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Original Article

The Impact of Health Maintenance Organizations in the Implementation of the Nigeria National Health Insurance Scheme in the Federal Capital Territory (Abuja), Nigeria.

***Murtala Audu Ngabea[1], Moses I Durotoluwa[2].**

[1]Department of Medicine, Maitama District Hospital, Faculty of Basic Medical Sciences, Baze University, Abuja,
[2]Department of Medicine, University of Abuja Teaching Hospital, Gwagwalada, Nigeria.

Abstract

Background: The activities of Health maintenance organizations (HMO) are central to the achievement of universal health coverage. This study sought to examine the number of HMOs actively operating in the FCT and to determine whether the HMOs are promoting or inhibiting universal coverage and proffer recommendations for the overall progress of the scheme.

Methodology: A descriptive prospective cross-sectional study design was used and mixed (qualitative and quantitative) methods A pre-tested interviewer-administered questionnaire make was used to collect quantitative data while qualitative data were collected through a review of literature and in-depth interviews to examine the roles of HMOs from stakeholders' points of view. A total of 250 participants comprised predominantly 230 enrollees into three major programs of the NHIS that is the formal sector social insurance program (FS-SHIP), tertiary institution social health insurance program (TI-SHIP), and community-based social health insurance program (CB-SHIP). The remaining 20 (twenty) enrollees comprised NHIA desk officers, HMO managers, community-based representatives, and healthcare providers.

Results: The majority of the respondents (64.8%) reported a high level of awareness of the knowledge of NHIS, while fewer than 19% indicated a lack of awareness as compared to 17% who did not respond to the question. Similarly, most of the respondents (62.2%) reported having satisfactory knowledge of the structure-function modalities of HMOs, while 20.4% were not aware of the mode of operation of HMOs.

Contrasting contributions of HMOs to NHIS implementation, approximately half of the respondents (50%) reported dissatisfaction. Likewise, about 50% of the study subjects were of the view that HMOs are not putting the desired commitment towards achieving this goal of universal health coverage. The report from the in-depth interview reiterated that the enrollees were not well satisfied due to the perceived poor and inadequate operational mechanisms of both the HMOs and NHIS.

Conclusions: The study revealed a high level of awareness of the knowledge of NHIS and good working knowledge of the structure and function of the HMOs. However, this study demonstrated a low understanding of the working interactions between the NHIS and HMO, among the respondents. Understanding HMOs and how they work is critical for choosing a health plan during open enrollment, hence, there is a need for more client enlightenment.

Keywords: Health Maintenance Organizations, National Health Insurance, Universal Health Coverage, Social Health Insurance.

***Correspondence:** Dr Murtala, Audu Ngabea, Faculty of Basic Medical Sciences, Baze University, Abuja, Nigeria.
Email: ngabea@yahoo.com

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Quick Response Code:

Introduction:

Health insurance is a type of insurance that covers the risk of incurring medical expenses among individuals. (1) By estimating the overall risk of health care and health system expenses, among a targeted group, an insurer can develop a routine finance structure, such as a monthly premium or payroll tax, to ensure that money is available to pay for the health care benefits specified in the insurance agreement. The benefit is administered by a central organization such as a government agency, private business, or not-for-profit entity. According to the Health Insurance Association of America, health insurance is defined as "coverage that provides for the payments of benefits as a result of sickness or injury. This Includes insurance for losses from accident, medical expense, disability, or accidental death and dismemberment" (2)

A health insurance policy is a contract between an insurance provider (e.g. an insurance company or a government) and an individual or his/her sponsor (e.g. an employer or a community organization). The contract can be renewable (e.g. annually, monthly) or lifelong in the case of private insurance or be mandatory for all citizens in the case of national plans. The type and amount of health care costs that will be covered by the health insurance provider are specified in writing, in a member contract or "Evidence of Coverage" booklet for private insurance, or in a national health policy for public insurance. (2)

National Health Insurance Scheme in Nigeria (NHIS): In October 2004, the government created the National Health Insurance Scheme by the promulgation of the NHIS ACT. (3) The scheme encompasses government employees, the organized private sector, and the informal sector. Legislative-wise, the scheme also covers children under five, permanently disabled persons, and prison inmates. In 2005, the implementation of the act was started by the Olusegun Obasanjo administration.

The primary objectives of the NHIS among others include the provision of access to good healthcare services to every Nigerian, ensuring equitable patronage of all levels of healthcare, and prevention of inappropriate use of levels of healthcare leading to unnecessary cost and under-utilization of specialized facilities. It is also within its coverage to improve and harness private sector participation in health care service delivery, ensure institutional quality assurance, and protect families from the financial hardship of huge medical bills. Other objectives include ensuring equitable distribution of healthcare costs among different income groups by limiting the rise in the cost of healthcare services and maintenance of high-standard healthcare delivery services within the scheme.

