SOCIO-ECONOMIC STATUS AND UTILIZATION OF HEALTHCARE SERVICES IN OBI LOCAL GOVERNMENT AREA OF NASARAWA STATE, NIGERIA

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Abstract

This study examined the relationship between socio economic status and utilization of healthcare services in Obi Local Government Area of Nasarawa State Nigeria. The study is rooted in persistent disparities in healthcare access in rural Nigeria where income, education and employment continue to shape health seeking behaviour despite policy efforts to expand coverage. The objectives were to assess the effects of income level, educational attainment and employment status on healthcare utilization. The study was anchored on Andersen's utilization of health services theory which explains healthcare use through predisposing, enabling and need factors while acknowledging structural constraints. A descriptive survey research design was adopted. Data were collected from 372 adults using structured questionnaire and in-depth interviews selected through multistage sampling. Quantitative data were analysed using descriptive statistics while qualitative data were analysed thematically. The findings revealed that low income significantly constrained access, frequency, quality and continuity of healthcare utilization leading to delayed treatment, self-medication and reliance on traditional care. Educational level influenced health literacy for formal healthcare and preventive service use although its effect was mediated by economic capacity and sociocultural factors. Employment status enhanced healthcare utilization through income stability and access to health insurance while unemployment reduced regular check-ups and preventive care. The study concludes among others that socio economic status remain a critical determinant of healthcare utilization in Obi Local Government Area operating through both individual and structural pathways. It recommends, among other measures, enhancing financial protection mechanisms, expanding community-based health insurance, implementing targeted health education programs, and extending health coverage to workers in the informal sector to ensure more equitable access to healthcare.

Keywords: Socio economic status, Healthcare utilization, Income level, Educational attainment, Employment status

Introduction

Utilization of healthcare services is a complex issue influenced by a variety of socio-economic factors, including income level, educational attainment, employment status, and social support networks. These factors impact an individual's ability to access and utilize healthcare, making healthcare access a significant global challenge (Hussain, 2022). Despite advancements in medical technology and healthcare delivery, disparities in healthcare access persist across different social and economic groups, affecting not only individual health outcomes but also broader public health. Access to healthcare is defined as the timely use of personal health services to achieve optimal health outcomes, and its importance as an indicator of a healthcare system's effectiveness is widely recognized (Braveman & Gottlieb, 2020).

The persistent disparities in healthcare access across different socio-economic groups are evident in both developed and developing countries. For instance, despite having advanced healthcare systems, the United States continues to grapple with significant disparities, with millions lacking health insurance, especially among racial minorities and low-income populations (United States Census Bureau, 2023). Similarly, in the United Kingdom, disadvantaged areas face longer waiting times for healthcare services (National Health Service Digital, 2023). In developing nations, particularly in Africa, socio-economic inequalities are even more pronounced, as many populations, especially those in rural areas, face significant barriers in accessing healthcare services. This includes limited healthcare facilities, high out-of-pocket costs, and geographic disparities (World Health Organization, 2023).

In Nigeria, socio-economic factors are significant determinants of healthcare utilization. The World Health Organization (2023) reports that a large proportion of Nigerians pay for healthcare out-of-pocket, with the poorest populations facing the greatest barriers. Similarly, income inequality and rural-urban disparities exacerbate healthcare access issues, with rural areas having fewer healthcare facilities (Federal Ministry of Health, Nigeria, 2023). Educational level also plays a crucial role, as individuals with lower levels of education tend to have limited awareness of available healthcare services and preventive care (National Health Service Programme, 2023).

This study addressed the gap in understanding how socio-economic status affects healthcare utilization in Obi Local Government Area (LGA) of Nasarawa State, Nigeria. Despite government efforts to improve healthcare access, disparities persist, particularly among low-income and rural populations. This study critically examined the influence of income, education, and employment status on healthcare utilization in Obi LGA. The findings provided important understanding into the barriers to healthcare access in this region, contributing to the body of knowledge on healthcare disparities and informing policy interventions aimed at improving healthcare access for vulnerable populations.

Research Objectives

The specific objectives of the study are to:

1. examine the effects of income level on utilization of health care services in Obi Local Government Area.
2. analyse educational level and utilization of health care services in Obi Local Government Area.
3. investigate the effects of employment status and utilization of health care services in Obi Local Government Area.

Conceptual Clarifications

Income Level and Utilization of Health Care Services

Income level exerts a strong influence on the utilization of health care services in Nigeria. In community-based studies, individuals with higher income or wealth consistently demonstrate greater use of formal health services than their lower-income counterparts (Archibong, Umoh & Etim, 2026). Lower income is associated with reduced likelihood of visiting health facilities when ill, while higher socioeconomic status increases uptake of antenatal, facility-based delivery and postnatal services (Oburota, Nwachukwu & Chukwu, 2023; Okoli, Nnamani & Ezeh, 2020). National survey analyses using Demographic and Health Survey 2018 data revealed that utilization measures such as antenatal care visits and skilled birth attendance are disproportionately concentrated among wealthier women, with negative concentration indices indicating lower service use among poorer segments (Nwosu, Ogbuji & Okoro, 2019). This pro-rich inequality persists despite national efforts to improve access, suggesting that economic barriers remain a major determinant of health service use across regions and population groups in Nigeria.

