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### **Toward Financial Sustainability of the National Health Insurance Scheme: A Perspective Study of clients and Service Providers in Oredo, Orhionmwon and Ikpoba-Okha Local Government Area of Edo State, Nigeria.**

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#### **Abstract**

This research was aimed at finding out the perception and awareness of service providers and clients toward financial sustainability of the National Health Insurance Scheme in the Edo South Senatorial District of Edo state. A descriptive study was adopted in this research and the study populations were clients and service providers accessing NHIS services in NHIS clinics within Oredo, Orhionmwon and Ikpoba-okha Local Government Area, whom were selected using a judgmental non-probability sampling method. The results from this study showed significant statistical difference ( $p < 0.05$ ) in responses to NHIS reduction of healthcare financing burden as most of the respondents strongly agreed that NHIS reduces healthcare financing burden. There was also significant statistical difference ( $p < 0.05$ ) in perception of

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clients and service providers on the NHIS efficiency in providing healthcare services as most of the respondent strongly agreed that NHIS is efficient in providing healthcare services. Results also showed significant statistical difference ( $p < 0.05$ ) in level of satisfaction by clients and service providers as most of the respondents were very satisfied with NHIS services. There was significant statistical difference ( $p < 0.05$ ) in response of respondents to preference of NHIS over the cash for service system in which most respondents prefers NHIS over cash for service system. There was significant statistical difference ( $p < 0.05$ ) in perception of clients and service providers on the financial sustainability of NHIS as most of the respondent strongly agreed that NHIS is financially sustainable. The result also shows that a significant number of respondents are unsatisfied with the NHIS services despite that they still want the scheme to be sustained. One of the recommendations made is that Registration should be made compulsory so as to ensure sufficient pooling of resource, spreading of risk and minimization of cost. This should solve the problem of drug insufficiency and availability.

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Keywords: Nhis; Sustainability; Clients; Formal Sector.

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## 1 INTRODUCTION

The research study based on towards financial sustainability of the national health insurance scheme. Health insurance is a type of insurance that pays for medical expenses prior to health service delivery. It is sometimes used more broadly to include insurance covering disability or long-term nursing or custodial care needs. It may be provided through a government-sponsored social insurance program, or from private insurance companies. It may be purchased on a group basis (e.g by a firm to cover its employees) or purchased by individual consumers. In each case, the covered groups or individuals pay premiums or taxes to help protect themselves from high or unexpected healthcare expenses. Similar benefits of paying for medical expenses may also be provided through social welfare programs funded by the government [1].

Scarce economic resources, low or modest economic growth, constraints on the public sector and low organizational capacity explain why the design of adequate health financing systems in developing countries, especially the low income ones, remains cumbersome and the subject of significant debate. In 1980s, a cost-recovery for health care via user fees was established in many developing countries usually as a response to severe constraints on government finance. However, most studies alert decision-makers to the negative effects of user fees on the demand for care, especially that of the poorest households [1, 2].

Mutual Health Insurance Schemes have evolved rapidly as alternative financing institutions in the health sector in recent years. Their objective generally is to provide an alternative to user fees through community risk-pooling mechanisms, and to ensure access to health care of acceptable quality to their

members [3]. A tax funded health system may not be easy to develop, due to the lack of a robust tax base, a low institutional capacity to collect taxes and weak tax compliance [1].

The objectives of the scheme ordinarily will appear easily achievable to many until they are viewed in the light of Nigeria's health indices. Nigeria's population as at 2003 was 135.6 million. Annual growth rate was 2.1%, life expectancy at birth was 45.3, infant mortality was 100 per a thousand live births and under -5 mortality per a 1000 live births was 108 deaths[4]. With respect to disease control, access to improved water was 60%, improved sanitation 30% success rate of treated Tuberculosis (registered cases) was 70 while directly observed therapy short-course (DOTS) detection rate per registered cases was 18%. In reproductive health, fertility rate stood at 5.6%, adolescent fertility (per 1000) was 122, and pregnancy related mortality rate (per 10,000) was 800 deaths. 13% of women (aged 15-45) made use of contraceptives. While 35% of deliveries were attended to by skilled staff, 17% were not. Risk factors and future challenges showed Tuberculosis prevalence, 293 per every 100,000, HIV prevalence between ages 15-49 was 5.4% while incidence of diabetes (within ages 20-79) was 0.4% [5]. In a country with a projected population of one hundred and eight six million citizens, financing the health sector could no longer be handled from dwindling Government resources alone. This need for equitable distribution of healthcare cost led to the establishment of NHIS in Nigeria in the year 2005.

