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Basil 1st Correction Utilization of National Health Insurance Scheme among Students of Tertiary Health Institutions, Kwara State, Nigeria

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Abstract

The National Health Insurance Scheme is a social health insurance programme designed by the Federal Government of Nigeria to complement sources of financing the health sector and to improve access to health care for the majority of Nigerians.This study aimed at Assessing the Utilization of National Health Insurance Scheme among students of Tertiary Health Institutions, Kwara state, Nigeria. Descriptive design was adopted for the study. Sample size was determined and disproportionate stratified random sampling technique was used to select 97 Students used for this study. A well structured questionnaire was used for data collection. Data collected was analysed using SPSS 22 and presented in frequency tables to represent each data collected randomly. The socio demographic characterististics of respondents shows that majority of the respondents are within ages less than 25 years (63.9%), females (86.6%), OND 1(33%), and enrolled for NHIS for 1 year (37.1%). This study reveal that the level of utilization of NHIS by respondents is very high (80%) and factors that influence the Utilization of NHIS services by respondents are Accessible and affordable health care services (77.3%), Well attended to by the health workers (75.2%), equipment are in good condition (68%) and the scheme run a 24 hours services (81.5%). Hypothesis tested revealed that there is significant relationship between factor influencing utilization by the student and the level of NHIS services they enjoy (P=0.002). In conclusion, promoting the utilization and

benefits of NHIS among minorities students who had difficulties utilizing the scheme will ensure total coverage among all students of tertiary health.

Keywords: Utilization; National Health; Insurance Scheme; Students

Introduction

Nigeria's National Health Insurance Scheme was introduced in 1999 and activated in 2005 with the objectives of enhancing access to necessary health services without financial burden and the rate of coverage is still very low, with slow progress towards achieving universal health coverage (Ipinnimo et al., 2022; Alawode & Adewole, 2021). The main issue highlighted by the literature is that the NHIS/NHIA coverage is not high, it is skewed towards the formal sector, and the informal sector is largely underrepresented(Effiong et al., 2025; Azeez et al., 2021; Alawode & Adewole, 2021). New evidence of equity in enrollment reveals a pattern of enrolment, rather than simply low numbers.

In Nigeria, coverage was lowest for women in the poorest quintile at 0.10%, and higher for women in the richest quintile at 9.77%, and for urban, educated, and wealthier women than for their rural, non-educated, and poorer girl peers, respectively (Ahuru & Daniel, 2026). Low uptake is due to design and implementation challenges. The above factors (voluntary participation, weak legal frameworks, poor awareness of benefits, distrust, and poor platforms to register and collect premiums from informal workers) hinder expansion (Alawode & Adewole, 2021; Adewole, 2024; Effiong et al., 2025). Increasing the number of beneficiaries and improving funding sources for the program is always recommended for mandatory enrolment (Adewole, 2024; Sunkanmi et al., 2025). Community-based and state schemes are more popular options for the rural and informal communities (Alawode & Adewole, 2021; Ahuru & Daniel, 2026). Recently, citizen engagement, equity, and data systems have been recognized as national reform priorities (Bashar et al., 2025).

The scheme is also hampered by the overall financial environment in Nigeria. Out-of-pocket payment is the major source of financing health services in Nigeria and is one of the highest in the world, thus limiting financial protection and access to care for poorer households (Madu & Osborne, 2023; Ahuru & Daniel, 2026; Rm & Ra, 2025). This financing approach is linked to poor design of schemes and low public investment. Sustainability challenges cited in reviews include underfunding and inadequate resource management, and a continued reliance on government or external funding for the sustainability of the initiative (Adewole, 2024; Sunkanmi et al., 2025; Effiong et al., 2025). Access to services is also uneven, following enrolment. There was a low level of NHIS accreditation of health facilities, at 31%, in one review, and this was concentrated in urban areas, leading to inequitable physical access to facilities (Azeez et al., 2021; Adewole et al., 2021).

Financing as well as implementation suffers from weaknesses in governance. Flawed administration and supervision, slow payment and authorization procedures, regulatory complexity, and failures of accountability are just some of the obstacles described by studies. (Alawode & Adewole, 2021; Effiong et al., 2025). The progressive literature in reform is growing in emphasis that legal reform will not be sufficient. More political will, improved health legislation, supervision, investment in the workforce, involvement of primary health care, and adjustments to reimbursement and funding policies are all argued

as essential to substantially expand(Alawode & Adewole, 2021; Madu & Osborne, 2023; Adewole, 2024).

