International Journal of Occupational Safety and Health

ISSN: 2091-0878 (Online) ISSN: 2738-9707 (Print)

Original Article

Implementation of National Health Insurance Scheme for Civil/Public Servants in Nigeria

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Date of submission: 21.04.2023
Date of acceptance: 02.12.2023
Date of publication: 01.07.2024

Conflicts of interest: None
Supporting agencies: None
DOI:
https://doi.org/10.3126/ijosh.v14i3.44912

ABSTRACT

Introduction: Nigeria's health system is characterized by gross underfunding, poor stakeholder coordination, and inadequate numbers and skills of health care workers. Thus, the study assessed the factors affecting the implementation of the National Health Insurance Scheme (NHIS) in Minna, Niger State, as well as the willingness of civil/public servants to enroll in the scheme. This study aims to determine the perceived benefits and barriers to participation in the NHIS by civil/public servants in Niger State.

Methods: The study employed a descriptive research design that is also comparative. Data were collected using questionnaires and analyzed using IBM-SPSS version 25.0 for Windows. A total of 1,740 were drawn from 10 ministries in Minna using a multi-stage sampling method. The duration of this study was four months (December 2020 – March 2021).

Results: A higher percentage of respondents (85.2%) said the scheme would be able to solve the problem of funding for health care delivery. However, more than half of the respondents, 56.1%, were either unsatisfied or very unsatisfied with their salaries. Nevertheless, 82.4% expressed good health status. All the respondents (100.0%) pay for their families' healthcare services without receiving any financial support from any other person. 127(39.2%) responded to the question asking about the effects of medical bills on their monthly expenditure. Yet, the majority, 265 (81.8%), were willing to part with a percentage of their salaries to contribute to NHIS.

Conclusion: The State Government should see the willingness of the civil servants to participate in the scheme as an opportunity to commence the implementation of the scheme without further delay to enable civil servants to participate and enjoy the benefits that the scheme offers.

Keywords: Barriers, Health insurance, Payments, Underfunding

Introduction

Despite Nigeria becoming the largest economy in Africa and its classification as a low middle-income country, health outcomes have witnessed slow progress and improvement. The health system is characterized by gross underfunding, poor stakeholder coordination, inadequate numbers and skills of health care workers, weak infrastructure, limited availability of evidence for planning and decision-making, inequalities in the distribution of health resources, poor access to services and little financial resources protection at the point care.[1]

Although the country is blessed with ample natural and human resources reserves, the government has struggled with translating these into concrete developmental gains. There remains a vast gap between poverty and economic inequality in Nigeria. In Nigeria, 40.1 percent of the total population was classified as poor.[2] In other words, on average, 4 out of 10 individuals in Nigeria have real per capita expenditures below 137,430 Naira (US$380.6) per year. This condition translates to over 82.9 million poor Nigerians by national standards, according to the Nigeria Bureau of Statistics' report on the 2019 poverty and inequality in Nigeria.

Similarly, the report indicated that in Niger State, 66.1 percent, representing 2.6 million of the total population, is within the poverty level. This figure is far above the national average, which is 40.1 percent. The challenge for this category of poor people is the ability to pay for health services out of pocket, when needed, within the meager financial resources, and without health insurance coverage.

The technical report of the 2017 National Health Account published in 2019 summarised the health care financing system. According to the report, government health expenditure as a proportion of total government expenditure increased from 2.8 percent in 2010 to 6.0 percent in 2017 but remained far below the target of 15 percent agreed to in 2001 when the Heads of the State of African Union member countries met and pledged to set a target of allocating at least 15 percent of their annual budget to improve the health sector (The Abuja Declaration). Also, out-of-pocket household spending was very high at 76.6 percent of current health expenditure compared to the WHO benchmark of 30-40 percent, while health insurance as a proportion of health expenditure remained very low at 1.6 percent in 2017.

Despite being the largest economy in Africa, the government has not translated economic growth into economic development. Nigeria spends less on health than many countries in the world.[3] In 2017, government health spending was 0.5 percent as a share of GDP or US$31.[4]The spending rate was much lower than in many African countries like Ghana (US$49), Kenya (US$67), and South Africa (US$588). Over the years, Nigeria's annual budgetary allocations to the health sector have fallen short of the minimum 15 percent in the Abuja Declaration. For example, a review of Nigeria's health budget over the past ten years (2010-2019) shows that provisions for the health sector range from 3.9 percent to 5.8 percent, far below the recommended minimum 15 percent benchmark. Similarly, a review of the Niger State budget over the same period (2010-2019) shows a 5.1 percent and 12.5 percent range. The National Health Insurance Scheme (NHIS) was launched in 2005 by the Federal Government of Nigeria to make health care services accessible and affordable to all Nigerians.

