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Awareness and Coverage of the National Health Insurance Scheme among Formal Sector Workers in Ilorin, Nigeria

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ABSTRACT

A prepayment scheme for health through the National Health Insurance Scheme (NHIS) was commenced in Nigeria about ten years ago. Nigeria operates a federal system of government. Sub- national levels possess a high degree of autonomy in a number of sectors including health. It is important to assess the level of coverage of the scheme among the formal sector workers in Nigeria as a proxy to gauge the extent of coverage of the scheme and derive suitable lessons that could be used in its expansion. This is a cross-sectional, descriptive survey carried out among formal sector workers in Ilorin Kwara State, Nigeria. A stratified sampling technique was used to select study participants. A self-administered questionnaire was used to collect data from respondents. Data was analysed with the SPSS. Ethical approval to conduct the study was obtained from the Bowen University Teaching Hospital Research Ethics Committee. A total of 370 people participated in the study. Majority, (78.9%) of the respondents were aware of the NHIS, however only 13.5 % paid for health care services through the NHIS. Logistic regression analysis shows that respondents with post-secondary education (OR = 9.032, CI = 2.562 – 31.847, p = 0.001) and in federal civil service (OR = 2.679, CI = 1.036 – 6.929, p = 0.042) were over nine and three times more likely to be aware of the scheme than others. Coverage of the scheme among the respondents was unimpressive. A lot still need to be done to fast-track the expansion of the scheme among this sector of the population.

Key words: health insurance, awareness, enrolment status, tiers of governance

INTRODUCTION

Prepayment method for health care financing have been adopted as the most certain strategy to ensure universal coverage for health (Chuma et al., 2013; WHO, 2010). Most countries in the developed world have a prepayment scheme for health (Evans, 2002; Mossialos and Dixon, 2002a) and have been existing for a considerable period of time. However, majority of the people in in the developing countries especially in Africa pay for health care through the out-of-pocket method. This exacerbates the high burden of chronic illnesses, disabilities and mortality which cumulates in sub-optimal productivity, low life expectancy and poor development compared with the developed world (Murray and Lopez, 2013, Murray et al., 2013). In recent times, many countries in Africa have embraced

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prepayment methods to finance health care services (Chuma et al., 2013).

In Nigeria, the National Health Insurance Scheme (NHIS) was established in 2005 with the aim of 'securing universal coverage and access to adequate and affordable healthcare in order to improve the health status of Nigerians, especially for those participating in the various programmes/products of the Scheme' (NHIS, 2015). However, efforts of the agency to implement a prepayment scheme have only been among the formal sector workers mainly, with coverage of about 4% of the general population (NHIS 2015; Onoka et al., 2013). This scenario is attributed, among others, to the fact that enrolment into the health insurance scheme in Nigeria is presently voluntary unlike in neighbouring Ghana where it is mandatory and thus with a better coverage in the latter (Odeyemi and Nixon, 2013). The major stakeholders in the health insurance industry in Nigeria are the state actors such as the federal government through the National Health Insurance Scheme, (NHIS), the States and the local governments, as well as the non-state actors such as the Health Maintenance Organizations (HMOs), health services providers (public and private), pharmaceutical industries, the Nigerian Medical Association (NMA) and the masses who are the potential beneficiaries.

Nigeria, like the USA, operates a federal system of government. In Nigeria, governance is shared along three levels of national, states and the local governments (NHIS, 2012). Except for the 'high politics' issues such as economic and security, the sub-national governments have the freedom to handle 'low politics' matters like health, education and others without much interference from the national government (Buse et al., 2012) . Similar to the USA, Nigeria is not without its challenges in the efforts to expand a nation-wide social health insurance programme (Peterson, 2011; Steinmo and Watts, 1995). However, social health insurance is long established in other developed places such as the UK as well as in many other European countries (Normand and Busse, 2002).

Previous studies have shown that age and sex, as well as marital, educational and socio-economic status of individuals and some other socio-demographic factors were associated with the awareness and the likelihood of participating in health promoting services and schemes (Ahmed et al., 2013; Fawole and Adeoye, 2015). Enrolment in prepayment schemes as a health status enhancing social policy is one of these as shown by previous studies (Bhat and Jain, 2006; Kirigia et al., 2005; Xu et al., 2006) . Studies have shown that awareness about, and any other factor that can enhance individuals' levels of awareness of existing beneficial social policies could positively influence enrolment in an available prepayment scheme for health (Agba et al., 2010; Bhat and Jain, 2006; Kirigia et al., 2005) . In Nigeria, however, studies have shown that level of awareness about the existing prepayment scheme as is available under the National Health Insurance Scheme is low (Dienye et al., 2011; Olugbenga-Bello and Adebimpe, 2010) . Nevertheless, it has been shown that prepayment schemes enjoys favourable disposition when its basics of operation, benefit package as well as the inherent benefits especially the availability of financial risk protection are made known to its potential beneficiaries (Mathauer et al., 2008; Onoka et al., 2013).

