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Acceptance of Health Insurance Scheme among Civil Servants in Ilorin West Local Government Area, Kwara State, Nigeria

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Abstract

Background: According to the National Health Insurance Scheme (NHIS) Decree No. 35 of 1999, the broad objective of the NHIS is to make sure that there is adequate provision of health insurance with the utmost benefit of cost-effective and good-quality health services designated to the insured person and its beneficiaries. The study aims to determine the level of awareness and acceptance of the Health Insurance Scheme (HIS) among Civil Servants in the Ilorin West local government area of Kwara State, Nigeria.

Method: A descriptive cross-sectional study that involves Civil Servants in Ilorin West Kwara State. Data were obtained through a self-administered questionnaire. A multi-stage sampling technique was used to select 310 participants. Data analysis was done using SPSS version 22, and univariate and bivariate analyses were conducted at p<0.05 level of significance.

Result: The majority (86%) of the respondents were not aware of the HIS. 87.8% believed that Out-of-Pocket services are better than HIS. Two-thirds (60.0%) of the respondents get their information about HIS program from radio/TV stations. A majority (83.5%) do not accept HIS, 13.1% of the respondents accept HIS and 3.4% were undecided. There is a significant relationship between marital status and acceptance of HIS (X²=14.093, P-value= 0.003).

Conclusion: Most of the respondents do not accept to participate in the implementation of HIS. Acceptance of the NHIS is strongly influenced by the marital status of the civil servants and all other variables do not influence acceptance of the NHIS.

Keywords: Healthcare financing, HIS, health insurance sheme, NHIS, national health insurance scheme, civil servants, acceptance.

Introduction

Healthcare financing is the mobilization of funds for healthcare services. In other words, it is the provision of money, funds, or resources to the activities designed by the government to maintain people's health. It is proportionate to the total income of a nation.¹ It has been opined that the nature of healthcare financing defines the structure and the behavior of different



stakeholders and the quality of health outcomes.² There are various sources of healthcare financing in Nigeria. These sources include the private sector (donor funding), based public sector health financing, household out-of-pocket health expenditure, social health insurance, and community-based health expenditure.

Health Insurance can be divided into two broad categories: Private Health Insurance and Social (National) Health Insurance. The National Health Insurance Scheme (NHIS) is a corporate body established by law under the NHIS Act 35 of 1999, to improve the health of all Nigerians at a cost the government and the citizens can afford. The NHIS is beneficial to the willing participants and stakeholders in the following ways: outpatient care, pharmaceutical care (Provision of drugs in the scheme's essential drug list), listed diagnostic tests, preventive healthcare services like immunization, antenatal and postnatal care, hospital care (15 days hospitalization by the scheme), etc. NHIS was designed to give economic security to workers concerning losses because of accidents, old age, sickness, and premature death of family wage earners.³

According to the NHIS Decree No. 35 of 1999, the broad objective of the scheme is to ensure that there is adequate provision of health insurance with the utmost benefit of cost-effective and good-quality health services designated to the insured person and its beneficiaries.¹

While the specific objectives as described by⁴⁻⁶ are to prevent high medical bills. (a) Reduce the arbitrary increase in the cost of health care services in the country. (b) Maintenance of smooth flow of funds for the effective running of the scheme and health program. (c) To ensure equality in the distribution of health care service costs across income level distribution. (d)The universal provision of healthcare in Nigeria. (e) Increase private sector participation in Nigeria's health care services. This study aims to determine the knowledge and acceptance of the health Insurance Scheme among Civil Servants aged 18 years and above, in the employment of the Kwara State government in the Illorin West Local Government Area of Kwara State.

Method

This study was a cross-sectional, descriptive survey conducted among Civil Servants in Ilorin West Local Government Area, Kwara State.

Ilorin West is one of the three local government areas in the Ilorin metropolis, others are Ilorin East and Ilorin South. It is the administrative seat of Kwara state. The sample size was estimated using Fischer's Sample Size Formula for a population less than 10,000 at a prevalence of 50%, d of 0.05, and a minimum sample size of 308 was calculated.

A multistage sampling technique was used for the selection of the respondents in this study. The selection was carried out in two stages. The first stage, A simple random sampling technique by balloting was used to select 8 government parastatals in Ilorin West LGA. Second stage, simple random sampling by balloting technique was used to choose 310 participants from the 8 government parastatals.

