



## Participation in the National Health Insurance Scheme Among Nurses in a Tertiary Teaching Hospital, North central Nigeria.

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### KEYWORDS

Participation,  
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### ABSTRACT

**Background:** The National Health Insurance Scheme was established under Act 35 of 1999 by the Federal Government of Nigeria and is aimed at providing easy access to health care for all Nigerians at an affordable cost through various prepayment systems. It is totally committed to achieving universal coverage and access to adequate and affordable health care aimed at improving the health status of Nigerians. Assessment of the programme after four years of operation, revealed less than three percent coverage of the Nigerian population. Therefore this study aimed at determining the level of its participation among nurses in a teaching hospital.

**Methodology:** This was a descriptive cross sectional, facility-based study involving four hundred nurses selected using multistage sampling technique. Structured, self-administered questionnaires were used to collect data that was analysed using Epi info version 3.5.1 statistical software.

**Results: Majority:** 268 (67%) of the respondents had good knowledge of the scheme, reflected by all of them acknowledging to having heard of the scheme with 312 (78%) actively participating in the scheme. One hundred and eighty eight (37.8%) of them had been participating for a duration of 0-2 years. A larger proportion; 216 (54%) respondents were not satisfied with the scheme with 80 (37.0%) of them noting that the process was cumbersome. There were statistically significant associations between sex ( $p < 0.0001$ ), cadre ( $p < 0.0001$ ) and participation in the scheme.

**Conclusion:** Though all the nurses had heard about the scheme, with a greater percentage having a good knowledge of what it entails, there were negative findings regarding practice in terms of payments made and the cumbersome nature of the scheme by respondents. There is therefore a need to address these observed gaps so as to improve acceptability and accessibility of the scheme among them.

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### Introduction

Historically, health insurance in Nigeria was free, provided and financed for all citizens by the government, through a special health scheme, for government employees and private firms through agreements with private health care providers. However, only a few individuals have access to the instances identified.<sup>1</sup> As a means to tackle this, the government of Nigeria launched the National Health Insurance Scheme (NHIS) in June 2005.<sup>2</sup> This scheme is designed to facilitate fair financing of health care costs. It is achieved through pooling a judicious utilization of financing risk protection and cost burden sharing for people; against the high cost of health care through institution of a prepaid mechanism prior to falling ill.<sup>2</sup>

Participation in the NHIS is optional, except for the public and private sector who will contribute five percent of their basic salary, while their employers pay ten percent for each worker. This includes the contributor, a spouse and four children to access medical care from any approved service provider.<sup>3</sup>

In most developing countries, Nigeria in particular, there is a clear lack of universal coverage of health care and inequality. Access to health care is severely limited.<sup>4,5</sup> Inabilities of the consumer to pay for the services as well as the health care provision that is far from being equitable have been identified among other factors to impose the limitation.<sup>6</sup> When the NHIS was introduced, it was expected to improve access to health care for the majority of Nigerians, particularly persons in the public service and private sectors. However, many Nigerians still depend on

out of pocket spending for health care.<sup>1</sup>

There cannot be health care without the health care providers who influence the quality of care required. Nurses are part of these health care providers and majority of patients come in contact with a nurse before leaving the hospital. Hence, their place in the scheme cannot be over emphasized. Some researchers have conducted a number of studies at different times, assessing the level of awareness, knowledge or participation in the scheme among health care providers, but there is a paucity of data involving Nurses in the study area, who are important members of the health care team.

## Methodology

Jos University Teaching Hospital (JUTH) is a 601 bed capacity tertiary hospital with its permanent site located in Lamingo, Jos East Local Government Area of Plateau State. It has 34 departments, including the nursing department which includes paediatrics, surgical, medical and obstetrics nurses. This descriptive, cross sectional, facility-based study was conducted among four hundred nurses in a tertiary hospital who were recruited using multistage sampling technique. The sample size was determined using the sample size for cross sectional studies. The four main departments (Paediatrics, Surgery, Medicine and Obstetrics and Gynaecology) where nurses work were stratified. In each of these strata, a list of all the nurses (525) was made to form a sampling frame. Using a sampling interval of 1 (derived from the division of the calculated sample size of 400 by the sampling frame), the respondents that met the inclusion criterion of being employees of the hospital for at least a year from commencement of the scheme in the hospital (in 2006) were selected until the required sample size was derived.

