

Statistical Analysis of the Knowledge and Accessibility of National Health Insurance Scheme (NHIS) Among Patients in Lagos State.

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Abstract

Standard healthy living is a major determinant of a healthy society. This study has the aim to assess the knowledge and accessibility of National Health Insurance Scheme (NHIS) among patients in General Hospital, Lagos State, Nigeria. Primary data was used through the administration of questionnaires. The data analysed was presented using Descriptive approach as well as inferential statistics. Seventy five percent of the respondents were females within the age range of 21 – 40 years. Majority of the respondents were singles and the highest academic qualification of the majority of the respondent was B.Sc./HND. Many of the respondents were aware of NHIS as revealed by high percentage of knowledge. The NHIS was not easily accessible to the people. There was a significant association between level of awareness of NHIS and some socio – demographic factors. It is recommended that more hospitals should be accredited so as to cope with the teeming populace.

Key words: accessibility, Knowledge, NHIS, Association, Significant

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I. INTRODUCTION

There is a saying that “a healthy nation is a wealthy nation” because health is wealth. The ability of a nation or group of people to achieve certain set goals depends largely on the state of their health. The social, economic, political success of any person, group of persons or even a nation is hinged on the health state. This will enhance the productivity of the citizenry in all aspects. Many countries have engaged health issues into their economic policy as a major issue. Federal government enacted National Health Insurance Scheme in 2005 to help soothe the pains and rigour of health cares of Nigerians. A very small fraction of the federal employees are enrolled into this noble scheme at date (approximately 4 million). Also, only about 2 million women that are pregnant including children who are under the age of five are enrolled since under this scheme. This shows a very little fraction of the population of about 200 million enjoying the benefits of this scheme in Nigeria as at the moment.

The scheme is supposed to cater for both public and private organizations so that their employees can enjoy the benefits of the scheme. Only 5 percent of the basic salary of the employees under the scheme is deducted monthly as contribution towards the running cost of the scheme. The scheme makes provision for a contributor, the spouse and four children under age eighteen for medical care. The NHIS scheme provides among other benefits good health care for Nigerians, give financial heave to families in health issues, regulate equal distribution of health care services among Nigerians of divergent cadres (Isaac, 2014).

1.2 Statement of the Problem

Everyday so many Nigerians are constantly faced with the inability to pay for their medical bills especially in times of unplanned health challenges which has led to many deaths. It is also observed that some others cannot comfortably pay for medicines and services offered to them, this has also led to many deaths. These challenges informed the formation of NHIS in 2005.

1.3 Aim & Objectives of the Study

- ✓ To determine the how knowledgeable the patients are concerning NHIS.
- ✓ To examine the association between the workers knowledge of NHIS and qualitative service in health.

1.4 Research Questions

- ✓ To what extent do the patients have the knowledge of NHIS?

- ✓ Was there association between the workers knowledge of NHIS and qualitative service in health?

1.5 Research Hypothesis

H₀: There is no association between the workers knowledge of NHIS and qualitative service in health.

H₁: There is an association between the workers knowledge of NHIS and qualitative service in health.

1.6 The Significance of this study

The study is useful to the Health Maintenance Organizations (HMOs), Health Services Providers. (HSPs), the government and the society in the administration of effective and efficient health care services.

1.7 The Scope of this study

The study covers in-patients as well as the out-patients of the General Hospital, Lagos.

1.8 Definition of Terms

Workers' knowledge: This is knowing about NHIS and participating in it.

Health care services: These are activities geared towards ensuring that the beneficiaries are in good health.

NHIS means National Health Insurance Scheme

HSPs means Health Service Providers

HMOs means Health Maintenance organizations.

II. LITERATURE REVIEW

According to Adaranijo and Ahonsi (2001), Nigeria is not utilizing the prospects of the NHIS. The unequal spread of this scheme has left much gap to be filled in the assessment of the performance of Nigeria in NHIS. Many people that are enrolled in this scheme have been accessing the scheme as expected. There are several complaints from different quarters regarding the operations of these Health Management Organizations. It has been of low level in the awareness of health insurance and the inaccessibility of this scheme coupled with the care services that are not equitable have marred the operations of the NHIS. Other factors have equally mitigated the efficiency of the scheme (Ahonsi, 2003).

Health care services are designed to be of immense and tremendous to the beneficiaries who are to contribute stipends to its operations through the Health Management Organizations. This has really been quite helpful (Currie and Gruber, 1996).

Kasper, Giovanni. and Hoffman (2000) revealed that the knowledge of National Health Insurance Scheme is quite disheartening considering the number of workers enrolled on the scheme. Levy and Meltzer, (2001) opined that increasing health care services can alleviate the suffering of the poor and bridge the gap between the rich and the poor in terms of health care. The World Health Report 2000 revealed that knowledge and implementation of the health care scheme are very vital to the survival of any nation's workforce.

