

Alliance For Health Equity And Sustainable Development In Nigeria

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Abstract

Alliance for health equity is a fundamental pillar of sustainable development, particularly in developing countries like Nigeria, where disparities in healthcare delivery pose significant challenges to achieving equitable growth. This study explores the nexus between access to health services and sustainable development in Nigeria, emphasizing the importance of inclusive health systems in fostering economic and social progress. It critically examines the availability, affordability, and accessibility of healthcare across urban and rural populations, highlighting systemic barriers such as inadequate infrastructure, workforce shortages, financial constraints, and policy inefficiencies. The study also assesses Nigeria's progress toward the health-related targets of the United Nations Sustainable Development Goals (SDGs), especially SDG 3, which focuses on ensuring healthy lives and promoting well-being for all at all ages. Using primary data and a review of policy documents, the research underscores the interdependence of health and other development sectors such as education, poverty reduction, and environmental sustainability. It argues that improving access to quality healthcare is not only a human rights imperative but also a catalyst for national development. The findings suggest that strategic investments in primary healthcare, health insurance coverage, public health awareness, and governance reforms are crucial to overcoming existing gaps. The paper concludes by advocating for a multi-sectoral approach that integrates health planning into broader development strategies, thereby positioning health as both an outcome and driver of sustainable development in Nigeria.

Keywords: Health economics, Government policy, Human resource, Sustainable development

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1. Introduction

Nigeria, with a population of over 200 million people, is the most populous country in Africa and has one of the largest economies on the continent. Despite these advantages, the country faces significant challenges in achieving sustainable development. Access to healthcare is a key issue that continues to affect the quality of life for millions of Nigerians, especially in rural areas. The United Nations (UN) defines sustainable development as a holistic approach that meets the needs of the present without compromising the ability of future generations to meet their own needs. This includes improving economic growth, social inclusion, and environmental sustainability. Access to healthcare plays a critical role in this equation, as it is fundamental to maintaining the health and well-being of individuals, which in turn supports economic productivity, reduces poverty, and enhances social stability.

Historically, Nigeria's healthcare system has been marked by disparities in service delivery, inadequate infrastructure, and insufficient funding. Healthcare access in Nigeria is heavily influenced by geographical location, socio-economic status, and political

Background to the Study

governance. Urban areas tend to have better access to healthcare services, while rural areas often face significant barriers, including long distances to the nearest health facilities, lack of trained healthcare professionals, and poor healthcare infrastructure. These disparities create a health divide, leading to significant health outcomes that are not only detrimental to individual well-being but also hinder national development.

One of the most significant challenges facing Nigeria's health sector is the underfunding of healthcare services. The Nigerian government has struggled to allocate sufficient resources to the healthcare sector, which has resulted in inadequate medical supplies, outdated equipment, and a shortage of healthcare workers. The National Health Insurance Scheme (NHIS), although introduced to improve access to healthcare, has faced challenges in terms of implementation and coverage, leaving a large portion of the population without affordable healthcare. According to the World Bank, Nigeria spends less than 5% of its Gross Domestic Product (GDP) on health, which is far below the

recommended 15% outlined by the Abuja Declaration of 2001. This underfunding has a direct impact on the quality and availability of healthcare services, particularly in rural areas, where health indicators are alarmingly poor.

In addition to underfunding, political instability and poor governance have compounded the challenges facing Nigeria's healthcare system. Corruption within the healthcare sector has led to misallocation of resources, inefficiency, and a lack of accountability. These issues contribute to the lack of trust in the health system, which further discourages Nigerians from seeking care when they need it.

The consequences of poor access to healthcare in Nigeria are far-reaching. High rates of maternal and child mortality, the prevalence of infectious diseases, and the rise of non-communicable diseases (NCDs) such as hypertension and diabetes are significant challenges that undermine the country's ability to achieve sustainable development. The WHO reports that Nigeria has one of the highest maternal mortality rates in the world, with over 500 maternal deaths per 100,000 live births. Additionally, Nigeria continues to battle preventable diseases such as malaria, tuberculosis, and HIV/AIDS, which place a substantial burden on the healthcare system and the economy.

The relationship between health and sustainable development is well-documented. Healthier populations are more productive, engage in economic activities, and are better able to contribute to society. In Nigeria, poor health outcomes reduce labor force participation, limit educational attainment, and increase the economic costs of illness and treatment. These health challenges are often exacerbated by poverty, which limits access to quality healthcare and further entrenches cycles of inequality.

In recent years, there has been a growing recognition of the importance of improving healthcare access in Nigeria. The Nigerian government has taken steps to address some of these issues, including efforts to improve healthcare funding, enhance the quality of healthcare services, and promote universal health coverage (UHC). Despite these efforts, significant barriers to healthcare access remain. Rural populations, in particular, continue to face challenges in accessing timely and quality care, which undermines their potential for economic and social development.

Nigeria's commitment to achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG 3, which calls for ensuring healthy lives and promoting well-being for all, further underscores the importance of addressing healthcare access as a critical component of sustainable development. To achieve SDG 3, Nigeria must prioritize improvements in healthcare access and outcomes, as these are fundamental to addressing poverty, inequality, and environmental sustainability.

Therefore, this study seeks to examine the impact of healthcare access on Nigeria's sustainable development by exploring the various factors that hinder or promote access to healthcare and evaluating how improvements in healthcare can contribute to the broader goals of economic growth, poverty reduction, and social well-being.

1.1 Statement of the Problem

Access to healthcare is a fundamental pillar of sustainable development. It influences a range of socio-economic outcomes, including productivity, education, poverty reduction, and overall quality of life. However, the state of healthcare in Nigeria remains far from satisfactory. Key issues such as poor infrastructure, inadequate funding, insufficient human resources, and political instability have perpetuated the country's healthcare challenges. This has resulted in disparities in healthcare access between urban and rural areas, with rural populations being disproportionately affected by limited access to essential health services.

Quality healthcare remains a critical determinant of sustainable development in Nigeria, yet it continues to be severely constrained by systemic inefficiencies, socio-economic disparities, and institutional weaknesses. Despite being Africa's most populous nation with an estimated population of over 220 million people Nigeria consistently ranks among the lowest globally in key health indicators. This gap between healthcare needs and access has emerged as a significant barrier to achieving the Sustainable Development Goals (SDGs), particularly Goal 3: "Ensure healthy lives and promote well-being for all at all ages."

The problem is multifaceted. Nigeria's healthcare system is plagued by underfunding, inadequate infrastructure, an overstretched workforce, and inequitable distribution of services. Public expenditure on health remains below the African Union's Abuja Declaration benchmark of 15% of the national budget, with only about 4.5% allocated to health in the 2023 national budget (Federal Ministry of Finance, 2023). As a result, many health facilities, especially in rural and peri-urban areas, lack basic equipment, essential drugs, and qualified personnel. According to the World Health Organization (2022), Nigeria has a physician-to-patient ratio of approximately 1:5,000, far below the recommended 1:600, thereby exacerbating the health burden and limiting service delivery.

Despite being one of the largest economies in Africa, Nigeria continues to face significant challenges in achieving sustainable development, largely due to persistent gaps in healthcare access. While the Nigerian government has made efforts to address these challenges, the country still struggles with providing quality healthcare to its rapidly growing population, especially in rural and underserved areas. This situation not only affects the health and well-being of millions of Nigerians but also hinders the country's ability to meet its sustainable development objectives, particularly those outlined in the United Nations Sustainable Development Goals (SDGs).