In addition, NHIS also ensures the availability of funds to the health sector for improved services and foster research in the health sector. Furthermore, the act was expected to ensure efficiency in healthcare services and adequate distribution of health facilities within the federation. (4)

The benefits and services derivable from participation in the scheme were clearly defined by law at inception and include; hospital in-patient and out-patient care, general practitioner services in the communities, physician specialist services, medicaments, ancillary services such as X-ray, Laboratory tests, vision test and spectacles, prostheses, appliances and rehabilitation, basic dental maintenances, reconstructive dental care, preventive care including immunization and family planning, ante-natal care, post-natal care and health education.(4)

The implementation of the NHIS involves five major stakeholders in the scheme; the employer, employee, primary care Providers (primary and secondary care), Health Maintenance Organizations (Operators of the scheme), and government agency- the National Health Insurance Authority (NHIA),

who are the regulator of the scheme. Thus, health maintenance organizations (HMOs) occupied a prime position in the implementation of the NHIS. There are various programs or sub-schemes under the NHIS to allow for coverage of various groups of the population like the formal sector social insurance program, community-based social insurance program, and tertiary institution social insurance program. (5)

The role of health maintenance organizations: The HMOs are effectively the operators of the scheme serving as intermediaries between the beneficiaries, health care providers, and the regulatory agency (NHIA). They are private limited liability companies registered with the Corporate Affairs Commission. Deriving from the experience of other government schemes, the NHIA is operated primarily as a private sector driven through the HMOs. This is to avoid financial leakages and ensure appropriate allocation and utilization of resources. (6)

The functions of the HMOs principally focus on the collection of contributions from eligible employers and employees in the form of capitation and payment of same to the health care providers under the supervision of the NHIA. The HMOs also ensure maintenance of quality assurance in the delivery of health care benefits within the scheme, and recruitment drive for more enrollments of participants in order to achieve the overall benefit of the scheme which is universal health coverage. (6, 7)

Currently, the following Health Maintenance Organizations operate in the Nigeria Health Insurance Scheme, (8), (Table 1).

Table1: list of health maintenance organizations.

Total Health Trust Limited	Prepaid Medicare Services Limited	Ives Medicare
Clearline International Limited	Sterling Health Managed Care Services Limited	Life Care Partners Limited
Medi-Plan Health Care Limited	Health Partners Limited	Doma Healthcare Limited
Aico-Multishield Nigeria Limited	Precious Healthcare Limited	Police Health Maintenance Limited
Healthcare International Limited,	Oceanic Health Management Limited	Novo Health Africa Limited
United Healthcare International Limited	Wellness Health Management Services Limited	Anchor HMO International Company Limited
Ronsberger Nigeria Limited	Greenbay Healthcare Services Limited	MetroHealth HMO Limited
Royal Health Maintenance Services	Medexia Limited	Greenfield Health Management Limited
International Health Management Services Limited	Marina Medical Service HMO Limited	Lifeworth Medicare Limited
Songhai Health Trust Limited	Nonsuch Medicare Limited	NNPC Health Maintenance Organization Limited
Integrated Healthcare Limited	Salus Trust GTE Limited	Health Assure Limited
Premier Medicaid	Prohealth HMO limited	Phillips Health Management Services Limited
Sunu Health Nigeria Limited	Axa Mansard Healthcare Limited	Ashmed Integrated Health Services Limited
Princeton Health Group	GNI Healthcare Nigeria Limited	Ankara Services Limited
Venus Medicare Limited	Ultimate Health Management Services Limited	Synergy Wellcare Medicaid Limited
Defence Health Maintenance Limited	Avon Healthcare Limited	Reliance HMO Limited
United Comprehensive Health Managers Limited	Regenix Health Services Limited	Roding Healthcare Limited
Healthcare Security Limited	Redcare Health Services Limited,	Fountain Healthcare Limited
Zuma Health Trust	Markfema Nigeria Limited	Well Health Network Limited,

This Study attempted to interrogate the extent to which the Health Maintenance Organizations as critical stakeholders in the Nigeria NHIS impacted the scheme. Specifically, this work seeks to achieve the following objectives: To examine the number of HMOs actively operating in the FCT, to assess the challenges facing the HMOs, to determine whether the HMOs are promoting or inhibiting the universal coverage, and proffer recommendations for the overall progress of the scheme.

Significance of the study: This study is very important because it seeks to examine the role of HMOs in the implementation of various NHIS programs to make universal coverage possible. It is equally believed to be of relevance to students, policymakers, and health care management as resource material in bridging the gaps that exist between society and the HMOs. The study discussed HMOs, their objectives, and functions, particularly towards the delivery of services and mediation between various stakeholders in the managed care industry. It, therefore, explores the effectiveness of HMOs and the efficiency of health care systems in the context of NHIS in the management of health problems of Nigerians.

Methodology

This study was prospective descriptive research in which a survey of three Health facilities within the Federal Capital Territory was conducted. Partially mixed sequential dominant status design was utilized in this study (9, 10). That is, a quantitative phase (surveys) preceded a qualitative phase (interviews). This allows for the combination of dominant and non-dominant phases. Thus, the dominant phase in this study was the quantitative phase because it had more variables of interest that were generated and analyzed. A pre-tested interviewer-administered questionnaire was used to collect quantitative data whereas in-depth interviews (IDIs) were used for qualitative data collection. Respondents were asked about their perceptions, roles of HMOs, and satisfaction with HMOs in the scheme. The data provided an empirical basis for understanding the roles of HMOs followed by thematic analysis in the qualitative phase. Qualitative data were collected through a review of literature and in-depth interviews (IDIs) to examine the roles of HMOs from stakeholders' points of view. This mixed methods approach allowed for triangulation hence helping to ensure the validity of the findings (11).

A sample size of 250 enrollees was used for the study. This was determined using the Cochran formula corrected for finite population (12). For the computation, z (confidence interval) = 1.96, p = 0.5, ε (precision) = 0.04.

