ORIGINAL ARTICLE

National health insurance scheme: How receptive are the private healthcare practitioners in a local government area of Lagos state

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ABSTRACT

Background: National Health Insurance Scheme (NHIS) is one of the health financing options adopted by Nigeria for improved healthcare access especially to the low income earners. One of the key operators of the scheme is the health care providers, thus their uptake of the scheme is fundamental to the survival of the scheme. The study reviewed the uptake of the NHIS by private health care providers in a Local Government Area in Lagos State. **Objective:** To assess the uptake of the NHIS by private healthcare practitioners**. Materials and Methods:** This descriptive cross-sectional study recruited 180 private healthcare providers selected by multistage sampling technique with a response rate of 88.9%. **Result:** Awareness, knowledge and uptake of NHIS were 156 (97.5%), 110 (66.8%) and 97 (60.6%), respectively. Half of the respondents 82 (51.3%) were dissatisfied with the operations of the scheme. Major reasons were failure of entitlement payment by Health Maintenance Organisations 13 (81.3%) and their incurring losses in participating in the scheme 8(50%). There was a significant association between awareness, level of education, knowledge of NHIS and registration into scheme by the respondents *P*-value < 0.05. **Conclusions:** Awareness and knowledge of NHIS were commendable among the private health care providers. Six out of 10 had registered with the NHIS but half of the respondents 82 (51.3%) were dissatisfied with the scheme and 83 (57.2%) regretted participating in the scheme. There is need to improve payment modalities and ensure strict adherence to laid down policies.

Key words: Knowledge, NHIS, private private healthcare providers, uptake

INTRODUCTION

The Nigerian Government took a definite step to establish a National Health Insurance Scheme (NHIS) in 1999 as a social tool towards attaining equity in health service delivery.[1] A major increase in financial resources for health is needed to scale up health interventions and strengthen health delivery systems to ensure that these interventions are accessible, particularly for the poor.[2] Health insurance scheme therefore holds the promise of ensuring a guaranteed pool of funds for health, improving the efficiency of management of health resources and protecting people against catastrophic expenditure for health.[3] The uptake of the NHIS by healthcare providers and the beneficiaries is of crucial importance to the performance of the scheme. This informed the need to undertake a critical appraisal of the uptake of the scheme by these important stakeholders.

There have been different accounts of the uptake of the scheme by different stakeholders. However of importance is the uptake of the scheme by the health care providers who are the main operators of the scheme. In the South-East, Okaro *et al* study in 2010 reported that almost all the hospitals studied had registered with the scheme.[4] Result from the study of Sanusi and Awe in 2009 showed that about 83% of the respondents have accepted the programme.[5] However, the Olugbenga-Bello study of 2008 reported only 0.3%.[6] and this is in contradistinction to the rate of uptake of the scheme in Lagos which increased from 4.5% in 2000 and 2003 to 13.6% in 2004, 27.6% in 2005

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and 31.6% in 2006.[7] The Federal mandate to the present NHIS administration is to achieve population coverage of 30% by 2015.[8] This is in contrast to France which operates a health insurance policy that is compulsory.[9] Ghana national health insurance act which was promulgated in 2003 with the aim of making health care available to all residents of Ghana recorded an uptake of 62% according to the 2009 annual report of the NHIS of Ghana. However, a decline of 34% in 2010 and 33% in 2011 were recorded in the respective annual NHIS Ghana reports.[10-12]

This study assessed the level of uptake of NHIS by private health care practitioners in a Local Government area of Lagos State. The objective was to assess the awareness, knowledge and uptake of NHIS among private health care providers.

MATERIALS AND METHODS

Multistage random sampling was used to recruit 180 participants with a response rate of 88.9% which was made up of 111 doctors and 49 nurses (160).

Stage 1

Stratification of health facilities into large (12), medium (127) and small (8) out of the 104 hospitals, 30 clinics and 26 maternity homes.

There were 12 big hospitals with an average of six healthcare providers (Doctors and Nurses), 127 medium hospitals with average of two healthcare providers (Doctors and Nurses) and eight small hospitals with average of two health care providers (only nurses).Total healthcare providers was (6 × 12) + (127 × 2) + (8 × 2) = 342.

