

# ASSESSING THE AWARENESS AND AVAILABILITY OF NATIONAL HEALTH INSURANCE SCHEME SERVICES AMONG TERTIARY INSTITUTION STAFF IN NORTHERN STATES, NIGERIA

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## Abstract

This paper assessed the awareness, availability, utilization, impact and satisfaction of National Health Insurance Scheme (NHIS) services among staff of tertiary institutions in Northern States, Nigeria. Ex post-facto research design was used on a sample size of 764 respondents. To achieve the stated objective, the researchers developed questionnaire as an instrument for data collection. The population of the study comprised of 64,986 academic and non-academic, male and female staff of tertiary institutions in Northern States, Nigeria. The data collected were analyzed using mean scores and standard deviation, and one sample t-test statistics at 0.05 level of significance. The result showed that significant difference existed between one academic institution and the other in their satisfaction on utilization of NHIS services in Northern States. Based on the finding, the study recommended that explicit consideration should be given to the needs for equal distribution of health care services in Northern States tertiary institutions irrespective of the status of the institutions. Government should ensure effective monitoring and evaluation of the scheme to ensure satisfactory service delivery to the clients and the management and authorities of the partner clinics/hospitals should improve and let the workers utilize some services such as radiology and medical imaging diagnostic test.

**Keywords:** NHIS, impact, utilization, satisfaction, tertiary institutions

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## Introduction

National Health Insurance Authority (NHIA) in Nigeria is a government agency established to oversee the implementation and regulation of the National Health Insurance Scheme (NHIS). The NHIS was introduced in 1999 with the primary goal of providing universal health coverage and affordable healthcare services to all Nigerians (Akande, Adedovin & Aderibigbe, 2022). The NHIA plays a pivotal role in the administration and management of the scheme, ensuring its efficient and effective operation. One of the key responsibilities of the NHIA is the registration and accreditation of healthcare providers, including public and private hospitals, clinics, and healthcare facilities. This process involves evaluating the facilities' infrastructure, equipment, personnel, and adherence to established standards to ensure they meet the required criteria for participation in the NHIS (Adewole, Dairo & Bolarinwa, 2019). By accrediting healthcare providers, the NHIA aims to guarantee the delivery of quality healthcare services to enrollees under the scheme.

The NHIA is also responsible for the enrollment and registration of individuals and organizations into the NHIS. This includes formal sector employees, self-employed individuals, and vulnerable groups such as children, pregnant women, and the elderly (Adewole *et al.*, 2019). The enrollment process involves the collection and management of relevant data, ensuring accurate record-keeping and efficient administration of the scheme. Another crucial role of the NHIA is the management and disbursement of funds collected through contributions from enrollees and government subsidies. The authority oversees the pooling of these funds and ensures their equitable distribution to accredited healthcare

providers based on the services rendered to enrollees (Akande et al., 2022). This financial management aspect is critical to maintaining the sustainability and viability of the NHIS. Furthermore, the NHIA is tasked with developing and implementing policies, guidelines, and regulations that govern the operation of the NHIS. This includes setting the contribution rates, defining the benefit packages, and establishing the rules and procedures for claims processing and reimbursement (Adewole *et al.*, 2019). The authority also plays a crucial role in monitoring and evaluating the scheme's performance, identifying areas for improvement, and making necessary adjustments to enhance its effectiveness.

In recent years, the NHIA has focused on expanding the coverage of the NHIS to include more Nigerians, particularly those in the informal sector and rural areas. This effort aims to bridge the gap in access to healthcare services and promote equity in the healthcare system (Akande, Dairo & Bolarina, 2022). The authority has also been working on strengthening its operational capacity, improving its information technology infrastructure, and enhancing collaboration with stakeholders, such as healthcare providers, employers, and state governments (Adewole *et al.*, 2019). However, the NHIA faces several challenges in its quest to achieve universal health coverage in Nigeria. These challenges include inadequate funding, inefficient administrative processes, limited awareness and understanding of the scheme among the public, and the reluctance of some healthcare providers to participate due to concerns over reimbursement delays and bureaucratic bottlenecks (Akande *et al.*, 2022). To address these challenges, the NHIA has been advocating for increased government support and funding, streamlining administrative processes, and intensifying public awareness campaigns (Adewole *et al.*, 2019). Additionally, the authority has been exploring innovative strategies, such as leveraging technology and fostering public-private partnerships, to improve the scheme's efficiency and reach (Akande et al., 2022).