At the sub-national analysis level, Niger State is one of the constituent states in the Nigerian federation that is affected by the challenges faced at the national level. These challenges exist because the state depends on monthly allocation from the federation account as a significant source of revenue. However, resources accruing to Niger State from monthly federal allowances are dwindling, and internally generated revenue is inadequate. Niger State adopted the health insurance scheme in 2019 by establishing the State Contributory Health Insurance Scheme. The 14 years gap between when the project was launched in federal and Niger State meant that successive governments in the state did not give the scheme the priority attention it deserves despite its enormous benefits.

The low political priority frequently given to the health sector in budget allocation is one of the major impediments to the ability of the Niger State government to meet up the health care needs of the citizens. The challenge of inadequate budgetary allocation to the health sector is further aggravated by the delay in the take-off of the state health insurance scheme for the formal sector. While the Niger State government had made all preparations for its take-off, agitation by labor unions over the statutory 2.5 percent counterpart funding from civil servants had delayed this.

Furthermore, the amount needed from the government to pay the statutory 2.5 percent counterpart fund of the NHIS has increased by 50 percent due to the 67 percent increase in the minimum wage for all civil servants in Nigeria and Niger State. These variables delayed the take-off of the Niger State Health Insurance Scheme for the formal sector. Therefore, this paper aimed to evaluate the willingness of civil/public servants to enroll in NHIS in relation to other factors that may influence their enrollment decisions, to assess the level of awareness and knowledge of civil/public servants in Niger State about the National Health Insurance Scheme (NHIS) and to determine the perceived benefits and barriers to participation in the NHIS by civil/public servants in Niger State.

Methods

The study was carried out in Minna, Niger State, located in the North Central region of Nigeria. Niger State covers 76,363 square kilometers and is divided into 25 local government areas. In Niger State, public officials account for just 0.7% of the state population of 3,954,772 from the 2006 National Census. The study is a descriptive survey that is also comparative, using mixed qualitative and quantitative research methods, data will be analyzed using both approaches to provide a more complete picture of the characteristics of the groups being studied and any differences between them. Semi-structured questionnaires were used to obtain data from participants selected from ten ministries in Minna, Niger State. Participants were determined using the multi stage sampling technique based on the hierarchical structure of natural clusters within the population. Clusters are natural groupings of public/ civil servants. A cross-sectional descriptive approach was adopted in this study because it allowed the researcher to collect essential data on the Implementation of National Health Insurance Scheme in Niger State and if Civil/Public Servants are Willing to Participate [5]

The state has 26,000 public/civil servants, and 1,740 were selected from ten ministries. The sample population comprised staff of the Ministry of Health and Health Services-307, Tertiary Education-124, Finance-161, Justice-162, Land and Housing-173, Agriculture and Rural Development-221, Local Government, Community Development and contingency Affairs-104, Information and Strategy-102, RUWATSAN-106, and Gender Affairs and Social Development-280, making a total of 1,740.

The sample size was calculated using the Yaro Yamane formula, as demonstrated below.

$n = N/1+N(e)^2$

$n = 1740/1+1740(0.05)^2$

$n = 325$

Where: n is the sample size,
N is the population size, and
e is the level of precision = 5% = 0.05 at 95% confidence level.

A multi-stage sampling method was used to select the study respondents. Ministries were clustered from a list of all ministries in the state using their functions. Ten (10) ministries were selected purposively from the clusters. The civil servants were selected by stratified sampling according to their ministry. From each stratum, a random sample of each sample was drawn. The different ministries were further grouped into grade-level categories from grade levels 1- 17/SG using the Niger state workforce distribution list by grade level, accordingly - 1-5; 6-10; 12-16; and 17/SG.
The required number for each grade level category was derived from each grade level category using proportional sampling on the respondents according to grade levels. The standard questionnaire containing open and closed-ended questions was pilot-tested within a sample population and modified before administering to respondents after obtaining consent. Research assistants were engaged in distributing the questionnaire to the respondents. Data collected include willingness to enroll in NHIS and factors affecting the implementation of the NHIS in Niger State.

Data were analyzed using the IBM-SPSS version 25.0 for Windows, a chi-Square analysis was performed to ascertain the relationship between the variables used in the study. The outcomes of data analysis were presented in tables. Ethical

approval was sought and received from the Health Research Ethics Committee of the Niger State Ministry of Health (STA/495/Vol/171). Only those individuals who were willing to participate were recruited and informed about the purpose of the study. All participants gave consent. This research work followed all the guidelines and protocols provided by the Academic Committee of the University to prevent plagiarism, including indicating and acknowledging sources to give credit to them.