It has also been demonstrated that the level of awareness about prepayment scheme among people of the same sector (formal or informal) category could differ depending on places of abode, urban or rural. This may have implications on acceptability and or enrolment in a prepayment scheme such as the NHIS (Agba et al., 2010). The mass media in various platforms have been mentioned as sources of information on prepayment schemes. In many of the high, middle and the low income countries, electronic media such as the radio and the television set, as well as the print media have been cited (Aizer and Grogger, 2003; Andrulis et al., 1999; Nyagero et al., 2012).

One of the factors militating expansion of the prepayment schemes in the informal sector is the lack of a cost-effective platform to collect contributions; which may increase transaction costs, and as well pose a burden on the managerial capacity especially where an existing one is weak as is usually the case in many developing countries (Normand and Busse, 2002; Xu et al., 2007). However, this can be circumvented in the formal setting as there is an existing platform in the form of a payroll that makes contributions easier to be deducted from enrolees. However, other factors that are common across the board as challenges to prepayment schemes expansion are a non-responsive health system and, among the enrolees, a perceived low quality of care in accredited facilities (Chuma et al., 2013).

However, since inception, studies to assess the awareness about and the willingness of formal sector employees to participate in a prepayment scheme as it is available under the NHIS are quite few (Agba et al., 2010). Studies about the awareness and willingness of the State and the LGA workers is important to provide the needed advocacy information for the state and the LGA authorities to adopt and create the platform for the civil servants at these levels, while it will provide an insight to the level of awareness as well as the current level of coverage of the scheme among the federal civil servants. These findings will serve as an important

feedback to stakeholders especially the NHIS, HMOs and service providers for policy direction and planning purposes in the expansion and scaling up of the NHIS.

MATERIALS AND METHODS

Study area. This study was carried out in Ilorin, Kwara state Nigeria. Ilorin is the capital city of Kwara State Nigeria with a population of 2,371, 089 and a landmass of about 32,500 square kilometers (Commission., Government., 2015). The city is 306 kilometers from the coastal commercial city of Lagos, and 500 kilometers from Abuja, the political and administrative capital of Nigeria. The city shares a common boundary with the Republic of Benin on its west side and the River Niger to the North. The public formal sector institutions the city were the local government service commission, state ministries and parastatals as well as the federal civil service and parastatals.

Study population. These were the public/civil servants in the employment of the federal government (Federal Secretariat), state government (State Secretariat) and the local government secretariats.

Study Participants. Only adults aged 18 years and above, whose place of work was in any of the three secretariats and who consented to participate were eligible for the study.

Study design. This is a cross-sectional, descriptive survey carried out between February and March 2012.

Sample size. Sample size was estimated using the result of a previous study where the proportion of those who were current beneficiaries of the prepayment scheme under the NHIS was 75% (Agba et al., 2010), with a power of 80% and a confidence level of 95%. This yields a sample size of 288, and adjusting for a 10% non - response rate, a total of 298 respondents were estimated for the study.

Sampling Technique: In a two stage sampling procedure, stratified sampling the technique was used to select 370 respondents proportionally drawn from workers in federal 137, state (96) and local (137) government institutions in the city of Ilorin. Using a systematic sampling technique the respondents were recruited into the study until the calculated sample size was achieved.

Data collection: A semi-structured, pre-tested, interviewer-administered questionnaire was used to collect the data. The questionnaire was developed based on the study objectives and review of relevant literature. The tool was pre-tested among civil servants in Ogbomoso North local government area which is in an adjacent state to Kwara State. The questionnaire was certified by face validity test by experts for content appropriateness and relevance to local setting. Ethical approval to conduct the study was obtained from the Bowen University Teaching Hospital Research Ethics Committee at Ogbomoso, Oyo state. Informed verbal consent was also obtained from all participants before the interviews. 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 data collection was completed in a period of 6 weeks.

