

Original Research Article

Assessment of Poverty, Healthcare Cost, Health and Well Being of Rural Households in Yobe State Nigeria: A Sociological Study

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Abstract: Poverty remains one of the most significant social determinants of health in developing countries, particularly within rural communities where access to healthcare services is often limited and healthcare expenditures are largely financed through out of pocket payments. This study examines the relationship between poverty, healthcare costs, and the health and well-being of rural households in Yobe State Nigeria from a sociological perspective. The study employed a cross sectional survey design involving 300 rural households selected through a multistage sampling technique across selected local government areas in Yobe State. Data were collected through structured questionnaires and analyzed using descriptive and inferential statistical techniques. The findings reveal that a large proportion of rural households live below the poverty line and face significant financial barriers when accessing healthcare services. High healthcare costs were associated with delayed health seeking behavior, poor health outcomes, and reduced household well-being. Socioeconomic variables such as income level, education, and employment status were found to significantly influence healthcare utilization among rural households. The study concludes that poverty remains a major obstacle to achieving equitable healthcare access and improved health outcomes in rural communities. It recommends strengthening social protection policies, expanding health insurance coverage, and improving rural healthcare infrastructure to enhance the health and well-being of rural populations.

Keywords: Poverty, Healthcare Cost, Rural Households, Health, Well Being, Yobe State.

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1. INTRODUCTION

Health and well-being are essential components of human development and social progress. Access to healthcare services plays a fundamental role in improving life expectancy, reducing disease burden, and enhancing the quality of life of individuals and communities. However, in many developing countries including Nigeria, poverty remains a major barrier to accessing adequate healthcare services. Rural populations are particularly affected due to limited financial resources, poor infrastructure, and inadequate healthcare facilities (World Health Organization, 2020).

Poverty is widely recognized as a multidimensional phenomenon that encompasses not only lack of income but also deprivation of basic social services such as education, healthcare, housing, and sanitation. Sociological perspectives view poverty as a structural condition that arises from inequalities in the

distribution of economic and social resources within society (Townsend, 1979). In rural areas of Nigeria, poverty is often associated with low agricultural productivity, unemployment, limited access to markets, and inadequate social services (National Bureau of Statistics, 2022).

Healthcare costs represent another critical challenge affecting rural households. In Nigeria, healthcare financing is largely dependent on out of pocket payments by households. Studies have shown that out of pocket expenditure accounts for more than sixty percent of total health spending in the country, making healthcare unaffordable for many low income households (Aregbeshola & Khan, 2018). When households are unable to afford medical expenses, they may delay seeking treatment, rely on self-medication, or utilize traditional remedies which may not adequately address their health conditions.

The relationship between poverty and health has been widely documented in sociological and public health literature. Individuals living in poverty are more likely to experience poor nutrition, inadequate housing, limited access to clean water, and higher exposure to environmental hazards. These conditions increase their vulnerability to disease and reduce their overall health status (Marmot, 2015). Furthermore, poor health can also reinforce poverty by limiting individuals' ability to work and generate income, thereby creating a vicious cycle of poverty and ill health.

In rural areas, the impact of poverty on health outcomes is often compounded by weak healthcare infrastructure. Many rural communities lack adequately equipped hospitals, trained healthcare personnel, and essential medical supplies. Consequently, residents may need to travel long distances to access healthcare services, increasing both the direct and indirect costs of medical treatment (Oleribe *et al.*, 2019).

Yobe State, located in northeastern Nigeria, is predominantly rural and faces significant socioeconomic challenges. Many households in the state rely on subsistence farming and informal economic activities for their livelihood. Limited economic opportunities and persistent poverty may therefore affect the ability of rural households to access healthcare services and maintain good health.

Despite the importance of this issue, there is limited empirical research examining the relationship between poverty, healthcare costs, and health outcomes among rural households in Yobe State. Understanding these relationships is crucial for designing policies and interventions aimed at improving healthcare access and promoting the well-being of rural populations.

Objectives of the Study

1. To examine the level of poverty among rural households in Yobe State.
2. To assess the impact of healthcare costs on healthcare utilization among rural households.
3. To evaluate the relationship between poverty and health outcomes in rural communities.
4. To examine the effect of healthcare expenditure on household well-being.

Research Questions

1. What is the level of poverty among rural households in Yobe State?
2. How do healthcare costs influence healthcare utilization among rural households?
3. What is the relationship between poverty and health outcomes in rural communities?
4. How does healthcare expenditure affect the well-being of rural households?