Stage II

Proportionate allocation of sample to determine number of questionnaires for each stratum. This was calculated thus:

$$\frac{\text{Number of health care providers in a stratum} \times \text{Minimum Sampling Size}}{\text{Total number of health care providers in all health facilities}}.$$

The estimated health care providers in all the health facilities were 342. For the Large health facility, the estimated number of health care providers was given as 72. The number interviewed was 72/342 × 160 = 34. The same procedure was carried out to obtain 119 for medium, and small gave 7 health facilities.

Stage III

Selection of health care facilities: All the large health facilities (12) were included in the study while 64 and 4 were randomly selected from medium and small health facilities respectively using simple random sampling by balloting.

Stage IV

Selection of participants: Simple random sampling was used to select eligible respondents using balloting until the desired numbers were obtained.

Scoring system

Overall knowledge of the study participants about NHIS was assessed using the 31 responses in the knowledge section of the questionnaire. After assessing normality to the score using histogram, the composite score was dichotomised using mean as a cut-off value so that higher value coded as 1 showing higher overall knowledge of NHIS.

A score of one was given to correct responses, zero being used for incorrect/do not know responses. Based on the mean score of the composite variable (mean = 19.5), the responses were categorised into good (score above mean value) and poor (score below mean value) knowledge of NHIS.

Data was analysed using Microsoft Excel and SPSS, and presented in tabular form, level of significance of results was tested using Chi-square, with *P*-value set at ≤0.05.

Ethical clearance was obtained from the Ethics and Research Committee of the Lagos University Teaching Hospital. All ethical research protocols were strictly adhered to.

RESULTS

Up to 180 private health care practitioners were recruited into the study with a response rate of 88.9%. This predominantly Christian (135, 84.4%), married (132, 82.5%) respondents had a mean age of 42.55 ± 10.6 years. Majority (53, 33.1%) were of age 30-39 years. There were more males (91, 56.9%) than females and more doctors (111, 69.4%) than nurses [Table 1].

Almost all the respondents (97.5%) 156 had heard of NHIS, mainly through seminars and conferences (58.1%) 93; news papers (45.6%) 73; friends and colleagues (40.6%) 65 and television and radio (35%) 56. Up to 83.8% (134) cited funding, 60.0 % (96) insufficient health facilities, 48.8% (78) inadequate health manpower as the key problems meant to be addressed by the NHIS. Up to 95.6% (153) correctly indicated access to good healthcare, efficiency in healthcare services (68.8%) 110 and high quality of healthcare (62.5%) 100, as objectives of NHIS. More than half of the respondents 65.0% (104) and 61.9% (99) associated pooling of resources and sharing of risk with concepts of NHIS, respectively, 14.4% (23) with paying of tax and 30.6% (49) had no clue. As pertained to payment strategy, 68.1% (109) identified capitation, 23.8% (38) fee for service and 22.5% (36) case payment as provider payment mechanism. The overall knowledge was good as 68.8% of the respondents had good knowledge [Table 2].

Table 1: Socio-demographic characteristics of respondents

Variables	Frequency	Percentage (%)
Age range (years)		
20-29	16	10.0
30-39	53	33.1
40-49	37	23.1
50-59	46	28.8
60-69	8	5.0
Mean age 42.55±10.6		
Total	160	100
Sex		
Male	91	56.9
Female	69	43.1
Total	160	100.0
Religion		
Christianity	135	84.4
Islam	23	14.4
Others	2	1.2
Total	160	100.0
Tribes		
Hausa	2	1.3
Igbo	28	17.5
Yoruba	109	68.1
Others	27	16.2
Total	160	100.0
Marital status		
Single	26	16.3
Married	132	82.5
Others (widowed)	2	1.3
Total	160	100.0
Health facility		
Hospital	104	65.0
Clinic	30	18.8
Maternity home	26	16.2
Total		
Education qualification		
Registered Nurse	26	14.4
MBBS	111	69.4
BSN	23	16.3
Total	160	100.0

A large proportion (74.4%) 119 believed that NHIS is the best healthcare financing option, 84.4% (135) agreed that healthcare services are inadequate in Nigeria. Up to 57 (35.6%) expressed dissatisfaction with level of NHIS publicity [Table 3].