Data analysis. The data was analysed using SPSS version 17. Frequency tables were generated. Chi-square test was used for categorical data to test associations between selected socio-demographic characteristics and awareness of the NHIS, while logistic regression model was used to determine predictors of awareness of the NHIS. Only variables associated with a p value <0.10 in bivariate analyses were considered eligible for inclusion in multiple logistic regression analyses. Level of statistical significance was set at $p < 0.05$.

RESULTS

A total of 370 consenting adults aged 18 years and above participated in the study. Thus, the response rate was 128.5%.

Socio-demographic characteristics of respondents

Mean age of respondents was 35 ± 9.1 years. As shown in Table 1, more than half 58.6% (217/370) of the respondents were males, majority 84.3% (312/370) were Yorubas, while age group 30-39 years had the highest proportion 37.6% (139/370) among the age groups. Those who attained educational achievement up to university level 44.9% (166/370) had the highest proportion of the educational strata, while married were in the highest proportion 68.9% (255/370). About two-thirds 62.7% (234/370) of the respondents were of the Islamic faith. Two-thirds 60.8% (225/370) had spouses who were gainfully employed

Table 1:
Socio-demographic Characteristics of Participants

Socio-demographic Characteristics (N=370)	Frequency	Percentage
Age		
≤ 29	123	33.2
30-39	139	37.6
40-49	71	19.2
≥50	37	10.0
Mean Age (std. dev.)	35.1(± 9.1)	
Sex		
Male	217	58.6
Female	153	41.4
Marital status		
Married	255	68.9
Single	110	68.9
Others*	5	1.4
Religion		
Christianity	138	37.3
Islam	234	62.7
Ethnicity		
Yoruba	312	84.3
Hausa/Fulani	18	4.8
Others‡	40	10.8
Educational status		
Primary	19	5.1
Secondary	51	13.8
University	166	44.9
Others	134	36.2

Others Separated, divorced, widow, widower*
Others‡ Hausa, Ibo

Methods of payment for health care

Almost all, 89.2% (330/370) pay for health care services by out-of-pocket method (Table 2).

First Source of Information about the NHIS

Majority, 78.9% (292/370) of the respondents were aware of the NHIS. Electronic media such as the radio and the television were the most cited source of information in 42.8% (125/370) among those who were aware. Sources such as friends, colleagues and relatives were cited in 43.5% (127/370). (Table 2).

Enrolment status in the NHIS

Among those who were aware of the NHIS, federal civil servants were in the highest proportion, 90.5% (124/137) (Table 4). Of those who were aware about the NHIS, only 27.1% (79/292) were enrollees in any form of prepayment scheme out of which 63.3% (50/79) were under the NHIS. The federal civil servants were in the highest proportion 64.0% (32/50) of those who were enrollees under the NHIS, while local government workers were in the least, 10.0% (Table 2).

Table 2:
Pattern of payment for health care and associated factors (N = 370)

Variable	Frequency	Percentage
Employment status of spouse (n = 370)		
Employed (self & employed by others)	225	60.8
Not employed at all	33	8.9
No response	112	30.3
Method of payment for health care costs (n = 370)		
Out-of-pocket	330	89.2
Upfront/prepayment method	33	8.9
Other forms of payment	3	0.8
Declined response	4	1.1
Ever heard about the NHIS (n = 370)		
Yes	292	78.9
No	77	21.1
First Source of information about the NHIS (n = 292)		
Radio/ TV	125	42.8
Print media	40	13.7
Others (other sources)	127	43.5
Health insurance enrolment status (n = 292)		
Yes	79	27.1
No	213	72.9
Type of health insurance (n=79)		
NHIS	50	63.3
Private HI	24	30.4
Others	5	6.3
Place of work of NHIS enrollees (n = 50)		
LGA	5	10.0
State	13	26.0
Federal	32	64.0
Type of health facility patronized on the scheme (n=50)		
Private facility	15	30.0
Public facility	35	70.0

Assessment of health service delivery in accredited health facilities

Of the respondents who were registered under the NHIS, 42% (21/50) reported a better attitude of health care workers towards clients than before the scheme, better availability of drugs in 44% (22/50), laboratory and other investigations in 40% (20/50) and a better physical environment in 46% (23/50) However, waiting time was

reported to be the same as it was before enrolment into the scheme in 56% (28/50) of the respondents (Table 3).

