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Awareness, knowledge and perceptions of physicians of the National Health Insurance Scheme in Nigeria: An exploratory study

Nene Okunna*[1], Nkiru Nwamaka Ezeama[2], Chukwuemeka Okwudili Ezeama[3], Leso Munala[4]

[1] *Department of Health Studies, School of Health Studies and Education, Saint Joseph's University, Philadelphia, USA*
[2] *Department of Community Medicine and Primary Health Care, Faculty of Medicine, Nnamdi Azikiwe University, Awka (Nnewi campus), Nigeria*
[3] *Department of Obstetrics and Gynecology, Faculty of Medicine, Nnamdi Azikiwe University, Awka (Nnewi campus), Nigeria*
[4] *Department of Public Health, St. Catherine University, St. Paul, Minnesota, USA*

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ABSTRACT

Nigeria implemented a National Health Insurance Scheme (NHIS) in 2005, introducing monumental changes to the health care delivery system. This study assessed physicians' understanding of the objectives of the NHIS as well as their perceptions of the scheme, to identify their level of acceptance and support of the health policy reform. A convenient sample of 134 physicians residing in South-East Nigeria were surveyed via a self-administered questionnaire. Descriptive statistics were used to summarize study data. Aggregate knowledge scores regarding health insurance and the NHIS objectives were assessed. Measures of consensus (Cns) of physicians' perceptions of the health reform were also obtained. Study results show a high level of awareness and support for the NHIS among participants. However, there were deviations between awareness of the NHIS and knowledge of the program's objectives. Aggregate knowledge scores differed significantly by age group, length of years of practice, place of employment and location. Further, consensus measures of physician's perceptions of NHIS (Cns index = 0.69) and the introduction of Health Maintenance Organizations (HMOs) as intermediary operators of the scheme (Cns index = 0.68) were positive and considered strong while perceptions on associations between HMOs and corruption in the country was moderate (Cns index = 0.56) and slightly negative. This study demonstrates physicians' support for the NHIS program in Nigeria and an acceptance of changes implemented with the health policy reform. Knowledge gaps were identified, highlighting the need for increased awareness of the reform and its objectives.

Key Words: Physicians, Knowledge assessment, National health insurance, Universal coverage, Nigeria

1. INTRODUCTION

A number of middle- and low-income countries are embarking on health policy reforms to address the lack of funding for health care by implementing national health insurance programs.[1,2] The objectives of health insurance reforms include eliminating regressive user fees as a means of financing health care, increasing availability of essential health services and achieving universal health coverage.[3] For physicians, these reforms mean changes in their work environment, particularly reimbursement mechanisms and the introduction

*Correspondence: Nene Okunna; Email: nokunna@sju.edu; Address: Department of Health Studies, School of Health Studies and Education, Saint Joseph's University, 5600 City Avenue, Philadelphia, USA.

of third-party intermediaries such as Health Maintenance Organizations (HMOs).

Physicians play such an integral role in the delivery of health care and their support is crucial to reforms enacted by the government.[4] As McCormick et al., point out; "physicians are well positioned to provide expert advice on how well the health care system functions for patients."[5] They also have substantial personal interest in health care reforms, particularly health care financing reforms which directly impact the physicians' "work lives, incomes and professional satisfaction."[5] Physicians' acceptance of health policy reforms is a predictor of the success or failure of the policy and should not be ignored.

Physicians' opinions, attitudes and perceptions can influence their behavior which can be "constructive or destructive."[6] For instance, a majority of general practitioners surveyed in the United Kingdom in 2001 were willing to resign from the National Health Service (NHS) over unfavorable NHS reforms.[7] Also, research shows that dissatisfied physicians can affect the quality of care provided, increase costs of care and influence patient satisfaction.[8] In Nigeria, physicians via the Nigerian Medical Association (NMA) constitute a strong political force in the country. Yet very few studies have assessed physicians' knowledge and perception of the health insurance reform.