Results

The study comprised 324 respondents from the Ministry of Health Services (57), Tertiary Education (23), Finance (30), Justice (31), Land and Housing (32), Agriculture (41), Local Government (20), Information (19), RUTSWAN (20), and Gender Affairs (52). Males constituted 52.2% (169) and females 47.8% (155). The majority of the respondents, 317 (97.8%), have heard about NHIS.

Table 1: Views of respondents about NHIS

Opinions	Frequency
Do you see the scheme as being able to solve the problem of funding for the health care delivery	276 (85.2%)
It is potential for success	238 (73.5%)
It is sustainable	222 (68.5%)
Secure individuals/families against the payment of substantial medical bills	213 (65.7%)
Improve the quality of care in health services	256 (79.0%)
Improve access to health care services	261 (80.6%)
Improve waiting time and staff attitude toward patients	241(74.4%)
Have any reservations about the scheme	10 (3.1%)
Total	324 (100%)

Table 1 shows respondents' views of NHIS; 276 (85.2%) said the scheme would be able to solve the problem of funding for the health care delivery, 238 (73.5%) believed in its potential success, 261 (80.6%) believed in its provision of access to health care services, while only 10 (3.1%) had any reservation about the scheme.

As shown in Table 2, more than half of the respondents, 182 (56.1%), were either unsatisfied or very unsatisfied with their salaries, while 66 (20.1%) rated their salaries satisfactory. However, 267 (82.4%) expressed good health status, and the majority, 259 (79.9%), sought medical care at general hospitals. Concerning the monthly amount spent on medical bills, out of 150 (46.3%) that responded to this question, 68 (45.3%) paid NGN2 000.00 or less monthly, 44 (29.3%) spent NGN3, 000.00 – NGN5, 000.00, while 38 (25.3%) spent above NGN5, 000.00 each month. Thus, all the respondents (100.0%) pay for their families' healthcare services without financial support from any other person. Out of 127 that responded to the question asking about the effects of medical bills on their monthly expenditure, 105 (82.7%) said the bills had a negative effect on their monthly expenses, while only 22 (17.3%) expressed positive effects of the medical bills on their monthly expenses. Yet, the majority, 265 (81.8%), were willing to part with a percentage of their salaries to contribute to NHIS.

Generally, the willingness to register 285 (88.0%) and contribute part of one's salary 265 (81.8%) to NHIS was applicable to all respondents. However, willingness to register and contribute was low in the ministry of Land and Housing 16 (50.0%) and 15 (46.9%) and RUWATSAN 10 (62.5%) and 9 (56.3%), while most of the respondents from other parastatals were willing to register and contribute part of their salaries for the scheme (Table 3).

Table 2: Payment for healthcare services and its impact on respondents' income

Variable	Parameter	Frequency
Impression about salary	Satisfactory	66 (20.1)
	Fair	77 (23.8)
	Unsatisfactory	144 (44.4)
	Very unsatisfactory	38 (11.7)
The present state of health	Good	267 (82.4)
	Fair	57 (17.6)
Place where family members seek medical care	General hospital	259 (79.9)
	Private clinic	24 (7.4)
	Private healthcare center	31(9.6)
	Specialist hospital	10 (3.1)
Monthly medical bill	≤2000	68 (45.3)
	3000 – 50000	44 (29.3)
	>5000	38 (25.3)
	Total response	150 (46.3)
Who pays medical bills	Self	324 (100.0)
Effect of medical bills on monthly expenditure	Negative	105 (82.7)
	Positive	22 (17.3)
	Total response	127 (39.2)
Willing to part with a % of salary as a contribution to NHIS	Yes	265 (81.8)
	No	59 (18.2)

Table 3: Distribution of respondents' willingness to participate in NHIS by ministries, monthly salary, and knowledge of NHIS

