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Awareness of National Health Insurance Scheme (NHIS) and Quality of Health Care Services among Civil Servants in Cross River State, Nigeria

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Abstract
As part of government effort to address the problems in the sector, the National Health Insurance Scheme (NHIS) was initiated to address the health problems in Nigeria. The study assessed awareness of NHIS and quality of health care among Cross River state civil servants. Simple and systematic random sampling technique was adopted in administering 561 questionnaires on civil servants. The generated data were statistically tested at the 0.05 level of significant using Pearson Product Moment Correlation analytical procedure..Results from the study showed that 92.3% of the respondents were aware of the existence of NHIS program while 65.8% registered with NHIS. 63.8 % Civil Servants in Cross River State had the knowledge that NHIS is designed to protect their families from financial hardship arising from huge medical bills and also 71.5 % respondents from the study were aware that NHIS will improve quality of health care in Nigeria. These are part of the objectives of the scheme to improve the quality of health care delivery. Civil servants in Cross River State have comprehensive knowledge of the National Health Insurance Scheme package as a desirable tool for satisfying their health needs. However, the analysis revealed civil servants 'awareness of NHIS was significantly related to the quality of health care service render to them.
Keywords: NHIS, civil servants, awareness, healthcare.

1. Introduction

Health services are judged to be unsatisfactory and inadequate in meeting the needs and demands of the public as reflected by the poor state of health of the population (FMOH, 1998). It is realistic to argue that some of the deaths and serious illnesses which occur among Nigerians are due to conditions which are easily preventable with simple remedies. Lack of timely and appropriate care often increases the risk of serious complications in the course of minor ailments (Irinoye, 2004). The current high rate of morbidity and mortality can be substantially reduced by a more rational application of available resources, even at the time of financial stringency (Irinoye, 2004).

Various reform programmes have been put in place and government has expressed its determination to pursue a bold reform of the system. In the attempt by the government to ensure that all citizens attain a state of perfect physical, mental and social well being, it has formulated and implemented National Health Policy. The National Health Policy and Strategy to achieve health for all Nigerian's came into effect in 1988 and was revised in 2004.

The main policy thrust of the National Health System includes Care Resources, National Health Interventions and Services Delivery, National Health Information Systems, Partnership for Health Development, National Research and Health Care Laws. In spite of a well structured health system, development of the Primary Health Care (PHC) has not improved the health experience of the population especially those in rural areas. The health sector's contribution to national development remains a serious issue. Therefore, as part of government effort to address the problems in the sector, the National Health Insurance Scheme (NHIS) was initiated to address the health problems in Nigeria. The NHIS is a corporate body established under Act 35 of 1999 by the Federal Government of Nigeria to improve the health of all Nigerians at an affordable cost. Health Insurance is an approach that protects insured persons from paying high treatment costs during an episode of

sickness. The basic health insurance process is that a client makes a regular payment to a managing institution. This institution is responsible for holding the payments in a fund and paying a healthcare provider for the cost of the consumer's care (Conn and Walford, 1998).

The history of Social Health Insurance (SHI) is as old as the history of mankind. One of the first countries which instituted SHI nationally was Germany in 1883 (World Health Organization, 1999). Since then the concept of Social Health Insurance spread throughout the world. Currently, according to World Bank, the system is practiced in more than 60 countries of the world (World Bank, 2006). Many European states have long embarked on healthcare reforms by introducing SHI for increased efficiency and consumer satisfaction in provision of health care services (Stefan, 2004).

It took decades for most of these developed countries to have SHI implemented (WHO, 1999). Some of the high-income countries which are successful in SHI include Germany, France, Belgium, Japan, Korea and Switzerland (World Health Organization, 1999). A replica of NHIS in South Africa is called the National Health Information System of South Africa (NHIS/SA). Its main goal is to provide affordable health for the people of South Africa at the local level. It is also extended to the district, provincial and national levels including the private and public sectors. The health need of an average South African is reportedly well taken care of by this scheme (Kujenya, 2009).