Respondents' opinion about prepayment scheme under the NHIS

All respondents, 370 (100%) were favourably disposed to prepayment schemes; 88.2% (315/357) were of the opinion that it was better than the OOP payment system, 91.6% (328/358) agreed it will reduce financial hardship during illness, 89.0% (318/358) will encourage other people to enroll into the scheme, while 86.9% (312/359) cited it will increase access to health care services. It was viewed as a good idea if implemented in 91.1% (327/359) of the respondents. (Table 3).

Respondents' socio-demographic characteristics and awareness of the NHIS

Table 4 shows the association between certain socio-demographic characteristics of respondents and awareness of the NHIS. Awareness of the NHIS was associated with education. Post-secondary education was significantly associated with awareness of the NHIS (χ^2 = 42.112, p < 0.000); more singles compared to married were significantly aware about the scheme, ($\chi^{2=}$ 7.070, p = 0.029) while federal civil servants were significantly more aware of the scheme than were the state and the local government civil servants ($\chi^{2=}$ 24.019, p = 0.000). Age, sex, and employment status of respondents' spouses were not significantly associated with awareness of the NHIS.

Predictor of awareness of the NHIS among respondents.

Respondents with post-secondary education were over nine times more likely to be aware of the scheme than were the lower educational status, (OR = 9.032, CI = 2.562 – 31.847, p = 0.001) [Table 5]. Workplace was also found to be associated with awareness about the NHIS; civil servants working with the federal government was significantly associated with awareness of the NHIS than were those with the state and the local governments (OR = 2.679, CI = 1.036 – 6.929, p = 0.042). Though the association was not statistically significant, age group 40 - 49 years, females, and spouse gainfully employed were more likely to be more aware about the NHIS than were the younger age groups, male respondents and those with spouses not gainfully employed (OR = 1.352, CI = 0.465 – 4.009, p < 0.587; OR = 1.453, CI = 0.753 – 2.802, p<0.265; OR = 1.446, CI = 0.576-3.631, p<0.433) respectively.

Table 3:
NHIS enrollees experience and opinion about the NHIS

	Service component in health facilities	Better than before (%)	Same as before (%)	Don't know (%)	Total
a	Attitude of health care workers at the health facility	42.0	40.0	18.0	100
b	Waiting time at the health facility	28.0	56.0	16.0	100
c	Availability of drugs at the health facility	44.0	38.0	18.0	100
d	Provision of laboratory services and other investigations at the health facility	40.0	34.0	26.0	100
e	General physical environment of the health facility	46.0	36.0	18.0	100

Respondents opinion about the NHIS (N = 370)

	Opinion	**Agree (%)**	**Disagree (%)**	**Don't Know (%)**	
a	It is better than OOP (n = 357)	88.2	6.4	5.3	100
b	Minimize financial hardship (n = 358)	91.6	2.5	5.9	100
c	Will encourage others (n = 358)	89.0	3.4	7.6	100
d	Enhance access to health care (n = 359)	86.9	4.2	6.1	100
e	A good idea (n = 359)	91.1	2.8	6.1	100

Table 4: Association between socio-demographic factors and awareness about the NHIS (N = 292)

Variable	Awareness about the NHIS				
	Aware n (%)	Not aware n(%)	Total n	χ^2	p-value
Age					
<30	101(82.1)	22(17.9)	123		
30-39	105(75.5)	34(24.5)	139	4.705	0.195
40-49	60(84.5)	11(15.5)	71		
50+	26(70.3)	11(29.7)	37		
Sex					
Male	171(78.8)	46(21.2)	217	0.004	0.948
Female	121(79.1)	32(20.9)	153		
Marital Status					
Married	197(77.3)	58(22.7)	255		
Single	93(84.5)	17(15.5)	110	7.070	0.029
Others*	2(40.0)	3(60.0)	5		
Educational status					
Primary	10(52.6)	9(47.4)	19		
Secondary	30(58.8)	21(41.2)	51	42.112	0.000
Post - secondary	154(92.8)	12(7.2)	166		
Others	98(73.1)	36(26.9)	134		
Spouse employment status (n = 197)					
Gainfully employed	175(77.8)	50(22.2)	225	1.9868	0.161
Not working	22(66.7)	11(33.3)	33		
Place of work					
LGA	91(66.4)	46(33.6)	137		
State	77(80.2)	19(19.8)	96	24.019	0.000
Federal	124(90.5)	13(9.5)	137		