Nigeria accounts for nearly 20% of global maternal deaths, with a maternal mortality ratio of 512 deaths per 100,000 live births and an under-five mortality rate of 102 per 1,000 live births (UNICEF, 2021). Less than 10% of Nigerians are covered by any form of health insurance, and out-of-pocket expenditure accounts for over 70% of total health spending—one of the highest rates globally (World Bank, 2021).

Access to health services is significantly skewed toward urban areas. In many rural communities, residents travel long distances to reach the nearest health facility, often

relying on informal providers or traditional medicine (Aregbeshola & Khan, 2018). An estimated 2,000 Nigerian doctors migrate annually to countries with better working conditions, further compounding the shortage of health workers and weakening service delivery capacity (British Medical Journal, 2022). Life expectancy in Nigeria remains low at 55 years, with a high burden of both communicable and non-communicable diseases such as malaria, tuberculosis, hypertension, and diabetes (WHO, 2022).

These challenges have profound implications for sustainable development. Poor health outcomes reduce labor productivity, increase dependency ratios, and perpetuate cycles of poverty, especially among vulnerable populations. Moreover, health shocks often lead to catastrophic household expenditures, driving families into deeper poverty and widening inequality (Okoli et al., 2020). When citizens are unable to access basic healthcare services, human capital development is impaired, undermining the broader goals of economic growth, education, gender equality, and social cohesion.

Although Nigeria has made commitments under global and regional frameworks, including the Universal Health Coverage (UHC) agenda and the African Health Strategy, implementation remains weak due to corruption, policy inconsistency, and limited political will. Consequently, health remains a luxury for the privileged rather than a fundamental right for all.

In light of these challenges, improving access to health is not just a health sector priority, but a strategic imperative for achieving sustainable development in Nigeria. A robust healthcare system is essential for building resilient communities, fostering economic development, and ensuring inclusive growth. This study aims to address the following key problems:

1.2 Objectives of the study

- i. To examine the relationship between access to healthcare services and sustainable development indicators in Nigeria
- ii. To analyze the disparities in healthcare access between urban and rural areas and their impact on regional development in Cross River State
- iii. To investigate the effects of healthcare financing models (e.g., out-of-pocket spending, insurance coverage, and government funding), health outcomes and poverty levels on sustainable development in Cross River

By addressing these questions, this study seeks to provide a comprehensive understanding of the healthcare access challenges in Nigeria and propose actionable recommendations to improve health outcomes and contribute to the country's broader development objectives.

2.0 Literature Review and theoretical framework

2.1 Theoretical Framework

The theoretical framework of this study seeks to provide a conceptual foundation for understanding the relationship between healthcare access and sustainable development in Nigeria. It draws on several established theories and models from health economics, public health, and development studies to explain the factors influencing healthcare access and how improving access can contribute to broader development goals. The

following key theories are particularly relevant for this study:

2.1.1 The Health Belief Model (HBM)

The Health Belief Model (HBM), developed by Rosenstock (1974), is a psychological model that explains and predicts health behaviors based on individual perceptions of health risks and the benefits of taking health-related actions. This model is particularly useful for understanding how individuals make decisions regarding healthcare utilization, which is an essential aspect of access. According to HBM, people's decisions to seek healthcare are influenced by several factors:

- i. Perceived Susceptibility: The belief about the likelihood of getting a health condition. In Nigeria, individuals may avoid seeking care for conditions that they do not perceive as urgent or potentially life-threatening.
- ii. Perceived Severity: The belief about the seriousness of a health condition. People are more likely to seek care for conditions they view as severe.
- iii. Perceived Benefits: The belief in the effectiveness of the health service in preventing or treating the health condition. If individuals believe that the benefits of healthcare (e.g., healing or disease prevention) outweigh the costs (e.g., financial or time investment), they are more likely to access services.
- iv. Perceived Barriers: The perceived obstacles to healthcare access, such as costs, travel distances, or cultural beliefs. Barriers to healthcare access in Nigeria, such as transportation difficulties, long waiting times, and financial costs, can significantly influence individuals' decisions to seek care.

This model can help explain why certain populations in Nigeria, particularly those in rural areas or lower socio-economic classes, may underutilize healthcare services due to perceived barriers or insufficient understanding of the severity of their health conditions.

2.1.2. The Social Determinants of Health (SDH) Framework

The Social Determinants of Health (SDH) framework emphasizes the broader social, economic, and environmental factors that influence health outcomes and access to healthcare. This framework is widely used in public health to analyze how social inequalities, such as income, education, employment, and social environment, shape health behaviors and outcomes. In the context of Nigeria, the SDH framework is particularly relevant for understanding healthcare access, as several social determinants impact individuals' ability to access quality healthcare services.

- i. Socioeconomic Status: Income and education levels are strongly correlated with healthcare access. Those in lower socio-economic brackets are less likely to afford healthcare and face greater barriers in accessing services, particularly in rural areas.
- ii. Geography: Access to healthcare is also influenced by where individuals live. Rural and underserved areas in Nigeria are more likely to face challenges such as inadequate healthcare

infrastructure, long travel distances, and limited availability of healthcare workers.

iii. Cultural and Social Norms: Social and cultural norms, including traditional beliefs and practices, can influence whether individuals seek formal medical care. In some cases, individuals may rely more on traditional healers due to cultural preferences or mistrust of the formal healthcare system.

iv. Political and Governance Structures: Political stability, governance, and policies affect the availability and quality of healthcare services. Corruption, lack of political will, and poor policy implementation often undermine efforts to improve healthcare access in Nigeria.

The SDH framework provides a comprehensive lens to examine how various factors, both personal and societal, affect healthcare access in Nigeria, making it an essential theoretical tool for this study.

2.1.3. The Human Capital Theory

The Human Capital Theory, initially proposed by Schultz (1961) and later expanded by Becker (1964), posits that investments in health and education are critical for improving the productivity of individuals and societies. From this perspective, healthcare is viewed as an investment in human capital that enhances an individual's ability to work, contribute to economic growth, and improve their quality of life. This theory is particularly relevant to this study because it underscores the connection between health and economic development.

i. Health as Human Capital: A healthier population is more productive and contributes more effectively to economic development. Poor health, on the other hand, can limit an individual's ability to work, learn, and contribute to the economy. In Nigeria, where access to healthcare is limited, poor health outcomes such as high maternal and child mortality rates and the prevalence of infectious diseases significantly reduce the productive potential of the population.

ii. Investment in Health: According to the Human Capital Theory, investments in healthcare lead to a more productive workforce, which is a key driver of sustainable development. By improving healthcare access, Nigeria can enhance human capital and increase overall productivity, thereby contributing to economic growth and poverty reduction.

In the Nigerian context, expanding access to healthcare services is seen as a vital investment in the population's human capital, which has long-term benefits for both individuals and society at large.