The mechanisms underlying this pattern are tied to direct costs and the structure of health financing in the country. Nigerian households still fund the majority of health care through out-of-pocket payments, which exceed 70 percent of total health spending, thereby limiting access for poorer households who cannot afford these costs (Jia, Zhang & Yang, 2025; Ogbodo, 2025). Where income is insufficient to cover direct and indirect health expenses, individuals may delay care, self-medicate, or rely on informal and traditional providers, further entrenching inequities in utilization (Muhammed, 2013; Archibong et al., 2026). Aggregate data show that disparities are not only economic but also geographic and educational, with low-income, less educated, and rural residents less likely to access key services such as skilled delivery or preventive care, reinforcing inequalities in health outcomes (Nwosu et al., 2019; Okoli et al., 2020). These findings highlight the need for policies that reduce financial barriers, strengthen social insurance schemes and expand equitable access to quality health services to address income-related disparities in utilization.

Educational Level and Utilization of Health Care Services

Educational attainment is a strong predictor of health care service utilization, particularly for maternal and child health indicators. Adedokun and Uthman (2023), revealed that women with secondary or higher education are substantially more likely to use antenatal care, deliver in health facilities, and attend postnatal care compared to those with less education. Specifically, 90 percent of women with secondary or higher education attended at least one antenatal care visit, 69 percent delivered in a health facility, and 30 percent received postnatal care, compared to significantly lower utilization among less educated groups. These findings aligned with broader evidence that maternal education enhances health literacy and awareness of services, which in turn influence timely and complete utilization of care (Bello, Esan, Akerele & Fadare, (2022; Umar, 2017). Cross-sectional analyses also indicate that only 74 percent of Nigerian women overall attend antenatal care, 41 percent deliver in formal health facilities, and 21 percent seek postnatal care, underscoring persistent gaps in service uptake that correlate with educational differentials (Adedokun & Uthman, 2023).

Beyond maternal health, the literature on general health care use and educational level in Nigeria underscores education as a mediator of health seeking behaviour and health outcomes. Research on health literacy suggests that only 38 percent of adults have access to formal education, which constrains health-related behaviours across populations (Enebeli, 2025). Higher educational attainment is linked not only to increased utilization of specific services but also to enhanced

ability to navigate health systems, understand preventive care, and engage with health information effectively (Bello et al. 2022). Studies focusing on health insurance enrollees also reveal that educational level can affect the effective use of National Health Insurance Scheme benefits, indicating that individuals with greater education are more likely to engage with available health coverage and services. Collectively, this body of evidence positions educational attainment as a key social determinant of health service utilization in Nigeria, with implications for interventions aimed at increasing access and reducing disparities in health outcomes.

Employment Status and Utilization of Health Care Services

Employment status in Nigeria has a demonstrable impact on how individuals access and use health care services, with both economic and structural mechanisms shaping patterns of utilization. Empirical evidence from studies of the National Health Insurance Scheme (NHIS) in Lagos indicates that formal employment significantly increases both registration with and utilization of health insurance–linked health services; civil servants, for whom NHIS coverage is often mandatory, had markedly higher participation rates than informal or unemployed groups, and employment status was statistically associated with utilization ($p = 0.001$) in cross-sectional analysis of adult patients at a tertiary facility (Abiola, Ladi-Akinyemi, Oyeleye, Oyeleke, Olowoselu, & Abdulkareem, 2019). In this context, less than one-fifth of general attendees were registered with NHIS, and formal sector employment emerged as a key determinant of both registration and utilization, reinforcing the role that stable employment plays in facilitating financial access to care within Nigeria's predominantly out-of-pocket health financing system (Abiola et al., 2019). Complementary evidence from tertiary hospital data in South-Western Nigeria shows that employment status and monthly income are significant predictors of service utilization among NHIS enrollees, with 88.1 % reporting enhanced use of health facilities after enrolment and employment status remaining a significant factor after adjusting for other sociodemographic variables (Adebobola, Olomofe, Akinwumi, & Adebobola, 2023). These findings point to a broader structural pattern in which employment not only secures financial coverage but also increases the likelihood of seeking preventive and curative services.

Beyond insurance enrolment, the broader relationship between employment status and health service utilization in Nigeria can be interpreted through socioeconomic lenses that link income, occupation, and access. Studies of occupational and socioeconomic determinants in Calabar and other urban centres have found that income level and occupational status shape utilization patterns: individuals with higher income or formal employment were more likely to seek health care and overcome financial barriers to access (Archibong, 2020). While linked socioeconomic factors complicate the measurement of employment per se, these data align with national estimates suggesting that only about 5 % of Nigerians are enrolled in any health insurance scheme and roughly 70 % continue to fund health care through out-of-pocket payments, a situation that disproportionately disadvantages the unemployed or informal workers who lack stable income or employer-sponsored coverage (Eze, Iseolorunkanmi & Adeloye, 2024). From a policy standpoint, these patterns underscore the need to expand formal employment opportunities and incorporate informal sector workers into social health protection mechanisms if Nigeria is to improve equity in health care utilization.

Theoretical Framework

Utilization of health services theory

The utilization of health services theory was developed by Ronald M. Andersen in 1968 and revised in 1973, 1995, and later years, provides a framework for understanding the factors that influence an individual's access to and utilization of healthcare services (Andersen, 1995). The

theory categorizes these factors into three components: predisposing factors, enabling factors, and need factors (Andersen, 1968). This framework is applicable to the study of socio-economic factors and access to healthcare services in Obi Local Government Area, Nigeria.