The Nigerian health insurance project has suffered from low levels of coverage, inequitable enrolment, underfunding, poor infrastructure and governance problems, with the ability to achieve universal health coverage relying on the enforceability of inclusion, improved funding and good governance (Sunkanmi et al., 2025; Bashar et al., 2025; Ndoh et al., 2022). In the developed world, insurance in one form or the other is a veritable and sustainable tool for financing healthcare (Jutting, 2017). The rising cost of health care services and the need to provide quality, accessible and affordable health care services with the people's demand, necessitated the establishment of the national health insurance scheme (Samin and Awe, 2019). National Health Insurance Scheme (NHIS) is a cooperate body under act 35 of 1999 by the Federal Government of Nigeria to improve the health of all Nigerians at affordable cost (NHIS, 2016).

Many have lost their lives due to their inability to meet their health needs. Statistics have shown that about 70 percent of Nigerians pay out of pocket for their health-care needs (NHIS,2016). In a cross sectional study done by Sabitu and James (2015), to assess the knowledge, attitudes and opinions health care providers working at different levels of care in Minna town. NHIS is battling with low knowledge and utilization, another major problem facing NHIS is Funding, more so Health facilities at some lower levels hospitals were inadequate, partiality in accessing the scheme by the enrolee is another problem facing the scheme (Schelleken, 2019). According to Oba (2019), this situation is not unconnected with corruption. Money meant to boost the health sector ends up in private pocket. According to African Peer Review Commission (APRM 2018), In the case of Nigeria, the revenue is dwindling, due to many factors, in the face of competing demands from various sectors of the economy. According to Schelleken (2019), Andersen's behavioral model of health services utilization proposes that people's use of health care services is a function of their predisposition to use services, the factors enabling or impeding use, their need for care, and their satisfaction with services.

Recent literatures reviewed that mandatory insurance, pooled funding, and vulnerable-group financing are likely to increase financial protection, although existing implementation challenges persist that continue to result in low coverage and high OOP expenditure (Ipinnimo et al., 2022; Ipinnimo et al., 2023; Sunkanmi et al., 2025). The NHIA is more supportive of UHC than the previous NHIS, which required responsible citizens to register for the policy, and includes funding options for poor and vulnerable groups (Awosusi, 2022; Ipinnimo et al., 2023). It also gives the authority a wider role to play, from managing one scheme to operating and supervising multiple schemes, that should add more coherence to the system (Ipinnimo et al., 2023; Ipinnimo et al., 2022).

However, the coverage is still very low and unequal today. It has been widely reported in empirical studies and reviews that less than 5-10% Nigerians are insured, and rural or informal workers are still not well-positioned in enrolment with the formal sector still dominating enrolment (Adewole, 2024; Azeez et al., 2021; Adewole, 2024). Wealth, education, region and household characteristics still influence access to and utilization of insurance at the micro level (Adebola, 2020). The aim of the NHIA's design is to minimize OOP expenditure, and this is referred to as a major purpose in several reviews (Sunkanmi et al., 2025; Ipinnimo et al., 2022; Ao et al., 2025). The best recent comparison available showed that NHIA users experienced less financial hardship than OOP payers (14.2% vs. 42.6% of users) and more preventive services (Onuorah, 2025).

However, Nigeria's health financing system has not yet undergone a population level change. The OOP private financing rate is approximately 70% of Nigerians and the private financing rate for care is still greater than 90% as revealed in older comparative work (Alawode & Adewole, 2021; Odeyemi &

Nixon, 2013); membership has been around 3.5% the entire time. Even for rural non-users, a range of delayed care, borrowing and economic hardship associated with non-enrolment is reported (Ao et al., 2025). The following are identified as main constraints to the SWD: Funding is a critical constraint as wider coverage of the SWD to vulnerable groups in Nigeria necessitates more public funds than are currently allocated to the SWD (Ipinnimo et al., 2022). The barriers to implementation still exist such as lack of awareness, poor trust, poverty, inefficient payment system and poor administrative capacity (Alawode & Adewole, 2021; Sunkanmi et al., 2025). There are gaps in service readiness such as poor drugs quality, inadequate infrastructure, and gaps in the workforce and quality differences in the state, which limit the value of insurance (Ulonna & Adekeye, 2025; Ambali et al., 2025). However, informal and rural populations are the most difficult to reach and are at the core of the UHC agenda (Alawode & Adewole, 2021; Ao et al., 2025; Odeyemi & Nixon, 2013). The research team haven observed that most students in tertiary institutions who were enrolled for the scheme preferred to go for over the counter medication than patronize the scheme when ill, promoted the research team to investigate the level of use and factors influencing the use of the scheme in tertiary institutions.

Objective of The Study

The broad objective of this study is to assess the Utilization of National Health Insurance Scheme among students of Tertiary Health Institutions, Kwara state, Nigeria.