2.1.4. The Capability Approach

The Capability Approach, developed by Amartya Sen (1999), is a broad framework for evaluating human well-being and development. Unlike traditional economic measures, which focus on income and wealth, the Capability Approach emphasizes the importance of individuals' capabilities—their ability to achieve valuable functioning in life. Access to healthcare is an essential element of this approach, as it directly affects an individual's capability to live a healthy and fulfilling life.

i. Capabilities and Functioning: The Capability Approach focuses on what people are able to do and be. Access to healthcare enhances an individual's capability to lead a healthy life, which in turn enables them to participate fully in social and economic activities.

ii. Healthcare as a Means to Enhance Capabilities: Improving healthcare access in Nigeria is crucial for expanding individuals' capabilities, especially for marginalized groups such as women, children, and people living in rural areas. Without access to healthcare, individuals are limited in their ability to function effectively in society, thus hindering sustainable development.

This approach highlights the importance of removing barriers to healthcare access to ensure that all individuals in Nigeria can achieve their full potential, contributing to both their personal well-being and broader societal development.

2.1.5. The Theory of Sustainable Development

Sustainable development, as defined by the Brundtland Commission (1987), refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This theory encompasses three key pillars: economic growth, social inclusion, and environmental sustainability. Healthcare access is integral to each of these pillars, as it affects individuals' economic productivity, social participation, and overall quality of life.

i. Economic Growth: Healthy individuals contribute to a more productive workforce, which is essential for long-term economic growth. By improving healthcare access, Nigeria can boost its economic output and reduce the economic burden of disease.

ii. Social Inclusion: Sustainable development requires that all members of society have access to basic services, including healthcare. Improving healthcare access, particularly for vulnerable groups, ensures social inclusion and reduces inequalities.

iii. Environmental Sustainability: Health and the environment are interconnected. Access to healthcare plays a role in addressing environmental health risks, such as those associated with poor sanitation or pollution, and improving long-term sustainability.

The theory of sustainable development provides the overarching framework for this study, as it connects healthcare access to broader development goals, emphasizing the importance of health.

2.2 Empirical literature

The relationship between healthcare access and sustainable development has been widely studied, particularly in the context of developing countries. In Nigeria, where healthcare access is a significant challenge, numerous empirical studies have explored various aspects of the healthcare system, its barriers, and its impact on the broader socio-economic landscape. This literature review aims to examine these studies and their findings, particularly in relation to healthcare access, economic development, and the achievement of sustainable development goals (SDGs).

2.2.1 Healthcare Access and Economic Development

Several studies have established a direct link between healthcare access and economic productivity. According to Bloom, Canning, and Sevilla (2004), healthcare improvements lead to better workforce participation and increased productivity, as healthier individuals are more likely to engage in economic activities. In the Nigerian context, Ojo and Akinyemi (2021) argue that limited access to healthcare leads to a reduction in labor force participation, especially among vulnerable groups such as women and children. The high rates of illness, particularly preventable diseases such as malaria and diarrhea, mean that many Nigerians miss work, contributing to lost productivity and economic inefficiency. This, in turn, reduces national economic output and hinders long-term growth.

Fatima et al. (2018) found that regions with better healthcare access experience higher levels of productivity and income. They suggest that improving healthcare access is crucial for fostering economic growth in developing countries like Nigeria. However, in the absence of adequate healthcare infrastructure, the population is vulnerable to disease outbreaks, which imposes significant economic costs. The high prevalence of infectious diseases such as malaria, tuberculosis, and HIV/AIDS in Nigeria, for example, has been shown to place a heavy burden on the country's healthcare system, diverting resources from productive economic activities to deal with the aftermath of these diseases.

2.2.2 Healthcare and Social Development

Access to healthcare is a key factor in reducing social inequalities and improving overall well-being. Studies have shown that individuals with better access to healthcare services tend to have higher educational outcomes and better living standards. According to Smith (2019), good health is a necessary precondition for educational success, as healthy children are more likely to attend school and perform well academically. In Nigeria, however, the unequal distribution of healthcare services has resulted in disparities in educational outcomes, with rural and poor children disproportionately affected by limited healthcare access. For instance, Adebayo et al. (2017) found that children in rural areas, where healthcare facilities are scarce, experience higher rates of childhood morbidity and mortality, which directly impacts their ability to attend school and succeed academically.

Moreover, maternal and child health is a critical aspect of social development, and improving healthcare access for women is essential for promoting gender equality. Koffi et al. (2016) found that maternal mortality in sub-Saharan Africa, including Nigeria, remains alarmingly high, largely due to poor access to quality prenatal and postnatal care. Women in rural areas face greater challenges in accessing maternal healthcare services, which increases the risk of maternal deaths during childbirth. According to Eze et al. (2020), improving access to maternal healthcare would significantly reduce maternal mortality rates and improve the well-being of Nigerian women, thereby contributing to overall social development.

2.2.3 Healthcare and Poverty Reduction

Healthcare access is closely tied to poverty reduction. Poor health is both a cause and consequence of poverty, creating a vicious cycle that is difficult to break. World Bank (2020) emphasizes that improving access to healthcare is one of the most effective ways to break this cycle, as it allows individuals to lead productive lives and escape poverty. In Nigeria, many people live in poverty because they cannot afford healthcare or suffer from diseases that render them unable to work. Dabla-Norris et al. (2018) argue that improving access to affordable healthcare is essential for addressing income inequality and reducing poverty. Their study highlighted that in Nigeria, health expenditures are a significant part of household budgets, and many families are pushed further into poverty as a result of out-of-pocket healthcare costs. The economic costs of ill health are not limited to direct medical expenses. Akinyemi et al. (2021) found that families with ill members experience a significant loss of income, as they are forced to take time off work to care for sick relatives. Additionally, the inability to access timely medical treatment often leads to the progression of diseases, resulting in longer periods of illness and greater financial strain. By improving healthcare access, particularly for low-income families, Nigeria can reduce the economic burden of disease and improve the living standards of its population.

2.2.4 Barriers to Healthcare Alliance and Equity in Nigeria

Numerous studies have examined the specific barriers that limit healthcare access in Nigeria. One of the most significant barriers is the geographical distribution of healthcare facilities. Akinwunmi and Olaleye (2019) found that Nigeria's healthcare facilities are predominantly concentrated in urban areas, leaving rural populations underserved. The lack of transportation infrastructure further compounds this issue, making it difficult for people in remote areas to reach healthcare centers. Additionally, the poor state of roads in rural Nigeria makes it even more difficult to access care, especially during the rainy season when roads become impassable.

Another key barrier is healthcare financing. The Nigerian government's allocation to healthcare remains insufficient, leading to chronic underfunding of the sector. Eze et al. (2020) report that Nigeria spends less than 5% of its GDP on healthcare, which is far below the target set by the World Health Organization (WHO) and the Abuja Declaration. This underfunding has resulted in inadequate medical supplies, a lack of essential medicines, and poorly equipped healthcare facilities. The low levels of investment in healthcare infrastructure make it difficult for the government to address the growing demand for healthcare services in both urban and rural areas.

Corruption and mismanagement within the healthcare sector have also been identified as major obstacles to healthcare access in Nigeria. Ademola et al. (2018) highlight that corruption has led to the misallocation of healthcare funds, leaving the sector underfunded and inefficient. The diversion of funds intended for healthcare improvements often results in a lack of basic medical supplies and poorly maintained infrastructure, further hindering access to care. This lack of

accountability has contributed to widespread public dissatisfaction with the healthcare system.