A close-ended and semi-structured self-administered questionnaire was used to collect data for the study. The questionnaire was developed based on the study objectives and a review of relevant literature. The questionnaire was certified by experts for content appropriateness and relevance. Participants who were not aware about a prepayment scheme for health were given the basics about a prepayment scheme for health. Questions from the respondents about the research were also permitted. Those who declined to participate were excluded from the study.

The Questionnaire was divided into 4 major sections which include: socio-demographic characteristics (age, occupation, educational level, religion, marital status, and number of children), knowledge and awareness about the Health Insurance Scheme of the selected staff, level of acceptance of health Insurance Scheme, and factors determining the acceptance of Health Insurance Scheme.

Data analysis was done using SPSS version 22. Descriptive statistics of proportions means, and standard deviations were generated and presented in the form of tables and figures as appropriate. The chi-square test was used to analyze the association between the selected socio-demographic characteristics and acceptance of the Health Insurance Scheme at a 5% significance level.

Results

The result outlines the socio-demographic characteristics of respondents, awareness, knowledge, and level of acceptability of health insurance schemes.



Table 1: Socio-Demographic Characteristics of Respondents

Γable 1: Socio-Demographic Ch Variables		Frequency	Percentage (%)
Sex	Female	177	58.8
	Male	124	41.2
Age group	18-25yrs	79	26.2
	26-39yrs	120	39.7
	40-49yrs	76	25.2
	50+yrs	27	8.9
Mean Age	34.6 ± 2.2		
Religion	Christianity	73	24.3
	Islam	227	75.4
	Others	1	0.3
Education Level	Secondary Education	38	13.3
	Post-Secondary education.	247	86.7
Marital Status	Single	94	31.2
	Married	203	67.4
	Divorced	2	0.7
	Widowed	2	0.7
Spouse is a government	Yes	120	39.3
worker	No	160	52.5
	Don't know	25	8.2
Spouse Employer	Federal	50	16.4
	State	86	28.2
	LG	31	10.2
	Don't know	138	45.2
No. of children	"0-2"	114	37.4
	"3-4"	116	38.0
	"5+"	30	9.8
	Don't know	45	14.8
Grade Level	1-6 grades	6	2.0
	7-11grades	229	75.8
	12-16grades	67	22.2
Income range	"<100K"	290	96.3
	"100K+"	11	3.7

The table above illustrates the socio-demographic information of the respondents. It revealed that less than two-thirds of 177 (58.8%) are female while close to half 124 (41.2%) are male; 79 (26.2%) are between the age range of 18-25 years, 120 (39.7%) are between the age of 26-39, 76 (25.2%) are between 40-49 while 27 (8.9%) are

age 50 years and above; the table further revealed that; 94 (31.2%) are single, 203 (67.4%) are married while 2 (0.7%) are divorced and widowed apiece. The table also revealed that 227 (75.4%) are Muslims, 73 (24.3%) are Christians and 1 (0.3%) are of other religions; the table revealed that 38 (13.3%) of the respondents have



secondary education while the majority 247 (86.7%) have post-secondary education. More than half of the respondents 160 (52.5%) have spouses that are not government workers, 120 (39.3%) have spouses who are government workers while there are 25 (8.2%) have no responses. Spouses' employers across Federal, State, and Local governments are 50 (16.4%), 86 (28.2%), and 31 (10.2%) respectively while 139 (45.2%) did not respond to this question. Three-quarters 229 (75.8%) of the respondents, are at grade levels 7 – 11, 6 (2.0%), and 67 (22.2%) at grade levels 1-6 and 12-16 respectively. The income of the majority, 290 (96.3%) of the respondents are below one hundred thousand naira while 11 (3.7%) earn that amount and above.

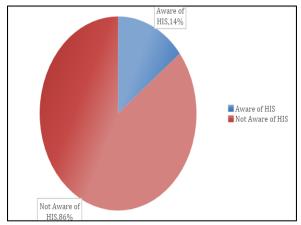


Figure 1: The Respondents' Awareness of HIS

Figure 1 above illustrates that the Majority (86%) of the respondents are not aware of the Health Insurance Scheme (HIS), while only 14% are aware of the Health Insurance Scheme (HIS).

