

## **Assessment of Civil Servants' Knowledge and Attitudes Toward the National Health Insurance Scheme in Ibarapa East Local Government Area, Oyo State, Nigeria**

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### **Abstract:**

Access to affordable health care remains a major challenge in Nigeria. The National Health Insurance Scheme (NHIS) was established to reduce out-of-pocket expenditure and improve financial risk protection, particularly among formal sector workers such as civil servants. This study assessed the knowledge, attitudes, and factors influencing utilization of NHIS among civil servants in Ibarapa East Local Government Area, Oyo State, Nigeria. A descriptive cross-sectional design was employed. Data were collected from 300 civil servants using a structured questionnaire covering socio-demographic characteristics, knowledge, attitude, and factors influencing NHIS utilization. Descriptive statistics and Pearson Product Moment Correlation were used to analyze the data at a 5% significance level. Among respondents, 59.3% were registered with NHIS, and 54.7% had collected their NHIS numbers. Despite generally high knowledge levels, 63.0% perceived the scheme as ineffective, and 70.7% indicated willingness to discontinue participation if given the opportunity. Age showed a weak but significant positive relationship with NHIS utilization ( $r = 0.249$ ,  $p < 0.01$ ). Level of education was strongly associated with knowledge of NHIS ( $r = 0.690$ ,  $p < 0.01$ ) and moderately associated with factors influencing utilization ( $r = 0.227$ ,  $p < 0.05$ ). Gender demonstrated a weak positive relationship with attitude toward NHIS ( $r = 0.190$ ,  $p < 0.05$ ). While civil servants demonstrated good knowledge of NHIS, negative perceptions and dissatisfaction persist, highlighting gaps between awareness and perceived value. Education emerged as a key determinant of knowledge and utilization. Targeted public enlightenment campaigns and improvements in service delivery are essential to enhance confidence, sustain enrollment, and optimize the effectiveness of NHIS.

**Keywords:** *National Health Insurance Scheme, civil servants, knowledge, attitude, utilization, Oyo State, Nigeria*

### **Introduction**

#### **Background**

The knowledge and attitudes toward health insurance have increasingly gained global attention as nations seek sustainable mechanisms to finance health care. Inequality and limited access to quality health services remain persistent challenges, particularly in developing countries where health care financing has historically been inadequate [1]. Health insurance has emerged as a widely recognized approach to addressing these financing challenges. In countries such as the United States and Canada,

achieving comprehensive health care through various forms of health insurance has been a prominent political issue, often featuring prominently in electoral campaigns and public discourse, reflecting the high value citizens place on accessible health services [1]. Health insurance, first introduced in Germany in 1883 under General Von Bismarck's old-age and disability insurance scheme, has since gained prominence across industrialized nations including France, the United Kingdom, and others [2]. Developing countries, including Costa Rica, Brazil, Bangladesh, China, India, Kuwait, Pakistan, and Thailand, have also increasingly adopted health insurance models. In Africa, countries such as Egypt, Tanzania, Kenya, Ghana, South Africa, and Zimbabwe have implemented similar schemes [3]. In Nigeria, escalating medical costs and chronic underfunding of the health sector, compounded by economic downturns in the 1980s and 1990s, led to low utilization of orthodox health services, closure of facilities, and migration of health professionals [1]. Consequently, many individuals resorted to alternative health care practitioners, including herbalists and spiritualists, resulting in persistently high mortality from common diseases. To mitigate these challenges, the government has introduced several interventions over time, including the Bamako Initiative, user fees, and drug revolving funds. More recently, attention has focused on health insurance as a viable strategy to improve access to quality care [2].

The National Health Insurance Scheme (NHIS) was first conceived in Nigeria in 1962 with a parliamentary bill, which faced opposition due to limited availability of quality health services. The concept resurfaced in the early 1980s, leading to council approval in 1989 and eventual inauguration of the scheme in 1992. The NHIS was formally launched in 1997, with its enabling law (Act 35 of 1999) signed in May 1999, and a presidential launch in June 2005 in Abuja. The scheme is a social security system designed to provide financial protection and facilitate access to quality health care for all Nigerians at an affordable cost [4][5]. It operates as a prepayment plan in which participants contribute regularly to a pooled fund used to cover medical expenses, with contributions often based on the individual's ability to pay [6]. Insurance, as defined by the International Labour Organisation, involves risk-sharing to reduce or eliminate the financial loss faced by individuals or households by pooling resources among many participants [7]. Health insurance specifically protects against the costs of disease, injury, or other health-related needs. Within this context, knowledge refers to awareness and understanding of NHIS objectives, operations, benefits, and responsibilities among civil servants. Attitude encompasses the predisposition of individuals to respond favorably or unfavorably toward NHIS, influencing their adoption and participation [8].