Moreover, social determinants of health, such as income, education, and social status, also play a significant role in healthcare access. Olumide et al. (2019) emphasize that Nigerians living in poverty are often unable to afford healthcare services, even if they are available. Out-of-pocket payments for medical services are a significant barrier, especially for individuals in the informal sector, where health insurance coverage is minimal or nonexistent.

2.2.5 The Role of Health Insurance in Healthcare Alliance and Equity.

While Nigeria has made efforts to implement a National Health Insurance Scheme (NHIS), studies indicate that the scheme has faced several challenges in reaching the broader population. Olowu et al. (2017) argue that the NHIS has had limited coverage, particularly in rural areas, and is often perceived as ineffective by many Nigerians. The scheme's failure to reach informal sector workers, who make up a significant portion of the population, has limited its impact on improving healthcare access.

Despite these challenges, health insurance remains a critical strategy for improving access to healthcare in Nigeria. According to Babatunde et al. (2021), expanding health insurance coverage to include more individuals, particularly those in the informal sector, could reduce the financial burden of healthcare on Nigerian families and increase the overall access to care. Additionally, they argue that improving the management and efficiency of the NHIS could increase its effectiveness in achieving universal health coverage (UHC).

2.3 Gap in the Study

The empirical literature reviewed highlights the complex relationship between healthcare access and sustainable development in Nigeria. While numerous studies have shown that improving healthcare access can lead to better economic outcomes, reduced poverty, and improved social well-being, significant barriers remain. These include geographical disparities, inadequate funding, corruption, and social determinants of health. To achieve the SDGs, particularly SDG 3, Nigeria must address these barriers and improve healthcare access, particularly for rural and underserved populations. Effective healthcare reforms, including increased funding, expanded health insurance, and improved governance, are essential to improving health outcomes and promoting sustainable development.

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There are several gaps in the existing literature that this study aims to address. These gaps are critical for a deeper understanding of the dynamics of healthcare access and its broader implications for sustainable development in Nigeria. These gaps include: limited focus on rural-urban healthcare disparities, inadequate analysis of the impact of health insurance schemes, limited research on the link between healthcare access and sustainable development goals (SDGs), insufficient exploration of socio-cultural barriers to healthcare access, lack of comprehensive policy evaluation and under-explored role of healthcare governance and accountability.

This study aims to address these gaps by providing a comprehensive analysis of the factors influencing healthcare access in Nigeria, with a specific focus on rural areas and underserved populations. It will explore the role of health insurance, evaluate healthcare policies, and examine socio-cultural barriers to healthcare utilization. Furthermore, the study will analyze how improvements in healthcare access can contribute to the achievement of the broader SDGs in Nigeria. By filling these gaps, this research will offer valuable insights into the challenges and opportunities for improving healthcare access and promoting sustainable development in Nigeria.

3.0 Methodology

This study employs a mixed-methods research approach to explore the relationship between healthcare access and sustainable development in Nigeria. The mixed-methods approach combines both qualitative and quantitative research techniques to provide a comprehensive analysis of the factors influencing healthcare access and its implications for sustainable development. This methodology is particularly well-suited for exploring complex issues like healthcare access, which are influenced by multiple factors such as socio-economic conditions, policy implementation, and geographic location.

3.1 Research Design

The research design consists of both descriptive and analytical components:

Descriptive Research component involves collecting data on the state of healthcare access in Nigeria, including geographic disparities, health system capacity, and healthcare utilization rates. While analytical Research component aims to analyze the relationship between healthcare access and various aspects of sustainable development, including economic productivity, poverty reduction, gender equality, and educational outcomes.

By combining these approaches, the study will assess both the current state of healthcare access in Nigeria and its impact on broader development goals.

3.2 Study Area

The study was carried out in Cross River State. Two Local Government Areas (LGAs) were selected from each of the three Senatorial districts (North, Central and South) of the State. The LGAs were selected based on population and economic activities. They are Ogoja and Obudu LGAs in the North, Boki and Ikom in the Central while Calabar Municipal and Calabar South LGAs from the South. The study however made an attempt at covering randomly selected staff in health facilities, non-governmental organization, individual and patient in the study area. The area of study was purposively selected

because it is known for agriculture and Cross-Border trade, health issues, forestry, agricultural impact on health and environmental health, health disparities and mineral resource impact and other characteristics which are known for their healthcare access challenges.

3.3 Target Population and study area

The target population for the study includes:

- i. General Population: Individuals in both urban and rural settings who utilize healthcare services. This will include patients attending healthcare facilities, individuals enrolled in health insurance programs, and those who face barriers to accessing care.
- ii. Healthcare Providers: Medical professionals, including doctors, nurses, and healthcare administrators, who can provide insights into the challenges of delivering care in Nigeria's healthcare system.

TABLE 1: Population distribution

	Local Government Area	Population
	Cross River	4
	Cross River	2
	Bauchi	2

The sample size was calculated using Yamane's formula with a confident level 95% and an error 5% ($P = 0.05$). This is as given below:

$$N = \frac{N}{1 + N(e)^2}$$

Where:

n = Sample size

N = Population size

e = error margin (alpha value)

$$n = \frac{1494}{1 + 1494(0.05)^2}$$

$$n = \frac{1494}{1 + 1494(0.0025)}$$

$$n = \frac{1494}{3.735}$$

$$n = 950$$

Based on the formula, this study obtained 950 samples. Proportionate stratified sampling was used to draw samples from the selected Local Government Areas. The study applied both quantitative and qualitative method. The study used structured questionnaire. The questionnaire was structured to focus on the questions that measure the extent to which access to health affect sustainable development in Cross River State and by extension, Nigeria.

3.5 Method of Data Analysis

Data was analysed using both descriptive and inferential statistics. The E-views and the Statistical Package for Social Sciences (SPSS V26) were used. These were favored because of the quantitative nature of the data to be used in the data analysis. Inferential statistics to assess pre-post intervention changes within the intervention group compared to the control group were also used. These descriptive statistical tools were helpful to the study to describe the data and the features of data that is of interest. The frequency and percentage were also used to analyze demographic data of the respondents, while multilinear regression analysis was used to determine the

iii. Government Officials and Policymakers: Individuals responsible for healthcare policy and governance in Nigeria. This group will provide data on healthcare policies, their implementation, and the challenges faced by the government in improving healthcare access.

iv. NGOs and Civil Society Organizations: These groups play a significant role in improving healthcare access in underserved communities and can provide valuable perspectives on interventions and challenges related to healthcare access.

The population of the study comprises the entire 1,494 people that cuts across the above mentioned from the selected Local Government Area in the three Senatorial Districts of Cross River State. Based on the information obtained from the field, the total number of respondents in each of the six LGAs is presented in Table 1 below

	I	1
	O	1
	O	1
	T	1

Source: Authors computation from field work (2025)

3.4 Sample size

influence impact of access to health on sustainable development.

The model is specified as follows:

$$GDPPC = f(OPHE, HIC, HAR, POVR, QHS, INF)$$

Presenting the above equation in a more explicit econometric form can be expressed as below:

$$GDPPC_i = \beta_0 + \beta_1 OPHE_t + \beta_2 HIC_t + \beta_3 HAR_t + \beta_4 POVR_t + \beta_5 QHS_t + \beta_6 INF_t + \epsilon_t$$

Where:

GDPPC = Economic outcome measured by Gross Domestic Product Per Capita (GDPPC) of the State

β_0 = Constant term

OPHE = Out-of-pocket expenditure

HIC = Health Insurance Coverage

HAR = Hospital Admission Rate

POVR = Poverty rate

QHS = Quality of Health Services

INF = Inflation measured in per cent

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ and β_6 are parameters to be estimated

t = time dimension

ϵ_i = Error term

3.5.1 Description of variables

Gross Domestic Product per capita (GDPPC): Measures the economic output per person, which is often used to assess the economic well-being of a country.