Table 2: Knowledge of respondents on HIS

Questions		Responses (%)	
	Yes	No	
HIS is a scheme that subsidizes the cost of health care.	8.4	91.6	
Have you heard about HIS being passed into law in Kwara State?	44.7	55.3	
HIS covers biological children less than 18 years?	19.6	80.4	
Have you benefitted from any Health Insurance Scheme?	68.7	31.3	
It is better than Out-of-Pocket services?	12.2	87.	
Do you think this will improve healthcare delivery?	8.5	91.5	

Table 2 above represents the respondents' knowledge of HIS. The table shows that the majority (91.6%) also disagreed that "HIS is a scheme that subsidized the cost of health care," close to half of the participants (44.7%) have heard about HIS being passed into law in Kwara State. Most of the civil servants (80.4%) did not know that HIS covers biological children less than 18 years of age. Approximately 68.7% had benefitted from any HIS program, Majority (87.8%) believe that Out-of-Pocket services are better than HIS. The majority (91.5%) do not think that HIS will improve healthcare delivery.

Two-thirds (60.0%) of the respondents get their information about HIS programme from radio/TV stations while 17.7% and 22.3% get their information from print media and other sources (families, Friends, colleagues, and relatives) respectively.

Figure 2 shows that the Majority (83.5%) do not accept HIS, while 13.1% of the respondents accept HIS and 3.4% were undecided. The null hypothesis is accepted while the alternative hypothesis is rejected.

Table 3 represents the crosstab of the factors determining respondents' Level of acceptability to the Health Insurance Scheme (HIS), the p-values for each test are greater than 0.05 (significant level). Using Chi-Square set at a level of significance p<0.05, df= degree of freedom. Less than one-fifth of both genders accept HIS as 13.9% and 12.9% of the respondents that accept HIS are female and male respectively while 86.1% and 87.1% of those who do not accept HIS are female and male respectively. P-value = 0.808>0.05. There is no significant relationship between Gender and acceptance of HIS. Similarly, 79.2%, 90.4%, 87.1%, and 88.5% of age groups 18-25 years, 26-39 years, 40-49 years, and 50 years and above respectively are not willing to participate in HIS implementation. P-value = 0.181>0.05. There is no significant relationship between age and acceptance of HIS. The majority (87% and 85.8%) of the Christians and Muslims respectively are not willing to participate in HIS implementation. P-value = 0.807 > 0.05. There is no significant relationship between religion and the acceptance of HIS.

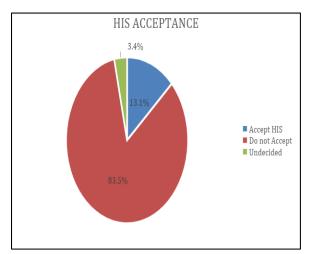


Figure 2: Respondents' Level of Acceptance of HIS

Also, the Majority (82.9% and 87.9%) of the secondary school certificate school holders and post-secondary school certificate holders respectively are not willing to participate in the HIS program. P-value = 0.407>0.05. There is no significant relationship between education level and acceptance of HIS. However, 83.9%, 88.5%, and 100% of the single married, and widowed respectively are not willing to participate in HIS,

contrary to the divorced group where 100% are willing to participate in HIS. P-value = 0.003<0.05. There is a significant relationship between marital status and acceptance of HIS. More than one-tenth (10.8%, 16.4%) of the respondents whose spouse is a government worker and those whose spouses are not government workers are willing to participate in HIS. P-value = 0.194>0.05. There is no significant relationship between a spouse being a government worker and acceptance of HIS

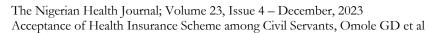
Most spouses whose employer is federal, state, or local government (85.4%, 82.9%, and 82.1%) are not willing to participate in HIS. P-value = 0.912>0.05. There is no significant relationship between spouse and employer and acceptance of HIS. The respondents with grade levels 1-6 grades, 7-11grades, and 12-16grades (0.0%, 14.9%, and 9.7% respectively) are willing to participate in HIS implementation. P-value = 0.964>0.05. There is no significant relationship between grade level and acceptance of HIS. Most of the respondents 86.3% and 90.9% whose incomes are less than one hundred thousand naira and greater than one hundred thousand naira respectively are not willing to participate in HIS. P-value = 0.550>0.05. There is no significant relationship between income and acceptance of HIS.