$n_o = Z^2 p\,(1-p)/\varepsilon^2$ = Cochran formula for sample proportion for large population

$n = n_0/1+(n_0-1/N)$ = the formula for correction for finite population.

Where ε =desired level of precision p =estimated proportion of the attribute in the larger population. n_o= Sample size for the sample population and n=Sample size for the finite population (FCT Population).

The sample of beneficiaries was selected using a 2-stage process. First, facilities were selected with probability proportionate to size (number of enrollees). Then, secondly, a random sample of enrollees was selected for the participant survey. Data that were provided by NHIS expectedly indicated the total number of NHIS enrollees in the FCT. The initial sampling frame was made up of a list of NHIS enrollees by facilities, in the FCT. The list was provided by the Zonal office of the NHIS which is in the FCT. The three selected health facilities are each in single locations. Based on the above two-stage process, two hundred and thirty (230) enrollees were recruited from the three major programs of the NHIS which are the formal sector social insurance program (FS-SHIP), tertiary institution social health insurance program (TI-SHIP), and community-based social health insurance program (CB-SHIP). The remaining 20 (twenty) enrollees comprised NHIS desk officers, HMO managers, community-based

representatives, and health care providers. All participants were recruited after written informed consent was obtained. NHIS enrollees attending the University of Abuja Teaching Hospital Gwagwalada (UATH), FCT Primary Health Care Centre, Lugbe, and Federal College of Education Zuba were recruited. The participating medical facilities were selected to allow for representation from the enrollees of three main programs under the NHIS through formal sector social health insurance program (FS-SHIP), tertiary institution health insurance program (TI-SHIP), and community-based social insurance program (CB-SHIP) respectively. In each medical facility, a simple random sampling technique method was employed to arrive at the predetermined required number. One hundred and twenty (120) patients were recruited from UATH Gwagwalada, fifty (50) were recruited from Primary Health Care Lugbe, Abuja, and sixty (60) were recruited from the Federal College of Education clinic respectively. Twenty (20) in-depth direct interviews were conducted. A mixed study design was employed to obtain both quantitative and qualitative data. Quantitative data were obtained using an interviewer-administered questionnaire while qualitative data were obtained through interviews of NHIS Desk officers, community health informants, and health care providers. Participants were recruited using a random sampling of various enrollees attending the NHIS clinics/units of the selected health facilities and questionnaires were administered to each respondent by the researchers during planned visits to each facility.

Results:

The majority of the study subjects (59.1%) were predominantly male (M: F= 136 and 94 respectively). A larger percentage (38.3%) of the respondents was in the age range of 26 to 30. (33.9%) of the respondents attained a tertiary level of education while 3.9% had no formal education (Table 3- summarizes the sample size and socio-demographic characteristics of the study subjects. A larger percentage of the recipients of health insurance were majorly government employees followed by private organization employees (31.7% versus 21.7%), while the majority of the subjects were married (married versus single: 53.9% and 38.7% respectively).

Concerning level of awareness of NHIS, majority of the respondents (64.8%) reported having high level of awareness of its operation, while fewer than 19% indicated lack of awareness as compared to 17% who did not respond to the question (Figure 1- graphically depicts the level of awareness to the existence of National Health Insurance Scheme (NHIS), knowledge of the structure-function of health maintenance organizations (HMOs) and knowledge of the association between NHIS and HMOs). Similarly, most of the respondents (62.2%) reported having satisfactory knowledge of the structure-function modalities of HMOs, while 20.4% were not aware of the mode of operation of HMOs. In contrast, most participants (65.7%) reported not having knowledge of the nexus between NHIS and HMOs while only a few respondents (17.4%) were aware that there are interconnections between the two agencies.

Contrasting the level of coordination or satisfaction between NHIS and HMOs, only 23.9% of the participants rated the coordination excellent (Figure 2- shows the distribution of subjects rating of coordination between NHIS and HMOs, respondents' view on who sensitizes enrollees and beneficiaries of NHIS programs). A total of 27.8% of the subjects rated the level of coordination to be good, 26.1% of the subjects rated it as fair, while 12.2% of the respondents considered the level of coordination between the NHIS and HMO as abysmally poor.

Concerning the duty of sensitization of the enrollees, 29.6% of the subjects reported that the duty of sensitizing the public cum patients rests on the shoulders of both NHIS and HMOs, 24.8% of the respondents showed that it is the responsibility of NHIS while 16.9% of the subjects were of the view that the duty of sensitization is vested on the HMOs, whereas 28.7% of the subjects were indifferent.

Fewer than 50% of the subjects reported being formal sector beneficiaries followed by 26.1% who reported being beneficiaries from tertiary institutions. A total of 18.3% reported being beneficiaries under a community-based social health insurance scheme (Figure 2- shows details of the beneficiaries of NHIS programs). As shown in Table 2, only 73 (31.7%) of the subjects were civil/public servants, and consequently likely the principals. Therefore, most of the subjects in this study were enrolled as dependents considering that all subjects reported being enrolled in one form of NHIS program or the other.

United Healthcare International Limited has the highest percentage of enrollees followed by Hygeia HMO Limited (Figure 3), while Defence Health Maintenance Limited and Venus Medicare have equal percentages of enrollees, whereas Nonsuch Medicare Limited has the least patronage (14.8%, 11.7%, 8.3%, 8.3% and 3.5% respectively).