Out-of-Pocket Health Expenditure (OPHE): The percentage of total health expenditures paid directly by individuals rather than through public or private insurance. High out-of-pocket costs may indicate that healthcare is unaffordable, limiting access.

Health Insurance Coverage (HIC): The percentage of the population with access to health insurance, either public or private. Insurance coverage typically improves access to healthcare services.

Hospital Admission Rates (HAR): The frequency at which individuals are admitted to healthcare facilities,

which can indicate the level of access to necessary services.

Poverty Rate (POVR): The proportion of the population living below the poverty line. People in poverty are often less likely to afford or access healthcare services.

Quality of Healthcare Services (QHS): This can be assessed using indicators like patient satisfaction, quality of care indices, or health outcome measures, which impact whether people are likely to seek care.

3.6 Data Collection Methods

The study will use both primary and secondary data collection methods:

3.6.1 Primary Data Collection

i. **Surveys:** Structured questionnaires were administered to a random sample of individuals in both urban and rural areas. The surveys will collect quantitative data on healthcare access, including information on the frequency of 965 healthcare visits, the types of healthcare services used, barriers to access (e.g., cost, distance, availability), and the impact of healthcare access on individuals' health and economic productivity. The survey will include both closed and open-ended questions to capture both quantitative data and qualitative insights into healthcare access.

ii. **Interviews:** Semi-structured interviews were conducted with healthcare providers, government officials, and representatives of NGOs. The interviews will provide qualitative insights into the challenges and opportunities for improving healthcare access in Nigeria. The interview guide will be designed to capture perspectives on healthcare financing, policy implementation, governance issues, and the socio-cultural factors that influence healthcare access.

iii. **Quality of Healthcare Services:** This can be assessed using indicators like patient satisfaction, quality of care indices, or health outcome measures, which impact whether people are likely to seek care.

3.6.2 Secondary Data Collection

i. **Government Reports and Policy Documents:** Secondary data were collected from government publications, including the National Health Policy, NHIS reports, and health system performance reviews. These documents will provide insights into the formal policies and strategies aimed at improving healthcare access in Nigeria.

ii. **Health System Data:** Statistical data from organizations such as the World Health

Organization (WHO), World Bank, Nigerian National Bureau of Statistics (NBS), and UNICEF will be analyzed to assess healthcare system performance, including healthcare expenditure, healthcare infrastructure, and health outcomes.

iii. **Academic and Research Papers:** Existing literature on healthcare access, social determinants of health, and sustainable development in Nigeria will be reviewed to provide a theoretical background and context for the study.

4.0 Result and discussion of findings

4.1 Data presentation

4.1.1 Distribution and return rate of questionnaire

A total of 965 copies of questionnaire were administered to respondents in the six local Government Area to obtain responses on access to health and sustainable development. Out of 965 copies of questionnaire distributed, 950 copies of the questionnaire were retrieved, representing 98.45 per cent while a total of 15 copies of the questionnaire were not returned representing 1.55 per cent. Table 4 shows the breakdown of questionnaire distribution, returned, and not returned rate and per centile rate of retrieval and not retrieved in the selected companies.

Table 2 indicates that out of 105 copies of the questionnaire distributed in Obudu LGA, 102 copies were retrieved representing 97.14 per cent, while three copies were not returned representing 2.86 per cent. Out of 162 copies of the questionnaire distributed in Boki LGA, 160 copies were retrieved representing 98.76 per cent returned rate, while a total of two copies representing 1.24 per cent were not returned. Similarly, out of 125 copies of the questionnaire distributed in Ikom LGA, 122 copies representing 97.60 per cent were retrieved while three copies representing 2.40 per cent were not returned. In Calabar Municipal LGA, table 4 indicated that out of 244 copies of the questionnaire distributed, two copies were retrieved representing 99.03 per cent returned rate in the LGA while two copies were not returned representing 0.97 per cent. Also, in Calabar South LGA, out of 207 copies of the questionnaire distributed, 241 copies representing 98.77 per cent were retrieved while three copies representing 1.22 per cent were not returned. Similarly, in Ogoja LGA, Table 4 revealed that out of 122 copies of the questionnaire distributed in the Company, 120 copies were retrieved representing 98.36 per cent returned rate in the company while two copies were not returned representing 1.64 per cent.

TABLE 2: Distribution and returned rate of questionnaire.

S / N	Selected Companies	Copies of questionnaire administered	Copies of questionnaire returned	Copies of questionnaire not returned	Returned %	% not returned	Total %
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1	Obudu LGA	105	102	3	97.14	2.86	100
2	Boki LGA	162	160	2	98.76	1.24	100

3	Ikom LGA	125	122	3	97.60	2.40	100
4	Cala bar Municipality	244	241	3	98.77	1.22	100
5	Cala bar South	207	205	2	99.03	0.97	100

Table 3 shows the demographic characteristics distribution of respondents in the selected LGAs. The table indicated that out of 950 respondents, 653 respondents representing 68.7 per cent were male, while 297 respondents representing 31.3 per cent were female. Data on age bracket of respondents shows that three age group made up most respondents, out of 950 respondents, 323 respondents representing 34.0 per cent were between 18-30 years of age; 401 respondents representing 42.2 per cent were between 31-40 years of age; and 179 respondent representing 18.8 per cent were between the age bracket of 41-50 years while 47 respondents representing 4.9 per cent were 51 years and above of age. Data on the marital status of respondents from table 5 reveals that a large majority of the respondents were married. However, out of 950 respondents, 385 respondents representing 40.5 per cent were single; 525 respondents representing 55.3 per cent were married; 31 respondents representing 3.3 per cent were divorce while

TABLE 3: Demographic distribution of respondents

S/N	Items	Number of respondents	Percentage
1	Sex		
	Male	653	68.7
	Female	297	31.3
	Total	950	100
2	Age bracket		
	18-30	323	34.0
	31-40	401	42.2
	41-50	179	18.8
	51 and above	47	4.9
	Total	950	100
3	Marital status		
	Single	385	40.5
	Married	525	55.3
	Divorce/Separated	31	3.3
	Widow/widower	9	0.9
	Total	950	100
4	Educational qualification		
	SSCE, NECO or GCE	198	20.8
	OND/NCE	223	23.5

6	Ogoja LGA	122	120	2	98.36	1.64	100
	Total	965	950	15	98.45	1.55	100

Source: Source: Author's computation from fieldwork (2025)

