NATIONAL HEALTH INSURANCE SCHEME (NHIS): KNOWLEDGE AND PERCEPTION OF HEALTH WORKERS IN A TERTIARY CARE SETTING

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ABSTRACT

Background: Huge out of pocket expenses deters individuals from seeking health care on time or deepens their impoverishment when they are compelled to make health expenditure. In view of this, the Federal Government of Nigeria set up the National Health Insurance Scheme, which aims to improve the health of all Nigerians at an affordable cost through various pre-payment systems.

Objectives: This study was undertaken to determine the knowledge and perception of doctors and nurses working in a tertiary health care setting towards the National Health Insurance Scheme (NHIS).

Methods: This was a descriptive, cross-sectional study involving doctors and nurses employed by Usmanu Danfodiyo University Teaching Hospital Sokoto, using a 2 stage sampling technique. A set of structured, self-administered questionnaire was used to obtain information from the respondents.

Results: A total of 182 doctors and nurses were studied of whom 57% were nurses, 43% doctors. The mean number of years post basic qualification was 8.74 ± 7.9 years. Most of the respondents (52.5%) did not have adequate knowledge of the operation of the scheme, 60.5% did not know monthly contribution made by employer and employee. Most (79.1%) of respondents were not satisfied with services being provided by the scheme, only 52.5% perceived the service as readily accessible. Respondents who were doctors were less likely (OR=0.421) to have reported finding the service readily accessible compared with nurses ($p=0.005$).

Conclusion: Most of the respondents did not have adequate knowledge of the operation of the scheme, majority of the respondents were not satisfied with the services as being provided by the scheme. With this finding, it is required that NHIS enlightens enrollees and the general public on various aspects of the operation of the scheme. A continuous monitoring of the operation of the scheme is also required to ensure that services rendered to insured clients are of the required standard.

Key words: Social insurance, health workers, Africa

INTRODUCTION

The poor health outcomes for most citizens of Nigeria can be attributed to poor utilization of modern health care delivery services, which may also be influenced by health care cost (direct and indirect). The Commission for Macroeconomics and Health estimates a cost of about US\$34 per person per year (per capita) to deliver an essential package of interventions to meet the Millennium Development Goals.¹

In Nigeria, the total per capital health expenditure is estimated at between \$10 with private out of pocket expenditure accounting for 70%.² It is also recognized that the poor spend a disproportionately higher percentage of disposable household income on healthcare and in the absence of social protection mechanisms (health insurance, social security or credible exemptions), this population face challenges of financial barriers to health care at the time of need. This no doubt deters individuals from

seeking health care on time or deepens their impoverishment when they are compelled to make health expenditure.²

It is in view of this that the Federal Government of Nigeria set up the National Health Insurance Scheme under Act 35 of 1999. It aims to improve the health of all Nigerians at an affordable cost through various pre-payment systems, and was launched in June 2005.^{3,4}

Participants in the National

Health Insurance Scheme includes the contributors, the Health Maintenance Organization (who Collects contributions from eligible employers and employees and make Payments to health care providers for services rendered), the Health Care Providers (primary or secondary) and the National Health Insurance organization (which serves as a regulatory body protecting the rights of all participants and ensuring that each actor meets his obligations).⁴

A contributor however, first register with an NHIS approved HMO, whom his employer affiliates with. Thereafter, he registers with a primary health care provider (PCP) of his choice (private or public) from an NHIS approved list of providers supplied by his HMO. This is the provider he will visit for all his health care needs. It is this PCP who will refer him to any other health professional should he need their services.⁴ Successful implementation of NHIS would go a long way in improving the productivity not only of workers but also of all citizens. For the NHIS to be successful, individuals for whom the NHIS was set up have to have adequate knowledge of its operation. Consequently this study was conducted to assess the knowledge of respondents with regards to the operations of NHIS, to determine the perception of respondents towards the National Health Insurance scheme and finally to determine factors associated with respondents' knowledge and perception of the National Health Insurance Scheme.

Assessing knowledge of the

operation of NHIS will help in determining whether enrolees understand the essence of the scheme, as enrolee's knowledge of the operation of the scheme provides a basis and criteria for evaluating the performance of the scheme. This study was undertaken to determine the knowledge and perception of doctors and nurses working in a tertiary health care setting towards the National Health Insurance Scheme (NHIS).

METHODS

Usmanu Danfodiyo University Teaching Hospital (UDUTH), the study center, is located in Wamakko LGA, within Sokoto metropolis. It is a tertiary institution with 700-bed capacity, serving as referral center to several hospitals within the Northwestern region. The hospital has 18 clinical departments and offers general and specialty services to patients.

This study was a descriptive cross-sectional study and was carried out among health workers working in the 18 clinical departments of the hospital and all health workers who were enrolled in the National Health Insurance Scheme were eligible to participate in the study.

All the 18 departments in UDUTH were enrolled in the study. Twenty five percent (25%) of the departments (5 departments) were selected using simple random sampling technique (ballot system). All health workers in the 5 selected departments were recruited for the study.