Predisposing Factors: These include demographic characteristics such as age, gender, education, and cultural beliefs. In Obi Local Government Area, a predominantly rural area, cultural and traditional beliefs may discourage healthcare utilization, particularly maternal and child health services. Low educational levels further limit awareness of available healthcare services.

Enabling Factors: Enabling factors encompass resources such as income, transportation, and healthcare infrastructure. Poverty, a common socio-economic challenge in Obi, hinders individuals' ability to afford healthcare services. Poor road networks and a lack of transportation exacerbate physical inaccessibility to health facilities.

Need Factors: These factors relate to individuals' perception of their health needs and illness severity. In Obi, many residents may underutilize healthcare services due to a lack of understanding of the severity of their conditions, further compounded by limited health education.

Critics argued that Andersen's framework is overly descriptive and lacks predictive power, as it focuses on categorization rather than exploring the dynamics between the components. Additionally, the theory has been criticized for its limited consideration of systemic and structural barriers, such as health policy inadequacies or corruption, which are significant in contexts like Nigeria (Mgbemena & Okeahialam, 2022).

The utilization of health services theory is a valuable framework for examining socio-economic factors influencing healthcare access in Obi Local Government Area. While predisposing, enabling, and need factors provide insights, addressing systemic challenges such as inadequate healthcare funding and infrastructural deficits is critical to improving healthcare access in the area. The integration of resource dependency theory and Andersen's utilization of health services theory provides a comprehensive framework for analysing socio-economic influences on healthcare utilization in Obi LGA, Nasarawa State. Resource dependency theory explains systemic constraints, such as reliance on unstable funding, limited infrastructure, and external resources, while utilization of health services theory focuses on individual-level factors like income, education, and perceived health needs. Both theories highlighted the impact of resource availability on healthcare access, with overlapping concerns around poverty, poor transportation, and low health literacy. Their combination captures both supply-side and demand-side barriers.

Methodology

This study employed a descriptive survey research design, chosen for its ability to easily access primary data from a sample within a large population, ensuring minimal bias and effective generalization. The design allowed for the collection of data from a wide population, facilitating time and cost efficiency. The study was conducted in Obi Local Government Area (LGA) in Nasarawa State, Nigeria, an area known for its agricultural productivity, cultural vibrancy, and socio-political significance. Obi LGA, with a population of approximately 290,000 people, features a mix of savannah and forest vegetation, a climate conducive to farming, and a population that engages in agriculture, particularly the cultivation of crops such as yam, cassava, and maize, alongside livestock farming. However, the healthcare infrastructure in the area is limited, with primary healthcare centres facing challenges related to medical staffing and equipment.

The study's target population consisted of adult men and women aged 18 and above in Obi LGA, which was projected to include 128,000 adults. Using the Yamane formula, a sample size of 400 respondents was determined for the quantitative part of the study. A multi-stage sampling technique was used, beginning with the selection of five wards from the 10 in Obi LGA, followed by the identification of communities within each ward, and random selection of households. Stratified random sampling ensured representation from different socio-economic groups. The study also applied Bowley's proportional method to ensure that the sample from each ward reflected the population distribution accurately. Primary data were collected through both questionnaires, designed with a three-point Likert scale, and in-depth interviews with key community leaders and healthcare providers to provide deeper insights into healthcare access barriers.

Quantitative data was analysed using SPSS software, employing descriptive and inferential statistics such as frequencies, percentages. Qualitative data from interviews were transcribed and analysed manually through content analysis, focusing on themes aligned with the study's objectives. Despite challenges such as low literacy levels among some respondents, logistical issues, and financial constraints, the study was able to overcome these obstacles through community engagement, flexible scheduling, and efficient use of available resources. Ethical considerations, including ensuring informed consent and confidentiality, were upheld throughout the study to protect participants' rights and well-being.

Findings

Of the 400 copies of questionnaire distributed, 372 (93%) were duly completed and returned, while 28 (7%) were either missing or incomplete and thus not recovered. Consequently, the analysis was based on the 372 valid responses.

Table 1: Socio- Demographic Distribution of Respondents

Variables	Frequency (N=372)	Percentage (%)	Mean	Std
Age				
18-25	108	29.0	**42.3**	**19.0**
26-33	36	9.7		
34-41	46	12.4		
42 and above	182	48.9		
Sex				
Male	182	48.9		
Female	190	51.1		
Marital Status				
Single	79	21.2		
Married	201	54.0		
Divorced	37	9.9		
Widowed	38	10.2		
Separated	17	4.6		
Level of Education				
Non formal education	153	41.1		
Primary	84	22.6		
Secondary	85	22.8		
Tertiary	50	13.4		
Religion				
Christianity	152	40.9		

Islam	211	56.7		
Africa Traditional Religion	9	2.4		
Occupation				
Farming	135	36.3		
Trading	118	31.7		
Public employed	11	3.0		
Private employed	44	11.8		
Unemployed	64	17.2		
Income				
1000-10,000	32	8.6	**72,128**	**87, 218**
10,001-20,000	51	13.7		
20,001-30,000	43	11.6		
30,001-40,000	213	57.3		
40,001 and above	33	8.9		

