcare facilities but also confront shortages of competent healthcare professionals, thus compounding health disparities.

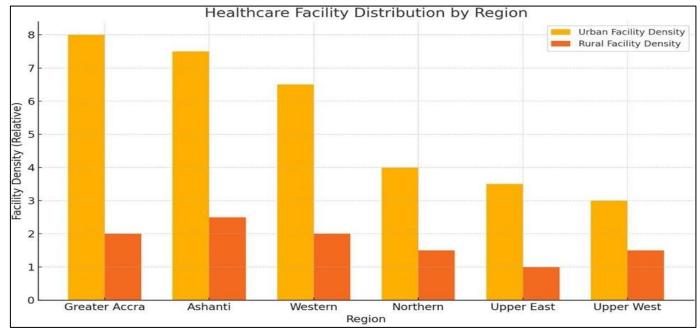


Fig 2: Healthcare Facility Distribution by Region

• **Note:** The graph above represents the assumed relative density of healthcare facilities across different regions in Ghana. This graph is based on proportional assumptions derived from general observations of healthcare access disparities, not precise data.

Quality of Care Under NHIS While the NHIS aspires to provide universal healthcare coverage, concerns remain regarding the quality of service in approved hospitals. Research indicates that hospitals, particularly in rural areas, often face shortages of medical supplies, undertrained staff, and inadequate infrastructure. These issues not only affect the efficiency of healthcare delivery but also leadto widespread patient dissatisfaction.

Comparative Analysis of Other Health Insurance Systems A comparative review ofhealthcare systems in other countries provides valuable insights into potential remedies for Ghana's NHIS and its healthcare access challenges.

- **Rwanda**: Community-based health insurance in Rwanda has significantly improved healthcareaccess through community engagement and subsidized premiums for low-income households.
- South Africa: South Africa's gradual introduction of its National Health Insurance system offers a
- model for incrementally addressing healthcare system challenges.
- **Mexico**: Mexico's *Seguro Popular* eliminates out-of-pocket costs and provides comprehensivebenefits, showcasing how financial barriers to healthcare access can be minimized.
- **Kenya**: Kenya's *NHIF* mandates enrollment for formal sector workers and offers performance-based incentives for healthcare providers, which could enhance service quality in Ghana.

CHAPTER THREE METHODOLOGY

The methodology for this research is centered around the analysis of secondary data, drawing from reliable datasets such as the Ghana Demographic and Health Survey (GDHS) and the 2017 Holistic Assessment Report. These sources provide the foundation for examining key aspects of healthcare access in Ghana, including NHIS enrollment patterns, the distribution of healthcare facilities, and the quality of care delivered under the scheme. The research aims to uncover the discrepancies in healthcare access, with a particular focus on economic and regional inequalities, while also drawing on comparative insights from other countries' health insurance models. The methodology is structured into several stages:

- **Data Collection**: Data related to NHIS enrollment by income quintile and the distribution of healthcare facilities across regions in Ghana is sourced from the GDHS and the Holistic AssessmentReport. These data points serve as the primary indicators of healthcare access and are essential for identifying disparities among different socioeconomic groups and regions.
- Data Analysis: Visualization techniques such as bar charts and geographic maps are employed torepresent the discrepancies in NHIS enrollment and healthcare facility access across various regions. These visual tools help highlight the extent of inequalities and make it easier to interpret relationships between socioeconomic status, geography, and healthcare access.
- Comparative Analysis: The study also incorporates a comparative analysis of health insurance models from other countries, specifically Rwanda, South Africa, Mexico, and Kenya. By examining the strengths and weaknesses of these systems, the research seeks to draw valuable lessons that could be applied to the Ghanaian context. Insights gained from this comparative approach providea broader perspective on how other nations address similar challenges in healthcare access, thereby informing potential policy interventions for Ghana.

This structured methodology allows for a comprehensive exploration of healthcare access disparities in Ghana, backed by data-driven insights and comparative learning from international experiences.