Moreover, the majority of the study subjects (57.8%) reported that NHIS and HMOs have what it takes to achieve universal coverage, while 29.6% of the respondents maintained that they lack the capacity to attain universal coverage whereas, 12.6% of the respondents were indifferent (Figure 4- shows distribution of respondents' views on the: ability of NHIS and HMOs to attain national coverage, most significant NHIS scheme and contribution of HMOs to NHIS performance and perception of the most important NHIS programs).

Furthermore, a total of 44.3% of the respondents reported that the community-based social health insurance program was the most significant NHIS program closely followed by formal sector social health insurance schemes (38.7%). Perhaps, because of its peculiarity in meeting the health needs of workers in the tertiary education sector, tertiary institution social health insurance program was rated low by the respondents (14.8%).

Contrasting contributions of HMOs to NHIS implementation, approximately half of the respondents (50%) reported dissatisfaction, 36.6% of the study subjects admired the efforts of HMOs toward achieving NHIS implementation while fewer than 5% of the respondents were highly impressed (Figure 4).

A total of 56.1% of the subjects maintained that they agreed that involvement of HMOs as coordinators of the scheme is a good idea, and it has paid off while 28.3% believed that HMOs have not lived up to its expectations and leave much to be desired (Figure 5 -shows the comparison of study subjects' views on the role of HMOs as coordinators between NHIS and end-users). On the other hand, 15.6% were indifferent.

Approximately 50% of the study subjects on four Likert-type scale rating how they agreed that HMOs are showing high commitment towards attaining national coverage submitted that HMOs are not showing the desired commitment towards achieving this goal (Figure 5), 36.5% of the subjects were of the opinion that HMOs are on track towards achieving national coverage whereas, 4.4% of the respondents reported that HMOs are highly committed to achieving national coverage.

Interviewed participants were identified through a well-coordinated approach and each group of participants was well-represented (Table 3). The report of the in-depth interview is depicted below; regarding the functions of the HMOs; some of the participants from Community Heath Informant (CBI) stated that to a great extent, "HMOs that the community signed up with were not performing its functions in the community insurance scheme. If you don't press for them to look in and see what the doctor is doing, or what is going on there, they will not care", while a participant from a health care provider

argued that "some of those who come here are not even properly guided by the HMOs on what the guidelines of the NHIS said with respect to their rights and privileges and when they could change provider and for what reason?" However, in speaking with the NHIS Desk officer she said: "HMOs take care of the enrollees based on the regulation - the primary provider refers to the secondary provider who in turn refers to the tertiary provider". The study also looked at how much HMOs have been able to achieve their objectives and a CHI has this say about that "NHIS and HMOs and even the providers are not investigated and that is why they do not even aim at achieving any objectives". But a health care provider responded that "even though the scheme is not currently efficient, things will still change with time". "If you are insured, you are better willing to go for services than when you are not insured, in the sense that you don't have to be paying this one or that one. I think the NHIS will go a long way in helping the health sector in Nigeria."

Table 2: Socio-demographic characteristics of the sample (%), N = 230

Socio-demographics	Frequency	Percentage
Sex		
Male	136	59.1
Female	94	40.9
Age		
18-25	62	26.9
26-30	88	38.3
31-40	35	15.2
41-50	20	8.7
51-Above	25	10.9
Marital Status		
Married	124	53.9
Single	89	38.7
Divorce	17	7.4
Education Level		
Primary School	39	17.0
Secondary School	65	28.3
Tertiary Institution	78	33.9
Adult Education	21	9.1
Others	18	7.8
No formal education	9	3.9
Occupation		
Public/Civil Servant	73	31.7
Self Employed	42	18.3
Private Organization	50	21.7
Student	65	28.3