Table 3: Factors determining respondents' Acceptability of Health Insurance Scheme

Variables	Categories	Are you willing to participate in HIS implementation?		P-value
		Yes	No	
Sex	Female	13.9%	86.1%	X ² =0.59
	Male	12.9%	87.1%	df = 1, P-value = 0.808
Age	18-25yrs	20.8%	79.2%	$X^2 = 4.881$
	26-39yrs	9.6%	90.4%	df = 3, P-value= 0.181
	40-49yrs	12.9%	87.1%	
	50+yrs	11.5%	88.5%	
Religion	Christianity	13.0%	87.0%	$X^2 = 0.060$
	Islam	14.2%	85.8%	df = 1, P-value= 0.807
Education Level	Secondary Education.	17.1%	82.9%	$X^2=0.688$
	Post-Sec.	12.1%	87.9%	df = 1, P-value= 0.407
Marital Status	Single	16.1%	83.9%	$X^2=14.093$
	Married	11.5%	88.5%	df = 3, P-value= 0.003
	Divorced	100%	0.0%	

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Variables	Categories	Are you willing to participate in HIS implementation?		P-value
		Yes	No	
	Widowed	0.0%	100%	
Spouse is a Government Worker	Yes	10.8%	89.2%	$X^2=1.686$
	No	16.4%	83.6%	df = 1, P-value=0.194
Spouse Employer	Fed.	14.6%	85.4%	X^2 =0.185 df = 2, P-value= 0.912
	State	17.1%	82.9%	
	LG	17.9%	82.1%	
Grade	1-6 grades	0.0%	100%	X^2 =0.074 df = 2, P-value= 0.964
	7-11grades	14.9%	85.1%	
	12-16grades	9.7%	90.3%	
Income	"<100K"	13.7%	86.3%	$X^2=1.0$ df = 1, P-value=0.550
	"100K+"	9.1%	90.9%	



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Discussion

The provision of the Health Insurance Scheme is to ensure access to quality healthcare services, provide financial risk protection, reduce the rising cost of healthcare services, and ensure healthcare efficiency.

The study revealed that most of the respondents were in the age group 26-39 years (39.7%). This contrasts with a study conducted in Sokoto Metropolis, Sokoto State-Nigeria where the mean age was 42 years, and most of the respondents are in the age group of 40-49 years.⁷ This is in keeping with the fact that the study group is civil servants who are at their active (productive) age working class of the population and they are eager to participate in such study because of their young minds. Three-quarter (75.8%) of the respondents are at grade levels 7 – 11grades while the income of the majority (96.3%) of the respondents are below one hundred thousand naira, which is low. These low earnings imply that they may be unable to afford extra expenses with HIS every month. In addition to the low income, most of the respondents do not visit the hospital frequently; this serves as a motivation for not participating in the

Only a small proportion are aware of the HIS which is like the study in southwest Nigeria by Adewole that also reported low awareness in the study. The similarities might be due to the reason that Adewole's study was done in the rural community in Oyo state where there is low access to the media.8 This is different from the findings in another study by Adewole et al. (2016) done in Ilorin among Formal Sector (Federal. State, and Local government) Workers in Kwara state, Nigeria where he reported that almost four-fifths (78.9%) of the respondents were aware of the scheme.9 The difference might be due to the civil servants' strata of employment, that is; Federal government workers are already in the scheme of HIS, therefore their awareness was high compared to this study, where the state civil servants are not in the scheme yet. This study is also different from the study by Onyedibe et al. (2012) in Jos, north-central Nigeria, where he reported that 58% are aware of NHIS.9 However, his study population is the entire inhabitants of Jos city. The difference may be due to the group of people being studied.

Similarly, 60.0% got to know about HIS for the first time from radio/TV, making radio/TV the highest source of information for the respondents. This is different from the study of Adewole *et al.* (2015),8 which reported major sources of information about the scheme were friends, family, and colleagues. This reveals the importance of radio/TV as a source of information; therefore, it should

be used to increase awareness of policies that relate to health and other social policies that will be of benefit to the populace. It is not advisable to use print media to increase awareness of Ilorin because only a small percentage of respondents make use of print media as their source of information.

The majority (87.8%) believe that Out-of-Pocket services are better than HIS. This is different from (Adewole *et al.* (2016),⁹ where most of the respondents (88.2%) agree that HIS is better than Out-of-Pocket services. The difference might be because most of the respondents in this study have not benefitted (31.3%) from HIS in any way.