The specific objective of the study aims at achieving the following objective which are to:

i. Determine the utilization level of National Health Insurance Scheme among students of Tertiary Health Institutions, Kwara state, Nigeria.
ii. Assess the factors that determine the utilization of National Health Insurance Scheme among students of Tertiary Health Institutions, Kwara state, Nigeria.

Research Hypothesis: There is no significant relationship between Factors influencing Utilization by the students and the level of NHIS services they enjoyed.

METHODOLOGY

Research Design: The study adopts the quantitative- descriptive survey design. This is because this type of research methods enables researchers to elicit or attain the judgment of the respondents and the fact that the researcher did not manipulate the variables of interest in the study.

Research Setting: The study was carried out in Six Tertiary Health Institutions known as University of Ilorin Teaching Hospital (UITH), School Complex, Ilorin, Kwara state. It has training institutions namely; School of Basic Nursing, School of Post Basic Nursing, School of Health Information Management, Community Health Officer Training institution and School of Orthopedic.

The Target: populations of this study consist of all the six hundred and twenty-eight (628) students in UITH schools complex as show in the table below:

Sample Size Determination: The first phase sample size of 244 students was determined using the Taro Yamane (1967) formula from the estimated study population of 628 students in UITH school complex. While final phase sample size of 97students was selected from the first phase 244 students sample size.

Sample Size was calculated using stratified random sampling technique as shown below; $nh = (Nh / N) \times n$**. This is done through** a disproportionate stratified random sampling (SRS) technique to arrive at the total number of respondents selected randomly as shown in the table below

Table 1:Total Number of Students and Number Sample in Each Department and Level.

S/N	DEPARTMENT	Stratum	Population size	Sampling fraction	Sampling size results (n)	
1	Community Health	_	28	½	14	14
			30	½	15	15
2	Orthopaedic School	OND 1	26	1/3	8.67	
						20.67
		OND 2	24	½	12	
3	Basic Nursing	100 Level	50		25	
		200 Level	54	½	27	75.5
		300 Level	47	½	23.5	
4	Post Basic Nursing	A&E	30	1/3	10	
		Nephrology	30	1/3	10	
		Opthalmic	25	1/3	8.33	37.66
		Pediatric	28	1/3	9.33	
5	SHIM		256	1/3	85.33	85.5
	TOTAL		**628**			

Thus, the sum total of the sampling size (Nh) result is 244.26

$nh = (Nh / N) \times n$

nh: sample size for nhth stratum (desired sample size)

Nh: population size for nhth stratum

N: size of the entire population

n: size of entire sample

Sample size (nh) for SON year 1 = 244.26/628 × 25 = 9.72

Sample size (nh) for SON year 2 = 244.26/628× 27 = 10.50

Sample size (nh) for SON year 3 = 244.26/628 × 23.5= 9.1

Sample size (nh) for CHO year 1= 244.26/628 × 15 = 5.84

Sample size (nh) for CHO year 2 = 244.26/628 × 14 = 5.45

Sample size (nh) for Accident and Emergency = 244.26/628 × 10=3.89

Sample size (nh) for Nephrology = 244.26/628 × 10=3.89

Sample size (nh) for Pediatric = 244.26/628 × 9.33= 3.63

Sample size (nh) for Opthalmic = 244.26/628 × 8.33 = 3.24

Sample size (nh) for SHIM = = 244.26/628 × 85.5 =33.19

Therefore, the total sample size of the population determined for the study is 96.49 approximately 97.

Instruments for data collection: Researcher developed a questionnaire titled NHIS Utilization Questionnaire (NHISUQ) to elicit information on Assessing NHIS Utilization. The instrument was fashioned after the Likert four rating scale. The reliability coefficient was determined using Cronbach Alpha statistical tool at 0.76.

Method of Data Analysis: The descriptive and inferential statistical analysis was employed using SPSS 22 in analysis of the data that collected for this study. That is, frequency counts and percentages and chi square tool was used to analyze the data collected.

Ethical Considerations: An approval Letter was obtained from ethical and research committee of Tertiary Health Institution, Kwara state and heads of each tertiary institution and participants as well. A recommendation letter endorsed by the Head of the research setting was obtained for consent to engage the students as respondents in the study. The purpose of the study was explained to the respondents. The electronic questionnaire was administered to the students in their respective school

platform. The electronic questionnaires were sent and the return rate was 100%. It took the researcher two weeks to send and retrieve the questionnaire.