The NHIS comprises several programmes targeting diverse populations, including formal sector employees (public and private), armed forces, students, voluntary participants, informal sector groups, and vulnerable populations such as the aged, disabled, and children under five [4][5]. Globally, health insurance can be categorized as government/social insurance, private insurance, employer-based insurance, and community-based insurance, each differing in coverage, contribution, and administration [2][3][9]. The NHIS falls under government/social insurance, providing compulsory or semi-compulsory coverage for formal sector employees, with contributions based on income rather than actuarial risk. Health insurance, by distributing health care costs across a larger population, mitigates the financial burden on individuals, allowing access to care even for high-cost or unexpected medical events. This rationale underpins the importance of NHIS in addressing health financing challenges in Nigeria. Despite these advantages, adoption and participation depend on the knowledge and attitudes of the target population. In this regard, understanding the level of awareness and perception of civil servants in Ibarapa East Local Government Area toward NHIS is crucial, as it directly influences scheme utilization and overall success of health care delivery interventions.

## Methodology

### Study Design

The study adopted a descriptive design, which is particularly useful for characterizing large populations and allows respondents to provide candid and valid responses. This design was considered

suitable for the study as it facilitates accurate sampling and enables the collection of targeted data necessary to draw meaningful conclusions and inform decisions.

### Study Location

The study was conducted in Ibarapa East Local Government Area (LGA) of Oyo State, Nigeria, with its headquarters at Eruwa. Established in 1989, the LGA covers an area of 705.78 km<sup>2</sup> and comprises ten political wards. Predominantly inhabited by the Yoruba ethnic group, the area also hosts other ethnicities such as Fulani, Igbo, and Tiv. The economy is largely agrarian, with over 75% of the population engaged in farming and agro-allied activities, supported by local institutions such as Nico Oil Palm Plantation, Zartech, Global-West, and Obasanjo Farms. The LGA is also home to two tertiary institutions: Ibarapa Polytechnic and Oyo State College of Education, Lanlate. The population engages in other economic activities including trading and cloth weaving.

### Sample Size and Sampling Procedure

The target population for this study consisted of all civil servants working in Ibarapa East LGA. A sample of 300 civil servants was selected using simple random sampling techniques to ensure representativeness and reduce selection bias. This sample size was considered sufficient to capture variations in knowledge, attitudes, and practices regarding NHIS among the study population.

### Data Collection

Data were collected using a structured questionnaire designed specifically for this study. The instrument comprised four sections: Section A captured demographic information of respondents, Section B assessed knowledge of the National Health Insurance Scheme (NHIS), Section C explored attitudes toward NHIS, and Section D identified factors influencing NHIS utilization. Reliability was determined through a pilot study administered to ten individuals with similar characteristics to the study population but not part of the main sample. This process ensured the instrument consistently measured the intended variables. The questionnaire was administered to consenting participants, with efforts made to retrieve completed questionnaires promptly to maximize response rate. Participants were briefed on the purpose and objectives of the study prior to data collection.

### Data Analysis

Data were coded, entered, and cleaned before analysis using the Statistical Package for the Social Sciences (SPSS) version 23. Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to summarize respondents' socio-demographic characteristics and levels of knowledge, attitudes, and NHIS utilization. Knowledge and attitude scores were computed and categorized into defined levels. Pearson product-moment correlation analysis was used to examine relationships between continuous variables and identify predictors of NHIS utilization, thereby testing the study hypotheses. Statistical significance was set at 0.05. Findings were presented in tables where appropriate.

### Ethical Considerations

Ethical approval and permission to conduct the study were obtained from relevant authorities within the LGA. Participants provided written informed consent prior to participation. The study objectives were explained to all respondents, and confidentiality of responses was assured.