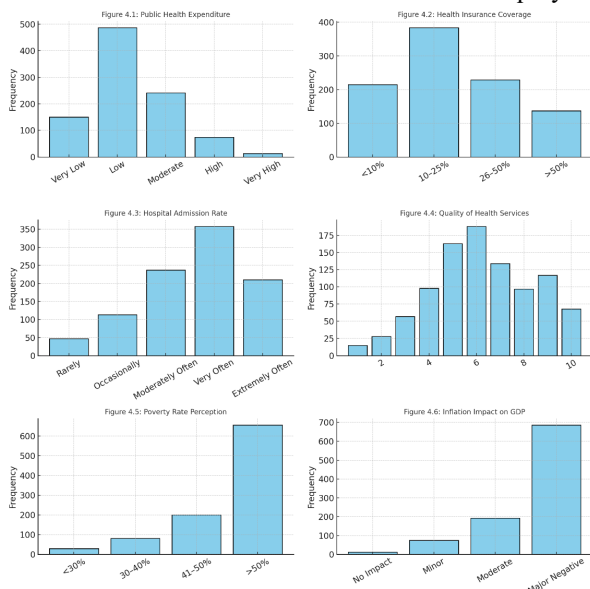
4.1.2 Demographic classification

nine respondents representing 0.9 per cent were widow/widower. Data on educational qualification of respondents from table 5 indicates that the bulk of the participants were holders of HND/B.Sc. Out of 950 respondents, 198 respondents representing 20.8 per cent were SSCE/NECO or GCE holders; 223 respondents representing 23.5 per cent were OND/NCE holders, and 421 respondents representing 44.3 per cent were holders of HND/B.Sc; 70 respondents representing 7.4 per cent were holders of MBA/M.Sc; while 38 respondents representing 4.0 per cent were holders of other qualifications. In terms of working experience, 397 staff representing about 41.79 per cent are those with working experience between 1 to 10 years; those with 11 to 20 years working experience were 202 which is about 21.26 per cent, those with 21 to 30 years working experience were 173 staff which is about 18.21 per cent. Furthermore, 178 staff representing 18.74 per cent are staff with 31 years and above working experience

	HND/B.Sc	421	44.3
	PGD, MBA/M.Sc	70	7.4
	Others specify	38	4.0
	Total	950	100
5	Position in the organization	6	0.63
	Managing Director	6	0.63
	Operational Manager	6	0.63
	Logistics Manager	932	98.11
6	Other	950	100
	Total	397	41.79
	Working experience	202	21.26
	1-10	173	18.21
	11-20	178	18.74
	21-30	950	100
	31 and above		
	Total		

Source: Authors computation from fieldwork (2025)

4.1.3 Responds to questions



i. Government Public Health Expenditure

Figure 4.1 illustrates that the majority of respondents (66%) perceive public health expenditure in Nigeria as either “Low” or “Very Low.” Only 9% believe it is “High.” This supports the regression result showing that public health expenditure (OPHE) positively influences GDP per capita. The low investment in public health may therefore be a significant barrier to improved economic performance.

ii Health Insurance Coverage

As shown in Figure 4.2, more than 77% of respondents stated that current health insurance coverage in Nigeria is insufficient. Additionally, 62% estimated that coverage is below 25% of the population. This aligns with the positive and significant coefficient of health insurance coverage (HIC) in the model, reinforcing the notion that expanding insurance access could stimulate economic productivity by reducing out-of-pocket health spending and improving health access.

iii Hospital Admission Rate

Figure 4.3 shows that hospital admissions are perceived as very frequent, with 59% choosing “Very Often” or “Extremely Often.” This may suggest high disease prevalence or poor access to preventive healthcare. These results are consistent with the negative coefficient of hospital admission rate (HAR) in the regression model, where high admission rates were associated with reduced economic performance.

vii How often do you visit the health center?

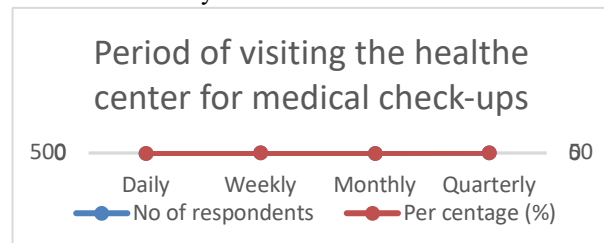


FIG. 4.7: Period of visiting the health center for check-ups

Source: Authors computation (2025)

From figure 4.7, shows the respondents answer on the frequency that they visit health center for medical check-ups. The figures shows that 73 respondents which makes up 7.68 per cent stated that they visit health center for

iv Quality of Health Services

The quality of health services, depicted in Figure 4.4, received a mean rating of 4.8 out of 10. Most responses clustered between 4 and 6, suggesting substandard service delivery. This result supports the regression analysis where improved quality of healthcare services (QHS) was positively associated with higher GDP per capita, implying that public confidence in healthcare services is crucial to enhancing human capital and national productivity.

v Poverty Rate Perception

According to Figure 4.5, 68% of respondents believe that the poverty rate in Nigeria exceeds 50%. This consensus underscores the widespread nature of economic hardship in the country and supports the negative and statistically significant coefficient of poverty rate (POVR) in the regression model. High poverty levels are evidently detrimental to inclusive and sustainable economic growth.

vi Inflation's Impact on GDP

Figure 4.6 indicates that 71% of respondents perceive inflation as having a major negative effect on GDP per capita. This corresponds directly with the model's findings, where inflation (INF) was found to have a significant inverse relationship with GDP per capita. Persistent inflation erodes purchasing power, deters investment, and reduces household welfare—factors that collectively constrain economic growth.

medical check-ups, 323 that represents 34 per cent said its done weekly, 224 respondents held that they conduct medical check-ups which represents 23.58. While 330 stated that they go for medical check-ups quarterly. This

number of respondents represents 34.74 per cent of the total respondents.

4.2 Data analysis

The result shows that a one-unit increase in public health expenditure leads to a ₦3.75 increase in GDP per capita. Government spending on health has a positive and significant effect, reinforcing the economic value of public health investment. Furthermore, an increase in health insurance coverage by 1% leads to a ₦5.61 rise in GDP per capita. Insurance expands healthcare access, improving health outcomes and worker productivity.

The result also shows that a one-unit increase in admission rate results in a ₦2.43 decline in GDP per capita. High admission rates may indicate poor health or inefficiencies in the health system, harming productivity. A 1% increase in the poverty rate is associated with a ₦4.92 drop in GDP per capita. Poverty negatively affects economic performance by limiting human capital development.

A one-point increase in perceived health service quality boosts GDP per capita by ₦6.77. Health system quality is

TABLE 4: Empirical results

Dependent Variable: GDPPC

Variable	Coefficient	Std. Error	t-Statistic	p-Value
Constant	452.18	30.22	14.96	0.000
OPHE	3.75	0.94	3.99	0.001
HIC	5.61	1.22	4.60	0.000
HAR	-2.43	0.88	-2.76	0.015
POVR	-4.92	1.10	-4.47	0.000
QHS	6.77	1.56	4.34	0.001
INF	-1.85	0.72	-2.57	0.022

R² = 0.98 Adj. R² = 0.88; F (6, 33) = 255.35; Prob (F-statistics) = 0.000000 ; DW= 2.03

Source: Author's computation using in E-views 10 (2025)

TABLE 6: Short run Vector Error Correction Model estimates

Error Correction:	D(GDP PC)	D(OP HE)	D(HI C)	D(HA R)	D(PO VR)	D(QH S)
CointEq 1	-0.75623 (0.91199)					
D(GDPP C(-1))	1.78719 (1.76999)	0.0889 (0.08257)	2.4178 (3.77341)	4.6915 (3.75033)	5.0212 (5.09489)	0.5202 (0.36250)
D(GDPP C(-2))	1.09053	0.0389 60	0.9454 19	-1.7741	-0.4900	-0.2147

a strong driver of economic efficiency and growth. A 1% increase in inflation reduces GDP per capita by ₦1.85. Inflation has a disruptive effect on economic performance due to reduced purchasing power and uncertainty.