The Data was obtained using a pre-tested, structured, self-administered questionnaire following permission from the hospital management and informed consent of the respondents. The obtained data (socio-demographics, knowledge and practice regarding NHIS) was analysed using Epi info statistical software, version 3.5.1.

For determination and classification of knowledge a total of 6 questions were asked which were graded and scored as: a total score of 4-6 correct responses was used to indicate good knowledge, 2-3 as fair knowledge and 0-1 as poor knowledge.

## Results

Majority; 340(85%) and 300(75%) of the respondents were female and married. More than a third, 176(44%) of them were Nursing Officers. The age group with the highest proportion of respondents was 40-49years; 128(32%). (Table1)

Majority 268(67%) of the respondents had a good knowledge of the scheme.(score of 4-6/6 correct responses ), with a lesser proportion,33% having a fair knowledge.(score of 2-3/6 correct responses).

Three hundred and twelve (78%) of the respondents were actively participating in the scheme or had done so sometime. Only 88(22%) of them had never participated in the scheme. The longest duration of participation in the scheme was between 6-8 years, which had the lowest proportion; 29% of the respondents. The shortest duration, 0-2 years had the highest proportion of respondents, 38%.

Among the 216 respondents that were participating in the scheme and yet not satisfied with it, 104 (48%) of them attributed their lack of satisfaction to inadequacies in the payments they make for service delivery. The lowest proportion of 15% was due to the slow nature of the procedures involved in service delivery. Majority, 35(58%) of the male respondents were satisfied with their level of participation in the scheme, while majority; 201 (59%) of the females were not satisfied with their level of participation, though a small proportion of both sexes were indifferent about it. This relationship was statistically significant;  $p < 0.0001$  (Table 2)

The relationship between cadre and participation in the scheme was statistically significant,  $p < 0.0001$  with the greater proportion; 154 (66%) of Nursing Officers participating in the scheme, while a lesser proportion; 9% of the Chief Nursing Officers were participants. (Table 3)

**Table 1: Socio-demographics of the Studied Population.**

<b>FACTOR</b>	<b>n = 400 FREQUENCY</b>	<b>n = 100% PERCENTAGE</b>
<b>Sex</b>		
Male	60	15
Females	340	85
<b>Age Groups</b>		
20 -29	96	24
30 -39	120	30
40 – 49	128	32
50 -59	56	14
<b>Cadre /Rank</b>		
N O	176	44
PN O	64	16
A C N O	72	18
C N O	88	22
<b>Marital Status</b>		
Single	88	22
Married	300	75
Widowed	12	3

**Key**

NO-Nursing Officer

PNO-Principal Nursing Officer

ACNO-Assistant Chief Nursing Officer

CNO-Chief Nursing Officer

**Table 2: Relationship between Sex and Level of Participation**

<b>Sex/level of Participation</b>	<b>Satisfied</b>	<b>Not Satisfied</b>	<b>Indifferent</b>	<b>Total</b>
Male	35(58%)	15(25%)	10(17%)	60
Female	119(35%)	201(59%)	20(6%)	340
<b>Total</b>	<b>154</b>	<b>216</b>	<b>30</b>	<b>400</b>

$X^2 = 26.114$ ;  $df = 2$ ;  $P < 0.0001$

**Table 3: Relationship between Cadre and Level of Participation**

Cadre / Participation	NO	PNO	ASCNO	CNO	TOTAL
Yes	154(66%)	4(2%)	56(24%)	20(9%)	234
No	22(13%)	60(36%)	16(10%)	68(41%)	166
<b>Total</b>	<b>176</b>	<b>64</b>	<b>72</b>	<b>88</b>	<b>400</b>

$X^2 = 190.35$ ;  $df = 3$ ;  $P < 0.0001$

### Discussion

In this study, knowledge on the NHIS was good among 67% of the respondents as was also observed in a study conducted in Osun State, Nigeria among healthcare consumers. The study revealed that majority (87%) of the respondents had good knowledge of the NHIS scheme as against a few (13%) of the respondents that recorded fair knowledge of the scheme.<sup>6</sup> This finding was similar to that of a study conducted in Zaria, Nigeria where 70% of the respondents had a good knowledge of the NHIS.<sup>7</sup> However, a study done in Lagos State, Nigeria among Dentists showed that a small percentage (28.7%) had good knowledge of the NHIS scheme, while 61.1% and 10.2% had fair and poor knowledge of the scheme respectively.<sup>8</sup>

Reasons for the good knowledge regarding NHIS in this study could be attributed to the mandatory participation of the scheme in the study area and therefore the need to be educated on it to ensure participation. This enhanced more awareness and knowledge of the scheme among the respondents, as it was reported that a lot of awareness was created by the employers.