The instrument of data

collection was a set of semi-structured questionnaire, containing 3 sections that sought to obtain information on respondent's socio-demographic characteristics, knowledge and perception of NHIS. The questionnaires were self-administered after obtaining informed consent.

The questionnaires were entered in the SPSS Version 17 statistical software package and were subsequently analysed. The knowledge of respondents on the operation of the National Health Insurance Scheme was scored. Each correct response was scored 1 and the incorrect responses were not given any score. Respondents mean knowledge score (percentage) was determined. Analysis of data started with description of data using mean and standard deviation for quantitative variables, counts and frequencies for qualitative variables. This was followed by inferential statistics. Results were presented in form of tables. All statistical tests were carried out using 2 tailed tests with alpha set at 0.05.

RESULTS

The respondents were between 20-54 years with a mean age of 33.6 ± 10 years. Most of the respondents were females (52.7%), Hausa (30.2%), Christians (70.3%) and married (60.4%). Fifty seven percent of the respondents were nurses while doctors constituted 43% of the respondents. Their mean number of years post qualification was found to be 8.74 ± 7.9 years.

Majority of the respondents (60.4%) knew that the National Health Insurance

Scheme (NHIS) was not set to maximize profit; respondents knew that the scheme is a means by which the Federal Government finances the health care sector (84.6%). Two-third of the respondents did not know the total monthly contribution to be made by employer and employee, most of respondents did not know that the scheme allows contributors with high income subsidize those with low income (65.9%); most (60.5%) did not know that contribution made under the scheme did not depend on health needs of the contributors, more than half (59.3%) of the respondents did not know that the scheme covers children of contributors who are less than 18 years of age. After aggregating the knowledge score, most of the respondents (52.5%) did not have adequate knowledge of the overall operation of the scheme.

Slightly more (52.5%) than half of the respondents perceived the service as readily accessible. Almost all (99.5%) of the respondents felt the scheme was a good idea, although they were not satisfied with services being provided by the scheme (79.1%). More than two-thirds of the respondents did not feel they had adequate information on the operations of the scheme.

The mean knowledge score of respondents with respect to the various operation of NHIS was observed to be higher among male respondents (67.9 ± 14) compared with female respondents (60.3 ± 12), this was statistically significant ($P=0.000$). The mean knowledge score of respondents who were medical

doctors (65.88 ± 14) was higher compared with that of nurses (62.39 ± 13) but this was not statistically significant ($P=0.085$). There was a statistically significant relationship between cadre of respondents and satisfaction with the operation of NHIS service ($P=0.001$), there was also a statistically significant relationship between cadre of the respondents and their perception of readily accessibility of NHIS service ($P=0.05$). The study observed a positive linear correlation between respondents' knowledge of operation of NHIS and their number of years post qualification ($r=0.323$), this was statistically significant ($P=0.000$).

Respondents who were doctors were less likely to be satisfied with the NHIS service ($OR=0.232$) compared with nurses, this was found to be statistically significant ($p=0.01$). Male respondents were also found to be less likely to be satisfied with the service compared with nurses ($OR=0.506$), although this was not statistically significant.

Respondents who were doctors were less likely to have reported finding the service readily accessible compared with nurses ($OR=0.421$), this was statistically significant ($p=0.005$), male respondents were also less likely than females to have found the service readily accessible ($OR=0.663$), but this was not statistically significant ($p=0.169$).

DISCUSSION

Most of the respondents in our study did not know proportion of their salary that is deducted for the insurance scheme nor amount their employer

contribute to the scheme on their behalf. This is not surprising, as similar studies conducted in southern Nigeria reported that only about a third of respondents knew the provider payment mechanism.^{5, 6} However, most of the respondents were found to have adequate knowledge of the operation of the scheme. This maybe because the respondents (all enrollees in the scheme) were all health workers, working in a hospital that is a primary care provider for NHIS. Knowledge about the operational guidelines of NHIS provides respondents with a basis and criteria for evaluating the performance of the scheme. Our finding contrasts with some other studies conducted in Nigeria, which reported that less than half of the respondent had good knowledge on the various aspect of operation of the scheme.^{7, 8-10}

The mean knowledge score with respect to various aspect of operation of NHIS was observed to be higher among male respondents compared with female respondents; also the mean knowledge score of respondents who were medical doctors was higher compared with that of nurses. This may be attributable to the fact that males bear the brunt of medical expenses in the family, as such they are likely to be more knowledgeable with respect to issues that will likely cut down their bills. Majority of the respondents felt the scheme was a good idea, which will improve the health status of beneficiaries if properly implemented. This finding is not surprising, as most beneficiaries of the scheme know that NHIS assist beneficiaries to cope with the

financial burden of medical bills. This finding is in line with finding from another study which reported that most of the respondents felt that the scheme was a good idea and will succeed if properly implemented.⁷ A previous study also conducted in Nigeria, however, reported that slightly less than half of respondents felt the scheme had not improved the health status of its beneficiaries.¹¹

Majority of the respondents were not satisfied with the health services as being provided by the scheme. Similar studies conducted in Nigeria reported fewer respondents reporting dissatisfaction with services provided by the scheme.^{8,9,11,12}