Mutual Health Organizations have exhibited promise in their ability to attract members, efficient finance care and to provide access to their members for their health care needs [6]. However, the Mutual Health Organizations remain relatively young and work remains to be done to ensure their long-term sustainability and their potential to leverage quality improvements in the health sector. Evidence from a study undertaken by [7] in three countries indicates that Mutual Health Organizations themselves consistently identify quality as a priority. A lot of research has to be carried out to identify the weaknesses and strengths so as to make informed and proper recommendations to the management and policy makers of the scheme.

Nigeria has prioritized universal coverage of health care and has therefore put in place policies and programmes to meet this goal. Even though success has been achieved in different aspects of the health sector, health care delivery remains inadequate especially for the poor people and other disadvantaged groups. The task confronting the health sector remains difficult; life expectancy remains low (60 years), morbidity of preventable diseases remains high; malaria, diarrhoea and other preventable diseases account for about 40% of child mortality and maternal mortality is still high [1]. In recent times, the national Health Insurance Schemes in the country is running into distress by their indebtedness to health care providers which compelled the health care providers to deny services to card bearing members of the NHIS. Some of the service providers have threatened to withdraw the services of health insurance clients if the amount owed by the schemes is not paid [8].

The concern therefore is whether the National Health Insurance Scheme would be sustainable in future. There is therefore the need to examine the concepts of the National Health Insurance Scheme to ascertain its financial viability and sustainability. The health care providers are expected to provide quality health care to the NHIS card bearers to ensure trust in the system. Again, the field agents popularly known as collectors are also expected to play positive role to ensure the sustainability of the scheme in the municipality notwithstanding the challenges they face in their daily activities. If the functions of these groups are not properly checked then the future of the National Health Insurance Scheme would be bricked. In the light of these developments, the research hopes to look at the view or perspectives of service providers and clients in the sustainability of the National Health Insurance Scheme in the Edo south.

## 2. METHODS

### 2.1 Type of study

A descriptive study designs was employed by the researcher. The descriptive study which is a type of non-intervention type of study is used to quantify and qualifies the distribution of certain variables in a population at a point in time. This research involves identification and measurement of the characteristics of the population of interest, which is the NHIS healthcare consumers in Edo state. It entails systematic collection of relevant data and the statistical analysis of the data so as to present a clear description of respondents' perception of the financial sustainability of NHIS service delivery in Edo state.

### 2.2 Study population

Population is the summation of the study group. The population includes the total number of service providers and clients who are directly involved in the NHIS scheme in the local governments under study in Edo state. In this study, the population of interest is the entire NHIS enrollees of eighteen years and above in the three LGAs in Edo state. The enrollees of the National Health Insurance Scheme (NHIS) in the area were sampled to determine their perception on the financial sustainability of NHIS scheme.

### 2.3 Study setting

The setting that was chosen to be involved in the study is three local governments' area which includes Oredo, Orhionmwon and Ikpoba-Okha local government area of Edo state. A total of 184 HCPs are in Edo state.

Table 1: List of health care providers in the selected local government area

Local Governments	Number of Hcp's
Oredo	27
Orhionmwon	18
Ikpoba-Okha	22
Total	67

Source: nhis.gov.ng

### 2.4 Study subjects

The study subjects whom the researcher involved in the research work are the service providers who are working in the accredited NHIS hospitals and the clients who are registered participants of the NHIS scheme in the local government's areas under study. The study subjects were chosen since they are the ones that are directed involved in the NHIS scheme. The service providers and clients are seen as competent to provide the detailed information about the NHIS scheme.

### 2.5 Sampling procedure

Sampling may be defined as the scientific method of obtaining unbiased and representative data from a given

population.

### 2.5.1 Study setting

A simple random sampling method which involved the use of ballottement or lucky dip was used in selecting eight (8) functional public health facilities each from both Local Government Areas. Presented in table 2 is the number of HCPs selected out of HCPs in each local government of study.

**Table 2: List of HCPs selected for study in the local government of study.**

Local Government	Health Care Facility
Oredo	University Of Benin Health Centre, Ekehuan Central Hospital, Ring Road Federal Staff Clinic, Benin City
Orhionmwon	Government Hospital, Igbanke Urban Medical Centre, Warrake General Hospital, Abudu.
Ikpoba-Okha	Narrow Way Clinic, Aduwawa. Our Medical Centre, Ikpoba Hill

Source: nhis.gov.ng

From table 2 , a total of three (3) health centers out of the initial twenty seven (27) was selected for the study in Oredo local government area, three (3) was selected out of eighteen in Orhionmwon local government area and two (2) health facility was equally selected for the study in Ikpoba-okha local government area of Edo state.