Although the concept of the scheme was targeted at the formal sector, that is the public service and organized private sector, the policy trust later changed to include people in the other sectors of the economy which include people in the rural community, the self-employed, the vulnerable groups and workers in tertiary institutions. This becomes necessary so as to ensure universal coverage and access to adequate and affordable health for all (Millinium Development Goals (MDGs 2016; Inegbedion, 2015). The NHIA is saddled with the mandate of universal coverage of all citizens by the end of 2020. As part of strategies to pursuit this mandate, the scheme, has design various programmes targeting the various segments of the Nigeria economy, the scheme has three different programmes to address different segments of the Nigeria society.

In addition every society large or small needs the best healthcare services for her people, the tertiary institutions cannot be left out of this noble course. As a matter of fact, the tertiary institutions need to play a leading role in the provision of healthcare services to the people because of the enlightened nature of the institutions and the belief that they should be more health conscious because of their knowledge. The continuous cost of health care services is a major concern to persons and all spheres of government in both developed and developing countries, particularly Nigeria, The fact that many policies have failed to mobilized enough financial, human and material resources to meet the existing or anticipated health needs of people. Perhaps this was the reason why availability of doctors, nurses and other health workers fall below a certain level. Access to health is fundamental human right, this assertion is enshrined in many global resolutions and declarations and merely the absence of diseases or infirmity. Access to health care services by the workers of tertiary institutions in Northern States, Nigeria is considered relatively low in Northern States, Nigeria. Also the facilities available in the health establishment, availability of alternative medical attention in the locality, perception of the attention received in the health care centre and the distance to the

centre's in terms of travel cost and time of reaching the health centre were perhaps hindrance to the utilization of NHIA health facilities.

While this phenomenon may hold true for all nations of the world, the developing countries, Nigeria inclusive are worst in achieving even minimal adequacy of health care services for its populace. The basic health needs of vast number of people remain unmet and the pursuit of improved standard of health has become a primary concern over the years (WHO, 2010). The sources of these problems, among others are perhaps poor government allocation of funds to the health sectors, inadequate supply of physicians accentuated by brain-drain syndrome in the health sector, poor distribution of health facilities or urban biased establishment of health facilities, shortage of drugs, corruption and attitude of the health workers. Obsolete and dilapidated health infrastructures, perhaps, are traceable to issues concerning efficiency, equity and resource constrains.

### **Purpose of the Study**

To assess the impact of satisfaction with National Health Insurance Scheme services on utilization among tertiary institutions staff in Northern States, Nigeria.

### **Research Question**

Are staff of tertiary institutions in Northern States satisfied with the utilization of National Health Insurance Scheme?

### **Hypotheses**

The satisfaction with National Health Insurance Scheme on the utilization of health care services for staff of tertiary institutions in Northern States is not significant.

### **Material and Methods**

Ex-post-facto research design was considered suitable for this study, since there will be manipulation of information from the respondents by the researchers hence the information needed is already in existence. According to Sambo (2008), the ex-post- facto research design leads to evaluation and identification of behavioural phenomena. The ex-post-facto research design was therefore, considered appropriate for this study.

The population of the study consisted of sixty-four thousand, nine hundred and eighty-six 64,986 (40,024 males and 24,940 females) Academic, and Non-Academic staff of nineteen (19) tertiary institutions in Northern States, Nigeria.

The sample size used in this study consisted of three hundred and eighty two (764) staff which was drawn from the sampled tertiary institutions in Northern States using Research Advisor (2006) Table for determining sample size from a given population. Research Advisor (2006) stressed that for a population of 60,000 to 74,999, the sample size should be 764 at 0.05 level, 5% margin of error and 95.0% degree of accuracy. The sampling procedure adopted for this study was stratified sampling technique, simple random sampling, proportionate sampling technique and systematic sampling technique.

The research instrument used for data collection was a close-ended questionnaire and it was structured using 4-point Likert scale, meant to determine the respondents' satisfaction with NHIS services on utilization among staff of tertiary institutions in Northern States, Nigeria

Descriptive statistics of frequency distribution and percentage count was used to describe demographic data of the respondents. Mean and standard deviation as used to analyze responses to the research questions, inferential statistics off one sample t-test was used to test the null hypotheses on the assessment of the impact of awareness, availability and satisfaction with the NHIS services on utilization among tertiary institutions; staff in Northern States, Nigeria.