## Results

**Table 1.** Socio-demographic Characteristics of Respondents (N = 300).

Variable	Frequency (n)	Percentage (%)
<b>Sex</b>		
Male	105	35.0
Female	195	65.0
<b>Age Group (years)</b>		

Variable	Frequency (n)	Percentage (%)
< 30	55	18.3
31–40	85	28.3
41–50	85	28.3
≥ 51	75	25.0
<b>Mean age ± SD</b>	<b>41.3 ± 10.5 years</b>	
<b>Educational Qualification</b>		
WAEC/SSCE or below	62	20.7
OND/NCE or equivalent	92	30.7
Bachelor's degree/HND	59	19.7
Postgraduate (MSc/PhD)	87	29.0
<b>Religion</b>		
Christianity	169	56.3
Islam	129	43.0
Traditional	2	0.7
<b>Marital Status</b>		
Married	174	58.0
Single	97	32.3
Divorced	6	2.0
Separated	9	3.0
Widowed	14	4.7
<b>Occupation</b>		
Health worker	76	25.3
Teacher	134	44.7
Administrative staff	45	15.0
Financial staff	22	7.3
Unskilled staff	23	7.7

A total of 300 civil servants participated in the study, with females accounting for 65.0% and males 35.0%. The age distribution showed that 28.3% of respondents were aged 31–40 years and 28.3% were aged 41–50 years, while 25.0% were 51 years and above and 18.3% were below 30 years. The mean age of the respondents was  $41.3 \pm 10.5$  years. Regarding educational qualification, 30.7% had OND/NCE or equivalent, 29.0% possessed postgraduate degrees (MSc/PhD), 19.7% held a bachelor's degree or HND, and 20.7% had WAEC/SSCE or below. Christianity (56.3%) and Islam (43.0%) were the predominant religions, with 0.7% practicing traditional religion. More than half of the respondents were married (58.0%), while 32.3% were single; 4.7% were widowed, 3.0% separated, and 2.0% divorced. In terms of occupation, teachers constituted 44.7% of the respondents, health workers 25.3%, administrative staff 15.0%, financial staff 7.3%, and unskilled staff 7.7%.

**Table 2.** Respondents' Knowledge of the National Health Insurance Scheme (NHIS) (N = 300).

Variable	Frequency (n)	Percentage (%)
<b>Awareness of NHIS</b>		
Yes	216	72.0
No	84	28.0
<b>Source of Information</b>		
Place of work	107	35.7
Radio	89	29.7
Colleagues/health workers	49	16.3
Newspaper	30	10.0
Friends	15	5.0
Relatives	10	3.3
<b>Knowledge of Type of Scheme NHIS Is</b>		
Government-owned insurance scheme	135	45.0
Medical aid scheme	79	26.3
Social health insurance	45	15.0
Community-based health insurance	41	13.7
<b>Knowledge of NHIS Launch</b>		
Knows year of launch	107	35.7
Does not know	193	64.3
<b>Correct Year Identified (2005) †</b>	15	5.0
<b>Knowledge of NHIS Objectives</b>		
To provide easy access to health care	153	51.0
To reduce cost of health care	56	18.7
To improve quality of health care delivery	45	15.0
To make health resources accessible to all	23	7.7
To improve efficiency of health services	18	6.0
Others	5	1.7

The findings in table 2 indicate that 72.0% of respondents had previously heard about the National Health Insurance Scheme (NHIS), while 28.0% had not. Among those aware of the scheme, the workplace was the most common source of information (35.7%), followed by radio (29.7%) and colleagues or fellow health workers (16.3%). Newspapers (10.0%), friends (5.0%), and relatives (3.3%) were less frequently reported as sources of information. Regarding knowledge of the type of scheme, 45.0% identified NHIS as a government-owned insurance scheme, while 26.3% described it as a medical aid scheme. Smaller proportions correctly identified it as a social health insurance scheme (15.0%) or as

a community-based health insurance scheme (13.7%). Concerning the historical background of the scheme, only 35.7% reported knowing when NHIS was launched, whereas 64.3% did not. However, just 5.0% of all respondents correctly identified 2005 as the year of its official launch.

In relation to the objectives of NHIS, over half of the respondents (51.0%) indicated that the scheme aims to provide easy access to health care, while 18.7% believed it is intended to reduce the cost of health care. Additionally, 15.0% associated the scheme with improving the quality of health care delivery, 7.7% stated that it seeks to make health resources accessible to all, and 6.0% linked it to improving the efficiency of health services.