Others* *Single, Separated, divorced, widow, widower*

Table 5: Predictors of awareness of the NHIS

Variable	Odds ratio	95% CI	p-value
Age			
<30(ref)	1.000		
30-39	0.643	0.248-1.665	0.363
40-49	1.352	0.456-4.009	0.587
50+	0.615	0.193-1.959	0.411
Sex			
Male(ref)	1.000		
Female	1.453	0.753-2.802	0.265
Educational status			
Primary(ref)	1.000		
Secondary	0.794	0.222-2.846	0.724
Post-Secondary	9.032	2.562-31.847	0.001
Others	2.057	0.644-6.572	0.224
Spouse employment status			
Not employed(ref)	1.000		
Gainfully employed	1.446	0.576-3.631	0.433
Work location			
LGA(ref)	1.000		
State	1.122	0.512-2.460	0.773
Federal	2.679	1.036-6.929	0.042

*Hosmer-Lemeshow goodness of fit test: $\chi^2 = 7.172$, df = 8, p = 0.518

DISCUSSION

Study respondents were more of middle age group, while men constitutes almost three quarters of them. This is in conformity with the average working age group as well as sex differences in formal sector employment in Nigeria. Four-fifths of them had post - secondary education. These findings are in conformity with earlier survey findings among formal sector workers in Nigeria (NPC, 2015).

Almost four-fifths of the respondents were aware of the scheme, which was quite an encouraging finding compare to the awareness among the informal sector workers which have been reported to be very low even in recent times (Adewole et al., 2015). The proportion of those who were aware about the scheme was high across the three levels of federal, state as well as the local governments. Awareness was also shown to be significantly better among singles compared with married, individuals with post-secondary education compared with others, as well as among the federal civil servants compared to those who work in the State and the LGAs. Awareness about prepayment schemes have been shown to be positively linked with enrolment in health insurance schemes (Bhat and Jain, 2006; Nyagero et al., 2012). The singles that were more aware were likely to be younger in age and better educated. Efforts to increase the level of awareness of the scheme among those who were not well informed about it should be a cardinal priority. Reported source of information about the scheme was the electronic media (TV/Radio) in 42.8% (125/292) and the Others in 43.5% (127/292) while the print media was the least source mentioned in 13.7% (40/292). These findings underscores the importance of the Others (family and friends, colleagues) serving as sources of information on beneficial social policies, and thus should be strengthened.

Participants in this study has good disposition towards prepayment scheme as it is currently available under the NHIS, as shown in their responses when their opinions were sought whether it is a better alternative to OOP among others opinions. Active participation in a policy is usually logically preceded by being aware about the same policy issue, followed by acceptance or adoption. Stakeholders saddled with the responsibilities of the implementation and expansion of the scheme could leverage on two favourable factors of high level of awareness and good disposition to the scheme expressed in this study as opportunities to increase the coverage of the scheme amongst this group of people among whom the scheme coverage is still very low (Agba et al., 2010; Olugbenga-Bello and Adebimpe, 2010).

However, it is important to note that the majority of the study participants reported paying for health care services by out-of-pocket method despite the present focus of the scheme's implementation on the formal sector workforce (Onoka et al., 2013). Also, less than one-fifth of those who reported been aware of the scheme were enrollees, among whom over two-thirds were federal civil servants, while the local government workers were in the least. Allocative efficiency of available health care services is usually greatly compromised with OOP system, and this disproportionately affect the poor (Maynard and Dixon, 2002; Robinson, 2002). It thus raises the issue of equity of access to health care services which is likely to be compromised with limited access to available health care services among the low income groups (Preker et al., 2002), who are also likely to be more ill, (Mossialos and Dixon, 2002a) because of, and as a result of limited access to quality health care services. OOP payment system may result in delay in the use of available health care services, reduces the use of the available health care or not using it all with the resultant morbidity and mortality affecting the disadvantage population groups the most (Gopalan and Durairaj, 2012).

Currently in Nigeria, prepayment scheme for health as is available under the NHIS is not mandatory, its implementation is among the federal civil servants sub-group of the formal sector workers, for whom the scheme pay capitation fee as monthly contribution. As designed, enrollees are supposed to make counterpart contributions, however, this is not yet in place (Muanya and Oyebade, 2012). Among those who were aware of any form of a prepayment scheme, only 27.1% (79/292) reported enrolment in a form of insurance scheme or the other. Under the NHIS, the scheme's coverage of the federal civil servants is expected to be more impressive if not total, however, only about one-quarter, 23.3% (32/137), while it was 13.5% (13/96) and 3.6% (5/137) among the State and the LGA workers respectively. These proportions could have been much lower if coverage for all study participants were considered.