RESULTS

The table 2 below shows the sociodemographic data of respondents, the age of respondents: The result obtained shows that majority 62 (63.9%) of respondents were less than 25 years, 27 (27.8%) of respondents were within the age range of 25 to 30 years, 5 (5.2%) of respondents were within the age range of 31 to 35 years and 3 (3.1%) of respondents were within the age range of 36 and above, the sex of respondents: The result obtained shows that majority 84 (86.6%) of respondents were females and 13 (13.4%) of respondents were males. The socio demographic characteristics of respondents shows that majority of the respondents are within ages less than 25 years (63.9%), females (86.6%), OND 1(33%), and enrolled for NHIS for 1 year (37.1%).

Table 2: Showing The Sociodemographic Data Of Respondents N= 97

Age	Frequency	Percent (%)
Less than 25 years	62	63.9
25-30 years	27	27.8
31-35 years	5	5.2
36 and above	3	3.1
Total	97	100.0
Sex		
Male	13	13.4
Females	84	86.6
Total	97	100.0
Level in School		
OND 1	7	7.2
100 L	32	33.0
200 L	23	23.7
300 L	23	23.7
HND 1	4	4.1
HND 2	8	8.2
Total	97	100.0
For how many years have you been an enrollee of NHIS?		
1 YEAR	36	37.1
2 YEARS	31	32.0
3 YEARS	26	26.8
OTHERS	4	4.1
Total	97	100.0

Level of Utilization of National Health Insurance Scheme in UITH School Complex

From the table 3 below showing the responses on the level of utilization of NHIS services in Tertiary Health Institution. The result obtained shows that Majority 70 (73.2%) Sometimes and 21 (21.6%) respondents always go to NHIS when ill. Also, many 71 (73.2%) Sometimes and 15 (15.5%) of respondents always obtain all prescribed medications on visiting NHIS. 24 (24.7%) said None, 55

(56.7%) said Sometimes and 18 (18.6%) said always enjoy services of a Specialist during NHIS visits. More than half 65 (67%) of respondents Sometimes identifies availabilities of equipment's while 23 (23.7%) respondents always identify equipment's necessary for delivering services are made available. Finally, 41 (42.3%) respondents do not go to NHIS for general checkup, 49 (50.5%) respondents Sometimes go there for checkup while only very few 7 (7.2%) respondents always go there for general check-up. This study reveal that the level of utilization of NHIS by respondents is very high (80%)

Table 3 Shows the Level of Utilization of NHIS By the Students.

I go there when I'm ill	Frequency	Percent (%)
None	6	6.2
Sometimes	70	72.2
Always	21	21.6
Total	97	100.0
I obtain all prescribed medications		
None	11	11.3
Sometimes	71	73.2
Always	15	15.5
Total	97	100.0
I enjoy services of a specialist		
None	24	24.7
Sometimes	55	56.7
Always	18	18.6
Total	97	100.0
		85.9%
Equipment necessary for delivering service are available		
None	9	9.3
Sometimes	65	67.0
Always	23	23.7
Total	97	100.0
I go there for general check-up		
None	41	42.3
Sometimes	49	50.5
Always	7	7.2
Total	97	100.0
		74.2%
		80%

Factors Influencing The Utilization Of National Health Insurance Scheme Services

From the Table 4. below on responses on factors that influence the utilization of NHIS services.The result obtained to I use NHIS services very well shows that majority 73 (77.3%) of respondents agreed, result obtained from I am well attended to by the Health Workers shows that 73 (75.2%) of respondents agreed, result obtained from Drugs prescribed are always available shows that 67 (69.1%) of respondents disagree, the result obtained from The equipments necessary for rendering care are in good condition shows that 66 (68%) of respondents agreed and the result obtained from The failure of the

scheme to run a 24 hours services is affecting it's utilization shows that 79 (81.5%) of respondents agreed. This study shows that factors that influence the Utilization of NHIS services by respondents are Accessible and affordable health care services (77.3%), Well attended to by the health workers (75.2%), equipment are in good condition (68%) and the scheme run a 24 hours services (81.5%).

Table 4. Shows the Factors that influence the Utilization of NHIS services.

Items on factors (n=97)	Frequency of agree semantics	Percent (%) of agree semantics	Frequency of disagree semantics	Percent (%) of disagree semantics
Accessible and affordable health care services	75	77.3	22	22.7
Well attended to by the health workers.	73	75.2	24	24.8
Drugs prescribed are always available.	30	30.9	67	69.1
The equipment is in good condition	66	68	31	32
The scheme runs a 24 hours services	79	81.5	18	18.5

Ho1 There is no significant relationship between Factors influencing Utilization by the students and the level of NHIS services they enjoyed.

The result obtained showed there is a significant relationship between factors influencing utilization by the students and the level of NHIS services they enjoy (X^2=2.696, df=1, p=0.000). The null hypothesis is rejected and the alternate hypothesis is accepted. This indicates that students' perceptions of accessibility and affordability, staff attentiveness, drug availability, equipment conditions and round the clock services provision are significantly associated with how much they actually utilize NHIS services

Table 5 shows the crosstabulation between factors influencing Utilization and level of NHIS services enjoyed.