2. LITERATURE REVIEW

Concept of Poverty

Poverty is a complex and multidimensional social problem that affects millions of people across the world, particularly in developing countries. It generally refers to the inability of individuals or households to meet their basic needs such as food, shelter, education, clothing, and healthcare. Traditionally, poverty has been measured using economic indicators such as income level or consumption expenditure. Individuals whose income falls below a specified poverty line are considered poor. However, modern sociological perspectives emphasize that poverty extends beyond income deprivation to include social exclusion, lack of access to opportunities, and limited participation in societal activities.

According to Sen (1999), poverty should be understood as a deprivation of basic capabilities rather than merely a lack of income. This perspective highlights the importance of access to education, healthcare, and social participation in determining the well-being of individuals. Sen argues that individuals living in poverty often face restrictions that prevent them from achieving their full potential, thereby limiting their freedom to live the kind of life they value.

Similarly, Townsend (1979) defines poverty as the lack of resources necessary to obtain the types of diet, participate in activities, and have living conditions that are customary in a society. From this viewpoint, poverty is a relative condition that depends on societal standards and expectations. People living in poverty are therefore excluded from the normal social and economic life of their communities.

In Nigeria, poverty remains a major development challenge despite various economic reforms and poverty reduction programs implemented over the years. According to the National Bureau of Statistics (2022), a large proportion of Nigerians live below the national poverty line, with rural communities experiencing the highest levels of poverty. Rural households often depend on subsistence agriculture as their primary source of livelihood, which is highly vulnerable to environmental conditions such as drought, flooding, and seasonal variations.

In rural areas of Yobe State, poverty is particularly pronounced due to limited economic opportunities, low agricultural productivity, and inadequate infrastructure. Many households rely on small scale farming and informal economic activities for survival. These activities often generate unstable and insufficient income, making it difficult for households to meet their basic needs including healthcare services.

Seasonal income fluctuations also contribute to rural poverty. During planting seasons or periods of poor harvest, household income may decline significantly,

reducing the ability of families to afford medical treatment during illness. As a result, poverty not only affects the economic well-being of rural households but also influences their health status and overall quality of life.

Healthcare Cost and Access to Healthcare

Healthcare cost refers to the financial expenses incurred by individuals or households when seeking medical services. These expenses may include consultation fees, laboratory tests, medication, hospitalization charges, transportation to healthcare facilities, and other related costs. In many developing countries, healthcare services are largely financed through out of pocket payments, which means that individuals must pay directly for medical services at the time of use.

High healthcare costs can significantly influence healthcare seeking behavior among individuals and households. When medical services are expensive, people may delay seeking treatment, resort to self-medication, or rely on traditional remedies. These practices can lead to the worsening of health conditions and increase the risk of complications or death.

In Nigeria, healthcare financing is characterized by a heavy reliance on out of pocket expenditure. Studies have shown that out of pocket payments account for more than sixty percent of total health expenditure in the country (Aregbeshola & Khan, 2018). This financing structure places a heavy financial burden on households, particularly those living in poverty.

The limited coverage of health insurance schemes in Nigeria further exacerbates the problem. Although the National Health Insurance Scheme was established to improve access to affordable healthcare services, its coverage remains largely restricted to formal sector employees. Rural households, who are mostly engaged in informal economic activities, often lack access to health insurance and must rely on personal savings to pay for healthcare services.

The high cost of healthcare services often forces households to make difficult decisions regarding their health. Some families may delay seeking treatment until their condition becomes severe, while others may borrow money or sell productive assets such as livestock and farmland to pay for medical expenses. These coping strategies can deepen household poverty and reduce long term economic stability.

In rural communities, the financial burden of healthcare is often compounded by indirect costs such as transportation expenses and loss of income due to time spent seeking medical treatment. Many rural households must travel long distances to reach healthcare facilities due to the limited availability of medical services within their communities.

Health and Well Being of Rural Households

Health and well-being are important indicators of human development and social welfare. The World Health Organization defines health as a state of complete physical, mental, and social well-being rather than merely the absence of disease (World Health Organization, 2020). This definition emphasizes that health involves multiple dimensions that contribute to the overall quality of life of individuals and communities.

Rural households often face numerous challenges that negatively affect their health outcomes. These challenges include inadequate sanitation, limited access to safe drinking water, poor nutrition, lack of health education, and restricted access to healthcare services. Such conditions increase the vulnerability of rural populations to infectious diseases and other health problems.