The present enrolment status among the federal civil servants could be a manifestation of a flaw in the design and in the implementation strategy of the scheme for which attention need to be paid for evaluation and re-strategizing to turn around the current unacceptable level of coverage (Meng et al., 2011). However, for the State and the LGA tiers, it could be a reflection of the present stand of these sub-national tiers of government about the scheme among other factors (Onoka et al., 2013). The State and the Local Government employees who reported to be enrollees in the scheme could be dependants of some of the federal civil servants who were themselves enrollees in the scheme. Direct beneficiaries (enrollees) in the scheme are privileged to

enroll four children under the age of eighteen years and a spouse as dependants (NHIS, 2012). This may explain the status of some of these study participants who were either State or LGA workers but who claimed to be enrollees in the scheme. This scenario may not be unexpected in Nigeria as the states as well as the LGAs are yet to accept the scheme on behalf of civil servants who works in these tiers of government. In Nigeria, the majority of political actors at the sub-national governments do not have favourable disposition to the scheme because of some structural contextual factors such as the economic and political interests. Nigeria operates the federal system of government, of which the national government cannot enforce certain social policies on the sub-national governments such as the states and the LGAs (Buse et al., 2012).

This scenario is similar to the challenges of the expansion of social health insurance scheme in the USA (Peterson, 2011; Steinmo and Watts, 1995) . It has been suggested that the current design of the scheme especially in relation to the flow of funds, and which tier of the government benefits more from it may have been a hindrance to its acceptance by the sub-national state actors who possibly perceive the present arrangement as unfavourable and thus tend to oppose it (Onoka et al., 2013). Parliamentary system of government as it is available in Ghana and the UK with its characteristic presence of chain of command from the national to the sub-national governments is a favourable factor in the more successful implementation of social health insurance scheme and its variants as it is presently available in Ghana and the UK, on one hand and, compare with the situation in Nigeria and the USA where expansion of similar schemes are not impressive partly due to a federal system arrangement and its characteristic lack of chain of command along tiers of government (Buse et al., 2012). In the USA, despite the success that the Affordable Care Act (ObamaCare) has achieved among the general population and especially among the underprivileged, stiff opposition to its implementation in some States and threats of repealing it altogether is real (Cohen and Martinez, 2015;Tavernise, 2015).

Again, the presence of 'veto points' in political institutions such as the federal system subjects proposed social policies to political manipulations through lobbying by especially the non-state actors in the health industry for political and economic interests (Buse et al., 2012; Immergut, 1990). This factor has been attributed to the long delay in the implementation of a social health insurance in the USA, which (factor) is also responsible for the challenges it is currently facing in its effort to expand in Nigeria. This is in contrast to the minimal or absence of veto points in a parliamentary system of government such as it operates in the UK and which has contributed to the progress made in the implementation of social policies such as a universal coverage for health care through the National Health Service a long while ago (Steinmo and Watts, 1995). These factors are largely responsible for the current differences in universal coverage for health through the social health insurance schemes between Nigeria and its neighbouring Ghana; whereas Ghana has made impressive progress, in Nigeria, coverage is unacceptably limited to the formal sector of the population, even so, the coverage of the formal sector is still very low (Humphreys, 2010; Odeyemi and Nixon, 2013; Witter and Garshong, 2009). Re- designing the scheme by reaching a compromise that all actors benefit from it, or at least don't feel short-changed, will go a long way to resolving this present challenge in the expansion of the scheme.

It is also important that the level of awareness of the scheme and its benefits is raised. Strategies to improve enrolment should be embarked upon especially among those who already have the support of the authorities as it is presently found among the federal civil service. These steps have been found to work in different settings and contributed immensely to impressive population coverage of prepayment schemes in both developed and developing countries (Meng et al., 2011; Nyagero et al., 2012). Similar strategies can be adapted to this environment. The potential beneficiaries themselves could act as political entrepreneurs to advocate and demand for its expansion.