Cross River State was the first state to sign into NHIS in 2006 followed by Bauchi and it has kicked off in other states of the Federation like Oyo, Sokoto, Niger, Gombe, Imo and Bayelsa . The programme covers employees of the formal sector, i.e the public sector and the organized private sector. It is mandatory for every organization with ten (10) or more employees to contribute 5 per cent of their basic salary to the scheme; while their employers are expected to pay 10 percent for each of its workers under the scheme. By the provision of the scheme, a contributor and his or her spouse and four children under 18 years are free to access Medicare from any approved service provider. The scheme is designed to:

(i) Ensure that every Nigerian has access to good health care services.
(ii) Protect families from the financial hardship of huge medical bill.
(iii) Limit the rise in the cost of health care services.
(iv) Ensure equitable distribution of health care cost among different income groups.
(v) Ensure high standard of health care services delivery to Nigerians.
(vi) Ensure efficiency in health care services.
(vii) Improve and harness private sector participation in the provision of health care services.
(viii) Ensure equitable distribution of health facilities within the federation.
(ix) Ensure appropriate patronage of all levels of health care.
(x) Ensure the availability of funds to the health sector for improved services (NHIS, 2006).

Health services consumers' opinions are important, since their perception of programme quality is one of the most important determinants in the success of any policy aimed at providing equitable, efficient and sustainable health care service to the citizenry (Sanusi and Awe, 2009). Therefore, this study was a critical assessment of workers' responses to health care delivery through National Health Insurance Scheme.

1.1 Workers' awareness and quality of health care services

In most developing countries (Nigeria in particular), there is a clear lack of universal coverage of health care and little equity. Access to quality health care is severely limited and awareness of health insurance scheme is very low (Otuyemi, 2001). Low level of health insurance awareness and inability of the consumers to pay for the services as well as the health care provision that is far from being equitable have been identified among other factors as imposing limitation on National Health Insurance Scheme to realize its goal of health care delivery (Sanusi and Awe, 2009).

A social health insurance scheme involves contribution based on means, utilization and need. A health insurance scheme is an arrangement in which contributions are made on behalf of individuals or groups (members) to a purchasing institution, Health Maintenance Organization (HMO), which is responsible for purchasing covered services from providers (Kutzin, 1997).

Ibiwoye and Adeleke (2007) reported that workers' awareness creation on the importance or benefits of National Health Insurance Scheme is desirable for health care. A number of arguments are put forward to stress the advantages of health insurance in improving health care delivery. They stressed that low awareness level is responsible for low patronage, and the seemingly poor quality of health care services.

Health Scheme, according to Rigoli and Dussault (2003) can improve health care. It can:

> Increase the availability of resources for health care, freeing up limited public funds to be directed towards poor people; offer a more predictable source of funding, compared with the unpredictability of tax finances which facilitates private investment in health; pool of resources allows for cross-subsidies between those who are healthy and those who are sick, and between rich and poor; reduce uncertainty for citizens and gives them financial protection against

improvement as a consequence of illness; contribute to better-quality health care by separating the purchasing and provision of services especially if payment is based on performance. Also people are more willing to pay for health insurance than to pay taxes, as their contribution is linked to entitlement (Rigoli and Dussault, 2003: 9)

Irinoye (2004) asserted that workers awareness of the benefits of NHIS is a factor in quality health care services. He stated further that social insurance arrangement is compulsory and is often designed to provide a minimum economic security for large groups of persons particularly those in the lower economic classes. It concerns itself with the unfavorable losses (income and cost) resulting from perils of accidental injury, sickness, old age, unemployment and the premature death of the family wage earner. The workers need to have comprehensive knowledge of the National Health Insurance Scheme package as a desirable tool for satisfying their health needs.

Noah (1992) reported that there is an association between workers awareness of the potentials of National Health Insurance Scheme and the quality of health service delivery. He stated that consumer awareness is necessary since the scheme is designed for them. The right time to start implementing NHIS is now, as the good health care for the poor must not wait for tomorrow that may never come. Noah concluded that if NHIS is to provide quality health care services, the people have to acquire sufficient knowledge about the aspects of the scheme.