Almost two-third of the health facilities 97 (60.6%) had been registered with NHIS. Of the 63 (39.4%) that did not register, 9 (14.3%); 8 (12.7%) 14 (22.2%) cited capitation not understood; capitation not adequate and insufficient clients as reasons for not registering respectively. Almost one third 45 (28.1%) of the respondents were satisfied with the scheme. Fifty-seven (35.6%) accepted the operation of the scheme of which 16(28.1%) had regrets of accepting the NHIS. Reasons for regrets were making loses in the scheme 8(50.0%) and late payment by HMO13 (81.3%) [Table 4].

Table 2: Awareness and knowledge of NHIS among respondents

Variable	Frequency	Percentage (100)
Awareness of NHIS		
Heard of NHIS	156	97.5
Not heard of NHIS	4	2.5
Total	160	100
Source of information		
Friend and colleagues	65	40.6
TV and Radio	56	35.0
Newspaper	73	45.6
Seminar and conferences	93	58.1
Key heath issues meant to be addressed by NHIS		
Funding	134	83.8
Inadequate health manpower	78	48.8
Insufficient health facilities	96	60.0
Poor salaries of health workers	47	29.4
Objectives of NHIS		
Access to good healthcare	153	95.6
Encourage health service among rich	14	8.8
Healthcare services by private hand	17	10.6
Efficiency in healthcare services	110	68.8
High standard of healthcare	100	62.5
Concept of NHIS		
Sharing of risk	99	61.9
Pooling of resources	104	65.0
Paying of tax	23	14.4
I don't know	49	30.6
Provider payment mechanism		
Case payment	36	22.5
Capitation	109	68.1
Fee for service	38	23.8
Knowledge of respondent about NHIS		
Good knowledge	110	68.8
Poor knowledge	50	31.3
Mean Knowledge	19.5±4.6	

There was a statistically significant association between awareness, level of education, knowledge of NHIS, attitude and registration, *P*-value < 0.05 [Table 5].

DISCUSSION

The sustainability and viability of a country's economic and social growth depend largely on vibrant healthcare sector of that nation, hence Nigerian National Health Insurance Scheme (NHIS) was launched with the major aim of improving accessibility and equity in healthcare delivery. This study revealed that 33.1% of respondents fell within the age bracket of 30-39 years. This implies that majority of respondents were within the (active age) working class of the population, relating closely with the 30-39 years (54%) obtained in Enugu study.[4] The mean age of the respondents was 42.6 ± 10.6 years in line with the study subjects with active age group in the middle range.[13] The high percentage of males (56.9%) in the study reflects the higher proportion of males in the

Table 3: Attitudes toward NHIS among the respondents

Variables	Frequency (%)			
	Disagree	Undecided	Agree	Strongly agree
NHIS is the best option for				
Healthcare financing	21 (13.1)	16 (10.0)	73 (45.6)	46 (28.8)
Health services are inadequate	7 (4.9)	14 (8.8)	85 (53.1)	50 (31.3)
Satisfaction with the level of				
Publicity	57 (35.6)	55 (34.4)	36 (22.5)	5 (3.1)
Rating of respondent Attitude about NHIS				
Negative Attitude	17 (10.6)			
Positive Attitude	143 (89.4)			

Table 4: Uptake of NHIS among respondents

Variable	Frequency	Percentage
Registered facilities with NHIS		
Registered	97	60.6
Not registered	63	39.4
Total	160	100.0
Reason for not registering		
Capitation not understand	9	14.3
Capitation not adequate	8	12.7
HMO not willing to negotiate	9	14.3
No of clients not sufficient	14	22.2
Satisfaction with the scheme		
Satisfied	45	28.1
Not satisfied	82	51.3
Don't know	33	20.6
Area accepted in the scheme		
Mode of payment	64	40.0
HMO's role	49	30.6
Health care provider's role	41	25.6
No of registered clients	20	12.5
Operation of the scheme accepted		
Accepted	57	35.6
Not accepted	103	64.4
Total	160	100.0
Reasons for acceptance *n* = 86		
Reasonable offer	22	38.6
Making of profit	22	38.6
Not to be left out of the scheme	27	47.4
Regret accepting the NHIS		
Regret	16	28.1
No regrets	41	71.9
Total	57	100.0
Reason for regret *n* = 160		
Making losses in the scheme	8	9.6
HMOs do not pay on time	13	15.7

parent population of study subjects (50.3%), as obtained by the 2005 National Population Census and the fact that men have traditionally constituted the bulk of the workforce, further buttressed by the 51.6% and 67.6% found in both Oyo and Enugu studies respectively.[5,4,14] The above assertion is, however, not tantamount to