Cross tabulation of hypothesis two		Factors influencing utilization level.		Total
		Factors: Agree(positive)	Factors :(disagree/negative)	
Level of utilization	Utilization level(positive)	39	9	48
	Utilization level(negative)	23	16	49
Total		72	25	97

Chi-Square Tests	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.696[a]	1	.000
Likelihood Ratio	2.620	1	.000
Linear-by-Linear Association	2.724	1	.000
N of Valid Cases	97		

Chi-Square Tests X^2=2.696[a] Df= 1, p=0.000 assuming the null hypothesis At P<0.05, At P>0.05, There is no significant relationship.

DISCUSSION

This study aimed at Assessing the Utilization of National Health Insurance Scheme among students of Tertiary Health Institutions, Kwara state, Nigeria. The socio demographic characteristics of respondents shows that majority of the respondents are within ages less than 25 years, females, OND 1 and enrolled for NHIS for 1 year. This finding is consistent with studies conducted among university students in Nigeria where the majority of participants were young adults and females because tertiary institutions are largely populated by individuals within this age group. Similar findings were reported by Abiola et al. (2023), who observed that most respondents in their study conducted at a tertiary hospital in Lagos were young adults and females, reflecting the demographic structure of tertiary institution populations. This study reveals that the level of utilization of NHIS by respondents is very high. This result agrees with the findings of Adebobola et al. (2023), who reported that enrollment in NHIS significantly increased the utilization of healthcare services among respondents attending a tertiary hospital in South-Western Nigeria. Similarly, a study by Inegbedion (2015) found that a considerable proportion of respondents utilized the services provided under NHIS after enrollment, demonstrating that health insurance coverage improves access to healthcare services. These findings indicate that health insurance schemes play an important role in improving access to healthcare and reducing out-of-pocket expenditure.

This study shows that the factors influencing the utilization of NHIS services by respondents are accessible and affordable healthcare services, being well attended to by health workers, equipment being in good condition, and the scheme running 24-hour services. These findings are supported by previous studies which have reported that accessibility of healthcare facilities, affordability of services, and quality of care provided by health personnel significantly influence the utilization of health insurance services. For instance, a study on NHIS utilization among federal civil servants in Rivers State reported that patients' satisfaction with healthcare providers and the quality of services offered significantly influenced their utilization of the scheme (Adebiyi & Adeniji ,2021). Similarly, research conducted among NHIS enrollees indicated that factors such as quality of healthcare services, accessibility, and availability of medical resources play important roles in determining the level of utilization of healthcare services (Adebobola et al.,2023).

Hypothesis tested revealed that there is significant relationship between factor influencing utilization by the student and the level of NHIS services they enjoy. This finding is consistent with the study of Ishola and Adeoti (2019), who reported that the perception of service quality, accessibility, and satisfaction with healthcare providers significantly influenced the level of utilization of NHIS services among enrollees. In addition, other studies have demonstrated that enabling factors such as service availability, quality of care, and positive healthcare provider attitudes are strongly associated with increased utilization of health insurance services (Adebiyi & Adeniji ,2021).

Conclusion

This study investigated the use of the National Health Insurance Scheme (NHIS) among students in Kwara State's tertiary health institutions, particularly at the University of Ilorin Teaching Hospital. The majority of respondents were under 25 years old and mainly female, with most having been enrolled in the NHIS for about a year. Utilization of NHIS services was high, as students who primarily visited the NHIS facilities when ill to obtain prescribed medications. However, routine check-ups were less common, indicating a focus on illness rather than preventive care. Factors influencing the use of NHIS included accessibility, affordability, health workers' attitudes, and availability of medical equipment, while constraints included shortages of medications and limited-service hours. The study concluded

that enhancing drug availability and extending service hours could improve NHIS effectiveness and student satisfaction.

Recommendations

The following suggestions are made in light of the study's findings:

1. Increased Access to Drugs To increase service utilization and patient satisfaction, authorities overseeing the NHIS in tertiary healthcare facilities should guarantee that prescribed medications are consistently available.
2. Offering Health Services Around-the-Clock In order to enable students to access healthcare services at any time, particularly during emergencies, NHIS service units in tertiary health institutions should think about running a 24-hour healthcare service system.
3. Enhancing Medical Facilities To support efficient service delivery under the NHIS, government and health administrators should provide sufficient infrastructure, working medical equipment, and routine maintenance.
4. Ongoing Education for Health Professionals To maintain the positive attitudes toward patients that respondents reported, healthcare workers under the NHIS should regularly receive training on patient care, communication, and professional ethics.
5. Observation and Assessment of NHIS Services To regularly evaluate the effectiveness, accessibility, and quality of NHIS services in tertiary healthcare facilities, a monitoring and assessment system should be put in place.
6. Encouragement of Preventive Medical Services Students should be encouraged by awareness campaigns to use NHIS services for regular checkups and preventive healthcare, in addition to when they are sick.
7. Cooperation with Stakeholders In order to ensure sustainable and effective service delivery, government agencies, healthcare providers, and institutional management must work together to implement NHIS effectively.