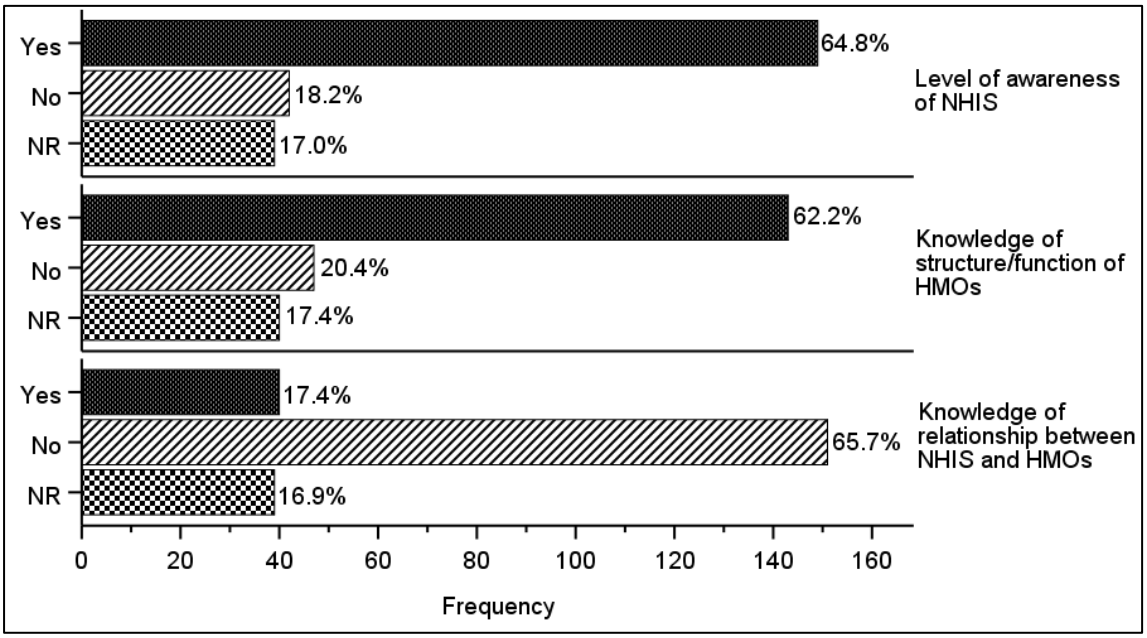

Figure 1: depicts the level of awareness of the existence of the National Health Insurance Scheme (NHIS), knowledge of the structure-function of health maintenance organizations (HMOs), and knowledge of the association between NHIS and HMOs)

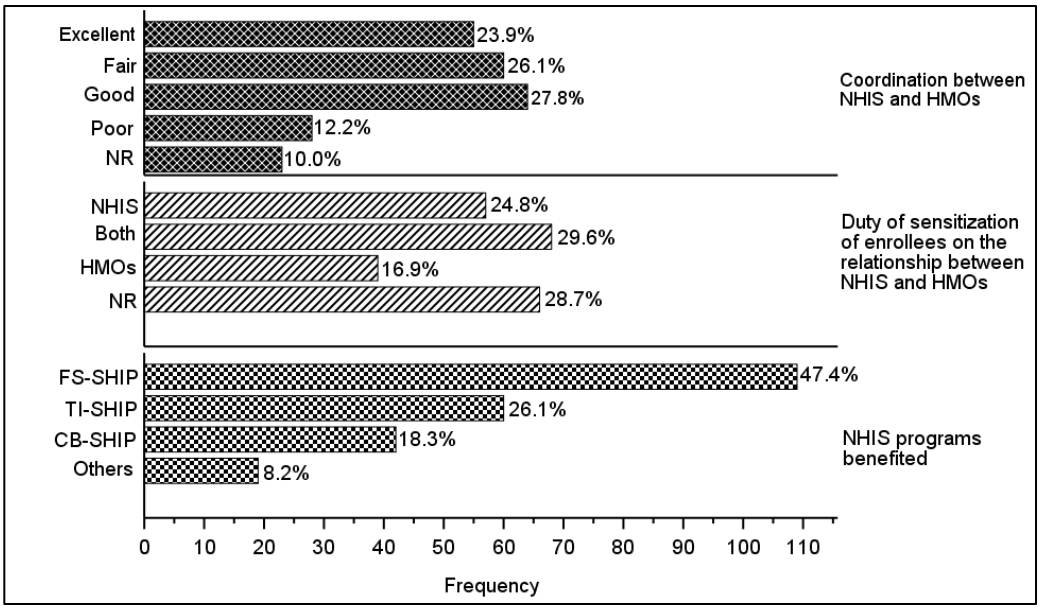

Figure 2: Distribution of subjects rating of coordination between NHIS and HMOs, respondents' view on who sensitizes enrollees and beneficiaries of NHIS programs.