Source: Fieldwork, 2025

Table 1 indicates respondent population skewed toward older adults, with those aged 42 years and above constituting nearly half of the sample at 48.9 percent, reflected in a relatively high mean age of 42.3 years and a wide standard deviation of 19.0, suggesting substantial age dispersion that is likely to shape patterns of healthcare utilization through increased morbidity and demand for chronic care services. Sex distribution is balanced, with females slightly predominating at 51.1 percent, implying minimal gender bias while still allowing examination of gendered differences in healthcare seeking behavior. Marital status is dominated by married respondents at 54.0 percent, followed by singles at 21.2 percent, indicating that household structure and spousal support may play a significant role in healthcare decision making and utilization. Educational attainment is generally low, as 41.1 percent reported non formal education and only 13.4 percent attained tertiary education, an implication that health literacy constraints may limit effective use of formal healthcare services and increase reliance on informal care. Religious affiliation is mainly Islam at 56.7 percent and Christianity at 40.9 percent, suggesting that faith based norms and institutions could influence health beliefs and service utilization pathways. Occupationally, respondents are concentrated in farming at 36.3 percent and trading at 31.7 percent, with relatively few in public employment, indicating a predominance of informal sector livelihoods often associated with unstable income and limited health insurance coverage. Income distribution further underscores economic vulnerability, with the majority earning between 30,001 and 40,000 and a high mean income of 72,128 coupled with a very large standard deviation of 87,218, signaling pronounced income inequality that is likely to translate into unequal access to healthcare services. Overall, each socio demographic characteristic points to structural inequalities in socio economic status that are expected to significantly condition both the capacity and willingness of individuals to utilize healthcare services.

Table 2: Distribution of respondents by income level and utilization of healthcare services

Questions	Yes	No	Not Sure	Mean	Std
Does low income prevent individuals from accessing healthcare services?	178 (47.8%)	130 (34.9%)	64 (17.2%)	1.69	.747
Does how much someone makes influence their frequency to hospital visits?	237 (63.7%)	88 (23.7%)	47 (12.6%)	1.49	.710
Does income level determine the choice between traditional and modern healthcare?	238 (64.0%)	79 (21.2%)	55 (14.8%)	1.51	.740
Do individuals with low income delay seeking medical treatment?	179 (48.1%)	135 (36.3%)	58 (15.6%)	1.67	.730
Does income influence the decision to self-medicate rather than seek professional care?	198 (53.2%)	121 (32.5%)	53 (14.2%)	1.61	.724
Do you think that income is a major determinant in the quality of healthcare received?	255 (68.5%)	73 (19.6%)	44 (11.8%)	1.43	.695
Are low-income earners less likely to follow up on referrals to consultants?	197 (53.0%)	90 (24.2%)	85 (22.8%)	1.70	.818

Source: Fieldwork, 2025

Table 2 demonstrates a strong perceived linkage between income level and healthcare utilization, as reflected across the response categories. Nearly half of the respondents at 47.8 percent affirmed that low income prevents access to healthcare services, while 34.9 percent disagreed and 17.2 percent were uncertain, indicating that financial barriers are widely recognized though not universally experienced, with implications for unequal access rooted in socio economic stratification. A larger proportion at 63.7 percent agreed that income influences the frequency of hospital visits, suggesting that individuals with higher earnings are more likely to seek care regularly, an implication that utilization is elastic to financial capacity. Similarly, 64.0 percent affirmed that income determines the choice between traditional and modern healthcare, implying that low income may push individuals toward less costly informal or traditional options, thereby reinforcing dual systems of care based on economic status. Regarding treatment delay, 48.1 percent agreed that low income earners delay seeking medical attention, while 36.3 percent disagreed, indicating that financial constraints may contribute to late presentation and poorer health outcomes among disadvantaged groups. More than half of the respondents at 53.2 percent agreed that income influences self-medication practices, suggesting that limited financial resources encourage cost avoiding behaviours that may undermine appropriate care utilization. A substantial majority at 68.5 percent perceived income as a major determinant of the quality of healthcare received, underscoring the implication that socio economic inequality translates directly into differential treatment experiences and outcomes. Finally, 53 percent agreed that low income earners are less likely to follow up on referrals to consultants, while a relatively high 22.8 percent were unsure, implying that financial uncertainty constrains continuity of care and specialist utilization. Collectively, the distribution of responses highlights income as a central dimension of socio economic status shaping access frequency choice quality and continuity of healthcare utilization. During the interview, some interviewees stated that.

> Ah, money is everything for hospital. When my child was sick last month, I had to borrow N15,000 just for consultation and drugs. Many of my neighbours just pray and hope sickness will go away because they cannot afford hospital bills **(IDI, Female; Age; 34; Gwadenye).**

Similarly, another respondent said that:

> Low income is the biggest wahala we face. When I am sick, I first check my pocket before checking my body. Sometimes I stay home for weeks because I cannot afford even the consultation fee. The children suffer most

> we choose between feeding them and taking them to hospital. (**IDI, Male; Age; 56; Adudu).**

A 57 years woman from Tudun Adabu narrated that:

> Income is everything for healthcare. In our village, we have saying: 'No money, no medicine.' Even when government hospital is free, you still need money for transport, drugs, and sometimes even bed space. Many people here die not because medicine cannot cure them, but because they cannot afford it. As a civil servant earning ₦80,000 monthly, any serious illness can finish my salary. I have seen colleagues sell their properties to pay for surgery. The fear of medical bills sometimes makes us avoid hospitals until condition becomes critical.

In confirmation, a 51 years community leader from Gidan Ausa II stated that:

> As traditional ruler, I see this problem daily. In my community, majority cannot afford basic healthcare. Parents bring dead children saying they had no money for treatment. Low income is killing our people more than diseases themselves. Income determines everything - from choosing healthcare provider to completing treatment. In my local government, we record many preventable deaths due to inability to pay for timely medical care.