Nigeria's health care reform

The Nigerian government launched the National Health Insurance Scheme (NHIS) in 2005 under the NHIS Act 35 of 1999, with the aim to provide universal coverage to all Nigerians. The NHIS is officially organized into six social health insurance programs (SHIPs): formal sector, urban self-employed, rural community, children under-5, permanently disabled persons, and prison inmates. The NHIS currently covers less than 5% of the population.[9, 10]

The health care system in Nigeria has undergone a number of structural and organizational changes with the implementation of the NHIS. For instance, the NHIS adopted a National Health Insurance (NHI) model similar to systems in Canada, South Korea and Taiwan which contracts both public and private providers to provide health care services under the scheme. Only NHIS accredited providers are contracted to provide services under the scheme.[11] The dependence on government funding and subjection to increased regulation and oversight are significant changes particularly for private providers who have functioned independently of the public sector in Nigeria. Under the NHIS, primary care is provided by both public providers and self-employed primary care providers and reimbursed via capitation arrangements. These are monumental changes for private medical practice in Nigeria which typically comprises of self-employed provider(s), whose income is dependent on the revenue generated from fee-for-service payments via user fees.

Another major development is the introduction of HMOs.[12] According to the NHIS, "a HMO is a private or public incorporated company registered by the Scheme solely to manage the provision of health care services through health care facilities accredited by the Scheme."[11] The HMOs are responsible for collecting the contributions of NHIS enrollees, reimbursing providers for services rendered and maintaining quality assurance in the delivery of health care services under the program. The introduction of third-party agencies may threaten the autonomy of decision making of the physicians in the country. For instance, the NHIS guidelines stipulate that physician referrals require the approval of the HMO except in emergencies.[11] Also, these third-party reviewers are required to conduct service utilization reviews and establish a quality assurance system with continuous monitoring of the facilities.

There is a dearth of literature on physcians' knowledge and perceptions of the NHIS and its effects on the healthcare delivery system in Nigeria. Given their pivotal role in the healthcare system, physicians' perceptions of their ability to deliver quality care under the NHIS has important policy implications as the country strives toward universal health coverage. This study adds to available scarce literature by assessing physicians' understanding of the NHIS and its objectives as well as their perceptions, to identify their level of acceptance and support of the health reform policy.

2. METHODS

2.1 Recruitment and data collection (N = 134)

This study utilized a quantitative cross-sectional study design. Study data was collected during the 2-day Annual Conference of Nigerian Medical Association (NMA) of its south eastern chapter, from August 5-6, 2021. Southeastern Nigeria is one of the six geopolitical areas in Nigerian. A non-random convenient sample of medical doctors who were willing to participate in the study were provided a self-administered questionnaire. An informed consent form was attached to the questionnaire. Informed consent was assumed when participants completed the questionnaire.

2.2 Survey instrument

The study questionnaire was developed based on existing literature on health care provider attitudes towards health care insurance reforms and comprised of 4 parts including demographics and professional information, knowledge of concepts of health insurance and the NHIS, and perception

of the NHIS and HMOs. A 4-point Likert forced choice scale was used to reduce social desirability bias.[13] A force choice scale does not provide in-between options such as "undecided," "No Opinion" or "Neutral," requiring respondents to critically assess each question and response option.[14] The Cronbach's alpha (internal reliability) for the questionnaire items was 80.4% (0.8035).

2.3 Measures

Study data included participant demographic and professional characteristics. Participant's age was measured as a continuous variable and re-categorized into 5-year age groups: 25-34, 35-44, 45-54, 55-64, 65+. Number of years of practice measured as a categorical variable with 4 groups i.e., less than 5 years, 5-10 years, 11-20 years and more than 20 years, while type of medical specialty was categorized into 7 groups i.e., general practice, surgery, community medicine, obstetrics and gynecology, pediatrics and other. Information on type of practice was collected and categorized into 4 groups as: public practice, private, non-profit/NGO, dual public and private practice. Location was categorized as either urban or rural.