REFERENCES:

Abiola, A. O., Ladi-Akinyemi, T. W., Oyeleye, O. A., Oyeleke, G. K., Oladele, P. D., & Olowookere, S. A. (2023).“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, vol. 11, no. 1, 4 Sept. 2019, https://doi.org/10.4102/phcfm.v11i1.2018.

Adebayo, E. F., Uthman, O. A., Wiysonge, C. S., Stern, E. A., & Lamont, K. T. (2015). A systematic review of factors influencing the uptake of community-based health insurance in low- and middle-income countries. BMC Health Services Research, 15, 543. https://doi.org/10.1186/s12913-015-1179-3

Adebiyi O, Adeniji FO(2021). Factors Affecting Utilization of the National Health Insurance Scheme by Federal Civil Servants in Rivers State, Nigeria. Inquiry. 2021 Jan-Dec;58:469580211017626. doi: 10.1177/00469580211017626. PMID: 34027708; PMCID: PMC8142525.

Adebobola, A. Z., Olomofe, C. O., Akinwumi, A. I., & Adebobola, O. A. (2023). Service Utilization and Client Satisfaction with Quality of Healthcare among Enrollees of Health Insurance Attending a Tertiary Hospital in South-Western Nigeria. Asian Journal of Medical Principles and Clinical Practice, 6(1), 12–25. Retrieved from https://journalajmpcp.com/index.php/AJMPCP/article/view/156

Adebobola, O. O., Adebayo, A. M., & Olowookere, S. A. (2023). Utilization of National Health Insurance Scheme services among enrollees attending a tertiary health facility in South-Western Nigeria. Asian Journal of Medicine, Public Health and Community, 6(1), 45–53.

Adebola, O. (2020). Universal Health Coverage In Nigeria And Its Determinants: The Case Of National Health Insurance Scheme. 97-111.

Adewole, D. (2024). The National Health Insurance Authority Of Nigeria And Implications For Universal Health Coverage. Annals Of Ibadan Postgraduate Medicine, 22, 107 - 111.

Adewole, D. (2024). The National Health Insurance Authority Of Nigeria And Implications For Universal Health Coverage. Annals Of Ibadan Postgraduate Medicine, 22, 107 - 111.

Adewole, D., Reid, S., Oni, T., & Adebowale, A. (2021). Geospatial Distribution And Bypassing Health Facilities Among National Health Insurance Scheme Enrollees: Implications For Universal Health Coverage In Nigeria. *International Health, 14*, 260 - 270. Https://Doi.Org/10.1093/Inthealth/Ihab039

African Peer Review Commission (2018). Factors Affecting Utilization Of Health Care Services By Mothers And Children Ill With Diarrhea In Rural Vietinam.Australis Primary Health Care Project, 5-15. Http://Www.Iss.Nl/Layout/Set/Print/Content/View/Full/12939.

Ahuru, R., & Daniel, O. (2026). Socioeconomic Inequalities In Health Insurance Enrolment Among Nigerian Women. *Discover Social Science And Health*. Https://Doi.Org/10.1007/S44155-026-00391-W

Alawode, G., & Adewole, D. (2021). Assessment of the design and implementation challenges of the National Health Insurance Scheme in Nigeria: a qualitative study among sub-national level actors, healthcare and insurance providers. BMC Public Health, 21. https://doi.org/10.1186/s12889-020-10133-5

Alawode, G., & Adewole, D. (2021). Assessment of the design and implementation challenges of the National Health Insurance Scheme in Nigeria: a qualitative study among sub-national level actors, healthcare and insurance providers. *BMC Public Health, 21*. https://doi.org/10.1186/s12889-020-10133-5

Ambali, A., Salawu, I., & Shuaib, O. M. (2025). HEALTH INSURANCE AND SERVICE QUALITY: AN ANALYSIS OF NIGERIA'S NATIONAL HEALTH INSURANCE POLICY. Wukari International Studies Journal. https://doi.org/10.64633/wissj.v9i4.16