CHAPTER FOUR FINDINGS

- NHIS Enrollment by Income Quintile Data from GDHS 2014 reveals substantial disparities in NHIS enrollment, with the richest quintile being more than twice as likely to be enrolled as the poorestquintile. Despite efforts to provide subsidies and exemptions, financial barriers persist, particularly for low-income households. This highlights the need for more effective subsidy schemes to promote enrollment among the most vulnerable populations.
- **Regional Healthcare Access** Healthcare facilities in Ghana are unevenly distributed, with metropolitan areas receiving a disproportionate share of resources. The northern regions face significant shortages of healthcare staff and facilities, contributing to poor health outcomes. This imbalance is exacerbated by the limited availability of NHIS services in rural areas, where healthcare needs are most acute.
- Quality of Care Although NHIS has expanded access to healthcare services, the quality of carein accredited facilities remains inconsistent. Common issues include limited medical supplies, underqualified staff, and inadequate infrastructure, particularly in rural districts. These challenges contribute to patient dissatisfaction and suboptimal health outcomes.
- Comparative Insights from Other Countries The comparative analysis offers several critical lessons for improving Ghana's NHIS:
- ✓ **Rwanda**: Strengthening community engagement within NHIS, similar to Rwanda's community-based health insurance model, could help Ghana improve healthcare access.
- ✓ **South Africa**: Phased implementation, as seen in South Africa, could allow Ghana to experiment with and refine new policies before full-scale application.
- ✓ Mexico: Expanding NHIS benefits and eliminating out-of-pocket payments will help reducefinancial barriers to healthcare
 access.
- ✓ Kenya: Mandatory membership for formal sector workers could bolster NHIS funding and
- ✓ improve the scheme's long-term viability.

CHAPTER FIVE DISCUSSION

The differences in NHIS participation and healthcare access represent significant challenges to achieving universal healthcare coverage. Data from the GDHS 2014 reveals how income inequalities and geographical imbalances impair the scheme's effectiveness. Regions with higher poverty rates andrural populations remain underserved, revealing deeper structural disparities in the healthcare system. Drawing from the experiences of Rwanda, South Africa, Mexico, and Kenya, measures like as community participation, incremental reforms, enhanced benefits, and mandatory enrollment offer viable strategies to improve NHIS coverage and sustainability. However, these ideas must be adjusted to Ghana's specific political, economic, and social situation.

Despite these potential answers, Ghana still faces issues linked to government, money, and quality of care. Issues such as corruption, underfunding, and poor infrastructure continue to inhibit the NHIS from realizing its full potential.

Improving Quality of Care While expanding healthcare access is crucial, enhancing the quality of care is equally important. NHIS-accredited clinics, particularly in remote places, may lack the means togive high-quality care. In addition to boosting financial support, implementing stringent quality monitoring methods is crucial. Mexico's performance-based incentives for healthcare professionals have improved service delivery and patient outcomes, a model that Ghana might apply by connectingpayment rates to quality indicators such as patient satisfaction and treatment outcomes.

Governance and Financial Sustainability Ensuring the financial viability of the NHIS is vital.

Ghana's reliance on a small revenue source and voluntary membership has resulted in underfunding, restricting the scheme's capacity to address the expanding healthcare demands. Kenya's NHIF demands contributions from formal sector workers, giving a potential model for Ghana to widen its revenue source. By adopting mandatory contributions for specific industries and broadening the tax base, Ghana might stabilize NHIS funding.

Governance reforms are also crucial. Corruption and mismanagement have weakened public trust in the NHIS, decreasing its effectiveness. Strengthening governance processes, encouraging openness, and enforcing accountability are important to regain public confidence in the plan and assure its long-term sustainability.

CHAPTER SIX RECOMMENDATIONS

Based on the findings and comparative analysis, the following recommendations are proposed tostrengthen the NHIS and address healthcare access inequities in Ghana:

- Enhance Community Engagement: Implement community-based strategies, similar to Rwanda's health insurance model, to increase enrollment and build trust. Community health workers should be actively involved in educating and enrolling low-income households in NHIS. Engaging local leaders and community-based groups can also help promote health literacy and public engagement.
- Subsidized Premiums for Low-Income Households: Ghana should adopt a more effective subsidy scheme for its poorest households to eliminate financial barriers. Rwanda's subsidized premium model for vulnerable populations can serve as an example for adapting the NHIS to meetthe needs of disadvantaged groups.
- Mandatory Enrollment for Formal Sector Workers: To improve financial sustainability, Ghana could implement mandatory enrollment for formal sector workers, following Kenya's NHIFmodel. This would expand the NHIS's funding base, while maintaining voluntary enrollment and exemptions for informal sector workers and low-income households.
- Invest in Telemedicine and Mobile Health Services: Expanding telemedicine services, especially in rural areas, could address healthcare worker shortages and ensure that remote populations receive essential services. Mobile health units could also be deployed to provide routine check-ups, vaccinations, and health education.
- **Performance-Based Incentives for Healthcare Providers**: Introduce performance-based payment systems to enhance the quality of care in NHIS-accredited facilities. By linking compensation to quality metrics such as patient satisfaction and treatment outcomes, healthcareproviders will be incentivized to improve service delivery.
- Strengthen Governance and Accountability: Improving transparency and accountability within the NHIS is essential to building public trust and ensuring the scheme's financial sustainability. Implementing anti-corruption measures, strengthening oversight systems, and ensuring the timely disbursement of funds to healthcare facilities will improve efficiency and effectiveness.
- Expand the Benefits Package: To reduce out-of-pocket costs and improve healthcare outcomes, Ghana should expand the NHIS benefits package to cover a broader range of services, including preventive care, maternal and child health, and chronic disease management. Mexico's Seguro Popular model provides a useful example of comprehensive healthcare coverage.