Okaro, Ohangwu and Njoku (2010) carried out a study that targeted all the radiographers in South Eastern Nigeria. A 17-item questionnaire designed in line with the objectives of the study was used to collect data. Data collected were analyzed with statistical package for social sciences (SPSS). The result indicated that there was a high level of awareness of the existence of NHIS in Nigeria among the Radiographers (n = 37). Seminars on the Hospitals were noted to be the major source of information about NHIS , knowledge about the various aspects of the scheme was not encouraging.

The Radiographers however showed positive awareness towards the scheme. The Researchers agreed that NHIS is capable of improving health care delivery in Nigeria and admitted their willingness to participate in the scheme. The Researchers concluded that the awareness of the existence of the scheme was very encouraging. However, this was not translated into knowledge of principles of operation of the scheme. The Radiographers showed positive awareness towards the scheme. Seminars in Hospital were noted to play important role in enlightening the healthcare professionals and should be encouraged.

Onuekwusi and Okpala (1998) maintained that successful implementation of the NHIS to achieve the objectives of Health care delivery to a large extent depends on the attitude of the Health care providers. In earlier work done to access workers awareness of NHIS among Nigerian Healthcare professionals, it was reported that one year after the launching of the NHIS, Nigeria Health care professionals who are major stakeholders in the programme have grossly inadequate knowledge of the rudimentary principle of the operation of a social health insurance scheme (Onuewkusi and Okpala 1998).

1.2 Research question

To what extent does workers' awareness of NHIS affect the quality of health care services render to them?

1.3 Objectives of the study

The study examined how the National Health Insurance Scheme can enhance quality of health care services in Cross River State civil servants' awareness of NHIS.

1.4 Definition of terms

i) Consumers: This refers to civil servants in Cross River State that use or purchase health care services.
ii) Workers' awareness: This refers to acquisition of knowledge about NHIS goals of Health care delivery. It includes consumers' knowledge of the scheme and participation in the scheme.
iii) Health care services: This is used here to refer to all aspects of providing and distributing health services to the workers. It includes prevention, treatment and management of illness and preservation of mental and physical well-being through the services offered by the medical and allied health professionals.
iv) Quality of health care services: This is used in this study to mean the goodness or high standard of health care services rendered to workers. In other words, it is the practice of managing the way health care is provided to make sure they are in a high standard.

2. Research Methodology

2.1 Research design

This study adopted descriptive survey method

2.2 Population of the study

The study involved all civil servants in all State ministries in Cross River State. These ministries are located in Calabar (capital of Cross River State). The total number of ministries in Cross River State is thirteen (13) and there are 5,520 workers in all the ministries. These employees were in better a position to supply information needed as consumers of NHIS services.

2.3 Profile of study area

Cross River State has a land mass of 23,074 square km. The state is covered by a body of waters from the tributaries of the Cross River and the Atlantic Ocean. This renders the land very fertile and provides abundant aquatic resources for exploitation. Two - thirds of Cross River State is covered by tropical rain forest, making it one of the world's biodiversity hotspot. The state is also blessed with mineral resources like: oil and gas; clay; salt; limestone; kaolin; barite; and quartize. The capital of Cross River State is Calabar and the state has 18 local government areas namely: Abi, Akampa, Akpabuyo, Bekwara, Biase, Boki, Calabar municipal, Calabar South, Etung, Ikom, Obanliku, Obubra, Obudu, Odupkani, Ogoja, Yakurr, and Yala.

The population of Cross River State is estimated at 2.89 million (NPC, 2006). Forty percent of the estimated population constitutes the active population that is engaged in various economic activities, ranging from subsistence agriculture to urban commerce and transport business. Agriculture has since 1970 been acknowledged as the leading economic sector of the state. Agriculture currently employs eighty percent of the state's labour force and contributes about 40 percent to the gross domestic product (GDP) of the state. The state has modern agricultural estimates and several small holders farms located in the various local government areas.

Located some 17 kilometres from Ikom, in northern Cross River State and about 300km from Calabar, are the Agbokim falls. The falls are considered a "miracle of nature" and consist of seven different streams, each cascading over steep cliffs, providing seven-faced falls. Cross River is also home to the largest naturally occurring Lake in the south- south region of Nigeria. The lake is central to a fishing festival, which takes place between March and May every year (2004 - 2011 Cross River State Government).