Though majority of the respondents in this study were participating in the scheme, they still mentioned factors that are hindering their full participation. This is not an uncommon finding. The high practice rate could be attributed to the professional level of the respondents; being in the healthcare delivery line, the knowledge they have most likely influenced their practice outcome. This was similar to findings in a study among Dentists in

Southwest Nigeria, where respondents were generally positive towards the scheme and viewed it as a good idea, thereby translating in their high level of participation in it.<sup>7</sup> However, the finding in another study conducted among civil servants in Osun State, Nigeria revealed contrary findings. Though 199 (52.5%) of them agreed to participate in the scheme, only 0.3% have so far benefited from NHIS.<sup>9</sup>

Topmost among the factors hindering satisfaction with participation in this study was payment inadequacies. Forty eight percent of the respondents reported to paying inconsistent amounts for purchased drugs and also heavily relying on out-of-pocket expenditure, despite participating in the scheme. This finding was similar to that observed in a study conducted among government employees in Eastern Nigeria, where though 28.4% of the respondents relied on the NHIS, 63.6% who relied on out-of-pocket payment reported their difficulties in accessing quality health care services as a result of financial hardship at the moment of seeking medical treatment.<sup>10</sup>

The cumbersome nature of the scheme was also a contributory factor to satisfaction with respondents' participation in the scheme. This could be due to long delays in seeing the relevant personnel at the time of service delivery and delays in getting some materials, especially NHIS prescription pads and at times drugs as observed in a study conducted in South east Nigeria.<sup>2</sup>

In this study, sex ( $P < 0.0001$ ) and cadre ( $P < 0.0001$ ) had significant associations with the level of participation in the scheme.

There is a high level of knowledge about the scheme, but implementation gaps are pertinent. This finding is topmost among a segment of the health personnel, who are the main custodians of this form of healthcare delivery. There is therefore a need to improve on the managerial gaps of this scheme, especially in the public and private sector as there is now an extension to the community. This will enhance efficiency and effectiveness of the scheme.

## REFERENCES

1. Monye F. An appraisal of the level of health insurance of Nigeria, common wealth law *Bulletin*, **32**(3): 415-427.
2. Ohagwu CC and Okoro AO. A health insurance scheme among radiographers in South East Nigeria. *American journal of scientific research* 2010. Issue 8: 18-25.
3. National Health insurance scheme Degree No 35 of the 1999 laws of the Federal Republic of Nigeria. PP 10-11.
4. Abati R. Nigerian problematic health care 2008 [Cited 20/03/2012] Available from: <http://www.dailytrust.com>.
5. Otunyemi OD. Orthodontics in Nigeria: Journal so far and challenges ahead. *Journal of orthodontics* 2001, **28** (1): 90-92.
6. Sanusi RA and Awe AT. An assessment of the level of awareness of national health insurance scheme among health care consumers in Oyo State, Nigeria. *The Medwell Journal* **4** (2): 143-148.
7. Adeniyi AA, Onajele AT. The National Health Insurance Scheme: a survey of knowledge and opinions of Nigerian Dentists in Lagos. *African Journal of medicine, med sci.* 2010 Mar **39** (1): 29-35.
8. Mohammed S, Sambo MN, Dong H. Understanding Client Satisfaction With a Health Insurance Scheme in Nigeria: Factors and Enrollees Experience. *Health Research Policy and Systems* 2011 **9**(20): 1-8.
9. Olugbenga-Bello AI, Adebimpe WO. Knowledge and attitude of civil servants in Osun state, Southwestern Nigeria towards the national health insurance. *Niger J Clin Pract.* 2010 Dec **13** (4): 421-6.
10. Oyibo P. Out-of-pocket payment for health services: constraints and implications for government employees in Abakaliki, Ebonyi State, South east Nigeria. *Afr Health Sci.* 2011 Sep **11**(3): 481-5.