Respondents were asked to express their opinions on whether income level influences the frequency of hospital visits; some participants indicated that:

> Of course! When my salary was ₦30,000, I visited hospital maybe twice a year only for emergencies. Now earning ₦120,000, I go for check-ups quarterly and take my family for routine visits. More money means more healthcare. **(IDI, Male; Age, 40; Adudu).**

Another interviewee emphasised that:

> Since retirement, my hospital visits reduced drastically. Before, I could afford monthly check-ups for my diabetes. Now, I go only when blood sugar is critically high. Reduced income means reduced healthcare access. Earning power plays huge role. When I was still working, my colleagues with higher salaries visit private hospitals monthly for executive check-ups. Those of us on lower grades visit only when sick. Income creates different healthcare cultures. (**IDI, Female; Age, 68; Agwatashi)**.

A 55 years community leader from Gwadenye stated that:

> Income creates clear patterns in hospital visits. High-income families visit hospitals regularly for preventive care and minor issues. Low-income families reserve hospital visits for life-threatening emergencies only.

Some of the healthcare providers, stated that:

> High-income patients visit regularly for check-ups, preventive care, and minor concerns. Low-income patients visit infrequently, usually for advanced conditions that could have been prevented with earlier intervention. Patient income dramatically affects visit frequency. Wealthy parents bring children for every small fever or concern. Poor parents delay visits until children are seriously ill, missing important preventive and early intervention opportunities **(IDI, Nurse; Female; Age, 42; Agwatashi).**

Table 3: Distribution of respondents by educational level and utilization of healthcare services

Questions	Yes	No	Not Sure	Mean	Std
Does level of education influence individual's decision to seek health care services?	140 (37.6%)	208 (55.9%)	24 (6.5%)	1.69	.587
Have you ever delayed seeking medical treatment due to limited health knowledge?	136 (36.6%)	209 (56.2%)	27 (7.3%)	1.71	.594
Does individual level of education determine their preference for formal health care over traditional medicine?	238 (64.0%)	83 (22.3%)	51 (13.7%)	1.50	.725
Do you think educated individuals utilize preventive health care services more than uneducated individuals?	275 (73.9%)	69 (18.5%)	28 (7.5%)	1.34	.612
Do you think higher education leads to increased awareness of personal health rights?	192 (51.6%)	116 (31.2%)	64 (17.2%)	1.66	.756
Does individual education influence their choice of health care services?	204 (54.8%)	115 (30.9%)	53 (14.2%)	1.59	.726
Does individual educational level affect how often they go for medical check-ups?	211 (56.7%)	110 (29.6%)	51(13.70%)	1.57	.722

Source: Fieldwork, 2025

Table 3 presents a distribution of respondents' educational levels and their utilization of healthcare services. It shows that a significant portion of respondents believe that education influences healthcare decisions, with the mean values ranging from 1.34 to 1.71, indicating general agreement with the statements. For instance, 73.9% of the respondents agreed that educated individuals are more likely to utilize preventive healthcare services compared to their uneducated counterparts, with a mean score of 1.34, suggesting strong support for this notion. Similarly, respondents believe that education impacts individuals' preferences for formal healthcare over traditional medicine (mean = 1.50) and their knowledge of personal health rights (mean = 1.66). On the contrary, a higher percentage of individuals (55.9%) disagreed with the statement that education influences the decision to seek healthcare services, indicating some skepticism around education's role in initiating healthcare seeking behaviour (mean = 1.69). The data suggests that educational attainment positively affects the frequency of medical check-ups (mean = 1.57) and healthcare choices. These findings underscore the importance of education in shaping health behaviours, influencing both preventive care utilization and engagement with formal healthcare services. The study explained how increasing educational interventions could enhance healthcare access and utilization among undereducated groups, potentially improving health outcomes in the population. This findings were collaborated with some response from the interviewers, when they were asked if they ever delayed seeking medical treatment due to limited health knowledge, some interviewee stated that:

> Not really due to lack of knowledge, but sometimes I have delayed because I wanted to research the condition first online or consult multiple sources. My education taught me to be analytical, so I do not rush into medical decisions without understanding them fully. **(IDI, Male; Age, 64; Adudu).**

This was further affirmed by another interviewer who stated that:

> This is very common in our community. People do not know the difference between symptoms that need immediate attention and those that can wait. Many rely on traditional knowledge passed down, which sometimes delays proper medical care. **(IDI, Community leader; Age; 53; Gwadenye).**

A 38 years old community health centre nurse stated that:

> Patients arrive with advanced conditions that could have been treated easily if caught early. Those with limited education often misinterpret symptoms or rely on unqualified advice from neighbours or traditional healers. Educated patients generally seek care earlier and ask relevant questions. However, some over-educated patients delay by over-researching online. The biggest delays come from patients with limited health literacy who do not recognize serious symptoms.

Respondents were asked if individual level of education determine their preference for formal health care over traditional medicine, some participants stated that:

> Absolutely. My scientific background makes me trust evidence-based medicine more. However, I do not completely dismiss traditional medicine, I use it as complementary care when there is evidence supporting it, not as primary treatment for serious conditions **(IDI, Female; Age; 36; Agwatashi).**

Another interviewee narrated that:

> I prefer hospitals for serious issues, but I still use traditional medicine for minor problems like headaches or stomach upset. My education helps me know which problems need professional medical attention and which do not **(IDI, Youth leader; Male; Age; 31; Tudun Adabu).**

A 51 years community doctor from Gidan Ausa II stated that:

> Educated patients come to us first and use traditional medicine as supplement. Less educated patients often try traditional healers first and come to us when condition worsens. Some refuse our treatment if it conflicts with traditional beliefs.