Cross River State operates a Federal system of government. it has a GSP growth of 8.06 %. The major cities are Calabar, Ikom, Ugep, Obudu, and Ogoja. Major languages include Efik, Ejagam, Bekwara, and English. Cross River State accords prime position to education and consider it pivotal for sustainable development, job creation and eradication of poverty. The education summit held in 2000 gave rise to a policy, which provides direction for development of primary, secondary technical and science education. Consideration has also been given to other forms of acquiring knowledge that may not fit into traditional classroom settings. These include adult and non-formal education as well as apprenticeship schemes with learning taking place in a parallel structure marked as appropriate to more traditional qualification.

The Ministry of Education has the responsibility for formulating policies of education and for providing leadership and strategic direction for development of education within the State. The Ministry seeks to meet the education needs of the people of Cross River State through 1021 Primary Schools , 232 Secondary Schools ,18 Technical Colleges , 1 University ,1 College of Education ,3 Special Education Centres , 240 Adult Literacy Centres ,3 State Libraries .

2.4 Sample and sampling procedure

The sample size was determined using the formula below.

$n = [(P (1-P) / [A^2/Z^2 + P (1-P)/N)]] / R$ (Jeff, 2001)

P = 0.5 (50 per cent)

N = 5520 (total number of study population)

A = 0.05 (5 per cent precision level)

Z = 1.96 (95 per cent confidence level)

R = 0.8 (80 per cent response rate)

$n = [(0.5 (1-0.5) / [0.5^2/1.96^2 + 0.5 (1-0.5)/5520)]] / 0.8 = 449$

However, since not everyone may respond, to accommodate non respondents, the final sample size will be:

n /Response rate (R) = 449/0.8 = 561

Simple random sampling was used to select six ministries from all the 13 ministries in Cross river state and systematic random sampling was used to select 561 respondents.

2.5 Method of data collection

Data for the study was obtained from both primary and secondary sources. Data collection made use of quantitative research method. The primary source consisted of first hand information obtained from respondents in the process of fieldwork.

Table 1. Distribution of respondents from the six sampled ministries in Cross River State civil service

Ministry	Total population	Number of respondents	Percentage (%)
Education	877	222	39.57
Land & Housing	373	94	16.76
Social welfare	134	34	6.06
Environment	77	19	3.39
Agriculture	694	176	31.37
L. G.A	64	16	2.85
TOTAL	2219	561	100

In this study, the questionnaire method was used to gather data. Questionnaires were given by the researcher and two trained enumerators to civil servants using the sampling approach already described. The secondary source of data consisted of reviews of other scholars, information on the major variables of the study.

2.6 Instrumentation

The major instrument of this study was questionnaire which was divided into three sections (A, B, and C). Section A was concerned with the socio-demographic information of respondents. It sought to elicit information such as age, sex, marital status, income per month, NHIS registration status. Section B sought to elicit information workers awareness of NHIS. Section C was the major dependent variable of the study. It elicited information on quality of health care services. The items in sections B and C were measured on a 5 – point likert scale.

SA- Strongly agree (5)
A- Agree (4)
U- Undecided (3)
D- Disagree(2)
SD- Strongly disagree (1)
(Ndiyo, 2005).

2.9 Data analysis

Data were analyzed using tables, percentages and Pearson Product Moment Correlation Coefficient.

3.0 Results and Discussions

3.1 Presentation and description of socio – demographic features of respondents

The demographic characteristics of respondents identified in the study included age, sex, marital status, educational status, income per month and sample distribution by registration status with NHIS. These features are presented in Tables 2 to 5. Table 2 shows that only 2 (0.4) respondents were less than 20years, while 124 (22.1%) males were between the ages of 21 and 30years .The peak age incidence for the population is 233 (41.6 %) and were between the ages of 31 and 40 years. Still from the population, 143(22.5 %) respondents were between the ages of 41-50years while 56 (10%) were between the ages of 51 and 60 years. This implies that the majority of the population that participated in the study was between the ages of 31 and 40 years as shown in Table 2.