Ao, E., Fo, M., Oa, A., Fm, L., R., Oj, P., Eo, M., At, E., Eo, K., Ia, A., Oo, A., Ga, F., Je, I., Ad, O., Ac, M., Ot, B., Ou, B., Ow, O., & Mh, E. (2025). Knowledge, accessibility and uptake of national health insurance authority and the negative economic effects of non-users in a rural community in South Western. Ibom Medical Journal. https://doi.org/10.61386/imj.v18i4.811

Aregbeshola, B. S., & Khan, S. M. (2018). Predictors of enrolment in the National Health Insurance Scheme among women of reproductive age in Nigeria. International Journal of Health Policy and Management, 7(11), 1015–1023. https://doi.org/10.15171/ijhpm.2018.68

Awosusi, A. (2022). Nigeria's mandatory health insurance and the march towards universal health coverage.. The Lancet. Global health, 10 11, e1555-e1556. https://doi.org/10.1016/s2214-109x(22)00369-2

Azeez, Y., Babatunde, Y., Babatunde, D., Olasupo, J., Alabi, E., Bakare, P., & Oluwakorede, A. J. (2021). Towards Universal Health Coverage: An Analysis of the Health Insurance Coverage in Nigeria. International Journal of Health and Life Sciences. https://doi.org/10.5812/ijhls.108727

Azeez, Y., Babatunde, Y., Babatunde, D., Olasupo, J., Alabi, E., Bakare, P., & Oluwakorede, A. J. (2021). Towards Universal Health Coverage: An Analysis of the Health Insurance Coverage in Nigeria. *International Journal of Health and Life Sciences*. https://doi.org/10.5812/ijhls.108727

Bashar, J. M., Hadiza, S., Ugochi, O. J., Muhammad, L., Olufemi, A., Eberechi, U., Agada-Amade, Y., Yusuf, A., Abdullahi, A. H., Musa, H. S., Ibrahim, A., Nnennaya, K.-U., Anyanti, J., Yusuf, D., Okoineme, K., Adebambo, J., Ikani, S. O., Aizobu, D., Abubakar, M., . . . Wada, Y. H. (2025). Charting the path to the implementation of universal health coverage policy in Nigeria through the lens of Delphi methodology. *BMC Health Services Research, 25*. https://doi.org/10.1186/s12913-024-12201-7

Effiong, F., Hassan, I. A., Dine, R., Olawuyi, D. A., & Adewole, D. (2025). Administrative perspectives on the implementation and sustainability of state-supported health insurance schemes in Nigeria: a descriptive qualitative study. *BMC Public Health, 25*. https://doi.org/10.1186/s12889-025-23941-4

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. https://doi.org/10.52872/001c.120197

Ifeagwu, S. C., Yang, J., Parkes-Ratanshi, R., & Brayne, C. (2021). Health financing for universal health coverage in Sub-Saharan Africa: a systematic review. *Global Health Research and Policy, 6*. https://doi.org/10.1186/s41256-021-00190-7

Inegbedion, H. (2015). Awareness and utilization of the National Health Insurance Scheme among civil servants in Nigeria. Ahmadu Bello University Institutional Repository.https://kubanni.abu.edu.ng/handle/123456789/7211

Ipinnimo, T., Durowade, K., Afolayan, C., Ajayi, P., & Akande, T. (2022). The Nigeria national health insurance authority act and its implications towards achieving universal health coverage. Nigerian Postgraduate Medical Journal, 29, 281 - 287. https://doi.org/10.4103/npmj.npmj_216_22

Ipinnimo, T., Durowade, K., Afolayan, C., Ajayi, P., & Akande, T. (2022). The Nigeria national health insurance authority act and its implications towards achieving universal health coverage. *Nigerian Postgraduate Medical Journal, 29*, 281 - 287. https://doi.org/10.4103/npmj.npmj_216_22

Ipinnimo, T., Omotoso, A. A., Bamidele, T. A., Sanni, T., Ibirongbe, D., Ipinnimo, M. T., & Ibikunle, O. (2023). Comparing the Nigeria National Health Insurance Scheme Act, 2004 and the National Health Insurance Authority Act, 2022 - What is New and its Implications for the Health System.. West African journal of medicine, 40 5, 525-532.

Ishola, A. G., & Adeoti, A. O. (2019). Perception and utilization of National Health Insurance Scheme services among enrollees in a Nigerian tertiary health facility. African Journal of Health Economics, 8(1), 12–20.