III. METHODOLOGY

3.1 Research Design

The adopted design for this study was the survey approach where structured questionnaire in accordance to the research questions was administered to the patient attending General Hospital at Lagos.

3.2 Study Area

This research was done in General Hospital in Lagos, Nigeria

3.3 Determination of Sample Size

Required sample for this study was found by the use of a popular method *Taro Yamane Formula (1967)*. It was obtained as thus;

$$n = \frac{N}{1 + Ne^2} ;$$

N = Population size

e = Degree of precision

$$n = \frac{1000}{1 + 1000(0.05^2)}$$

n = 286

3.4 The Reliability test

The value of the Cronbach depicts how reliable the data are. This can be interpreted as correlation coefficient. Placing Cronbach's alpha threshold at 0.50. Table 3.1 shows that the overall scale was found highly reliable (17 items; $\alpha = .625$).

Table 3.1 Reliability Statistics

Cronbach's Alpha	N of Items
.625	323

Source: Field survey, 2018

3.5 Method of Data Analysis

IBM SPSS Version 23.0 was used for the analysis and the tools employed was descriptive statistics consisting of frequency counts and simple percentage (%) to describe the demographic characteristics of the respondents with Chi – square test for inferential statistics.

IV. DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction

The presentation and analysis of data collected during the study is done here. The data were presented using frequency distribution, percentages and pie chart. The statistical tool used for the analyses was chi – square.

4.2 Presentation of Result

Socio-demographic characteristics of the respondents

Table 1: Respondents Distribution by Gender

Variable	Frequency	Percentage (%)
Male	166	58.0
Female	120	42.0
Total	286	100.0

Source: Researcher's field survey, 2018

From the above, 166 out of the 286 patient (58%) used for the study were male while the remaining 120(42%) were female.

Table 2: Respondents Distribution by Age Range

Variable	Frequency	Percentage (%)
<= 20years	20	7.0
21-40years	215	75.2
41-60years	51	17.8
Total	286	100.0

Source: Researcher's field survey, 2018

Age profile shows that 75% of the respondents were between 21-40 years, 41-60 years (18%) and less or equal to 20 years (7%).

Table 3: Respondents Distribution by Age Category

Variable	Frequency	Percentage (%)
Late teenage	20	7.0
Early adulthood	215	75.2
Middle age	51	17.8
Total	286	100.0

Source: Researcher's field survey, 2018

The age group shows that 75% of the respondents were categorized as early adulthood, 18% were in the middle age and 7% were categorized as late teenage.

Table 4: Respondents Distribution by Religion

Variable	Frequency	Percentage (%)
Christianity	153	53.5
Islam	127	44.4
Others	6	2.1
Total	286	100.0

Source: Researcher's field survey, 2018

The result in Table 4 & figure 4, 54% of the respondents practice Christianity, 44% practice Islam and 2% practice other religion.

Table 5: Respondents Distribution by Marital status

Source: Researcher's field survey, 2018

Variable	Frequency	Percentage (%)
Single	148	51.7
Married	108	37.8
Divorce	15	5.2
widower	15	5.2
Total	286	100.0

The marital status profile shows that 52% of the respondents were single, 38% were married, while 5% each were separated and divorced. This implies that majority of the respondents are single.

Table 6: Respondents Distribution by Academic Qualification

Variable	Frequency	Percentage (%)
PhD/Masters	79	27.6
BSc/HND	139	48.6
ND/NCE	32	11.2
SSCE/WASCE	32	11.2
Others	4	1.4
Total	286	100.0

Source: Researcher's field survey, 2018

The academic qualification reveals that 28% of the respondents were Ph.D. / Masters holders, 49% were B.Sc./ HND holders, 11% were ND/NCE holders and 11% were SSCE/WASCE holders whereas 1% possess other qualification. It can be deduced here that the highest academic qualification of the majority of the respondent is B.Sc./HND.

Table 7: Respondents Distribution by Employer

Variable	Frequency	Percentage (%)
Self	67	23.4
Private	114	39.9
Government	105	36.7
Total	286	100.0

Source: Researcher's field survey, 2018

The employer profile indicates that 40% of the respondents were private employees', 37% were government employees' and the remaining 23% were self-employed or working for themselves. It can be deduced here that the highest participant of this study were privately employed workers.