Domains on awareness, knowledge and perceptions of health insurance and the NHIS were evaluated on a 4-point Likert scale which ranged from strongly disagreed (1) to strongly agreed (4). Awareness and knowledge of concepts of insurance and the NHIS were measured using 10-item statements and each item evaluated on the 4-point scale. The maximum obtainable score for the domain on awareness and knowledge was 40. Aggregate knowledge scores were estimated for each participant by adding up number of points obtained for each statement on the 4-point scale. These scores were further sub-divided into three categories to indicate their level of knowledge. Aggregate knowledge scores of 0-20 were considered poor while 21-30 were average and 31-40 considered good. Perception was assessed using 9-item statements with levels of agreement which ranged from 1 to 4, where 1 represented strong disagreement and 4 represented strong agreement.

2.4 Analysis

Descriptive statistics including prevalence estimates, and 95% confidence intervals (CI) were obtained to assess participant demographic and professional characteristics. The Chi-square test was used to determine if there were statistically significant relationships between the physicians' characteristics and their aggregate knowledge scores. Significance was set at $p < .05$. Further, the consensus (Cns) on participant perceptions/opinions regarding the NHIS and HMOs were estimated using the Cns measure of consensus developed by Tastle and Wierman.[15] The Cns measure was developed to understand the dispersion of ordinal data and it values lie between 0 and 1. A value of 0 indicates a complete lack of consensus or perfect disagreement, while a value of 1 indicates a complete consensus or perfect agreement. Statistical analyses were performed using STATA (StataCorp. 2021. Stat Statistical Software. Release 17. College Station, TX).

3. RESULTS

3.1 Demographic characteristics

A total of 134 physicians participated in this study. Study participants were mostly male (73.9%; 95%CI: 65.7-80.7), general practitioners (50.6%; 95%CI: 42.2-59.2), who had practice medicine for more than 20 years (39.6%; 95%CI: 31.6-48.1) and aged 55-64 years (24.4%; 95%CI: 17.4-32.9). Half of the physicians engaged in dual practice i.e., were employed both public and private sectors (50.0%; 95%CI: 41.5-58.5) and were predominately located in urban cities (84.3%; 95%CI: 77.1-89.6) (see Table 1).

3.2 Awareness and knowledge of how insurance and the NHIS works

Study participants were asked to indicate their level of agreement with statements that assessed their awareness and knowledge of the concepts of health insurance, the NHIS as well as NHIS objectives and operational policies (see Table 2). Almost all study participants agreed or strongly agreed (95.5%; 95%CI: 90.3-97.9) to knowing how insurance works. This knowledge was reaffirmed with statements that assessed concepts of health insurance such as protection from catastrophic health care spending (93.1%; 95%CI: 87.3-96.4) and premium contributions (94.0%; 95%CI: 88.4-96.9). However, 40.5% (95%CI: 32.3-49.1) of study participants considered paying premium even when health care is not required, a scam. Also, while 91.3% (95%CI: 84.8-95.1) affirmed their knowledge of capitation payment, only 28.8% (95%CI: 15.8-30.4) demonstrated an understanding of how this reimbursement method works.

A total of 133 out of 134 study participants responded affirmatively, indicating their awareness of the existence of the NHIS. However, 10.8% (95%CI: 6.5-17.4) of the physicians indicated a lack of knowledge of how the NHIS works and the objectives of the program. Further, approximately 29% of physicians incorrectly agreed with the statement that the NHIS was solely funded via taxes (28.5%; 95%CI: 21.3-36.9) while 7.8% (95%CI: 4.2-13.9) incorrectly disagreed with the statement that accreditation was required to provide services under the NHIS.

The mean knowledge score of the physician's knowledge of health insurance and the NHIS was 27.1 $\pm$ 12.8 out of a max-

imum total score of 40. Aggregated knowledge scores show considerable knowledge of health insurance and the NHIS; 58.21% (95%CI: 49.6-66.3) had a good aggregate knowledge score while 29.10% (95%CI: 21.9-37.4) and approximately 13% (12.7%; 95%CI: 7.9-19.5) obtained average and poor aggregate knowledge scores respectively (see Table 3). There were statistically significant associations between physician aggregate knowledge scores and age group, length of years of practice, place of employment and location (see Table 3).