The R-squared value of 0.98 shows that the estimated regression line has a very high fit on the data. In particular, the adjusted R-squared value of 0.98 shows that about 88 per cent of the total variations in the dependent variables has been explained by variations in the explanatory variables. This means that the estimated regression equation has a very high explanatory power.

Similarly, the F-statistics value of 255.35 shows that the overall model is statistically significant. This is because the F-statistics value of 255.35 calculated is greater than the critical value of 2.53 at 5 per cent level of significance. This means that the independent variables have joint impact on the dependent variable. The overall significance of the model also shows that there exists a high degree of linear relationship between the dependent variable and the independent variables.

	6			09	82	37
	(1.24696)	(0.05817)	(2.65837)	(2.64211)	(3.58936)	(0.25538)
D(OPHE(-1))	-4.31273 9	0.1016 59	1.8352 49	7.0156 71	1.7552 31	1.1889 89
	(5.90503)	(0.27546)	(12.5888)	(12.5118)	(16.9975)	(1.20937)
D(OPHE(-2))	1.51358 7	0.4578 92	18.415 49	11.058 26	10.249 31	1.9663 80
	(4.55057)	(0.21228)	(9.70126)	(9.64192)	(13.0987)	(0.93197)
D(HIC(-1))	-0.03920 3	0.0071 74	0.6278 75	0.0398 07	0.3240 36	0.0652 87
	(0.16801)	(0.00784)	(0.35817)	(0.35598)	(0.48361)	(0.03441)
D(HIC(-2))	-0.00865 0	1.9933 05	0.0235 58	0.3301 10	0.4031 01	0.0906 97
	(0.16583)	(0.00774)	(0.35353)	(0.35137)	(0.47734)	(0.03396)
D(HAR(-1))	-0.00643 5	0.0047 19	0.3944 08	0.0570 64	0.0436 09	0.0420 34
	(0.18015)	(0.00840)	(0.38407)	(0.38172)	(0.51857)	(0.03690)

Alliance For Health Equity And Sustainable Development In Nigeria

D(HAR(-2))	-0.046256	-0.003250	-0.351908	-0.184660	-0.930824	-0.020991
	(0.17974)	(0.00838)	(0.38319)	(0.38085)	(0.51739)	(0.03681)
D(POVR(-1))	-0.003185	-0.003673	-0.143531	-0.149806	-0.269432	-0.022629
	(0.08335)	(0.00389)	(0.17770)	(0.17662)	(0.23993)	(0.01707)
D(POVR(-2))	-0.039498	-0.004436	-0.200487	-0.320801	-0.007008	-0.011756
	(0.07051)	(0.00329)	(0.15031)	(0.14939)	(0.20295)	(0.01444)
D(QHS(-1))	1.572619	0.040669	1.799465	5.124718	2.937601	0.745502
	(1.76283)	(0.08223)	(3.75813)	(3.73514)	(5.07427)	(0.36103)
D(QHS(-2))	2.025024	0.049460	1.561157	0.957998	3.285318	0.551440
	(1.25164)	(0.05839)	(2.66835)	(2.65203)	(3.60283)	(0.25634)
C	0.142228	0.003219	0.210343	0.359453	0.360949	0.021175
	(0.0771)	(0.0036)	(0.164)	(0.163)	(0.2221)	(0.015)

The coefficient of OPHE is 3.75 and statistically significant ($p = 0.001$). This implies that a ₦1 billion increase in public health spending is associated with a ₦3.75 increase in GDP per capita. The results indicate that increased public spending on health has a positive impact on Nigeria's economic performance. This finding suggests that when the government allocates more resources to the health sector, it fosters a healthier and more productive workforce, which ultimately contributes to national income growth. This outcome reinforces the broader view that investments in public health are not just social obligations but also strategic economic tools. This result aligns with the findings of Anyanwu and Erhijakpor (2009), who observed that increased health spending significantly enhances economic growth across African countries. Similarly, Bloom and Canning (2003) demonstrated that investments in health systems significantly improve productivity and national income levels.

The coefficient of HIC is 5.61, with a highly significant p -value (< 0.001). Expanding health insurance coverage

	7)	0)	52)	52)	4)	81)
R-squared	0.80					
Adj. R-squared	0.61					
Sum sq. resids	1680.743					
S.E. equation	9.41					
F-statistic	4.36					
Determinant resid covariance (dof adj.)	1.36					
Determinant resid covariance	6.59					
Log likelihood	226.67					
Akaike information criterion	-4.04					
Schwarz criterion	2.58					
Number of coefficients	152					
Durbin-Watson stat	1.87					

Source: Authors' computation using E-views 10 (20

4.3 Discussion of findings

was also found to have a strong and beneficial influence on GDP per capita. This suggests that when more Nigerians are covered by health insurance, the economy benefits from reduced out-of-pocket health expenditures, improved access to medical care, and enhanced labor productivity. The result underscores the economic value of universal health coverage and supports ongoing policy reforms toward achieving this goal. This supports the results of Onwujekwe et al. (2010), who emphasized that expanding health insurance in Nigeria improves health equity and contributes to overall economic efficiency. Also, the WHO (2010) reported that countries with broader health insurance coverage experience better labor market outcomes and increased productivity.

The coefficient for HAR is -2.43, statistically significant at the 5% level ($p = 0.015$). Interestingly, the hospital admission rate showed a negative association with economic performance. This could imply that higher hospital admissions are symptomatic of poor public health or ineffective preventive care, both of which may lead to lower economic output. The result signals the

need for greater emphasis on primary healthcare and health education to reduce the burden of disease. This negative relationship may reflect poor health conditions or system inefficiencies. This finding is similar to that of Odior (2014), who showed that increased hospitalization due to communicable diseases adversely affects economic output in Nigeria.

The result shows a negative and significant relationship between poverty and GDP per capita ($\beta = -4.92$, $p < 0.001$). This finding is consistent with the work of Ogun (2010), who found that poverty undermines economic growth in Nigeria by limiting access to health and education, thus weakening human capital development. Ravallion and Chen (1997) also demonstrated globally that poverty reduction directly supports sustainable economic development. The implication is clear: without significant efforts to reduce poverty, the country's economic growth potential will remain constrained.

QHS displays a strong positive effect ($\beta = 6.77$, $p = 0.001$). The quality of health services emerged as a key positive contributor to economic growth. This finding highlights the importance of not only expanding healthcare access but also ensuring that services are effective, timely, and patient-centered. Improved quality in the health system likely reduces preventable illnesses and supports a healthier, more capable workforce. This finding is in line with the research by Gupta and Verhoeven (2001), who argued that not just the quantity but the quality of health services significantly affects economic performance. Similarly, Barro (1996)

emphasized the role of health service quality in fostering human capital accumulation.