Table 8: Respondents Distribution by Working hours

Variable	Frequency	Percentage (%)
8-10hours	113	39.5
10-20hours	42	14.7
20-40hours	78	27.3
Others	53	18.5
Total	286	100.0

Source: Researcher's field survey, 2018

The working hours profile reveals that 39% of the respondents worked for 8 – 10 hours, 27% worked for 20 – 40 hours, whereas 15% worked for 10 – 20 hours and 19% worked for other hours apart from the aforementioned.

Research Question 1: What is the level of awareness of NHIS among patient in the hospital?

Table 9: Are you insured?

Variable	Frequency	Percentage (%)
Yes	110	38.5
No	176	61.5
Total	286	100.0

Source: Researcher's field survey, 2018

Table 9 shows that 38% of the respondents insured while 62% do not insured. This implies that majority of the respondents in this study were not insured.

Table 10: Awareness of health insurance policy

Variable	Frequency	Percentage (%)
Yes	223	78.0
No	63	22.0
Total	286	100.0

Source: Researcher's field survey, 2018

From the table above, 78% of the respondents were aware of the insurance policy while the remaining 22% do not aware of health insurance policy. This implies that a vast number of the respondents in this study were insured in the health insurance policy.

Research Question 2: To what extent do the patient have the knowledge of NHIS?

Table 11: Knowledge of National Health Insurance Scheme (NHIS)

Variable	Frequency	Percentage (%)
Yes	227	79.4
No	59	20.6
Total	286	100.0

Source: Researcher's field survey, 2018

The above table shows that 79% of the respondents were knowledgeable of NHIS while the remaining 21% do not have the knowledge. This implies that a vast number of the respondents in this study have the knowledge of NHIS

Table 12: Possession of health insurance

Variable	Frequency	Percentage (%)
Yes	180	62.9
No	106	37.1
Total	286	100.0

Source: Researcher's field survey, 2018

The table above shows that 63% of the respondents possess health insurance while the remaining 37% do not own health insurance. This implies that a vast number of the respondents in this research possess health insurance.

Accessibility of health Services Delivery

Table 13: Have you ever benefited from National Health Insurance Scheme (NHIS)

Variable	Frequency	Percentage (%)
Yes	108	37.8
No	178	62.2
Total	286	100.0

Source: Researcher's field survey, 2018

Table 13 shows that 38% of the respondents have benefited from National Health Insurance Scheme (NHIS) while the remaining 62% have not benefited. This implies that majority of the respondents in this study have not benefited from National Health Insurance Scheme (NHIS).

Table 14: Health insurance benefit by employer

Variable	Frequency	Percentage (%)
Yes	113	39.5
No	108	37.8
Don't know	65	22.7
Total	286	100.0

Source: Researcher's field survey, 2018

Table 14 shows that 40% of the respondents have benefited from National Health Insurance Scheme (NHIS) through their employer, 38% have not benefited from the scheme by their employer while the remaining 22% do not know whether they benefited. This implies that majority of the respondents in this study have not benefited from National Health Insurance Scheme (NHIS) through their employer.

Table 15: If no benefit, are you willing to buy

Variable	Frequency	Percentage (%)
Yes	110	40.3
No	163	52.7
Total	273	100.0

Source: Researcher's field survey, 2018

Table 15 shows that 40% of the respondents that have not benefited from National Health Insurance Scheme (NHIS) through their employer are willing to buy while the remaining 53% are not willing to buy.

Table 16: Does it cover family member

Variable	Frequency	Percentage (%)
Yes	194	67.8
No	92	32.2
Total	286	100.0

Source: Researcher's field survey, 2018

Table 16 shows that 68% of the respondents said that National Health Insurance Scheme (NHIS) benefited through their employer cover family member while the remaining 22% said it do not cover the family member. This implies that majority of the respondents are enjoying National Health Insurance Scheme (NHIS) that covers their family member through their employer.

Table 17: Extent of cover of health insurance

Variable	Frequency	Percentage (%)
Spouse only	75	26.2
Spouse & Children	121	42.3
Spouse, Children & Extended family	90	31.5
Total	286	100.0

Source: Researcher's field survey, 2018

Table 17 shows the categories of family member that the health insurance scheme covered. 26% of the respondents said it covered only their spouse, 42% said it covers spouse and children and 32% said it covered spouse, children & extended family.

Payment of the Health Services

Table 18: Description of Current Health Insurance Policy

Variable	Frequency	Percentage (%)
Affordable	213	74.5
Cheap	44	15.4
Expensive	29	10.1
Total	286	100.0

Source: Researcher's field survey, 2018

Table 18 depicts the description of health insurance policy in which 75% of the respondents said that the health policy was affordable, 15% said it was cheap and the remaining 10% said that the policy was expensive

Table 19: For what medical services have you ever visited the hospital ?