Table 1. Physicians' demographic characteristics

Characteristic	n/N	%	95%CI
Gender (N = 134)			
Female	35	26.1	19.3-34.3
Male	99	73.9	65.7-80.7
Age group (Mean Age = 48, N = 119)			
25-34	24	20.2	13.8-28.4
35-44	25	21.0	14.6-29.3
45-54	25	21.0	14.6-29.3
55-64	29	24.4	17.4-32.9
65+	16	13.4	8.4-20.9
Medical Specialty (N = 134)			
General Practitioner	68	50.6	42.2-59.2
Surgery	11	8.2	4.6-14.3
Community Medicine	10	7.5	4.0-13.4
Obstetrics and Gynecology	14	10.5	6.3-16.9
Pediatrics	14	10.5	6.3-16.9
Other	17	12.7	7.9-19.5
Length of Years of Medical Practice (N = 134)			
Less than 5 years	19	14.2	9.2-21.2
5-10 years	35	26.1	19.3-34.3
11-20 years	27	20.1	14.2-27.9
More than 20 years	53	39.6	31.6-48.1
Place of Employment (N = 134)			
Public/Government Employee	11	8.2	4.6-14.2
NGO	2	1.5	0.4-5.8
Private Practice	54	40.3	32.3-48.9
Public and Private	67	50.0	41.5-58.5
Location (N = 134)			
Urban	113	84.3	77.1-89.6
Rural	21	15.7	10.4-22.9

3.3 Consensus in perceptions/opinions of HMOs and NHIS

Overall, the consensus on participants' perception of the NHIS was considered positive and strong (0.6-0.79) (see Table 4). Consensus was highest for including patient feedback as measures of quality assessment, 95.3% of the physicians agreed or strongly agreed to this statement (Cns index = 0.71). The second highest consensus measure indicated approval of the NHIS as a laudable effort by the government (Cns index = 0.69). Also, consensus on the introduction of HMOs in the Nigerian health care delivery system was strong (Cns index = 0.68), 72.7% of the physicians agreed or strongly agreed that HMOs will increase quality of health care in the country. However, consensus for the statement regarding HMOs as a threat to physician autonomy (0.59) and statement assessing if the introduction of HMOs will increase corruption (Cns index = 0.56) was considered moderate.

4. Discussion

This study provides an assessment of physician's knowledge of health insurance and the Nigerian NHIS as well as their perceptions of the health policy reform. Study results show

a high level of awareness of the NHIS among study participants. However, there were deviations between awareness and knowledge of the objectives and operational policies of the program. For instance, approximately 29 percent of the study population responded incorrectly to how the NHIS is funded while 10.8 percent indicated a lack of knowledge of the NHIS's objectives. Available research shows similar deviations in awareness and knowledge of the program's operations among healthcare providers[16–18] as well as members of the general public.[19–21] These results highlight the need for increasing the awareness of the NHIS and its objectives.

Table 2. Assessment of physicians' awareness and knowledge the NHIS and how insurance and works