### 2.5.2 Study subjects

A judgmental non-probability sampling method was used in selecting the required respondent from the population for response. This method was applied due to the fact that the researcher already knows the subjects to be used who are service providers and clients.

### 2.5.3 Sample size determination

In order to determine the sample size of the study subjects, Taro Yamane style was used to calculate the number of subjects to be involved in the study using 5% as margin of error [9].

**Table 3: List of selected respondents in each health facility both clients and service providers**

Health Care Facility	Population	Sample Size
University Of Benin Teaching Hospital	2518	111
Central Hospital	712	43
Federal Staff Clinic	413	30
Government Hospital	1525	68
Urban Medical Centre	820	44
General Hospital	670	30
Narrow Way Clinic	280	15
Our Medical Centre	158	18
<b>Total</b>	<b>7096</b>	<b>379</b>

SOURCE: nhis.gov.ng

From the application of the Taro Yamane formulae in calculation, it could be seen that the total number of subjects to be involved in the research study for is 379 respondents.

## 2.6 Data collection

### 2.6.1 Procedure for data collection

A letter of notification for the conduct of research was submitted to the various heads of health facilities to be used in the study in order to be granted permission to conduct the research. The researcher gathered data from primary and secondary sources. For the primary data collection, a well-developed questionnaire was designed as a research instrument consisting of questions aimed at eliciting responses from the respondent in responses to the research objectives and variables to be measure in the hypothesis. The secondary source involved the collection of data from Edo state ministry.

#### 2.6.2 Instrument used for data collection

The researcher gathered information using the Questionnaire. The researcher personally distributed structured questionnaire to the clinic mother. This was to enable the researcher elicits useful information that was help in assessing, analysing responses from both the clients and service providers on the subject matter.

#### 2.7 Procedures for data analysis and presentation

A data analysis sheet was prepared for the collection of data in coded format for easy computing into the computer system. The variable, bio-data and the individual question was analysed using (SPSS) statistical package for social sciences and the results was displayed and presented in the form of tables were necessary for clarity and easy understanding and interpretation of result so that Conclusions can be easy drawn with absolute clarity. The researcher intends to employ quantitative analysis in calculating the bio data and to test the variables in the hypothesis.

#### 2.8 Ethical consideration

The researcher presents the introductory letter to the institutions and the subjects. The researcher sought the consent of the institutions and respondents to create a good atmosphere for the conduct of the research. The principle of the declaration on the right of the subject was employed for this study after approval had been sought. Before enrolment for the study, the participants were duly informed on the significance of the study and any other matters as relating to the research work. The researcher respected the culture, religion and values of the people. The researcher avoided undue violation of privacy and assured the subject/institution of security and confidentiality of any answer given. The researcher also performed his duties within the ethics of research.

### 3. RESULTS

#### 3.1 Analysis of Demographic Characteristics of the Respondents

Table 4 is demographic characteristics of the respondents to the questionnaires administered in Oredo, Orhionmwon and Ikpoba-okha local government area of Edo state were analysed using descriptive statistics in conjunction with chi-square statistical analysis.

Table 4: Socio-Demographic Characteristics Of Respondents

Socio-Demographic Characteristics	Numbers Of Respondents	Percentage (%)
Age		
15-24	66	21.0
25-34	84	26.8
35-44	100	31.8
45-54	64	20.4
Gender		53.5
Male	168	
Female	146	46.5
Educational Level		
Primary	0	0
Secondary	67	21.3
Nce/Hnd	86	27.4
Higher Education	123	39.2
Postgraduate	38	12.1
Numbers of Years in NHIS		
1-3	107	34.1
4-6	100	31.8
7-10	107	34.1
Marital Status		
Married	186	59.2
Single	106	33.8
Divorced	22	7
Widowed	0	0

### 3.2 NHIS reduction of healthcare financing burden

Presented in table 5 is the response of respondents to NHIS reduction of healthcare financing burden. There was significant statistical difference ( $p < 0.05$ ) in responses to NHIS reduction of healthcare financing burden as most of the respondents strongly agreed that NHIS reduces healthcare financing burden. There is significant reduction in Healthcare financing burden amongst NHIS service providers and clients in Edo south.