Table 3 shows the distribution of respondents by sex. The study population is dominated by males, 294 (52.4%) respondents while a total number of 267 (47.6%) respondents were females out of 561 respondents. Table 4 shows that 412 (73.4 per cent) of the respondents were married while 126 (22.5 per cent) were single. Others representing 4.2 per cent were divorced, separated or widowed.

Table 2. Sample distribution by age

Variable Age range	Respondents	Percentage (%)
Less than 20 years	5	0.9
21 – 30 years	124	22.1
31 – 40 years	233	41.6
41 – 50 years	143	25.5
51 – 60 years	56	10.0
Total	561	100

Table 3. Sample distribution by sex

Variable Sex	Respondents	Percentage (%)
Male	294	52.4
Female	267	47.6
Total	561	100

Table 4 also shows that majority of respondents 304 (54.2 %), had polytechnic or university education, 129 (23.0%) respondents attained postgraduate, while 109 (19.4 %) respondents have secondary school education. The rest 19(3.4 %) respondents possessed primary school qualification. The distribution of the income in Table 4 demonstrates that 89(15.9 %) respondents earned less than N21,000 .

A total of 243 (43.4 %) respondents earned a monthly income of between N21,000 and N40,000, 141(25.1%) respondents earn between N41, 000 and N60,000 monthly while 44 (7.8 %) respondents earned between N61,000 and N80,000 and same percentage earn above N81,000. This implies that the study population was dominated by married respondents, 412 (73.4 %) respondents and greater number, 304 (54.2 per cent) respondents were with polytechnic/university qualification. According to Table 4, the population was dominated by those who earned between N21,000 and N40,000 as income. This population made up 243 (43.4 %) respondents of the sample size (561).

Table 5 indicates the status of respondents as regard registration with National Health Insurance Scheme (NHIS). A total of 369 (65.8 %) respondents registered with NHIS while 192(34.2 %) respondents who indicated ‘’No’’ did not register with NHIS.

Table 4. Sample distribution by marital status, educational qualification and income per month

Variable	Category number		Percentage (%)
Marital status	Single	126	22.4
	Married	412	73.4
	Separated	11	2.0
	Divorced	2	0.4
	Widowed	10	1.8
	Total	561	100.0
Educational qualification			
	Primary school	19	3.4
	Secondary school	109	9.4
	Polytechnic/ university	304	54.2
	Postgraduate	129	23.0
	Total	561	100.0
Income per month			
	Less than N21,000	89	15.9
	N21,000-N40,000	243	43.4
	N41,000-N60,000	141	25.1
	N61,000-N80,000	44	7.8
	N81,000 and above	44	7.8
	Total	**561**	**100.0**

Table 5. Sample distribution by registration status with NHIS

Variable Registration with NHIS	Respondents	Percentage (%)
Yes	369	65.8
No	192	34.2
Total	561	100

Table 6. Distribution of respondents on awareness of NHIS

S/N	Questionnaire Item	Responses		
		Positive (%)	Negative (%)	Neutral (%)
1.	I have heard about NHIS.	518 (92.3%)	33 (5.8%)	10 (1.8%)
2.	NHIS is restricted to certain class of people(such as Directors ,Commissioners, senior civil servants, etc).	138 (24.6%)	379 (67.6%)	44(7.8%)
3.	There is a law that mandates every work to register with NHIS.	284 (50.6%)	187(33.3%)	90(16.0%)
4.	Government will soon start deducting 5% of my basic salary every month.	263 (46.9%)	162(28.9%)	136(24.2%)
5.	I know that government pays 10% contribution to NHIS on my behalf.	297(52.9%)	164(29.2%)	100(17.8%)
6.	NHIS will improve quality health care in Nigeria.	401 (71.5%)	103(18.3%)	57(10.2%)
7.	NHIS is designed to protect my family from financial hardship arising from huge medical bills.	358 (63.8%)	160(28.5%)	43 (7.7%)
8.	The scheme is meant to pool resources from rich and poor to treat every Nigerian whether in civil service or not.	280 (49.9%)	218(38.9%)	63 (11.2%)
9.	I am aware that I can register with any hospital whether private or government.	344(61.3%)	151(26.9%)	66 (11.8%)
	TOTAL	**2883 (57.1%)**	**1557 (30.8%)**	**609 (12.1%)**