However, this study is in line with a study conducted in Ghana which reported that most of respondents were satisfied with services as being provided by the scheme.¹³ One of the causes of dissatisfaction with the scheme may have to do with the bureaucracy that precedes accessing medical services, laboratory services and drugs. Enrollees have to obtain NHIS forms from record clerks who sometimes may not be at their place of work, which brings about delay in obtaining services. Complaints can also arise where providers deny enrollees their full entitlements or when providers charge additional fees on the pretext of non-inclusion of the service in the benefit package.¹⁴

Enrollees in the scheme should be encouraged to voice out their grievances. This will keep other participants in the scheme such as primary, secondary care providers as well as the HMOs on their toes,

Table 1: Socio-demographic characteristics of respondents

Variables	n (%)
Age (Years)	
20-29	72 (39.1)
30-39	41 (22.3)
40-49	28 (15.2)
50-59	17 (9.2)
Mean age =33.6± 10.4 years	
Gender	
Male	86 (47.3)
Female	96 (52.7)
Tribe	
Hausa	55 (30.2)
Yoruba	38 (20.9)
Igbo	42 (23.1)
Others	47 (25.8)
Religion	
Islam	54 (29.7)
Christianity	128 (70.3)
Marital status	
Single	53 (29.1)
Married	110 (60.4)
Separated	9 (4.9)
Widow	10 (5.5)
Cadre	
Doctor	78 (42.9)
Nurse	104 (57.1)
Number of years post qualification	
1-10	120 66
11-20	42 23
≥21	20 11

Mean = 8.74±7.9 years

Table 2: Knowledge of respondents on the operation of National Health Insurance Scheme

Variables	n (%)
Knew the monthly contribution made by both employer and employee under the scheme	
Yes	61 (33.5)
No	121 (66.5)
The NHIS is a means for health care financing	
Yes	154 (84.6)
No	16 (8.8)
I do not know	12 (6.6)
The NHIS is meant to maximize profit	
Yes	50 (27.5)
No	110 (60.4)
I do not know	22 (12.1)
NHIS covers all children of contributors who are less than 18yrs	
Yes	74 (40.7)
No	107 (58.8)
I do not know	1 (0.5)
NHIS allows people with high income to subsidize those with low income	
Yes	62 (34.1)
No	100 (54.9)
I do not know	20 (11)
NHIS does not allow one to change his service provider	
Yes	43 (23.6)
No	55 (30.2)
I do not know	84 (46.2)
Contributions made in NHIS depends on health need	
Yes	70 (38.5)
No	72 (39.6)
I do not know	40 (22.0)
Knowledge score	
<50%	95 (52.5)
≥50%	86 (47.5)

Table 3: Perception of respondents on the National Health Insurance Scheme

Do you feel setting up NHIS was a good idea	n (%)
Yes	181 (99.5)
No	1 (0.5)
Do you feel you have adequate information on NHIS	
Yes	60 (33.0)
No	122 (67.0)
Do you feel NHIS services is easy to access	
Yes	95 (52.5)
No	86 (47.5)
Do you think NHIS has improved the health status of beneficiaries	
Yes	140 (76.9)
No	42 (23.1)
Are you satisfied with services as provided by NHIS	
Yes	38 (20.9)
No	144 (79.1)
Is the service readily accessible?	
Yes	95 (52.5)
No	86 (47.5)

Table 4: Correlates of satisfaction and accesibility of NHIS services

Variables		Satisfied with NHIS service	
		Yes	No
Cadre	Doctor	7 (18.4)	71 (49.3)
	Nurse	31 (81.6)	73 (50.7)
Test Statistics & P-value		OR= 0.232 X ² =11.71, DF=1, p=0.01	
Variables		Satisfied with NHIS service	
		Yes	No
Gender	Males	13 (34.2)	73 (50.7)
	Females	25 (65.8)	71 (49.3)
Test Statistics & P-value		OR=0.506 X ² = 3.28, DF=1, P=0.07	
Variables		Is the service readily accessible	
		Yes	No
Cadre	Doctor	31 (32.6)	46 (53.5)
	Nurse	64 (67.4)	40 (46.5)
Test Statistics & P-value		OR=0.421 X ² =8.03, DF=1, P=0.005	
Variables		Is the service readily accessible	
		Yes	No
Gender	Males	40 (42.1)	45 (52.3)
	Females	55 (57.9)	41 (47.7)
Test Statistics & P-value		OR=0.663 X ² = 1.89, DF= 1, P=0.169	

as the scheme gives a contributor the right to change his care provider after a minimum period of six (6) months if he is not satisfied with his services.

CONCLUSION

Most of the respondents did not have adequate knowledge of the operation of the scheme, felt the scheme was a good idea which will improve the health status of beneficiaries if properly implemented. However, only about a half of respondent perceived the service as easily accessible, while majority of the respondents were not satisfied with the services as being provided by the scheme.

With this finding, it is required that NHIS enlightens enrolees and the general public on various aspects of the operation of the scheme. A continuous monitoring of the operation of the scheme is also required to ensure that services rendered to insured clients are of the required standard.

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