Table 5: Reduction of healthcare financing burden by NHIS

Responses	Frequency (n)	Percentage (%)
Strongly Disagree	23	7.3
Disagree	13	4.1
Agree	63	20.1
Strongly Agree	215	68.5
Total	314	100.0

$\chi^2 = 112.25$ ,  $df = 3$ ,  $p < 0.05$

Table 5 shows that 23 (7.3%) strongly disagreed that NHIS helps in reducing healthcare financing burden, 13 (4.1%) disagreed that NHIS helps in reducing healthcare financing burden, 63 (20.1%) agreed that NHIS helps in reducing healthcare financing burden and 215 (68.5%) strongly agreed that NHIS helps in

reducing healthcare financing burden.

### 3.3 NHIS efficiency in providing healthcare services

Table 6 shows the response to the efficiency of NHIS in providing healthcare services. There was significant statistical difference ( $p < 0.05$ ) in perception of clients and service providers on the NHIS efficiency in providing healthcare services as most of the respondent strongly agreed that NHIS is efficient in providing healthcare services. Since  $p < 0.05$ , NHIS service providers and clients in Edo south do perceive NHIS healthcare services as efficient.

Table 6: The efficiency of NHIS in providing healthcare services

Responses	Frequency (n)	Percentage (%)
Strongly Disagree	35	11.1
Disagree	19	6.1
Agree	86	27.4
Strongly Agree	174	55.4
Total	314	100.0

$\chi^2 = 27.23$ ,  $df = 3$ ,  $p < 0.05$

Table 6 shows that 35 (5.56%) of the respondent strongly disagreed that NHIS is efficient in providing healthcare services, 19 (6.1%) of the respondent disagreed that NHIS is efficient in providing healthcare services, 86 (27.4%) of the respondent agreed that NHIS is efficient in providing healthcare services while 174 (55.4%) of the respondent strongly agreed that NHIS is efficient in providing healthcare services.

### 3.4 satisfactions with NHIS services

Presented in table 7 is response of respondents to level of satisfaction with NHIS services. There was significant statistical difference ( $p < 0.05$ ) in level of satisfaction by clients and service providers as most of the respondents were very satisfied with NHIS services. Since  $p < 0.05$ , NHIS Healthcare consumers' satisfaction with Healthcare service in Edo south is significant.

Table 7: level of satisfaction with NHIS services

Responses	Frequency (n)	Percentage (%)
Not Satisfied	51	16.2
Satisfied	135	43
Very Satisfied	128	40.8
Total	314	100.0

$\chi^2 = 10.72$ ,  $df = 2$ ,  $p < 0.05$

### 3.5 preferences of NHIS over cash for service system

Presented in table 8 is the response of respondents to their preference of NHIS over cash for service system. There was significant statistical difference ( $p < 0.05$ ) in response of respondents to preference of NHIS over the cash for service system in which most respondents prefers NHIS over cash for service system. Since  $p < 0.05$ , NHIS Healthcare consumers and service provider in Edo south do prefer NHIS healthcare services than the



cash-and-carry system.

Table 8: Preference of NHIS over Cash for Service System

Responses	Frequency (n)	Percentage (%)
Strongly Disagree	47	14.9
Disagree	32	10.2
Agree	139	44.2
Strongly Agree	96	30.7
Total	314	100.0

$X^2 = 10.7$ ,  $df = 3$ ,  $p < 0.05$

Table 8 shows that 47 (14.9%) of the respondents strongly disagreed that they do not prefer NHIS over cash for service system, 32 (10.2%) of the respondents disagreed that they do not prefer NHIS over cash for service system, 139 (44.2%) of the respondents agreed that they prefer NHIS over cash for service system and 96 (30.7%) of the respondents strongly agreed that they prefer NHIS over cash for service system.

### 3.6 Financial sustainability of NHIS

Presented in table 9 is the response of respondents on the financial sustainability of NHIS. There was significant statistical difference ( $p < 0.05$ ) in perception of clients and service providers on the financial sustainability of NHIS as most of the respondent strongly agreed that NHIS is financially sustainable

Table 9: the financial sustainability of NHIS

Response	Frequency (n)	Percentage (%)
Strongly Disagree	5	1.5
Disagree	9	2.8
Agree	100	31.9
Strongly Agree	200	63.8
Total	314	100.0

$X^2 = 34.45$ ,  $df = 3$ ,  $p < 0.05$

Table 9 shows that 5 (1.5%) of the respondent strongly disagreed that NHIS is financially sustainable, 9 (2.8%) of the respondent disagreed that NHIS is financially sustainable, 100 (31.9%) of the respondent agreed that NHIS is financially sustainable while 200 (63.8%) of the respondent strongly agreed that NHIS is financially sustainable. Since  $p < 0.05$ , NHIS Healthcare consumers and service provider in Edo south do perceive NHIS as financially sustainable.