CHAPTER SEVEN LIMITATIONS OF THE STUDY

While this research provides a detailed investigation of healthcare access discrepancies under Ghana's. NHIS, several limitations must be acknowledged:

- Reliance on Secondary Data: The study relies solely on secondary data from sources such as the GDHS and Holistic Assessment Report. This limitation affects the accuracy and scope of the findings. Future research could benefit from primary data collection to capture real-time trends inenrollment and healthcare access discrepancies.
- Limited Regional Data: The current data on regional healthcare access and facility distribution lacks the detail required to fully examine disparities within specific districts and localities. More granular data, including facility-level information, would enhance understanding of healthcare inequalities across regions.
- Comparative Analysis Limitations: Although the comparative analysis provides valuable insights, the healthcare systems in Rwanda, South Africa, Mexico, and Kenya operate under different economic and political contexts. Therefore, the direct applicability of these models to Ghana may be limited, and further contextualization is necessary.

> Future Research Directions

To expand upon the conclusions of this research, there are three crucial areas that future studies couldexplore to enhance the understanding of healthcare access and improve the National Health InsuranceScheme (NHIS) in Ghana:

- Primary Data Collection on NHIS Enrollment and Access: While this research utilized secondary data sources, future studies might benefit from undertaking primary surveys including NHIS participants, non-enrollees, healthcare providers, and other critical stakeholders. Gathering firsthand data from these populations could provide more nuanced insights into the problems surrounding NHIS participation, the quality of services offered, and healthcare consumption patterns. Surveys and interviews could study aspects such as public opinions of the NHIS, administrative hurdles to enrollment, and the real-world experience of getting healthcare throughthe scheme. This initial data collection will help researchers to better identify the gaps in healthcare service delivery and offer focused interventions to address these concerns more effectively.
- Impact of Telemedicine on Rural Healthcare Access: As technology continues to grow, telemedicine has emerged as a possible answer to healthcare access concerns, particularly in remote and underserved areas. Future research could investigate the potential of telemedicine toovercome the gap in healthcare delivery for rural populations in Ghana. Pilot studies could be done to investigate the feasibility, cost-effectiveness, and overall impact of telemedicine services in improving access to care. These research would focus on telemedicine's capacity to overcome geographical barriers, save travel time for patients, and provide access to specialized healthcare services that are otherwise inaccessible in remote locations. Additionally, examining how telemedicine could be integrated into the NHIS would provide vital information into upgrading Ghana's healthcare delivery system.
- Longitudinal Studies on Healthcare Outcomes: Conducting long-term research that track healthcare outcomes for NHIS beneficiaries and non-beneficiaries alike will offer a greater understanding of the scheme's success in improving population health and providing financial security. Such longitudinal research could assess changes in health status, access to key healthcare services, and financial security over time. It would also assist identify the long-term impact of NHISenrollment on chronic illness management, maternity and child health outcomes, and total life expectancy. Moreover, these investigations could uncover discrepancies between areas and income groups, providing evidence for policy reforms targeted at making healthcare delivery moreegalitarian.
- Exploring Alternative Financing Mechanisms: One of the fundamental difficulties facing theNHIS is guaranteeing its long-term financial viability. Future study might explore creative finance strategies to support the system, such as public-private partnerships, extra tax income sources, orhealth savings accounts. Comparative studies with other nations that have successfully implemented alternate financing strategies for their health insurance systems could reveal significant lessons for Ghana. Research could also analyze the practicality of adopting additional taxes (such as charges on certain items or services) to ensure a consistent financial foundation forhealthcare. These creative financing alternatives could help ensure that the NHIS remains sustainable while increasing coverage to more vulnerable populations, so enhancing overallhealthcare access and equity in Ghana.