## Results

**Research Question:** Are staff of tertiary institutions in Northern States satisfied with the utilization of National Health Insurance Scheme Services?

**Table 1.1; Mean Scores of Respondents and standard deviation on satisfaction of National Health Insurance Services**

Items	Mean	Std. Deviation
1 Hospitals and Inpatient Care (Hospital Admission) are satisfactorily cover for clients	2.58	1.133
2 The Prescribed Drugs and Pharmaceuticals in NHIS partner hospitals/ clinics are satisfactorily given because I never lack.	2.60	1.113
3 Specialist Consultation Services in NHIS partner hospitals/ clinics are provided to the clients satisfactorily	2.52	1.123
4 Maternal and Health Child Care Services in NHIS partner hospitals/ clinics are satisfactory.	2.64	1.112
5 Diagnostic Laboratory Test Services provided by NHIS partner hospitals/ clinics are promptly and satisfactorily covered.	2.47	1.122
6 Restorative and Rehabilitative Services for Physiotherapy provided by NHIS partner hospitals/ clinics are satisfactorily covered.	2.57	1.116
7 Accident and Emergency Services are promptly given to the sudden illness and causalities in NHIS partner hospitals/clinics satisfactorily	2.49	1.127
8 Dental Care Services provided by NHIS partner hospitals/clinics are satisfactory	2.50	1.122
9 Surgical Services provided by NHIS partner hospitals/clinics are satisfactorily taken care of	2.53	1.090
10 Obstetrics' and Gynecology Services provided by NHIS partner hospitals/clinics are satisfactory	2.49	1.134
11 Radiology and Medical Imaging Services provided by NHIS partner hospitals/clinics are satisfactory	2.46	1.112
12 Ophthalmology and Optometric (Eye) Care Services provided by NHIS partner hospitals/clinics are satisfactory	2.58	1.114
13 Preventives and Control Health Care Services provided by NHIS partner hospitals/clinics are satisfactory	2.50	1.134
14 Mental Health Care Services provided by NHIS partner hospitals/clinics are satisfactory	2.51	1.134
15 Outpatient Care Services provided by NHIS partner hospitals/clinics are satisfactory	2.61	1.131
16 Medical Test Services provided by NHIS partner hospitals/clinics are satisfactory	2.57	1.113

17	Basic Health Coverage Services provided by NHIS accredited partner hospitals/clinics are satisfactory	2.52	1.090
18	Ambulance Services provided by NHIS partner hospitals/clinics are satisfactory	2.47	1.129
19	Chronic Disease Management Services provided by NHIS partner hospitals/clinics are satisfactory	2.49	1.141
20	Family Planning Services provided by NHIS partner hospitals/clinics are satisfactory	2.58	1.128
21	Pediatrics' Services provided by NHIS partner hospitals/clinics are satisfactory	2.60	1.090
22	Ear, Nose and Throat (ENT) Services provided by NHIS partner hospitals/clinics are satisfactory	2.61	1.112
23	Primary Health Care services provided by NHIS partner hospitals/clinics are satisfactory	2.58	1.116
<b>Aggregate Mean Score</b>		<b>2.54</b>	<b>1.119</b>

Table 1.1 shows respondent responses on satisfaction with utilization of health care services available under National Health Insurance Scheme in tertiary institutions in Northern States, Nigeria. This study sought to evaluate staff satisfaction with healthcare services available through Nigeria's National Health Insurance Scheme (NHIS) in tertiary institutions across Northern states. Satisfaction was measured across 23 specific services and an aggregate average using a 4-point adopted Likert scale. The aggregate mean satisfaction score was 2.54, just above the mid-point of 2.5. Standard deviation of 1.119 shows responses clustered closely around the mean. Individual item means ranged from 2.49 to 2.64. Most fell between 2.5 to 2.6, similar to the aggregate. This suggests that staff perceived satisfaction as leaning towards moderate rather than high levels.

Items number 15, 22, 2, 21, 1, 12, 20, 23, 6, and 16 had the highest mean scores of 2.57 to 2.61 which indicates that the respondents are in agreement with the idea that outpatient care services, ear, nose and throat (ENT) care services, prescribed drugs and pharmaceutical, pediatrics care services, hospital an inpatient care, ophthalmology an optometric (eye) care services, family planning services, primary health care services, restorative an rehabilitation services for physiotherapy and medical test services. Next are items number 9, 3, 13, 14 and 17 with second highest mean scores of 2.50 to 2.53, while items number 5, 7, 10, 11, 18 and 19 had the least mean scores of 2.51 to 2.54 respectively.