This study has shown that the enrolment status of the formal sector workers in Nigeria is currently low. The finding corroborates earlier studies carried out in the country in this area of research (Agba et al., 2010; Humphreys, 2010; Odeyemi and Nixon, 2013; Olugbenga-Bello and Adebimpe, 2010; Onoka et al., 2013). Generally, implementation of prepayment schemes in the formal sector is easier than it is in the informal sector for an obvious reason among which is a ready data bank of the potential beneficiaries of the scheme (Chuma et al., 2013; Mossialos and Dixon, 2002b). The low NHIS coverage of the formal sector as it is presently in Nigeria is a concern that should be appropriately addressed by all stakeholders. If the Scheme is yet unable to achieve appreciable coverage in the formal sector, it almost signals a tough task in the effort to expand the scheme among the larger, poorly organized informal sector. Thus, more need to be done in the efforts to expand the scheme, especially an evaluation and re-strategizing of the scheme's implementation strategy, among the formal sector workforce is desirable.

This study was carried out among the formal sector workers of the three tiers of governance in Nigeria, in order to assess the level of progress of the prepayment scheme for health as it is currently available under the NHIS. Findings have shown that level of awareness about the scheme was impressive. Participants also expressed a willingness to participate in the scheme. However, currently the level of coverage was very low across the three tiers; it was highest among the federal civil servants and lowest among the local government civil servants. It is recommended that an overall assessment of the scheme especially the implementation strategy is carried out by the stakeholders to fast-track and improve level of coverage of the NHIS among the formal sector workers.

REFERENCES

Adewole D. A., Adebayo A. M., Udeh, E. I., Shaahu V. N. and Dairo M. D.(2015): Payment for Health Care and Perception of the National Health Insurance Scheme in a Rural Southwest Nigeria. *Am J Trop Med Hyg*. 14-0245. [Epub ahead of print]

Agba A., Ushie E. and Osuchukwu N. (2010): National Health Insurance Scheme (NHIS) and Employees′ Access to Healthcare Services in Cross River State, Nigeria. *Glob J Hum Soc Sci,* 10**,** 9-16.

Ahmed S., Delaney K., Villalba-Diebold P., Aliyu G.,Constantine N., Ememabelem M., Vertefeuille J.,Blattner W., Nasidi A. and Charurat M: (2013): HIV counseling and testing and access-to-care needs of populations most-at-risk for HIV in Nigeria. *AIDS care,* 25**,** 85-94.

Aizer A. and Grogger J. (2003): Parental Medicaid expansions and health insurance coverage. National Bureau of Economic Research.

Andrulis D. P., Bauer T. A. and Hopkins S. (1999): Strategies to increase enrollment in children's health insurance programs: a report of the New York Academy of Medicine. *Journal of urban health,* 76**,** 247-279.

Bhat R and Jain N. (2006): Factoring affecting the demand for health insurance in a micro insurance scheme. (Available at: http://hdl.handle.net/123456789/175)

Buse K., Mays N. and Walt G. (2012): *Making health policy*, McGraw-Hill Education (UK).

Chuma J., Mulupi S. and McIntyre D. (2013): Providing financial protection and funding health service benefits for the informal sector: Evidence from sub-Saharan Africa. RESYST Working Paper 2. Disponible en ligne sur: http://resyst. lshtm. ac. uk/sites/resyst. lshtm. ac. uk/files/docs/reseources/WP2_financialpro tection. pdf, dernière visite le 4 septembre.

Cohen R. A. and Martinez M. E. (2015). Health Insurance Coverage: Early Release of Estimates From the N ational Health Interview Survey, 2014 [Online]. CDC. Available at: http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201506.pdf [Accessed 11th July, 2015 2015].

National Population Commision (2006): Census. Available at: http://www.population.gov.ng/index.php/censuses

National Population Commission (2013). National Demographic and Health Survey. Available at: http://www.population.gov.ng/index.php/2013-nigeria-demographic-and-health-survey

Dienye P., Brisibe S. and Eke R. (2011): Sources of healthcare financing among surgical patients in a rural Niger Delta practice in Nigeria. *Rural and remote health,* 11**,** 1577.

Evans R. G. (2002): Financing health care: taxation and the alternatives. In: *Funding health care: options for Europe,* 1**,** 31-58.

Fawole O. I. and Adeoye I. A. (2015): Women's status within the household as a determinant of maternal health care use in Nigeria. *African health sciences,* 15**,** 217-225.

Gopalan S. S. and Durairaj V. (2012): Addressing women's non-maternal healthcare financing in developing countries: what can we learn from the experiences of rural Indian women. *PloS one,* 7**,** e29936.

Kwara State Government. (2015): Kwara State Available at: http://www.kwarastate.gov.ng/main/article/About-Kwara-State 2015].