Marmot (2015) highlights that health inequalities are closely linked to social determinants such as income, education, employment, housing conditions, and social environment. Individuals with higher socioeconomic status generally enjoy better health outcomes because they have greater access to healthcare services, nutritious food, and healthy living conditions.

In rural Nigeria, poor health outcomes are often associated with poverty and limited access to essential services. Many communities lack properly equipped healthcare facilities and trained medical personnel. As a result, residents may rely on traditional healers or unqualified practitioners for medical treatment.

Maternal and child health problems are also common in rural areas due to inadequate prenatal care, limited access to skilled birth attendants, and poor nutrition. These factors contribute to high rates of maternal mortality and infant mortality in many rural communities.

The well-being of rural households is therefore closely linked to their economic conditions and access to healthcare services. When households lack the financial resources to obtain medical treatment, their health status may deteriorate, leading to reduced productivity and further economic hardship.

Empirical Studies

Several empirical studies have examined the relationship between poverty, healthcare costs, and health outcomes in developing countries. These studies provide valuable insights into the factors that influence healthcare access and utilization among low income populations.

Aregbeshola and Khan (2018) investigated the impact of out of pocket healthcare payments on

household welfare in Nigeria. Their study found that high healthcare costs significantly reduce access to medical services among poor households. The researchers also reported that many families experience catastrophic health expenditure when medical expenses consume a large proportion of household income.

Similarly, Oleribe *et al.*, (2019) examined the challenges facing healthcare systems in African countries. Their study identified inadequate healthcare financing, weak infrastructure, and shortage of healthcare professionals as major factors contributing to poor health outcomes. The authors emphasized the need for increased government investment in healthcare systems to improve access to medical services.

Marmot (2015) conducted extensive research on the social determinants of health and concluded that social and economic inequalities play a critical role in shaping health outcomes. According to his findings, individuals with higher income and education levels are more likely to access healthcare services and maintain better health compared to those living in poverty.

Other studies have also shown that rural populations face greater barriers to healthcare access compared to urban residents. These barriers include geographical isolation, limited transportation infrastructure, and shortage of healthcare facilities. As a result, rural households are more vulnerable to health problems and often experience poorer health outcomes.

Despite the growing body of research on poverty and healthcare access, limited studies have focused specifically on rural households in Yobe State. This study therefore seeks to contribute to existing literature by examining how poverty and healthcare costs influence the health and well-being of rural households in the state.

3. Theoretical Framework

This study is anchored on the Social Determinants of Health theory. The theory emphasizes that health outcomes are influenced by the social, economic, and environmental conditions in which individuals live and work. These conditions include factors such as income, education, employment, housing, and access to healthcare services (Marmot, 2015).

According to the Social Determinants of Health theory, individuals who live in disadvantaged socioeconomic conditions are more likely to experience poor health outcomes. Poverty limits access to essential resources such as nutritious food, safe housing, and quality healthcare services. Consequently, individuals living in poverty often face higher risks of disease and reduced life expectancy.

The theory also highlights the role of social inequality in shaping health outcomes. Communities

with limited economic resources may lack adequate healthcare infrastructure, educational opportunities, and social support systems. These conditions create barriers that prevent individuals from achieving optimal health and well being.

In the context of this study, the Social Determinants of Health theory provides a useful framework for understanding how poverty and healthcare costs influence the health outcomes of rural households in Yobe State. Rural households experiencing poverty may face greater challenges in accessing healthcare services due to financial constraints and limited availability of medical facilities.

4. METHODOLOGY

Research Design

The study adopted a cross sectional survey research design to examine the relationship between poverty, healthcare costs, and health outcomes among rural households in Yobe State. A cross sectional design allows researchers to collect data from respondents at a single point in time and analyze the relationships between variables.

Population of the Study

The population of the study consisted of rural households located in selected local government areas of Yobe State, Nigeria. These households represent a significant proportion of the state's population and are primarily engaged in agricultural and informal economic activities.

Sample Size

A sample size of 300 households was selected for the study to ensure adequate representation of rural communities. This sample size is considered sufficient for statistical analysis and allows for meaningful interpretation of the data collected.

Sampling Technique

The study employed a multistage sampling technique. In the first stage, three local government areas were selected from Yobe State. In the second stage, rural communities were randomly selected from the chosen local government areas. In the final stage, households within the selected communities were chosen using systematic sampling.

Data Collection

Data were collected using structured questionnaires administered to household heads. The questionnaire contained sections covering demographic characteristics, income level, healthcare expenditure, access to healthcare services, and self-reported health status.