Statement	n/N	%	95%CI
I am aware of the existence of the Nigerian NHIS (N = 133)			
Strongly Agree/Agree	133	100.0	
Strongly Disagree/Disagree	0	0.0	
I am knowledgeable of NHIS Objectives and Operation (N = 130)			
Strongly Agree/Agree	116	89.2	82.6-93.6
Strongly Disagree/Disagree	14	10.8	6.5-17.4
I understand how Insurance works (N = 133)			
Agree/Strongly Agree	127	95.5	90.3-97.9
Disagree/Strongly Disagree	6	4.5	2.0-9.7
The NHIS is solely funded via taxes (N = 130)			
Strongly Agree/Agree	37	28.5	21.3-36.9
Strongly Disagree/Disagree	93	71.5	63.1-78.6
The main goal of health insurance is to protection from financial hardship (N = 131)			
Agree/Strongly Agree	122	93.1	87.3-96.4
Disagree/Strongly Disagree	9	6.9	3.6-12.7
Insurance requires monthly contributions even when health care is not needed/used (N = 133)			
Agree/Strongly Agree	125	94.0	88.4-96.9
Disagree/Strongly Disagree	8	6.0	3.0-11.6
Requiring individuals to pay premiums even when they do not use health care services is a scam (N = 131)			
Agree/Strongly Agree	53	40.5	32.3-49.1
Disagree/Strongly Disagree	78	59.5	50.9-67.7
Capitation payment is a pre-determined fixed rate to provide a set of services for each enrollee (N = 126)			
Strongly Agree/Agree	115	91.3	84.8-95.1
Strongly Disagree/Disagree	11	8.7	4.9-15.2
Capitation payment method reimburses the healthcare provider for every healthcare service provided to the NHIS enrollee (N = 126)			
Strongly Agree/Agree	98	77.8	69.6-84.3
Strongly Disagree/Disagree	28	22.8	15.8-30.4
Accreditation is required for health providers interested in providing services under the NHIS (N = 128)			
Strongly Agree/Agree	118	92.2	86.0-95.7
Strongly Disagree/Disagree	10	7.8	4.2-13.9

Table 3. Association between physician demographic characteristics and aggregate knowledge score of health insurance and the NHIS

Characteristic	Aggregate Knowledge Score (%)			χ^2	*p* value
	Poor	Average	Good		
Gender					
Female	4 (16.7)	8 (33.3)	23 (26.7)	1.7759	.411
Male	20 (83.3)	16 (66.7)	63 (73.3)		
Age Group					
25-34	2 (8.3)	9 (37.5)	13 (15.1)		
35-44	4 (16.7)	2 (8.3)	19 (22.1)	24.038	.002*
45-54	0 (0.0)	3 (12.5)	22 (25.6)		
55-64	8 (33.3)	3 (12.5)	18 (20.9)		
65+	10 (41.7)	7 (29.2)	14 (16.3)		
Medical Specialty					
General Practitioner	12 (50.0)	15 (62.5)	41 (47.7)		
Surgery	1 (4.2)	1 (4.2)	9 (10.5)		
Community Medicine	2 (8.3)	1 (4.2)	7 (8.1)	7.5884	.669
Obstetrics and Gynecology	2 (8.3)	0 (0.0)	12 (13.9)		
Pediatrics	3 (12.5)	3 (12.5)	8 (9.3)		
Other	4 (16.7)	4 (16.6)	9 (10.5)		
Length of Years of Medical Practice					
Less than 5 years	1 (4.2)	8 (33.3)	10 (11.6)		
5-10 years	4 (16.7)	4 (16.7)	27 (31.4)	14.3638	.026*
11-20 years	5 (20.8)	3 (12.5)	19 (22.1)		
More than 20 years	14 (58.3)	9 (37.5)	30 (34.9)		
Place of Employment					
Public/Government Employee	4 (16.7)	0 (0.0)	7 (8.1)		
NGO	0 (0.0)	1 (4.2)	1 (1.2)	15.9693	.014*
Private Practice	11 (45.8)	16 (66.7)	27 (31.4)		
Public and Private	9 (37.5)	7 (29.1)	51 (59.3)		
Location					
Urban	20 (83.3)	15 (65.5)	78 (90.7)	11.3109	.003*
Rural	4 (16.7)	9 (37.5)	8 (9.3)		

Note. * *p*-value < .05

Study results show some evidence of knowledge gaps on concepts of insurance, 6% of the study population responded incorrectly to the question on premiums. Further, 40.5 percent vs 59.5 percent of physicians considered premiums a scam. This sentiment maybe indicative of a lack of understanding of the concept of risk pooling i.e., the regular contributions made in times of good health and used in the event of illness.[22] A similar resentment towards premium contributions has been found among the general public in Nigeria. In a study by Sanusi and Awe,[21] respondents were under the impression that they are being short-changed on their contributions to the program. These results have important implications for expanding health insurance coverage in the country particularly to the informal sector. A lack of insurance literacy is considered a critical barrier to the successful implementation of health policy reform.[23] According to Tabor,[24] a lack of understanding of the benefits of insurance is associated with under-insurance i.e., individuals buying less insurance than needed or could be afforded.