VARIABLE	Willing to register on the NHIS scheme	Willing to part with a % of monthly salary as a contribution to NHIS
MINISTRY		
Agriculture and Rural Development	39 (95.1)	41 (100.0)
Finance	27 (96.4)	27 (96.4)
Gender Affairs and Social Development	46 (90.2)	45 (88.2)
Health and Health Services	58 (90.6)	58 (90.6)
Information and Strategy	20 (100.0)	18 (90.0)
Justice	28 (96.6)	21 (72.4)
Land and Housing	16 (50.0)	15 (46.9)
Local Government, Community Development and contingency Affairs	18 (90.0)	13 (65.0)
RUWATSAN	10 (62.5)	9 (56.3)
Tertiary Education	23 (100.0)	18 (78.3)
Total	285 (88.0)	265 (81.8)
X^2 (P-value)	57.728 (<0.001*)	70.644 (<0.001*)
MONTHLY SALARY (NAIRA)		
Below 50,000	44 (67.7)	48 (73.8)
50,000 - 100,000	38 (71.7)	44 (83.0)
101,000 - 150,000	29 (82.9)	33 (94.3)
151,000 - 200,000	49 (89.1)	52 (94.5)
201,000 - 250,000	52 (94.5)	53 (96.4)
251,000 - 300,00	32 (82.1)	35 (89.7)
301,000 - 350,000	11 (100.0)	10 (90.9)

351,000 - 400,000	5 (83.3)	5 (83.3)
Above 400,000	5 (100.0)	5 (100.0)
Total	265 (81.8)	285 (88.0)
X^2 (P-value)	23.873 (0.002*)	29.233 (0.022*)
AWARE OF NHIS	283 (89.3)	264 (83.3)
X^2 (P-value)	57.668 (<0.001*)	61.999 (<0.001*)

* Significant at p<0.05

Also, the respondents earning more than NGN50,000.00 monthly were more willing to register and pay for NHIS (>80%) than those earning below NGN50, 000.00 (<80%). All respondents 5 (100.0%) earning more than NGN400, 000.00 were willing to register and contribute to NHIS compared to those earning less than NGN50, 000.00 44 (67.7%) and 48 (73.8%) (P<0.05). Similarly, the majority of those that were aware of the NHIS were willing to enroll 283 (89.3%) and part of their monthly salary as a contribution to the scheme 264 (83.3%), p<0.001.

The study shows that the majority of the respondents consider that factors like cultural and religious beliefs 249 (76.9%), not being willing to prepay for healthcare 263 (81.2%), lack of trust in government social policies 280 (86.5%), resistance from labor union about 5% deduction from workers salary 262 (80.9%), lack of political will from successive governments 277 (85.4%), delay with initial take-off grant from the government 282 (87.1%), inadequate publicity by the government about the scheme 272 (83.9%), and absence of essential drugs in government hospitals 286 (88.3%) constitute the factors affecting the implementation of the NHIS in Niger State (Table 4).

Table 4: Factors affecting the implementation of the NHIS in Niger state

Parameter	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Cultural and religious beliefs	99 (30.6)	150 (46.3)	22 (6.8)	19 (5.9)	34 (10.5)
Unwillingness of the people to prepay for healthcare	95 (29.3)	168 (51.9)	33 (10.2)	10 (3.1)	18 (5.6)
Lack of trust in government social policies	123 (38.0)	157 (48.5)	20 (6.2)	6 (1.9)	18 (5.6)
Resistance from labour union about the 5% deduction from workers salary	101 (31.2)	161 (49.7)	26 (8.0)	17 (5.2)	19 (5.9)
The scheme will not allow members to opt out and access their funds if dissatisfied with the scheme	63 (19.4)	71 (21.9)	36 (11.1)	115 (35.5)	39 (12.0)
Lack of political will from successive governments	121 (37.3)	156 (48.1)	21 (6.5)	16 (4.9)	10 (3.1)
Delay with initial take-off grant from government	90 (27.8)	192 (59.3)	22 (6.8)	8 (2.5)	12 (3.7)
Inadequate publicity by government about the scheme	109 (33.6)	163 (50.3)	23 (7.1)	16 (4.9)	13 (4.0)
Absence of essential drugs in government hospitals	116 (35.8)	170 (52.5)	14 (4.3)	8 (2.5)	16 (4.9)

Discussion

The majority of the respondents expressed dissatisfaction with their current salary, yet, all pay for medical care. The majority of the study respondents have heard about NHIS though not all had in-depth knowledge of the insurance system. Respondents from the ministries of gender affairs and social development, justice, land and housing, and RUWATSAN showed a significantly lower awareness of the benefits of NHIS than participants from other ministries. The respondents are generally enthusiastic and willing to enroll in NHIS and contribute part of their monthly salaries to financing the scheme. The result is corroborated by a study conducted by Yeshiwas et al.[6] in Northwest Ethiopia, where the Social Health Insurance Scheme received 72.7% support for enrolment, and 66.6% were willing to contribute part of their monthly salaries. Another study among health professionals in Ethiopia indicated that 62.5% of the respondents were willing to participate in a social health insurance scheme, and 74.9% were willing to contribute part of their monthly salaries.[7] Thus, the willingness to enroll and pay for the NHIS, as expressed by respondents in all ministries except the Ministries of Land and Housing and RUWATSAN in Nigeria, is critical to the successful implementation of the program.