Looking more closely, means hovering around 2.50 denote satisfaction rated predominantly as moderate. Scores closer to the scale endpoints would indicate stronger feelings of (dis)satisfaction. The narrow range and clustering near the midpoint therefore point to moderate, middling assessments of overall satisfaction. While Natural variation was evident, evaluations remained constrained within one scale point of respective means. Responses form a consolidated body indicating shared moderate perspectives.

**Hypothesis One:** The satisfaction with National Health Insurance Scheme health care services for staff of tertiary institutions in Northern States, Nigeria, is not significant

**Table 1.2: One sample t-test Analysis on the satisfaction with National Health Insurance Scheme services for staff of tertiary institutions in Northern States, Nigeria**

Variable	N	Mean	Std	Df	t-cal	p-value
Satisfaction	764	2.54	1.119	762	0.99	.069
Test Mean		2.50	.000			

**$t(762) = .99, p > .05$**

This one sample t-test examined whether the mean satisfaction rating of 2.54 among 764 staff differed significantly from the test value of 2.50, the midpoint of the 4-point scale.

The t-test yielded a calculated value of 0.99 with 762 degrees of freedom. This value does not surpass the critical value of 1.96 needed for significance at the 0.05 level.

Additionally, the p-value was reported as 0.069, which exceeds the cut-off value of 0.05. Therefore, as the p-value is greater than 0.05, the researcher fails to reject the null hypothesis that the sample mean is equal to the test value. While the sample mean satisfaction rating of 2.54 was slightly higher than the scale midpoint of 2.50, which indicated least satisfaction. This difference is not statistically significant according to the one sample t-test results. It cannot be claimed that reported satisfaction levels were significantly higher or lower than moderate. Therefore, the satisfaction with the NHIS health care services is not significant.

### **Discussion of Findings**

The study was on assessment of the impact of satisfaction of National Health Insurance Scheme (NHIS) health care services on utilization among staff of tertiary institutions in Northern States, Nigeria showed that there is significant satisfaction of National Health Insurance Scheme services among staff of tertiary institutions in Northern States, Nigeria.

Findings of this study revealed that satisfaction is a state of pleasure or commitment with an action or service, especially one that was previously desired and when applied to medical care, patient's satisfaction can be considered with context of participants' appraisal of their desire and expectations of health care (Ilochonwu & Adedigba, 2017). Morgan, Anderson and Mittal (2015) in their study suggested that satisfaction is related to perception of the outcome of care and the extent to which it meets patients' satisfaction. This is supported by Newsome and Wright (2017) who demonstrated that a relationship between satisfaction and expectation is not necessarily direct but content that, it then seems reasonable to suggest that expression of figure to some extent. Odo and Ogye (2022) asserted that, it is difficult to sell services if individuals are dissatisfied with the services because in a competitive health care environment, patients waiting time play an increasingly important role in a clinic's ability to attract new business. However, this study revealed that health care services under the National Health Insurance Scheme impact on Academic and non-Academic staff of tertiary institutions of Northern States, Nigeria. This agreed with Muriithi (2013) and Varian, (2014) who concur that, in terms of benefits, health insurance scheme was discovered to have two side of its coin; Empirical studies suggested that workers in jobs with health insurance coverage had higher productivity and lower turnover than workers without health insurance benefits. On the other hand, other studies suggested that offering health insurance has very little or no effect on job turnover (Muriithi, 2013; Varian, 2014). However, it is generally believed that people without health insurance are more likely to be in worse health condition and have higher death rates than those people with health insurance coverage because they are less likely to seek medical care. Cunningham in Odo and Ogye (2022) asserted that patient's satisfaction through enhanced medical care, long waiting time has frequently been mentioned as one factor which may limit health care service utilization by any community.

## Conclusion and Recommendations

Based on the results of the findings, this study concludes that satisfaction with NHIS services on utilization among tertiary institutions staff in Northern States, Nigeria cannot be over emphasized. Therefore, the following recommendations are made:

1. Government at both federal and state should provide equal NHIS services to all the tertiary institutions in Northern States, Nigeria irrespective of the status of the institutions.
2. The management and authorities of the partner clinics/hospitals should improve and let the workers utilize some services such as radiology and medical imaging diagnostic test.
3. Government at all of governance should ensure effective monitoring and evaluation of the scheme to ensure satisfactory service delivery to the clients

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