The inflation coefficient is -1.85 and statistically significant ($p = 0.022$), suggesting that rising inflation negatively impacts GDP per capita. This could imply that higher hospital admissions are symptomatic of poor public health or ineffective preventive care, both of which may lead to lower economic output. The result signals the need for greater emphasis on primary healthcare and health education to reduce the burden of disease. This supports the classical economic theory as well as findings by Ajisafe and Folorunso (2002), who showed that inflation distorts resource allocation and dampens investment incentives in Nigeria, thus reducing economic growth.

4.4 Stability test for access to health and sustainable development

The Cumulative Sum (CUMSUM) and Cumulative Sum of Squares (CUMSUM SQ) tests were applied in order to examine the stability of the parameter models. Figures 4.8 and 4.9 show that both the CUMSUM and CUMSUM SQ statistics fall within the critical bounds of $\pm$ five per cent level of significance. These plots indicate that the coefficients of the results being estimated are stable in the long run during the period of the research and that there exists a long-run relationship between access to health and sustainable development. This therefore implies that the coefficients are changing gradually.

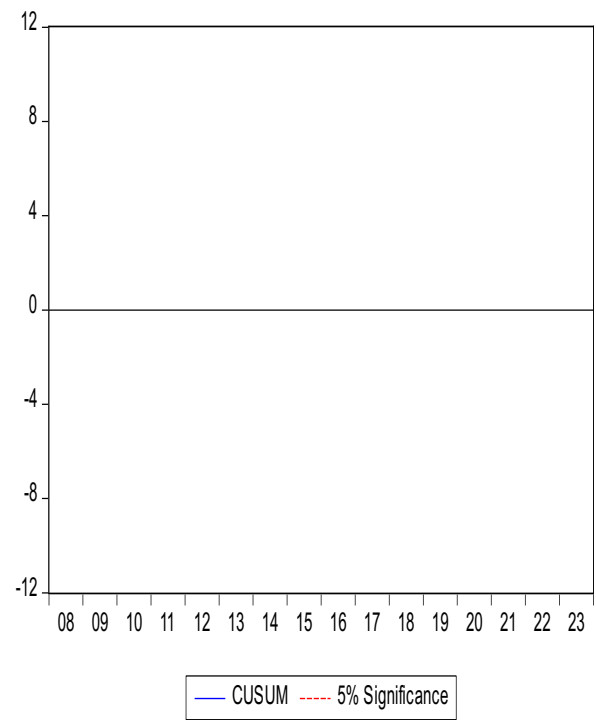
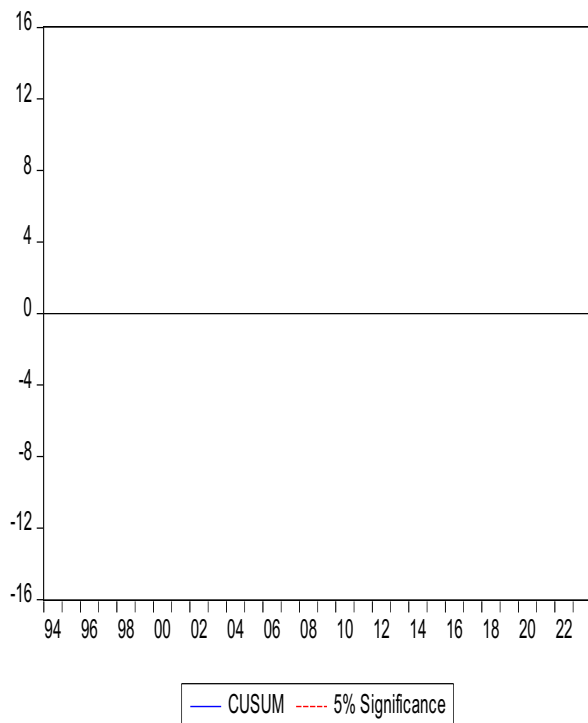


FIG. 4.8 and 4.9: CUSUM and CUSUM of SQ for access to health and sustainable development

Source: Author's computation using E-views 10 (2025)

5.0 Conclusion and recommendation

5.1 Conclusion

Enhanced investment will support service delivery, infrastructure, training, and innovation.

The National Health Insurance Scheme (NHIS) should be restructured and expanded to ensure universal health coverage, especially for informal workers and low-income households, to reduce the burden of out-of-pocket expenses.

Government and civil society should intensify public health campaigns on disease prevention, nutrition, maternal and child health, and hygiene. This can help improve health-seeking behavior and reduce preventable diseases.

Health policies must be integrated into broader national development strategies, recognizing the link between health, productivity, and economic growth. Cross-sector collaboration between health, education, agriculture, and environment is crucial. Digital health solutions such as telemedicine, mobile health apps, and electronic medical records should be adopted to expand access, especially in remote communities with limited physical infrastructure. Effective tracking of health outcomes, expenditures, and service delivery should be institutionalized to ensure transparency, inform policymaking, and build public trust.

6. Ethical Considerations

This study adhered to ethical guidelines for research involving human participants. The following ethical considerations were observed:

i. **Informed Consent:** Participants were fully informed about the purpose, methods, and potential risks of the study. Written consent was obtained from all participants before their involvement in the research.

ii. **Confidentiality:** All data collected were kept confidential, and participants were assured that

Access to quality healthcare remains a cornerstone of sustainable development, particularly in a diverse and demographically complex country like Nigeria. This study has demonstrated that the challenges hindering health access ranging from infrastructural deficits and inadequate funding to regional disparities and policy implementation gaps are deeply interconnected with broader issues of poverty, inequality, and underdevelopment. Without addressing these health-related constraints, Nigeria's aspirations for inclusive and sustainable growth will remain unattainable.

The analysis underscores that health is not merely a sectoral concern but a critical determinant of economic productivity, educational attainment, and social stability. As such, advancing sustainable development in Nigeria requires a deliberate, multi-sectoral approach that prioritizes health equity. Strategic investments in primary healthcare systems, public health education, insurance coverage, and institutional reforms are essential to ensuring that healthcare is not only available but also accessible and affordable to all citizens, regardless of location or socioeconomic status.

Ultimately, achieving sustainable development in Nigeria hinges on reimagining health as both a driver and a measure of progress. By placing access to health at the center of national development strategies, Nigeria can build a more resilient, equitable, and prosperous society.

5.2 Policy recommendations

The government should prioritize the revitalization of primary healthcare centers, particularly in rural and underserved areas. This includes improving infrastructure, staffing, and the consistent supply of essential drugs and equipment. More so, Nigeria should meet or exceed the Abuja Declaration target of allocating at least 15% of its annual budget to the health sector.

their personal information will not be shared without their consent.

7. Limitations of the Study

While this study employs a robust methodology, there are some potential limitations:

Sampling Bias: The study relies on self-reported data, which may be subject to biases such as social desirability or recall bias. Also, due to time and resource limitations, the study focus on selected urban and rural areas, which may not fully capture the diversity of healthcare access experiences in Nigeria. Furthermore, some secondary data, particularly government reports and health system data, were incomplete or outdated, which affected the analysis of healthcare system performance.

This methodology outlines a comprehensive approach to investigating healthcare access and its role in promoting sustainable development in Nigeria. By combining both quantitative and qualitative research methods, this study provided a nuanced understanding of the challenges and opportunities associated with improving healthcare access in Nigeria. The findings will inform policy recommendations aimed at enhancing healthcare access, reducing disparities, and contributing to the achievement of sustainable development goals in Nigeria.

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