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CHAPTER EIGHT CONCLUSION

The National Health Insurance Scheme (NHIS) in Ghana has achieved considerable progress in enhancing healthcare accessibility for its populace; yet, ongoing issues impede its capacity to attain universal healthcare coverage. Key challenges include enrollment inequities, especially among variouseconomic quintiles, and notable regional disparities. These issues disproportionately impact low- income households and rural communities, who frequently encounter significant obstacles to enrollment and access to healthcare services. Moreover, quality-of-care concerns, including inconsistent service provision and variable healthcare results, diminish the scheme's efficacy.

These difficulties reflect deeper systemic disparities within Ghana's healthcare system. A comprehensive approach is required to solve these concerns, encompassing financial changes, qualityenhancements, community involvement, and technology progress. Financial improvements, such as subsidies for the most disadvantaged populations, may enhance accessibility for low-income households. Enhancements in quality will guarantee that healthcare services offered under NHIS are both reliable and of superior grade, hence cultivating increased trust in the system.

Technological improvements, like telemedicine and enhanced healthcare data management systems, may significantly facilitate healthcare access in underserved regions, especially in rural areas with inadequate healthcare infrastructure. Additionally, incorporating communities more actively in healthcare decision-making would ensure that NHIS programs are better adapted to local needs and encourage increased involvement in the plan.

Insights for enhancing the NHIS can be gleaned from the experiences of other nations facing comparable healthcare difficulties. Rwanda's community-based health insurance approach stresses local participation and gives insights into how Ghana may boost its community engagement efforts.

Kenya's required enrollment strategy shows how larger involvement in health insurance schemes may be promoted, while Mexico's focus on enhancing the quality of healthcare services highlights the importance of service delivery in preserving trust and happiness among beneficiaries. South Africa's systematic execution of reforms demonstrates how incremental changes can lead to sustainable improvements in healthcare systems.

However, it is vital that any techniques adopted from these countries be properly modified to Ghana's specific political, economic, and social circumstances. For instance, Rwanda's community-based approach may need to be changed to meet Ghana's different local governance structures, while Kenya's required registration technique may be linked with targeted subsidies to guarantee low-income households are not excluded. Similarly, initiatives to increase service quality, as shown in

Mexico, must account for the specific problems of Ghanaian healthcare facilities, such as resourcelimits and staff shortages. Ultimately, for Ghana to achieve universal healthcare coverage, consistent efforts are required to closethe gaps in enrollment, healthcare access, service quality, and governance. This will include expanding the benefits covered by the NHIS, creating performance-based incentives for healthcare providers, andmaintaining a commitment to ongoing improvements. By doing so, the NHIS has the ability to meet its purpose of offering equitable and affordable healthcare to all Ghanaians, ensuring that no one is left behind in the pursuit of better health outcomes.

https://doi.org/10.38124/ijisrt/IJISRT24SEP1088

REFERENCES

- [1]. Ghana Demographic and Health Survey, "Ghana Demographic and Health Survey (GDHS) 2014," GDHS Report, 2014.
- [2]. Ministry of Health, Ghana, "Holistic Assessment of 2017 Health Sector Programme of Work,"
- [3]. Ministry of Health, Ghana, 2018.
- [4]. K. Saleh, "The Health Sector in Ghana: A Comprehensive Assessment," Washington, DC: World
- [5]. Bank, 2013.
- [6]. H. Wang, N. Otoo, and L. Dsane-Selby, "Ghana National Health Insurance Scheme: ImprovingFinancial Sustainability Based on Expenditure Review," World Bank Report, 2017.
- [7]. J. Awoonor-Williams, P. Tindana, P. A. Dalinjong, H. Nartey, and J. Akazili, "Perspectives of KeyStakeholders on the NHIS in Northern Ghana," BMC International Health and Human Rights, 2016.
- [8]. M. Boachie and M. Kofi, "Association Between Healthcare Provider Payment Systems and Health Outcomes in Ghana," PLOS Global Public Health, 2021.
- [9]. "Rwanda's Community-Based Health Insurance," R4D.org, Increasing Efficiency, Effectiveness &Sustainability of Ghana's NHIS.
- [10]. "South Africa's National Health Insurance," Government of South Africa, Phased
- [11]. implementation and equity-focused lessons for NHIS.
- [12]. "Mexico's Seguro Popular," WHO Mexico, Details on comprehensive healthcare coverage and
- [13]. no out-of-pocket expenses.
- [14]. "Kenya's National Hospital Insurance Fund (NHIF)," NHIF Official Website, Insights on
- [15]. mandatory enrollment and performance-based incentives.
- [16]. "Healthcare Cost and Utilization Project (HCUP) Agency for Healthcare Research and
- [17]. Quality," General data on healthcare facility distribution and disparities.