The majority (91.5%) do not believe that HIS will improve healthcare delivery. This is different from the study in Osun state, Southwestern Nigeria regarding national health insurance. About half of the respondents in this study believed that the scheme would improve the efficiency of the health system and the well-being of participants. This may be due to the lack of knowledge by the civil servants in this study about the benefits of HIS. Also, it may be due to their low level of income and low level of visits to the hospital.

The majority (86.3%) of the respondents are not willing to participate in HIS implementation. Few (13.7%) of the participants are willing to participate in HIS. This is relatively low compared to the study⁷ which concluded that from the 425 respondents, 64% of the respondents accepted the scheme, and another in Edo state, Nigeria in which 60% of the respondents agreed to participate in the Scheme.¹¹ The difference might be a result of many factors including low awareness since HIS has been passed into bill in Kwara state. It can also be due to the reason that the modal age group is between 26-39 years; they are still younger, so having strong immunity. Whereas older individuals are known to be more prone to sickness than younger individuals because of declining immunity. Therefore, they might not be willing to participate in HIS. Awareness of HIS is directly linked to the acceptance of this scheme.¹²

Most of the respondents visit Missionary hospitals when ill. HIS is offered in public and some private hospitals; therefore, there may be low acceptance of the HIS scheme since it is not being used in missionary hospitals. Facilities used by individuals also affect the acceptance of HIS.

Contrary to what the literature review suggested, it was found that participants who had post-secondary school education were less likely to accept health insurance



schemes.¹³ The study also demonstrated the contrary findings that those who had post-secondary education were less likely to accept health insurance schemes. Many studies suggest that individuals with high income are liable to accept HIS; this is also contrary to this study; those with high income were less likely to accept health Insurance schemes. Such that only 9.1% were willing to accept HIS among those who are high-income earners. However, 16.1% of the single, and 11.5% of the married are willing to participate in HIS, contrary to the divorced group where 100% are willing to participate in HIS. P. value = 0.003<0.05. There is a significant relationship between marital status and acceptance of HIS. This is different from the study in Sokoto Metropolis, Sokoto State, Nigeria; where there is a strong relationship between its dependent and independent variables and more importantly a significant relationship between independent variables (Occupation, Marital Status, Good knowledge of NHIS, and knowledge of financial contribution) and the dependent variable (Acceptance).⁷ The only common variable from both studies that has a significant relationship with HIS acceptance is marital status (with p=0.003).

These findings underscore the critical role of awareness in the promotion of participation in the HIS unlike in the Edo state where they were educated about the concept of HIS; therefore, increases the willingness to participate in HIS by those respondents.¹¹

Limitations and Strengths of the Study

The strength of this study is that it involved the sociodemographic characteristics of respondents, awareness levels, knowledge about HIS, sources of information, and acceptance rates in tables and figures, providing a comprehensive overview of the data. This study was limited to Ilorin West and civil servants alone due to time constraints, results obtained were specific to that area and to the civil servant group alone, hence the information may not be applicable to other formal sectors and informal sectors in Kwara state as there could be a diverse response to acceptance. To solve this, other researchers should take up this study; surveying all other local governments in Kwara state and enough time should be allocated to them for effective study.

Implications of the Findings of the Study

These results may assist the government in understanding gaps in knowledge and acceptance of health insurance in healthcare coverage improvement. The study also shows that the health insurance programme's stakeholders, including HMOs, need to work harder to grow the program by analyzing its overall evaluation, paying particular attention to the

implementation plan, which will expedite and enhance the programme's level of coverage among state civil servants.

Conclusion

This study revealed that only a few of the state civil servants in Ilorin West accept the implementation of health insurance schemes; that means the acceptability level is low. This is due to low awareness and knowledge and because it is not yet mandatory for State civil servants. Stakeholders in the health insurance scheme such as HMOs need to put more effort into expanding this scheme by evaluating an overall assessment of the scheme, especially the implementation strategy to fast-track and improve the level of coverage of the HIS among the State civil servants.

Declarations

Ethical consideration: This research received ethical approval from Kwara State University Research Ethics Board.

Authors' contribution: The study was developed and designed by OGD, who also carried out the research, supplied the research tools, and gathered the data from the field via a questionnaire. Data were examined and interpreted by TSK, AOV, and OTP. Initial and final drafts of the essay were written by AAA and ROA, who also assisted with logistics. The study was supervised by OLB The content and similarity index of the paper are the responsibility of all authors, who also gave the final text a critical assessment and approval.

All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

Conflict of interest: The authors declare that they have no conflict of interest.

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