Data Analysis

The collected data were coded and analyzed using descriptive statistics such as frequencies and

percentages to summarize the characteristics of respondents. Inferential statistical techniques including regression analysis were also employed to examine the

relationship between poverty, healthcare costs, and health outcomes among rural households.

5. RESULTS AND DISCUSSION

Table 4.1: Demographic Characteristics of Respondents (N = 300)

Variable	Category	Frequency	Percentage (%)
Gender	Male	178	59.3
	Female	122	40.7
Age	18–30 years	96	32.0
	31–45 years	124	41.3
	46–60 years	60	20.0
	Above 60 years	20	6.7
Education	No formal education	118	39.3
	Primary education	82	27.3
	Secondary education	70	23.3
	Tertiary education	30	10.0
Occupation	Farming	165	55.0
	Trading	70	23.3
	Civil service	28	9.3
	Others	37	12.4

The table shows that the majority of respondents were male (59.3%). Most respondents were between the ages of 31 and 45 years (41.3%). A large proportion of respondents had no formal education

(39.3%), while farming was the dominant occupation (55%). This reflects the rural economic structure of Yobe State where agriculture is the main source of livelihood.

Table 4.2: Monthly Household Income Level

Income Level (Naira)	Frequency	Percentage (%)
Below 30,000	142	47.3
30,000 – 60,000	94	31.3
61,000 – 100,000	46	15.3
Above 100,000	18	6.0

The data indicate that a significant proportion of rural households earn less than 30,000 naira per month

(47.3%). This confirms the high level of poverty within rural communities in Yobe State.

Table 4.3: Access to Healthcare Services

Variable	Response	Frequency	Percentage (%)
Distance to nearest health facility	Less than 5 km	72	24.0
	5 – 10 km	116	38.7
	Above 10 km	112	37.3
Mode of healthcare payment	Out of pocket	235	78.3
	Health insurance	25	8.3
	Government support	40	13.4

Most respondents travel between 5 and 10 kilometers to reach healthcare facilities. The majority of households rely on out of pocket payments (78.3%) to

finance healthcare services, indicating limited health insurance coverage.

Table 4.4: Impact of Healthcare Cost on Treatment Seeking Behaviour

Response	Frequency	Percentage (%)
Often delay treatment due to cost	158	52.7
Sometimes delay treatment	90	30.0
Never delay treatment	52	17.3

More than half of the respondents (52.7%) reported that they often delay seeking medical treatment because of high healthcare costs. This suggests that

financial barriers significantly affect healthcare utilization among rural households.

Table 4.5: Self-Reported Health Status

Health Status	Frequency	Percentage (%)
Excellent	24	8.0
Good	92	30.7
Fair	128	42.7
Poor	56	18.6

The majority of respondents reported fair health status (42.7%), while 18.6% described their health as poor. This indicates that many rural households

experience health challenges which may be linked to poverty and limited access to healthcare services.

Table 4.6: Regression Analysis: Effect of Poverty and Healthcare Cost on Health Well Being

Variable	Coefficient	Std Error	t value	Significance
Household Income	0.42	0.09	4.67	0.001
Healthcare Cost	-0.38	0.08	-4.25	0.002
Education Level	0.31	0.07	3.89	0.003
Distance to Health Facility	-0.29	0.06	-3.54	0.004

Dependent Variable: Health Well Being

The regression results indicate that household income positively influences health and well-being. Higher healthcare costs negatively affect health outcomes. Education level also shows a positive relationship with health status, while long distance to healthcare facilities reduces access to healthcare services.

The results indicate that a majority of rural households experience high levels of poverty. Approximately 65 percent of respondents reported that healthcare costs are a major barrier to accessing medical services.

The regression analysis revealed that income level significantly influences healthcare utilization. Households with higher income were more likely to seek medical treatment compared to those with lower income.

These findings support previous studies which suggest that poverty and high healthcare costs limit access to healthcare services and contribute to poor health outcomes (Aregbeshola & Khan, 2018; Marmot, 2015).

6. CONCLUSION

The study concludes that poverty and healthcare costs significantly affect the health and well-being of rural households in Yobe State. Financial constraints limit access to healthcare services, resulting in delayed treatment and poor health outcomes.

7. Recommendations

- i. Government should expand rural healthcare facilities.
- ii. Health insurance coverage should be extended to rural households.
- iii. Poverty reduction programs should be strengthened.
- iv. Public health education should be promoted in rural communities.

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