Table 5: Association between awareness of NHIS, educational qualification and registration

Characteristics	Registration with NHIS		X^2	*P*-value
	Yes *n* (%)	No *n* (%)		
Awareness				
Not aware	0 (0.0)	4 (100.0)	6.317	0.012
Aware	97 (62.2)	59 (37.8)		
Level of education				
BSc.	9 (37.5)	15 (62.5)	9.898	0.042
MSc	1 (100.0)	0 (0.0)		
HND	2 (100.0)	0 (0.0)		
MBBS	68 (61.3)	43 (38.7)		
Registered nurse	17 (77.3)	5 (22.7)		
Knowledge of NHIS				
Poor	24 (48.0)	26 (52.0)	4.856	0.028
Good	73 (66.4)	37 (33.6)		
Attitude towards NHIS				
Negative	55 (53.4)	48 (46.6)	6.326	0.012
Positive	42 (73.7)	15 (26.3)		
Total	63 (39.4)	97 (60.6)		

60.4% of respondents being females reported in the Minna study. An observation that can be attributed to 74.1% of respondents being nurses and/or midwives, a profession generally skewed towards the female gender.[3] The married respondents of 82.5% obtained in this study is high, probably because the age bracket of the study is in reproductive age compared to 75.7% of Enugu study. The other demographic features of respondents also echo those of the parent population, with most (68.1%) being Yoruba by tribe and reverse for Christians (84.4%).[14]

The study revealed that 97.5% of the respondents had heard of the National Health Insurance Scheme. This is slightly close to a similar study in Enugu state carried out in 2009 by Okaro which showed an awareness level of 100%.[4] This is as a result of the fact that the establishment of the scheme is almost running to 7 years now. Hence, awareness did translate to good uptake as many respondent 97 (60.6%) had registered with the scheme [Table 4]. There was a statistical significant association between awareness and registration of the scheme. The main sources of information were friends and colleagues 40.6%, radio/TV 35.0%, newspaper 45.6%, seminars and conferences 58.1%. Short intensive course of study (seminars and conferences) as the principal source of information about health insurance in this study is in contrast to the Niger and Lagos studies with 11.6% and 13.5%, respectively.[15,16]

Respondents in this study exhibited a high level of knowledge of NHIS. The knowledge of provider payment mechanism and capitation was higher (68.1%) than the

studies in Niger and Osun states with 13.7% and 26.5%, respectively. The overall knowledge of the respondents in this study was high as demonstrated by the grading using the mean knowledge of 19.5 ± 4.6: good 110 (68.8%) and poor 50(31.3%) [Table 2].

The increasing trend of awareness to health insurance from the studies may be attributed to increased publicity of the NHIS following its formal launching in 2000 and commencement of operation in 2001.

Six out of 10 (60.6%) of the respondents in this study had registered with the scheme. This is slightly lower than a similar study by Sanusi and Awe in 2009 in Oyo state, where about 83% of the respondents were registered. Just about half (53.4%) accepted the operation of the scheme, and reasons for acceptance of the operation ranged from; reasonable offer (13.85), making of profit (13.87%) and not to be left out of the scheme (16.95%). However, as high as 57.2% expressed their regrets of accepting the scheme, major reasons for regret bordered on finance; in terms of failure of payment by HMOs (59.4%) and making losses in the scheme (30.6%).

CONCLUSION AND RECOMMENDATION

The study revealed that private healthcare providers in the Local Government Area were aware of the existence of NHIS in Nigeria. There was good demonstration of adequate knowledge with regards to principles of operation of health insurance scheme. However, more than half of the participants regretted keying into the scheme mainly due to late payment by HMOs and running the scheme at a loss. There is therefore need to improve the financial payment system.

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