Table 6 shows the sample distribution of the respondents on the awareness of NHIS. A total of 518 (92.3%) respondents agreed that they have heard about NHIS while 33 (5.8 %) responded negatively and 10(1.8 %) were neutral to same question 1. For item number 2 on Table 6 which states that NHIS is restricted to certain class of people, a total number of 379 (67.6 %) respondents responded negatively to this, which implies that they are aware that the scheme is not restricted to certain class of people, while 138(24.6 %) responded positively that the scheme is restricted to certain class of people and 44 (7.8 %) respondents were neutral. 284 (50.6%) respondents agreed that they were aware that there is a law mandating workers to register with NHIS while (187) 33.3 respondents disagreed and 90 (16%) respondents were neutral to item 3.

Still on Table 6, 263(46.9%) respondents were positive to question 4 which states that "government will soon start deducting 5 percent of the respondent's basic salary". A total of 162 (28.9 %) respondents were negative while 136 (24.2%) respondents were undecided. In response to question 5 which states "I know that government pays 10% contribution to NHIS on my behalf", a total of 297 (52.9 %) respondents responded positively, 164 (29.2%) disagreed while 100 (17.8%) respondents were neutral. The majority, 401(71.5%) of the respondents agreed to item 6 that NHIS will improve the quality of health care services in Nigeria. 103 (18.3%) disagreed with this and 57(10.2%) respondents remained neutral to the same question.

Similarly for question 7 which states "NHIS is designed to protect my family from financial hardship arising from huge medical bills", a total of 358 (63.8 %) respondents were affirmative, 160 (28.5%) respondents were negative and 43 (7.7%) respondents had no idea. In response to item 8 which states "The scheme is meant to pool resources from rich and poor to treat every Nigerian whether in civil service or not" a total of 280 (49.9%) respondents were affirmative, 218 (38.9%) respondents were of contrary opinion and 63 (11.2%) were neutral.

For item 9 which states "I am aware that I can register with any hospital whether private or government", a total of 344 representing 61.3 per cent were aware that they can register with any hospital whether private or government while151(26.9%) respondents disagreed and 66 (11.8%) respondents expressed no opinion.

Tables 7 represents sample distribution on quality of health care services. From Table 7, item 1, a total of 216(38.5%) respondents opined that "cost of health care is still high with NHIS" while 206 (36.7%) respondents did not support this view and 139 (24.8%) respondents were neutral. The responses to item 2 on Table 7 which state "NHIS is designed to limit the rise in cost of health care services and improve efficiency", 303 (54.1%) respondents agreed while 138(24.6%) respondents disagreed and 120 (21.4%) respondents were neutral.

For item 3 on Table 7, majority which constituted 244 (43.5%) respondents believed "there is no difference in NHIS health care services and past health care services", 211 (37.6%) respondents held a contrary opinion while 106(18.9%) respondents were undecided.

From Table 7, item 4, 208 (37.1%) respondents were quite satisfied with the services rendered to them while 241 (42.9%) respondents were not; 112 (20.0%) were undecided on this question. A total of 255 (45.5 %) respondents accepted "Health services like laboratory, drug availability, nursing care have improved with NHIS"; while 194 (34.6%) respondents responded in the negative. Majority of the respondents, 284 (50.6%) respondents believe "too much time is wasted to see the doctor even with NHIS card", 169 (30.1%) respondents held a negative opinion and 108 (19.3%) respondents were undecided. According to item 7 on Table 7, which states "Health care delivery has really improved since NHIS started", 256 (45.7%) respondents affirmed this, 212 (37.8%) respondents did not agree and 93 (16.5%) respondents were neutral. For item 8 on Table 7 which states "I am promptly attended to by my health provider (Doctor, laboratory, Pharmacy) since the beginning of NHIS", 230 (41%) respondents agreed, 204 (36.4%) respondents disagreed while 127 (22.6%) respondents were undecided on this issue.