Respondents were asked if individual educational level affect how often they go for medical check-ups. Some of the interviewees stated that:

> Absolutely. My education taught me the importance of regular health monitoring. I have annual comprehensive check-ups, regular blood pressure and cholesterol screenings, and age-appropriate cancer screenings. I see it as health investment. **(IDI, Male; Age; 42; Tudun Adabu).**

Another interviwee also noted that:

> I understand check-ups are important, but I do not go as regularly as I should - maybe once every two years. Financial constraints and work commitments are barriers, but I do try to take my children for regular check-ups **(IDI, Female; Age, 53; Agwatashi).**

A 61 years old community leader from Gidan Ausa II narrated that:

> Educated people go for check-ups even when feeling well. They understand prevention. Less educated people only visit healthcare facilities when sick. We need community health education to change this mind-set.

Table 4: Distribution of respondents by employment status and utilization of healthcare services

Questions	Yes	No	Not Sure	Mean	Std
Does being employed increase utilization to health care services?	216 (58.1%)	120 (32.3%)	36 (9.7%)	1.52	.667
Does joblessness reduce the likelihood of utilizing health care services?	281 (75.5%)	55 (14.8%)	36 (9.7%)	1.34	.648
Does employment provide individuals with health insurance coverage?	295 (79.3%)	40 (10.8%)	37 (9.9%)	1.31	.642
Does the absence of a stable job discourage individuals from attending medical check-ups?	263 (70.7%)	45 (12.1%)	64 (17.2%)	1.47	.771
Does being employed increase utilization of available health care services?	242 (65.1%)	85 (22.8%)	45 (12.1%)	1.47	.702
Are unemployed persons less likely to have regular health screenings?	220 (59.1%)	79 (21.2%)	73 (19.6%)	1.60	.796
Are employed individuals with health savings accounts more likely to utilize preventive health services than those without such accounts?	243 (65.3%)	73 (19.6%)	56 (15.1%)	1.50	.743

Source: Fieldwork, 2025

Table presents responses regarding the relationship between employment status and healthcare utilization, with a clear trend indicating that employment positively influences access to and utilization of healthcare services. Majority of the respondents agree that being employed increases the likelihood of utilizing healthcare services (58.1%) and provides access to health insurance (79.3%), while joblessness appears to decrease healthcare utilization (75.5%). Additionally, employment is associated with increased attendance at medical check-ups (70.7%) and more regular health screenings (59.1%). Moreover, individuals with health savings accounts are more likely to engage in preventive health services compared to those without (65.3%). The mean values, which range from 1.31 to 1.60, suggest a strong positive correlation between employment and healthcare utilization, with a standard deviation indicating some variability in responses. These findings suggest that employment status, particularly access to health insurance and health savings accounts, plays a significant role in improving healthcare access, emphasizing the importance of stable employment in fostering better health outcomes and regular health check-ups. This interpretation aligned with the response from the interviewees, where they stated that:

> Since I got this job at the textile factory three years ago, I can finally afford to go to private clinics when I am sick. Before, I had to queue for hours at the general hospital or just endure the pain. My salary allows me to pay for medications without borrowing money **(IDI, Male; Age, 46; Gidan Ausa II).**

A 29 years lady from Agwatashi said:

> Being unemployed is very difficult. I depend on my family for everything, including medical expenses. Last month, I had malaria but couldn't afford the rapid diagnostic test at the private clinic. I had to go to the overcrowded public health centre where I waited six hours just to be seen.

A 58 years community leader from Adudu stated that:

> There is a clear divide in my community. Those with steady jobs - teachers, civil servants, traders with established businesses they take their families to better healthcare facilities. The unemployed ones often resort to traditional medicine or delay treatment until conditions become severe.

A 37 years old community nurse from Gwadenye stated that:

> Employed patients typically have better health outcomes because they can afford prescribed medications and recommended tests. Unemployed patients often ask for 'cheaper alternatives' or partial treatments, which affects their recovery.

Regarding whether employment provides individuals with health insurance coverage, some of the interviewees mentioned that:

> The National Health Insurance Scheme through my job has been a lifesaver. My family and I can access healthcare at approved facilities without paying consultation fees. However, many services are not covered, and we still pay out-of-pocket for specialized treatments. **(IDI, Male; Age; 51; Tudun Adabu).**

Another interviewee also stated that:

> My company provides health insurance, but it is basic coverage. It covers consultations and some medications, but when my husband needed surgery last year, we still had to pay a significant amount. It is better than nothing, but not comprehensive **(IDI, Female; Age; 50; Gwadenye).**

> About 25% of our patients have some form of employment-based insurance, mostly civil servants and employees of large corporations. The coverage varies widely, and many still face significant out-of-pocket expenses for specialized care or emergency procedures. **(IDI, Community doctor; Male; Age; 47; Agwatashi).**

Respondents were asked if employed individuals with health savings accounts more likely to utilize preventive health services, some of the participants stated that:

> Having the health savings account has completely changed how I approach healthcare. I now go for quarterly check-ups, annual comprehensive screenings, and don't hesitate to see specialists when needed. Knowing the money is specifically for health removes the guilt of spending on medical care. Last year, I detected high cholesterol early and started treatment immediately. **(IDI, Female; Age; 53; Adudu).**

A 42 years community nurse from Tudun Adabu stated that:

> Employees with health savings accounts are more engaged in their healthcare. They ask more questions, are more compliant with treatment plans, and schedule regular follow-ups. They view healthcare as an investment rather than an expense. Their health outcomes are noticeably better than those paying from regular income.