Variable	Frequency	Percentage (%)
Dental	22	7.7
Optics	52	18.2
Maternity	46	16.1
General Healthcare	140	49.0
Others	26	9.1
Total	286	100.0

Source: Researcher's field survey, 2018

Table 19 shows that 49% of the respondent visited the hospital for general health care, 18% visited the hospital for optics, 16% visited for maternity, whereas 8% visited for dental, while 9% of the respondent visited for other medical services.

Table 20: How would you rate the cost of the service of the healthcare provider?

Variable	Frequency	Percentage (%)
Affordable	214	74.8
Cheap	55	19.2
Expensive	17	5.9
Total	286	100.0

Source: Researcher's field survey, 2018

Table 20 shows that 75% of the respondents said that the cost of healthcare service providers were affordable, 19% said the service was cheap and 6% said the service was expensive. This implies that majority of the respondent said that the cost of the service of the healthcare provider were affordable.

Table 21: Who pays health bill

Variable	Frequency	Percentage (%)
Self	207	72.4
Company	31	10.8
Government	48	16.8
Total	286	100.0

Source: Researcher's field survey, 2018

Table 21 shows that 72% of the respondents said that the health bill was paid by themselves, 11% said that company paid their health bill, while 17% said government were responsible for their health bill. It was revealed that majority of the respondents are responsible for their health bill.

4.3 Hypothesis Testing

Hypothesis

Ho: There is no association between workers knowledge of NHIS and quality of health service delivery

H1: There is association between workers knowledge of NHIS and quality of health service delivery

Table 23: Knowledge of NHIS and Ever benefited from NHIS

				Knowledge of NHIS		
				Yes	No	Total
Have you ever benefited from NHIS	Yes	Yes	104 (96.3%)	4 (3.7%)	108 (100.0%)	
		No	123 (69.1%)	55 (30.9%)	178 (100.0%)	
	Total		227 (79.4%)	59 (20.6%)	286(100.0%)	

Continuity correction $\chi^2_1 = 28.723$; $p = 0.000$

Source: Researchers field survey, (2018)

Table 23 shows that 96.0% of respondent that have the knowledge National Health Insurance Scheme (NHIS) have benefited from the scheme. Likewise, 69% that have the knowledge have not benefited from the scheme. The Chi square test shows that the proportions are significantly different from each other ($\chi^2_1 = 28.723$; $p < 0.05$). The null hypothesis is rejected, hence, it is therefore concluded that workers knowledge of NHIS have an association with quality of health service delivery.

4.4 Discussion of results

The study testifies to the low fact that different levels of respondents benefited from the scheme through their employer, while few that do not benefit from the employer are paid on their own. This supports the assertion of (Currie and Gruber, 1996) that health care services are designed to be of immense and tremendous to the beneficiaries who are to contribute stipends to its operations through the Health Management Organizations. This has really been quite helpful. The study further demonstrates that workers awareness and knowledge of NHIS have an association with quality of health service delivery. This supports the findings of Kasper, Giovanni and Hoffman (2000) in a study to examine an association between workers knowledge of NHIS.

5.1 Summary of findings

Indeed, the researcher after analysis and interpretation of questionnaire in the previous chapter present these findings:

- ✓ Observation from the findings depict that there are more male than female. A vast number of the respondents are single and the highest academic qualification of the majority of the respondent was B.Sc./HND.
- ✓ Findings also indicate the employer profile that 40% of the respondents were private employees', 37% were government employees' and the remaining 23% were self-employed or working for themselves. It can be deduced here that the highest participant of this study were privately employed workers.
- ✓ In addition, findings revealed the working hour's profile that 39% of the respondents worked for 8 – 10 hours, 27% worked for 20 – 40 hours, whereas 15% worked for 10 – 20 hours and 19% worked for other hours apart from the aforementioned.
- ✓ It was revealed that the level of awareness and knowledge of NHIS among the participant was very high.
- ✓ Findings furthermore depict that those who are enjoying National Health Insurance Scheme (NHIS) through their employer cover their family member.
- ✓ It was revealed from the study that the cost of the service of the healthcare provider were affordable and that 72% of the respondents said that the health bill was paid by themselves, 11% said that company paid their health bill, while 17% said government were responsible for their health bill.
- ✓ Findings revealed a statistically significant association between knowledge of NHIS and quality of health service delivery.

5.2 Conclusions

From the findings above and in line with the objectives of study, the following conclusions were drawn;

- ✓ Patients' knowledge of NHIS was commendable and satisfactory
- ✓ There is a significant association between the workers knowledge of NHIS and quality of health service delivery

5.3 Recommendations

These are our recommendations:

- More awareness campaigns can be created through seminars and conferences on National Health.
- There is need to improve the accessibility of people to NHIS through well organized system of registration.

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