**Table 3.** Respondents' Attitude Toward the National Health Insurance Scheme (NHIS) (N = 300).

Variable	Frequency (n)	Percentage (%)
<b>Registration Status</b>		
Registered with NHIS	178	59.3
Not registered	122	40.7
<b>NHIS Number</b>		
Collected NHIS number	164	54.7
Not collected	136	45.3
<b>Reason for Not Registering / Not Collecting NHIS Number</b>		
Not available	69	50.7
No time	58	42.7
No reason	9	6.6
<b>Frequency of NHIS Service Use</b>		
Always	48	29.3
Often	36	22.0
Seldom	27	16.5
Rarely	53	32.3
<b>Adherence to NHIS Doctor's Instructions</b>		
Yes	139	84.8
No	25	15.2
<b>Timing of NHIS Hospital Visits</b>		
When sick	39	23.8
Anytime convenient	68	41.5
For physical examination	30	18.3
During holidays	27	16.5
<b>Perception of NHIS as Scam</b>		
Yes	189	63.0
No	111	37.0
<b>Intention to Discontinue NHIS if Possible</b>		

Variable	Frequency (n)	Percentage (%)
Yes	212	70.7
No	88	29.3

The results show that 59.3% of respondents were registered with the National Health Insurance Scheme (NHIS), while 40.7% were not. Just over half of the respondents (54.7%) had collected their NHIS numbers, whereas 45.3% had not. Among those not registered or without an NHIS number, the main reasons cited were unavailability of the scheme (50.7%) and lack of time (42.7%), with a small proportion (6.6%) providing no specific reason. Analysis of service utilization revealed that 29.3% of respondents reported always using NHIS services, 22.0% used them often, 16.5% seldom, and 32.3% rarely. Adherence to medical instructions provided by NHIS doctors was high, with 84.8% of respondents reporting compliance. Regarding the timing of visits to NHIS facilities, the majority (41.5%) attended whenever convenient, 23.8% visited only when sick, 18.3% for routine physical examinations, and 16.5% during holidays. Perceptions of the scheme were mixed, with 63.0% of respondents expressing the belief that NHIS is a scam or does not adequately provide care, while 37.0% disagreed. A substantial proportion (70.7%) indicated that they would discontinue the scheme if given the opportunity, compared to 29.3% who would remain enrolled.

**Table 4.** Factors Influencing Respondents' Use of the National Health Insurance Scheme (NHIS) (N = 300).

Variable	Frequency (n)	Percentage (%)
<b>Age as a factor in NHIS utilization</b>		
Yes	203	67.7
No	97	32.3
<b>Gender as a factor in NHIS utilization</b>		
Yes	198	66.0
No	102	34.0
<b>Family benefits influencing NHIS usage</b>		
Yes	159	53.0
No	141	47.0
<b>Education and awareness through seminars, workshops, and programs encourage NHIS use</b>		
Yes	179	59.7
No	121	40.3
<b>Lack of awareness and education hinders NHIS utilization</b>		
Yes	179	59.7
No	121	40.3

Table 4 indicate that 67.7% of respondents reported age as a factor influencing NHIS utilization, particularly noting that younger individuals are less likely to visit NHIS clinics. Gender was also identified as an influencing factor by 66.0% of respondents. The family benefits package was reported

by 53.0% as encouraging scheme usage. Furthermore, 59.7% of respondents indicated that education and exposure to awareness programs promote NHIS utilization, while the same proportion reported that lack of adequate awareness and education hinders effective use of the scheme.

**Table 5.** Pearson Product Moment Correlation Showing Relationships between Selected Variables and NHIS Utilization (N = 300).

Variables Compared	Mean ± SD (Variable 1)	Mean ± SD (Variable 2)	r	df	p-value
Age and NHIS utilization	40.00 ± 4.81	16.00 ± 2.70	0.249**	298	<0.01
Level of education and knowledge of NHIS	36.67 ± 6.71	50.41 ± 8.61	0.690**	298	<0.01
Gender and attitude toward NHIS	55.00 ± 11.87	19.00 ± 4.75	0.190*	298	<0.05
Level of education and factors influencing NHIS use	36.60 ± 6.71	16.60 ± 4.27	0.227*	298	<0.05

The Pearson Product Moment Correlation analysis demonstrated a statistically significant positive relationship between age and NHIS utilization ( $r = 0.249$ ,  $p < 0.01$ ), indicating that utilization of the scheme increased with age, although the strength of the association was weak. A strong positive and statistically significant relationship was observed between level of education and knowledge of NHIS ( $r = 0.690$ ,  $p < 0.01$ ), suggesting that higher educational attainment was associated with better knowledge of the scheme. Gender also showed a weak but statistically significant positive relationship with attitude toward NHIS ( $r = 0.190$ ,  $p < 0.05$ ), implying that attitudes toward the scheme varied across gender. In addition, level of education was positively and significantly correlated with factors influencing the use of NHIS ( $r = 0.227$ ,  $p < 0.05$ ), indicating that respondents with higher education were more likely to report identifiable factors affecting their utilization of the scheme.