This study also demonstrates a lack of understanding of reimbursement used under the NHIS. Under the NHIS, primary health care facilities are reimbursed via capitation while fee-for-service is used to reimburse secondary and tertiary facilities.[11] Capitation reimbursement arrangements are significant changes, particularly to the private sector providers who are usually reimbursed on FFS basis via user fees and retainerships from large public or private organizations such as banks, oil companies or private health insurance arrangements.[25] More than 50% of physicians in this study incor-

rectly identified capitation as reimbursement for every service provided. A similar lack of understanding of capitation reimbursement was found in a study assessing both clients and providers in Ghana.[26] It is important that providers have a good understanding of the risks and benefits associated with reimbursement mechanisms used by the NHIS. Capitated payments tend to transfer the financial risk of health care costs from insurers to providers by paying them a prospectively determined fixed flat rate for each insured patient regardless of how much care the patient received.[27,28] According to Bodenheimer and Grubmbach,[29] this risk involves "the potential to lose money, earn less money or spend more time without additional pay." Research shows that provider payment mechanisms affect the performance and sustainability of health programs.[30]

Table 4. Physicians' perception of the NHIS and HMOs

Statement	Responses n (%)				W_{mean}	Std	Consensus (Cns) Index
	SD:1	D:2	A:3	SA:4			
The NHIS is a laudable effort by the government to improve the healthcare system (N = 132)	2 (1.5)	3 (2.2)	48 (36.4)	79 (59.9)	3.65	0.62	0.69
Universal health insurance coverage will improve health outcomes in the country (N = 131)	2 (1.6)	13 (9.9)	40 (30.5)	76 (58.0)	3.61	0.74	0.63
The introduction of HMOs to the Nigerian healthcare system will increase the quality of healthcare in the country (N = 132)	6 (4.6)	30 (22.7)	78 (59.1)	18 (13.6)	3.00	0.72	0.68
The presence of HMOs as quality monitors threatens physician's autonomy (N = 131)	12 (9.2)	61 (46.6)	45 (34.3)	13 (9.9)	2.71	0.79	0.59
Routine inspections of health facilities should include patient's perceptions of the quality of services they received (N = 127)	0 (0.0)	6 (4.7)	66 (52.0)	55 (43.3)	3.48	0.56	0.71
HMOs should supervise healthcare providers to ensure quality of care (N = 126)	9 (7.1)	18 (14.3)	68 (54.0)	31 (24.6)	3.19	0.82	0.65
The introduction of HMOs increases corruption in the healthcare system in the country (N = 128)	10 (7.8)	61 (47.7)	36 (28.1)	21 (16.4)	2.82	0.86	0.56
Decisions on the type of services provided to the patient is solely the physician's (N = 124)	9 (7.3)	61 (50.0)	34 (27.4)	19 (15.3)	2.79	0.84	0.57
I have seen improvements in the health sector since the NHIS was implemented (N = 131)	15 (11.4)	71 (54.2)	33 (25.2)	19 (9.2)	2.59	0.79	0.61

Note. SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree; Std: Standard deviation; W_{mean}: Weighted Mean; Consensus Index: 0-0.19 = very weak consensus, 0.2-0.39 = weak consensus, 0.40-0.59 = moderate consensus, 0.6-0.79 = strong consensus, 0.8-1 = very strong consensus.

Specifically, this study found statistically significant associations between participant characteristics and their aggregate knowledge scores. While a majority of participants obtained good aggregate knowledge scores, approximately 35% of respondents obtained average or poor aggregate knowledge scores. A similar study assessing private providers show that 31.3% of study of their participants obtained poor knowledge scores of the NHIS.[31] In another study assessing dentists, 61.1% of their study participants had fair knowledge of the NHIS while 10.2% had poor knowledge.[17] There is a dearth of literature examining associations between knowledge and health provider characteristics. The evidence of significant associations between physician sociodemographic and professional characteristics found in this study suggest that overall assessments may mask important factors associated with different levels of knowledge of the NHIS. These findings highlight the need for more studies to better understand factors associated with sub-optimal knowledge of the NHIS, to create tailored interventions aimed at specific groups of healthcare providers in particular and the general public.