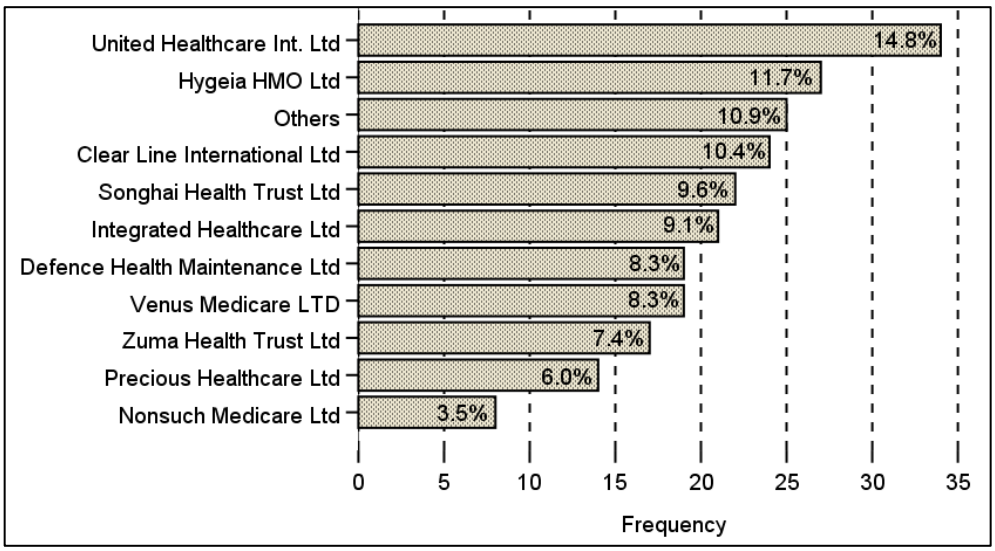

Figure 3: Distribution of participants per HMO

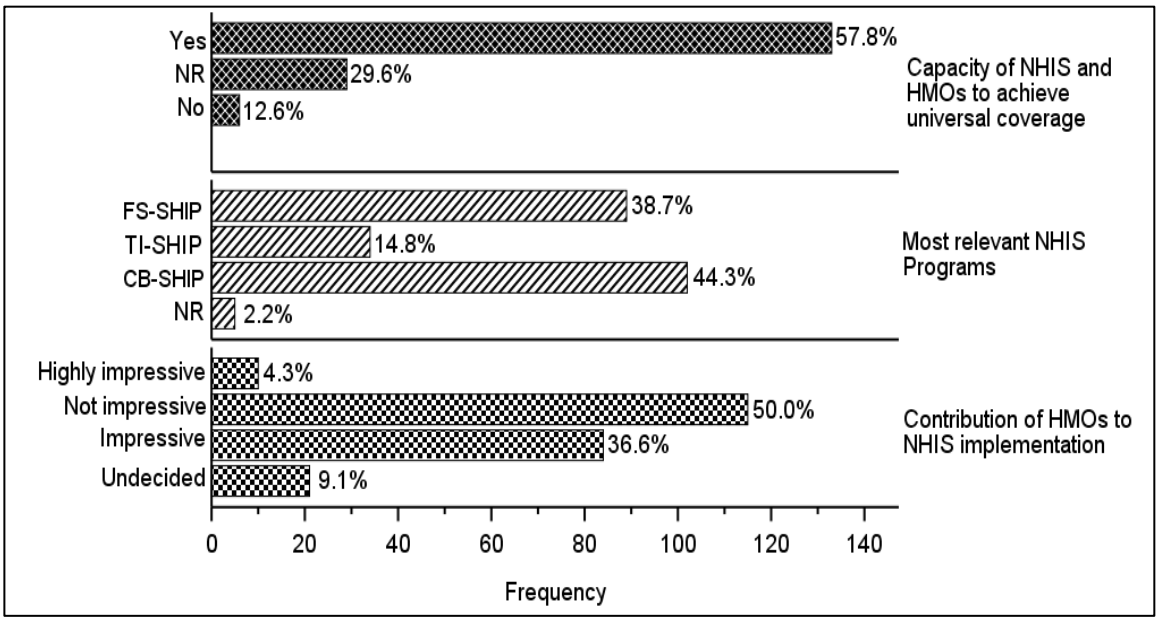

Figure 4: Distribution of respondents' views on the: ability of NHIS and HMOs to attain national coverage, the most significant NHIS scheme, and the contribution of HMOs to NHIS performance.

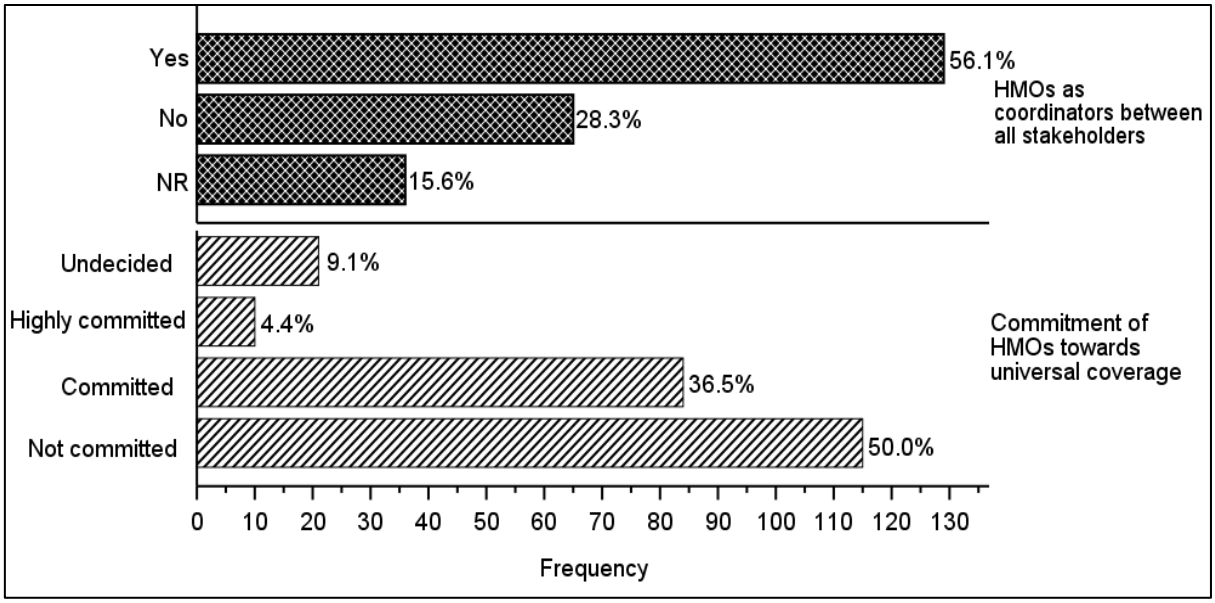

Figure 5: Distribution of the study sample based on their position that HMOs are good coordinators of stakeholders and respondents' views regarding HMOs' commitments towards attaining national coverage.

Table 3: Breakdown of Participants interviewed.

Participants	Initial	Number interviewed
NHIS Desk officers	NHDO	7
Community-based health informants	CBI	7
Health care providers	HCP	6

Discussion

This study investigated the level of awareness of the respondents on the roles and interactions between NHIS and HMO. A social health insurance scheme involves contributions based on means and utilization based on need (13-15) and to ensure equity and effective coverage, it comprises a tripartite arrangement between the NHIS, HMO, and health care facility with HMO being the middleman (16). This aims to reduce out-of-pocket payments in all forms as this payment method promotes equity of access to health care (17, 18). In this study, the majority of our respondents were at the young age group, this age group belongs to the prime working age with the majority having at least a primary level of education.