Similarly, a 48 years community doctor from Agwatashi narrated that:

> We have seen increased utilization of preventive services since health savings accounts became popular among corporate clients. Patients with health savings accounts are more likely to opt for comprehensive packages rather than basic consultations. This has allowed us to invest more in preventive care infrastructure and specialized screening equipment.

Discussion of Findings

The study found that income plays a significant role in determining access to healthcare services, with a majority of the respondents in this study agreeing that low income affects healthcare access and utilization. The respondents consistently indicated that individuals with lower incomes are more likely to face barriers to seeking medical care, delaying treatment, and resorting to self-medication instead of seeking professional help. This aligned with Koch et al. (2021) that emphasized income as a determinant in healthcare access, where lower-income groups tend to experience higher barriers to seeking medical attention, which can lead to worsened health outcomes. On the contrary, some respondents disagreed with the notion that low income affects healthcare access, suggesting that other factors may also influence healthcare-seeking behaviour. These contrasting views suggest that while income is an essential determinant, it may interact with other socio-economic factors such as education or awareness, which can also significantly impact healthcare utilization (Blumberg et al., 2022). This discrepancy highlights the complexity of healthcare access and the need for policies addressing both income disparities and other barriers to healthcare.

The study found a strong correlation between education and the utilization of healthcare services, with many respondents acknowledging that higher levels of education influence the decision to seek medical care, prefer formal healthcare over traditional medicine, and engage more with preventive health services. These results support Marmot et al. (2020) who highlighted the positive impact of education on healthcare utilization, where individuals with higher education tend to be more informed about health issues and more likely to use healthcare services effectively. However, there was also notable disagreement, with some respondents stating that education does not significantly affect their healthcare choices or the frequency of medical visits, suggesting that other factors, such as income or cultural beliefs, may override the influence of education in certain contexts. This contrast points to the complexity of healthcare utilization, where education, while important, interacts with other socio-economic and cultural factors that can either enhance or hinder health-seeking behaviour (Lynch et al., 2022). Thus, while education is undeniably an important determinant, it should be considered alongside other factors in the design of health policies aimed at improving healthcare access.

The study found a clear relationship between employment and increased healthcare service utilization. A significant majority of the respondents indicated that employment enhances access to healthcare services, with employed individuals more likely to utilize health insurance and attend regular medical check-ups. This supports Smith and Anderson (2019) research that highlights the role of employment in facilitating healthcare access, particularly through employer-sponsored health insurance. However, there is also some disagreement, as a small subset of respondents felt that employment did not significantly impact their healthcare utilization, suggesting that factors such as income, job type, and healthcare system accessibility may play a more substantial role in certain cases (Hussain et al., 2021). On the other hand, unemployment was consistently linked to reduced healthcare service utilization, with joblessness seen as a barrier to

accessing healthcare, likely due to the absence of employer-provided health insurance and limited financial resources for out-of-pocket payments. These findings align with the broader literature, which demonstrates that unemployment often leads to poorer health outcomes due to financial constraints and the lack of health coverage (Koch et al., 2020). Thus, while employment undoubtedly facilitates healthcare access, the specific nature of employment, such as the availability of health benefits remains a critical determinant in shaping health behaviours.

Conclusion

In conclusion, this study has shown that the socio economic status has a significant influence in the utilization of health care service in Obi Local Government Area, Nasarawa state, with income level, educational attained and working status standing out as important definer. The findings show that low income has a detrimental effect on access, frequency, quality and continuity of healthcare utilization, often leading to delayed healthcare treatment, self-medication and reliance on traditional healthcare services, while higher income results in regular and preventive service utilization. Educational level was found to explain health literacy, knowledge of health rights and preference for formal healthcare, but these are mediated by economic capacity and sociocultural contexts. Employment status further reinforces these patterns by equating financial stability and medical healthcare insurance which are the foundation for higher chances of a continuous involvement in healthcare. Anchored in Andersen's use of health services theory, the study highlights the relationship between characteristics of the individual level with the structural constraints in shaping healthcare behaviour.

Recommendations

Based on the findings, the study provided the following recommendation;

1. The Federal Ministry of Health and the National Health Insurance Authority (NHIA) should implement targeted financial protection schemes such as subsidies or voucher systems for low-income households to reduce out-of-pocket expenses. Strengthen and fully operationalize the Basic Health Care Provision Fund (BHCPF) in Obi LGA with improved awareness campaigns and transparent management, and expand community-based health insurance schemes with affordable premiums, tailored to the economic realities of rural and informal workers.
2. Nasarawa State ministry of health in collaboration with media houses and Non-Governmental Organizations should integrate community health education programs into local schools, religious centres, and market associations to improve health literacy. Launch targeted public awareness campaigns on preventive care, maternal health, child immunization, and chronic disease management, using local languages. Partner with NGOs to deliver adult education and literacy programs that include health-related topics.
3. The Federal Ministry of Labour and Employment & Nasarawa State Ministry of Commerce and Industry should extend health insurance coverage to informal sector workers through flexible, low-cost payment plans and simplified enrolment processes. Promote the creation of formal employment opportunities with health benefits through government and private sector collaboration. Establish mobile clinics and outreach services to reach unemployed and informally employed individuals in underserved areas.