## 4. DISCUSSION OF RESULT

This study shows that NHIS covers all age group which is in line with the objectives of NHIS. It also shows that NHIS is mostly accessed by those in the working age of 35-44years who serves majorly as the

primary enrollees. This also suggests that the NHIS clinic in Edo south has its operations in tandem with the goals of NHIS to provide health insurance to both the insured and their dependents.

Both genders patronize NHIS scheme without disparity. The numbers of male respondents were more than their female counterparts in this study; usually more females attend clinics than males. Although, this is not significant, it might be a reflection of the high tertiary level of education observed among the respondents and a positive health orientation. Also, this may be due to a more pleasant experience in NHIS clinic that made the male folks to seek health care.

There is a greater number of people with higher education attending NHIS clinic in Edo south, this is a reflection of high literacy level of city dwellers and the impact their level of education have on their health seeking behaviour irrespective of the gender status. The table also shows that the higher the level of education, the greater the acceptance of NHIS. This observation supports earlier reports by [10] in a study carried out in Ibadan that those with tertiary education were more satisfied with NHIS in the areas of drug availability and healthcare provider services.

This study found that NHIS clinic is majorly accessed by married people who will thereby increasing the level of registration as the principal will also register immediate family as dependents. This is also typical of westernization and education which is expected of a civilized environment such as Edo south.

Most people registered during the inception of NHIS as lesser registrations are occurring from 34% to 31% and most of the respondent have spent above 5 years in NHIS. [10] reported that clients with longer duration of enrolment were more satisfied with waiting time and staff attitude which is the case in KGH.

This study shows that most respondents prefer NHIS services which are as a result of the provision of quality health service by NHIS than other health facilities. Moreover, majority of respondents have a good perspective of NHIS. This is in line with a study conducted in Jos, Nigeria, the clients accessing the NHIS are satisfied with scheme and a similar report from a study carried out in Ibadan, undulating nature of satisfaction was observed.

This study found that many of the respondents are satisfied with the services rendered about 89% of respondents was satisfied while 10.9% were dissatisfied with NHIS services. [11] reported a similar satisfaction rate of 61.5% and dissatisfaction rate of 26%. This finding is also supported by earlier reports by [12] who recorded an overall satisfaction rate of 66.8% in his study in south-eastern Nigeria. In Addition, [13] reported that 61.5% were satisfied with NHIS services while 26% were dissatisfied. However, [10] reported an undulating level of satisfaction with NHIS services depending on the component under examination. Therefore, this shows that most of the respondents are satisfied with NHIS services but the number (22.9%) of the respondent that are unsatisfied is still significant and warrant necessary action. This number may increase if separate components of NHIS services are examined suggesting a need for thorough service evaluation and assessment.

It was also observed that NHIS services in Edo south are assessed as efficient by the respondents. This suggests that the NHIS in Edo south is operating at a capacity similar to that of a teaching hospital. However, a significant minority would regard the services as below expectation (17.2%). This assessment by these respondents might be due to other factors relating to treatment and not necessarily the treatment given which could have influenced their evaluation. This is supported by [14] who reported that quality of NHIS services is influenced by patient perception of different component such as health care provider relationship or availability of drugs. In his report, [10] also found out that ineffective operation of the scheme undoubtedly

depicts poor quality of services from the patients' perspective.

The results also show that majority of the respondents' beliefs that NHIS is financially sustainable.

## 5. Conclusion

The conclusion regarding this study can only be generalized to Edo south senatorial district. The discussion of the quantitative result revealed that NHIS helps in the reduction of Healthcare financing burden amongst NHIS service providers and clients in Edo south as most of the respondents' beliefs that NHIS is financially sustainable. The results also show that NHIS service providers and clients in Edo south do perceive NHIS healthcare services as efficient. This is as a result of the provision of quality health services in the NHIS clinic and the satisfactory attitude of the health workers in the clinics. The result also shows that NHIS Healthcare consumers' satisfaction with Healthcare service in Edo south is significant. This finding is in line with [10] who reported that clients with longer duration of enrolment were more satisfied with waiting time which is the case in Edo south where 65.9% of the patients have spent over 3years in NHIS. The result also show that Gender is not associated with NHIS clinic attendance in Edo south. The result also shows that a significant number of respondents are unsatisfied with the NHIS services despite that they still want the scheme to be sustained.

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