We found a high level of awareness of NHIS operation among respondents, similar to the study of Obikeze et al(19), Eyong et al(20), and Micheal et al, (21) although the later study was conducted primarily among the NYSC with tertiary level of education, this level of awareness is however,

unsurprising as there has been increased sensitization for enrollment into the NHIS scheme both by the NHIS and HMO and more so, there has been increased national policy driven this in the past few years.

In contrast, Alawode et al (22) reported a low level of awareness, this disparity may be due to the demographics of the study population, while this study investigated the level of awareness among the enrollees, Alawode et al (22) conducted their study among the stakeholders comprising health insurance regulators, healthcare providers, and policymakers.

In addition, a good number of the respondents displayed a good working knowledge of the structure and function of the HMO similar to the findings of Obikeze et al, (22), moreover the knowledge of the working relationship between the NHIS and HMO was unimpressive, this was consistent with the finding of Alawode et al, (22) this probably could be attributed to the fact that there was no direct relationship of the enrollees with the NHIS as it is with the HMO.

About 75% of the respondents rated the coordination between the NHIS and HMO to range from fair to excellent as exemplified by the performance index, only a quarter of the respondents adjudged the coordination to be near to perfect while about 25 % of the subject considered it to be very poor. Although the NHIS guidelines spelt out what every stakeholder should do, (19) respondents believed that monitoring and supervision of HMOs and healthcare facilities by the NHIS has been grossly inadequate.

Similarly, fewer than 30% of the respondents accepted that it is the duty of both the NHIS and HMO to sensitize enrollees, while about 25% were indifferent. This could be attributable to their level of perception about the roles of HMOs on the one hand and their unsatisfactory encounter with the scheme on the other hand.

The concentration index further demonstrated that the formal sectors benefited mostly from the NHIS scheme. The demand for health insurance services is influenced by several factors such as the enrollees' level of awareness about the program, different expectations from the providers which greatly determine the extent of their demand for services, and enrollees' level of education and socioeconomic status (23, 24); these factors probably accounted for the positive disposition towards the formal sector social health insurances. Similarly, the level of care provided by the health insurance providers in the formal sector health insurance program may also be contributory as they offer specialized services at the reference level and hence may be perceived as of high quality, and thus receive high patronage. (25)

The choice of whose HMO to subscribe to may be largely influenced by the quality of health insurance service rendered, the plan or policy being offered, and the information they receive from healthcare providers. In our study, we observed a uniform spread of the enrollees across various HMOs. This may have been engendered by increased sensitization and awareness campaigns of the HMOs. This means therefore that as the level of awareness increases then the influence of the demand for health insurance services increases. (23)

Furthermore, most of the respondent affirmed that the capacity of the NHIS increases by tightening the loose ends between HMOs and the health care facility and strengthening their relationship as the most identified drawbacks of NHIS are operational in nature. Community-based social health Insurance (CBSHI) has been promoted as an effective health financing option for providing access to care for individuals in the informal sector and toward attaining universal health coverage (26, 27), similarly, our findings show that the most relevant program considered by the respondents was community-based social health insurance.

Whereas the majority of the respondents considered internal coordination and interactions between the NHIS and HMOs to be effective, in contrast, about half of the respondents felt that the HMOs do not contribute satisfactorily to the implementation of NHIS, hence, some were of the opinion that the HMOs gave less commitment towards universal health coverage, this was similar to the findings of Obikeze et al (19). Moreover, while this may be true, it also reflects that some of the respondents do not have a good working knowledge of the NHIS- HMO operational modus operandi as laid down by the operational guidelines.

The report from the in-depth interview reiterated that the enrollees were not well satisfied due to the perceived poor and inadequate operational mechanisms of both the HMOs and NHIS, while the care provider perceived this to be due to improper enlightenment of the enrollees by the HMOs. The NHIS Desk officers argued that though bottlenecks exist, but all hands were on deck to right the wrongs and improve their delivery.

Conclusions

The study revealed that there is a high level of awareness of the knowledge of NHIS and satisfactory knowledge of the structure and function of the HMOs. While there was a wide spread of enrollees to various HMOs available, this study observed that increased awareness has contributed in no small measure to the insurance open enrollment.

However, this study demonstrated a low understanding of the working interactions between the NHIS and HMO among the respondents which caused some respondents to view the performance of the HMO as unsatisfactory thus constituting a limitation to universal health coverage. Understanding HMOs and how they work is critical for choosing a health plan during open enrollment, hence, there is a need for more client enlightenment on the types of plans or policies available for purchase for both the intending and current enrollees respectively and the responsibility lies on both the NHIS and HMO.