References

Abiola, A. O., Ladi-Akinyemi, T. W., Oyeleye, O. A., Oyeleke, G. K., Olowoselu, O. I., & Abdulkareem, A. T. (2019). Knowledge and utilisation of National Health Insurance Scheme among adult patients attending a tertiary health facility in Lagos State, South-Western Nigeria. *African Journal of Primary Health Care & Family Medicine*, 11(1), e1–e7.

Adebobola, S. A., Olomofe, F. F., Akinwumi, A. M., & Adebobola, A. O. (2023). Predictors of health care service utilization among NHIS enrollees in southwestern Nigeria: A cross-sectional study. *Health Policy and Planning*, 38(3), 295-302.

Adedokun, S. T., & Uthman, O. A. (2023). Determinants of partial and adequate maternal health services utilization in Nigeria: Analysis of cross-sectional survey. *BMC Pregnancy and Childbirth,* 23(457).

Archibong, D. (2020). Socioeconomic determinants of health care utilization in urban Nigeria. *Nigerian Journal of Health Economics*, 12(4), 45-52.

Archibong, B., Umoh, U., & Etim, U. (2026). Socioeconomic determinants of health service utilization in Calabar Metropolis, Nigeria. *Journal of Public Health Policy and Planning*, 31(1), 45-58.

Bello, C. B., Esan, D. T., Akerele, S .A. & Fadare, R. I. (2022) Maternal health literacy, utilisation of maternal healthcare services and pregnancy outcomes among newly delivered mothers: A cross-sectional study in Nigeria. *Public Health Pract* (Oxf). 3;3:100266.

Blumberg, M. S., Greene, D., & O'Neil, R. (2022). Socio-economic determinants of healthcare access and utilization in rural communities. *Journal of Health Economics*, 45(2), 56-67.

Braveman, P., & Gottlieb, L. (2020). The social determinants of health: It's Time to consider the causes of the causes. *Public Health Reports*, 135(2), 12-32.

Enebeli, M. O. (2025). Relationship between health literacy and level of Education on Health-Related Behaviours of the Nigerian population in Anambra State. *African Journal of Health Nursing and Midwifery,* 8(3), 28–56.

Eze, O. I., Iseolorunkanmi, A., & Adeloye, D. (2024). The National Health Insurance Scheme (NHIS) in Nigeria: current issues and implementation challenges. *Journal of Global Health Economics and Policy*, 4. https://doi.org/10.52872/001c.120197

Federal Ministry of Health Nigeria (2023). *Annual health sector performance report*. Federal Government of Nigeria, Abuja.

Hussain, S. A., Ahmad, R., & Khan, F. (2021). Employment status and healthcare access: An examination of socioeconomic disparities. *Journal of Public Health Policy,* 42(3), 318-329.

Hussain, S. (2022). Socio-economic determinants of education in developing countries. *Journal of Education and Practice*, 3(9), 32–42.

Jia, L., Zhang, H., & Yang, L. (2025). Out-of-pocket health expenditure and its impact on access to healthcare services in Nigeria. *International Journal of Health Economics and Policy*, 42(2), 99-113.

Koch, H., Martens, M., & Petrovic, M. (2021). The role of income in healthcare access in developed nations. *Social Science & Medicine*, 271, 113-120.

Lynch, J. W., Smith, G. D., & Hillemeier, M. M. (2022). The educational gradient in health: The role of income and other socio-economic factors. *Social Science & Medicine,* 269, 46-54.

Marmot, M., Allen, J., Goldblatt, P., Herd, D., & Morrison, J. (2020). Fair society, healthy lives: The Marmot Review. *The Lancet*, 373(9661), 1652-1660.

Muhammed, H. (2013). Health-seeking behaviour in low-income rural communities in Nigeria. *Journal of Health and Social Behaviour*, 53(4), 329-340.

Nwosu, A. C., Ogbuji, Q. I., & Okoro, U. (2019). The influence of socioeconomic status on maternal health services utilization in Nigeria: Evidence from the 2018 Nigeria Demographic and Health Survey. *International Journal of Maternal and Child Health*, 15(3), 212-221.

Oburota, D. O., Nwachukwu, M. N., & Chukwu, O. K. (2023). Socioeconomic factors affecting antenatal and postnatal care utilization in rural Nigeria. *Health Care for Women International*, 44(2), 145-159.

Okoli, C., Nnamani, O., & Ezeh, S. (2020). The role of income and education in the utilization of health care services in Nigeria: A case study of urban and rural populations. *Nigerian Journal of Social Policy*, 22(4), 200-212.

Ogbodo, U. (2025). The implications of out-of-pocket health spending on healthcare access in Nigeria. *Journal of African Health Economics*, 27(1), 78-92.

Smith, M. D., & Anderson, J. R. (2019). The role of employment in healthcare access: Employer-sponsored health insurance as a determinant. *Health Economics Review*, 9(1), 1-9.

Umar, A. S. (2017). Does female education explain the disparity in the use of antenatal and natal services in Nigeria? Evidence from demographic and health survey data. *African Health Sciences,* 17(2), 391.

U.S. Census Bureau (2023). *Health insurance coverage in the United States: 2022. Current population reports.* Washington, DC: U.S. Government Printing Office.

World Health Organization. (2023). *Global health expenditure database: Health financing and universal health coverage.* Geneva, Switzerland: World Health Organization.