## Discussion

The findings of this study provide empirical evidence on the knowledge, attitudes, and utilization of the National Health Insurance Scheme (NHIS) among civil servants in Ibarapa East Local Government Area. Civil servants demonstrated moderate levels of registration and utilization of the scheme, although skepticism regarding its effectiveness and a willingness to discontinue participation were observed. This aligns with national evidence showing that formal health insurance coverage remains low in Nigeria, and out-of-pocket payments dominate health financing, potentially leading to financial hardship [10]. Educational attainment was strongly and positively associated with knowledge of NHIS, indicating that respondents with higher education were more aware of the scheme and its benefits. This finding is consistent with studies by Agada-Amade and Manning, which reported that higher education improves understanding and awareness of health insurance [2]. Education enhances individuals' ability to process information, assess benefits, and make informed decisions regarding health care. More recent studies in low- and middle-income countries similarly show that educational attainment is a key predictor of health insurance literacy and enrollment [7]. These results suggest that sustained public enlightenment campaigns are essential, particularly for individuals with lower educational levels.

Age was positively correlated, though weakly, with NHIS utilization, indicating that older civil servants were more likely to use the scheme. This is consistent with evidence that older adults, who face higher morbidity and chronic health needs, tend to engage more with health services and insurance programs [9]. This finding reinforces the principle of risk pooling in social health insurance, where contributions are based on ability to pay, but utilization is driven by health needs. Gender showed a weak but statistically significant association with attitudes toward NHIS, with females demonstrating slightly more positive attitudes. This aligns with prior research by Finkelstein and Kilpatrick, which observed that women generally exhibit more proactive health-seeking behavior and favorable attitudes toward health interventions [11][12]. Women's positive orientation may be influenced by reproductive and family health responsibilities, but the weak association suggests that gender alone is not the primary determinant of attitudes, and other contextual or institutional factors may play a role. Level of education was also significantly related to factors influencing NHIS utilization. Civil servants with higher education were more likely to recognize determinants such as awareness, family benefits, and service accessibility as influencing their use of the scheme. This corroborates findings by Okezie and the National Health Insurance Scheme, emphasizing that education shapes both knowledge and perception of structural and contextual determinants of health insurance uptake [4][6]. The National Health Insurance Authority further underscores that targeted communication strategies and stakeholder engagement are critical for increasing coverage and participation [13].

Despite relatively high awareness, negative attitudes and willingness to discontinue the scheme highlight a gap between knowledge and perceived value. This disconnect may be attributed to challenges in service delivery, including limited availability of drugs, long waiting times, and administrative inefficiencies, as reported in previous studies [1][5][14] [15][16][17][18][19][20]. Such systemic issues undermine public confidence and satisfaction, illustrating that information campaigns alone are insufficient to ensure sustained utilization [21][22][23][24][25][26][27][28][29][30][31][32][33].

## **Conclusion**

This study reveals important findings on knowledge, attitude and use of the NHIS among civil servants in Ibarapa East Local Government Area of Oyo State, Nigeria. Results mean: Overall, although the majority of respondents had a relatively high level of awareness and knowledge of NHIS, actual perceptions and attitudes towards the scheme remained rather negative with many respondents expressing dissatisfaction with, and a desire to stop participating in, NHIS. Education was identified as an important factor affecting knowledge and use: relates to the better knowledge of the scheme and understanding of factors affecting use in the case of respondents who attained higher level of education. Age also had a weak but significant positive association with the use of NHIS, which means older civil servants used the scheme more than younger ones, but this observation is hardly surprising as older individuals would generally have greater health needs. These results reveal an important disconnect between knowledge and perceived efficacy of the scheme suggesting knowledge is not sufficient to promote a positive attitude or uptake over time. Policymakers and health administrators of PP-00019 in the NHIS should not only prioritize delivery of free medical access but also address the administrative inefficiency hindering service delivery, thus providing medical services consistently within the NHIS framework to reform public confidence and stabilize enrollment against access to free healthcare as a major source of benefit in an insurance scheme. In addition, it needs focused education campaigns and stakeholder engagement strategies to promote awareness and buy-in to the scheme among civil servants and the general population. Subsequently, studies are needed to assess service quality, institutional impediments and beneficiary experiences in other regions of Nigeria to provide insights on the determinants of perceptions and sustainable participation in national health insurance programs.

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