References

1. NHIS, About us, 2013 National Health Insurance Scheme. http://www/nhis/gov.ng/.
2. National Health Insurance Guidelines (2005): https//www/ oseroghoassociates.com>articles> 105-national-health-insurance
3. National Health Insurance Scheme Decree No 35. Law of the Federation of Nigeria. http://www/nhis/gov.ng/
4. Chima OA, Kara H, Johanna H. Towards universal coverage: a policy analysis of the development of the National Health Insurance Scheme in Nigeria. Health Policy Plan. 2014; 9:1105 –17.
5. Health Maintenance Organization Act. Ministry of Justice, USA. 1973. https:// study.com/academy/lesson/health-maintenance-organization-act-history summary.html.
6. Toyin A. Repositioning Health Insurance in Nigeria: Prospects and Challenges. Int J Health Sci. 2014;2(2):151 –62
7. Emily GW, Onno S. Achieving universal health coverage in Nigeria one state at a time: a public-private partnership community-based health insurance model. Washington DC: Brooke Shearer Working Paper Series; 2013.
8. National health insurance scheme of Nigeria: strategic plan and implementation framework; 2020-2030. http://www/nhis/gov.ng/
9. Leech NL, Onwuegbuzie AJ. A typology of mixed methods research designs. Qual Quant. 2009; 43:265 –75. https://doi.org/10.1007/s11135-007-9105-3.

10. Wao-Hesborn O, Onwuegbuzie Anthony J. A mixed research investigation of factors related to time to the doctorate in education. Int J Doctoral Studies. 2011;6(9):115 –34.
11. Creswell JW. Qualitative inquiry and research design: choosing among five approaches. 2nd ed. Thousand Oaks: Sage; 2007
12. Cochran WG. Sampling Techniques. Aulf. New York: Willey; 1963
13. Spaan E, Mathijssen J, Tromp N, Mcbain F, Have A, Baltussen R. The impact of health insurance in Africa and Asia: a systematic review. Bull World Health Organ. 2012; 90 (9):685–92.
14. Ogaboh A. National Health Insurance Scheme (NHIS) and employees' access to healthcare services in Cross River State, Nigeria. Glob J Human-Soc Sci Res. 2010; 10:7.
15. Onoka CA, Onwujekwe OE, Uzochukwu BS, Ezumah NN. Promoting universal financial protection: constraints and enabling factors in scaling-up coverage with social health insurance in Nigeria. Health Res Policy Syst. 2013b; 11(1):1.
16. National Health Insurance Scheme Operational. NHIS Operational Guidelines (Revised). 2012b. Available from: https://www.nhis.gov.ng/file/repository/NHIS_Operational_Guidelines.pdf
17. Ezeoke OP, Onwujekwe OE, Uzochukwu BS. Towards universal coverage: examining costs of illness, payment, and coping strategies to different population groups in southeast Nigeria. Am J Trop Med Hyg. 2012; 86(1):52–7.
18. Mcintyre D, Garshong B, Mtei G, Meheus F, Thiede M, Akazili J, Ally M, Aikins M, Mulligan JA, Goudge J. Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. Bull World Health Organ. 2008; 86(11):871–6.
19. Obikeze, E., Onwujekwe, O. The roles of health maintenance organizations in the implementation of a social health insurance scheme in Enugu, Southeast Nigeria: a mixed-method investigation. Int J Equity Health 19, 33 (2020). https://doi.org/10.1186/s12939-020-1146-4
20. Eyong AK, Agada PO, Asukwo EO, Irene C. Awareness of national health insurance scheme (NHIS) and quality of health care services among civil servants in Cross River state, Nigeria. Res Humanities Soc Sci. 2016; 6:1–10
21. Michael GC, Grema BA, Aliyu I, Tanimu ST, Suleiman AK, Shuaibu A, et al. Awareness, Knowledge, and Perception of the National Health Insurance Scheme among National Youth Service Corp Members in Kano, Nigeria. Niger Med J. 2020;61(4):201-205. doi: 10.4103/nmj.NMJ_140_1
22. Alawode GO, Adewole DA. Assessment of the design and implementation challenges of the National Health Insurance Scheme in Nigeria: a qualitative study among sub-national level actors, healthcare, and insurance providers. BMC Public Health 2021; 21:124.https://doi.org/10.1186/s12889-020-10133-5
23. Adewole, DA., Akanbi, SA., Osungbade, KO, Bello, S. Expanding the insurance scheme in the informal sector in Nigeria, awareness as a potential demand-side tool. The Pan African Medical Journal,2017; 27, 52
24. Ajemunigbonhun SA, Aduloju SA, Sogura AB, Azeez FT. Demand for health insurance among individual households in Lagos state: effects of sociodemographic variables. European Journal of Accounting, Financial & Business, 2017; 5, 13.
25. Obi Ikechukwu Vincent, Okoronkwo Ijeoma Lewechi, Iloh Gabriel Uche Pascal, Nwonwu Elizabeth Uzoamaka, Ogbu Kenneth, Yakubu Adole Agada-Amade. Critical Determinants of Demand for Services in the Nigeria Formal Sector Social Health Insurance Programme. International Journal of Health Economics and Policy 2020. 5(1):1-8. doi: 10.11648/j.hep.20200501.11

26. Adebayo EF, Uthman OA, Wiysonge, CS, Stern EA, Lamont KT, Ataguba, JE. A systematic review of factors that affect uptake of community-based health insurance in low income and middle-income countries. BMC Health Services Research, 2015; 15(543), 1–13
27. Lawal AF, Araba KT, Yusuf J. (2022). The Context of Community-Based Health Insurance in Nigeria: Lessons for the African Continent. In: Baikady, R., Sajid, S., Przeperski, J., Nadesan, V., Islam, M.R., Gao, J. (eds) The Palgrave Handbook of Global Social Problems. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-68127-2_209-1