Study findings demonstrate support of the policy reform among physicians, as a majority of the study participants viewed the NHIS favorably; 96.3% of study participants agreed or strongly agreed that the NHIS was laudable effort by the government. These study results are indicative of a change in physician attitudes overtime. A previous study in 1986 had shown support of a national insurance program in Nigeria among 59% of their study population of physicians.[6] Physician support of the NHIS have important implications to the successful implementation of the health reform in the country as the government seeks to ex-

pand coverage. In the US, the support of American Medical Association which was previously resistant to government sponsored insurance was instrumental to the implementation of the Affordable Care Act health policy reform in 2010.[32]

Perception of HMOs was considered strong (Cns index = 0.68) and indicative of improving attitudes towards managed care practices in Nigeria. Available literature in the US show that managed care policies were viewed as “unwelcome intrusions” impacting physicians’ professional autonomy and relationship with their patients.[33] Likened to a tool-box, managed care employs various mechanisms in the provision of health care services to contain costs, which include: the use of practice guidelines, gate-keeping, health care networks, second opinion requirements, pre-approval requirements for expensive treatments or hospitalization, physician payment structures with financial incentives for performance and selective contracting of physicians.[34] Doctors’ perceptions of managed care organizations and their acceptance of managed care tools were integral to their successful implementation in the US.[33] In Nigeria, there have been previous reports of physicians’ distrust of the NHIS and a low opinion of HMOs. The Nigerian Medical Association (NMA), according to Okonkwo,[35] was skeptical of the success of the scheme, surmising corruption, which is endemic in the country, to be the bane of the program. A chairperson for the organization had cited the possibility of providers and HMOs enriching themselves at the expense of the scheme. This was also corroborated by the study by Katibi et al.;[36] surveyed medical practitioners had envisaged fraud and mismanagement among some of the problems with the implementation of the Scheme. This study provides some evidence of improving opinions of HMOs in Nigeria.

Also, perceptions on associations between HMOs and corruption in the country was considered moderate (Cns index = 0.56); more than half of physicians (55%) surveyed in this study disagreed or strongly disagreed that the introduction of HMOs will increase corruption in the health care system while 45% of study participants agreed or strongly agreed with the statement. These results are not surprising as corruption is considered to be endemic in Nigeria.[37] It is imperative that the Nigerian government build physician and public trust in the NHIS by ensuring transparency. Garnering stakeholder and public’s trust in the NHIS has important implications for the sustainability of the program.

A number of limitations need to be considered when interpreting these study findings. First, the study utilizes a small convenient sample of physicians. Measures obtained are subject to selection bias due to the voluntariness of participation. Also, study participants were based in the south-eastern region of the country, predominately male and residing in urban areas, their perceptions may not be representative of the entire Nigerian physician population. Hence, these findings are not generalizable. There is the need for more nationally representative studies. Second, social desirability i.e., the tendency for respondents to answer questions that portray them in a positive way, may have influenced participant responses and biased study results.[38] A force scale was used in this study to minimize this bias. Notwithstanding these limitations, this exploratory study provides evidence of knowledge gaps of insurance concepts and the NHIS objectives as well as positive perceptions of the NHIS and structural changes introduced by the national health policy reform.

5. Conclusion

This study demonstrates physicians’ support of the NHIS program in Nigeria and an acceptance of changes implemented with the health policy reform. The findings are significant as physicians’ acceptance of any policy is crucial to its successful implementation and impact. However, knowledge gaps were identified particularly with the objectives of the NHIS and knowledge of health insurance concepts. These findings highlight the need for more awareness and understanding of the NHIS and its objectives.

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Conflicts of Interest Disclosure

The authors declare that they have no competing interests.

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