Table 7. Distribution of respondents based on quality of health care services

S/N	Questionnaire Item	Responses		
		Positive (%)	Negative (%)	Neutral (%)
1.	The cost of health care services is still high with NHIS.	216 (38.5%)	206 (36.7%)	139 (24.8%)
2.	NHIS is designed to limit the rise in cost of health care services and improve efficiency.	303 (54.1%)	138 (24.6%)	120 (21.4%)
3.	No difference in NHIS health care services and past health care services.	244 (43.5%)	211 (37.6%)	106 (18.9%)
4.	I am quite satisfied with the health care services rendered to me.	208 (37.1%)	241 (42.9%)	112(20.0%)
5.	Health services like laboratory, drug availability and nursing care have improved with NHIS.	255 (45.5%)	194 (34.6%)	112(20.0%)
6.	Too much time is wasted to see the doctor even with NHIS card.	284 (50.6%)	169 (30.1%)	108(19.3%)
7.	Health care delivery has really improved since NHIS started.	256 (45.7%)	212 (37.8%)	93 (16.5%)
8.	I am promptly attended to by my health provider (Doctor, laboratory, Pharmacy) since the beginning of NHIS.	230 (41.0%)	204 (36.4%)	127(22.6%)
	TOTAL	1996 (44.5%)	1575 (35.1%)	917 (20.4%)

Table 8. Pearson product moment correlation coefficient analysis of the relationship between workers 'awareness of NHIS and quality of health care services in Cross River State (N = 561)

Variable	$\sum X$	$\sum X^2$	$\sum XY$	r-cal
	$\sum Y$	$\sum Y^2$		
Workers' awareness about NHIS(X)	16787	518483	412339	0.22
Quality of Health Care Services (Y)	13690	343372		

*P<0.05, df=559, Critical r= 0.062

4. Conclusion

The statistical analysis shows that workers' awareness of NHIS has significant relationship with the quality health care delivery in Cross River State. This is true, since the Pearson product moment correlation coefficient analysis of the relationship between workers' awareness of NHIS and quality of health care services in Cross River State is 0.22. This finding supports Irinoye (2004) that workers' awareness of the benefits of NHIS is a factor in quality of health care services. This finding was highly consistent with Ibiwoye and Adeleke (2007) that consumers' awareness creation on the importance or benefits of National Health Insurance Scheme is desirable for quality of health care. The finding also agrees with Noah (1992) that consumer awareness of the potentials of National Health Insurance Scheme is important for quality of health care services since the scheme is designed for them. The findings further support Onekwusi and Okpala (1998) that consumer awareness of the implementation of the National Health Insurance Scheme is needed to achieve the objectives of the health care delivery. The effectiveness of National Health Insurance Scheme both economically and socially depends on consumers acquiring sufficient knowledge about the aspects of the scheme. In Cross River state for instance, NHIS exist and is effectively implemented. For instance, from Table 6, 358 (63.8 %) Civil Servants in Cross River State had the knowledge that NHIS is designed to protect their families from financial hardship arising from huge medical bills and also 401 (71.5 %) respondents from the study believed that NHIS will improve quality of health care in Nigeria. These are part of the objectives of the scheme to improve the quality of health care delivery.

Civil servants in Cross River State have comprehensive knowledge of the National Health Insurance Scheme package as a desirable tool for satisfying their health needs. However, the significant relationship implies that the awareness relationship with quality of health care service had been observed by consumers of NHIS (Cross river state civil servants). From the study, it was observed that the scheme in Cross River State pool resources from rich and poor to treat every Nigerian whether in civil service or not. Also, in compliance with the law establishing NHIS in Nigeria (Act 35 of 1999), the Cross River State civil service mandates every civil servant to register with NHIS. By the same law, the government also directed the deduction of 5% of civil servants' basic salary every month, but this is yet to be implemented. However, it was observed that the state government pays 10% contribution to NHIS on behalf of cross river state civil servants. This is captured in Table 6 which indicates that 297 respondents agreed that the state government have been paying while 164 responded in the negative. This further accentuates the participation of civil servants in the scheme based on this awareness.

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