The high level of unwillingness to register for the scheme among respondents from these ministries can be associated with their insufficient knowledge of the scheme, among other factors. This finding underscores the need for more awareness to be carried out among the public and civil servants in the state, educating them about the benefits of NHIS to contributors.

Also, willingness to register and contribute part of their salary to NHIS was higher among respondents earning higher wages than those whose monthly incomes were below NGN50, 000.00. However, all participants earning more than NGN400 000.00 were ready to register and contribute 5% of their monthly salary to the scheme. The implication of this is that increasing awareness is not enough without financial empowerment. Hence, there is a need for better remunerations for the civil servants or consideration for reducing the percentage of counterpart contribution ratio. Willingness to renew NHIS membership depends on several factors: the prior knowledge of health status. Health status will influence NHIS renewal such that those in good health are unlikely to renew, whereas those in poor health are most likely to continue.[8] Also, since there are direct benefits attached to NHIS enrollment, people are more likely to pay for participating in the scheme than to pay taxes [9]. Some previous studies have also reported a high level of willingness to enroll in NHIS among beneficiaries or contributors.[9–15]

Similarly, a high rate of willingness to enroll found among respondents with knowledge of the scheme reported in this study agrees with previous studies that found that individuals aware of the scheme were willing to participate.[9,13] Dienye *et al.*[12]and Adewole et al.[16]even reported that though most of their study participants were unaware of NHIS, 84.3% were willing to enroll after being informed. Furthermore, the association between willingness to contribute part of salary for NHIS among enrollees and monthly earnings found in this study corresponds to the reports of Oladimeji *et al.*[10]and Omotowo et al.[17], who found a significant connection between willingness to pay and occupation. There was a significant association between knowledge and willingness to register and contribute part of the income. Respondents displayed a high willingness to enroll and contribute part of their monthly salaries to the scheme. People earning less were concerned about a decrease in their salary due to a deduction for NHIS.

Implementing the NHIS program is one of the most critical aspects of health program management. Respondents highlighted factors affecting the implementation of NHIS in Niger State as cultural and religious beliefs, unwillingness to prepay for healthcare, lack of trust in government social policies, resistance from labor unions about the 5% deduction from workers' salary, lack of political will from

successive governments, delay with initial take-off grant from the government, inadequate publicity by the government about the scheme, and absence of essential drugs in government hospitals. Previous studies have reported insufficient funding, inadequate infrastructure, lack of trust, and insufficient healthcare experts.[10,18] Since NHIS requires adequate funding to be operational, inadequate funding by the government and unwillingness to pay for the scheme by enrollees will hamper the scheme's success.

The NHIS was established to decrease the high cost of healthcare services and make them affordable and available to many Nigerians. However, many Nigerians continue to pay medical bills out-of-pocket and unwilling to enroll in the scheme. This attitude is due to individuals' lack of trust in government policies and a lack of political will by the policymakers. This out-of-pocket payment has kept pushing many people into poverty and terrible health expenses.[19]

Similar to the findings of this study, previous studies have reported factors affecting the successful implementation of NHIS in Nigeria like poverty due to low level of income, lack of knowledge, poor perception, wrong opinion, poor mode of payment, lack of drugs, poor administration, inadequate supervision, and lack of political will.[19–21] In addition, insufficient budgetary allocations for health continue to fall short of the 15% pledged by Nigeria's government in the Abuja declaration [18]. Besides, the spread of enrollees is biased toward government healthcare facilities. Most respondents prefer to access healthcare services in general hospitals due to the predominance of specialists. Therefore, there is a need to strengthen the primary health care system to improve patronage at this level of care toward a successful implementation of NHIS.

Conclusions

The study concluded that the majority of civil servants are willing to enroll in the scheme and commit part of their monthly salaries. Lack of political will, inadequate publicity, and inadequate funding for NHIS are key factors affecting the implementation of NHIS in Niger State. The State Government should see the willingness of the civil servants to enroll in the scheme as an opportunity to commence the implementation of the scheme without further delay, to enable civil servants to participate and enjoy the benefits that the scheme offers. Also, there is a need for prompt and adequate funding of NHIS by the Niger State government.

Conflicts of Intrest

The authors have declared that no competing interests exist.

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