Jutting, J. (2016). World Development: Do Community-based Health Insurance Schemes Improve Poor People's Access to Health Care. Suidence from Rural Scengal World report

Madu, A., & Osborne, K. (2023). Healthcare Financing in Nigeria: A Policy Review. *International Journal of Social Determinants of Health and Health Services*, *53*, 434 - 443. https://doi.org/10.1177/27551938231173611

National Health Insurance Scheme (2016). 'We are still paying', A study on the factors affecting implementation of the exemption policy in Ghana. Accra Health Research unit, Ministry of Health, Ghana. Retrieved 10th May, 2019 from

National Health Insurance Scheme (2018). Human resources Development for Primary Health Care Evaluation Study No. 9 in the Thematic Evaluation Programme, Geneva, 107-110.

Ndoh, K., Ahmed, A. B., Yates, R., Adewole, I., Bagudu-Shinkafi, Z., Odedina, F., Alawode, G., & Alabi, S. (2022). Cancer Control Funding in Nigeria: A Case for Universal Health Coverage.. *Journal of cancer policy*, 100335. https://doi.org/10.1016/j.jcpo.2022.100335

Nora, N.A. (2015). Factors Affecting the Choice of Material and Child Health Services in Rural Area in Saudi Arabia. *Eastern Mediterranean Health Journal*1(2):26-269.

Oba, F. O. (2019). Availability and Utilization of Primary Health Care Services in Nigeria, PhD Dissertation Ahmadu Bello University, Zaria

Odeyemi, I., & Nixon, J. (2013). Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: a review-based comparative analysis. International Journal for Equity in Health, 12, 9 - 9. https://doi.org/10.1186/1475-9276-12-9

Odinenu, T., & Anago, C. J. (2025). Financing Universal Healthcare Coverage in Nigeria Through the Basic Health Care Provision Fund: Challenges and Potential Solutions.. *The International journal of health planning and management*. https://doi.org/10.1002/hpm.3909

Okaro, A. O., Ohagwu, C. C., & Njoku, J. (2010). Awareness and perception of National Health Insurance Scheme among radiographers in South-East Nigeria. American Journal of Scientific Research, 8, 18–25.

Onoka, C. A., Hanson, K., & Hanefeld, J. (2015). Towards universal coverage: A policy analysis of the development of the National Health Insurance Scheme in Nigeria. Health Policy and Planning, 30(9), 1105–1117. https://doi.org/10.1093/heapol/czu116

Onuorah, W. (2025). Comparative Effectiveness of NHIA Versus Out-of-Pocket Payment Models in Promoting Preventive Healthcare Utilisation in Nigeria. British Journal of Healthcare and Medical Research. https://doi.org/10.14738/bjhr.1205.19300

Onuorah, W. (2025). Impact of NHIA On Immunization Rates and Antenatal Visits in Nigeria. International Journal of Public Health, Pharmacy and Pharmacology. https://doi.org/10.37745/ijphpp.15/vol10n15258

Rm, Y., & Ra, A. (2025). An assessment of the practice of out-of-pocket health expenditures and its effects on access to health care among heads of households in gwagwalada area council, abuja nigeria. *International Journal of Health Care and Biological Sciences*. https://doi.org/10.46795/ijhcbs.v6i2.720

Sabitu.E.J and James, E. (2015).Knowledge, attitudes and opinions of healthcare providers in Minna towards NHIS. Annals of Nigerian medicine 1, 9-13

Samin, H. and Awe, A. T. (2019). Universal healthcare coverage: assessing the implementation of Ghana's NHIS Law. Bloomington: Indiana University Press.

Schelleken, A. F. (2019). Financing healthcare in sub- Saharan Africa through user fee and insurance. Washington D.C: World Bank,14-21

Sunkanmi, A., Adaeze, M., & Titilope, O. (2025). The Promises and Perils of Mandatory Health Insurance in Nigeria Under the National Health Insurance Authority. World Journal of Public Health. https://doi.org/10.11648/j.wjph.20251003.13

Sunkanmi, A., Adaeze, M., & Titilope, O. (2025). The Promises and Perils of Mandatory Health Insurance in Nigeria Under the National Health Insurance Authority. *World Journal of Public Health*. https://doi.org/10.11648/j.wjph.20251003.13

Ulonna, N. F., & Adekeye, J. A. (2025). A Comparative Analysis of National Health Insurance Scheme (NHIS) and National Health Insurance Authority (NHIA) on Universal Health Coverage (UHC) In Nigeria. Mediterranean Journal of Social Sciences. https://doi.org/10.36941/mjss-2025-0037

Uzochukwu, B. S. C., Ughasoro, M. D., Etiaba, E., Okwuosa, C., Envuladu, E., & Onwujekwe, O. (2015). Health care financing in Nigeria: Implications for achieving universal health coverage. Nigerian Journal of Clinical Practice, 18(4), 437–444. https://doi.org/10.4103/1119-3077.154196

World Health Organization. (2023). Universal health coverage and health financing in Nigeria. World Health Organization. https://www.who.int