Humphreys G. (2010). Nigerian farmers rejoice in pilot insurance plan. *Bull World Health Organ,* 88**,** 329-30.

Immergut E. M. (1990): Institutions, veto points, and policy results: A comparative analysis of health care. *Journal of Public Policy,* 10**,** 391-416.

Kirigia J. M., Sambo L. G., Nganda B., Mwabu G. M.,Chatora R. and Mwase T. (2005): Determinants of health insurance ownership among South African women. *BMC health services research,* 5**,** 17.

Mathaeur I., Schmidt J. O. and Wenyaa M. (2008). Extending social health insurance to the informal sector in Kenya. An assessment of factors affecting demand. *The International journal of health planning and management,* 23**,** 51-68.

Maynard A. and Dixon A. (2002): Private health insurance and medical savings accounts: theory and experience. In: *Funding health care: options for Europe***,** 109-127.

Meng Q., Yuan B., Jia L., Wang J., Yu B., Gao J. and Garner P. (2011). Expanding health insurance coverage in vulnerable groups: a systematic review of options. *Health Policy and Planning,* 26**,** 93-104.

Mossialos E. and Dixon A. (2002a): Funding health care in Europe: weighing up the options. In: *Funding health care: options for Europe***,** 12, 272-300.

Mossialos E. and Dixon A. (2002b): Funding health care: an introduction. In: *Funding health care: options for Europe, 1,1-30.*

Muanya C.and Oyebade W. (2012): Health Insurance Scheme seeks commission to make it mandatory, financially viable. *Guardian Newspaper, Nigeria*. Avalaible at: http://www.guardiannewsngr.com/index.php?option=com_content&view=article&id=76435:health-insurance-scheme-seeks-commission-to-make-it-mandatory-financially

Murray C. J.and Lopez A. D. (2013): Measuring the global burden of disease. *New England Journal of Medicine,* 369**,** 448-457.

Murray C. J., Vos T., Lozano R., Naghavi M., Flaxman A. D., Michaud C., Ezzati M., Shibuya K., Salomon J. A. and Abdalla S. (2013): Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The lancet,* 380**,** 2197-2223.

NHIS. (2012): National Health Insurance Scheme: Operational Guidelines revised October, 2012. Available at: http://www.nhis.gov.ng/index.php?option=com_content&view=article&id=107:operational-guidlines&catid=34:home&Itemid=77

NHIS (2015): National Health Insurance Scheme Programmes. Available at: http://www.nhis.gov.ng/index.php?option=com_content&view=article&id=53&Itemid=57 2015].

Normand C. and Busse R. (2002): Social health insurance financing. *Funding health care: options for Europe,* 59.

Nyagero J., Gakure R. and Keraka M. (2012): Health insurance education strategies for increasing the insured among older population–a quasi experimental study in rural Kenya. *Pan African Medical Journal,* 12.

Odeyemi I. and Nixon J. (2013): Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: a review-based comparative analysis. *Int J Equity Health,* 12**,** 10.1186.

Olugbenga-Bello A. and Adebimpe W. (2010): Knowledge and attitude of civil servants in Osun state, Southwestern Nigeria towards the national health insurance. *Nigerian journal of clinical practice,* 13.

Onoka C., Onwujekwe O., Uzochukwu B. and Ezumah N. (2013): Promoting universal financial protection: constraints and enabling factors in scaling-up coverage with social health insurance in Nigeria. *Health Res Policy Syst,* 11**,** 20.

WHO. (2010): Health systems financing: the path to universal coverage. Geneva, Switzerland.

Peterson M. A. (2011): It was a different time: Obama and the unique opportunity for health care reform. *Journal of health politics, policy and law,* 36**,** 429-436.

Preker A. S., Jakab M. and Schneider M. (2002): Health financing reforms in central and eastern Europe and the former Soviet Union. In: *Funding health care: options for Europe***,** 4, 80-109.

Robinson R. (2002): User charges for health care. In: *Funding health care: options for Europe***,** 7, 161-83.

Steinmo S. and Watts J. (1995). It's the institutions, stupid! Why comprehensive national health insurance always fails in America. *Journal of Health Politics, Policy and Law,* 20**,** 329-372.

Tavernise S. (2015): *Fewer Poor Uninsured After Health Law, Study Finds 2015*. Available at: http://www.nytimes.com/2015/06/23/us/fewer-poor-uninsured-study-finds-in-health-law.html?smid=nytnow-share&smprod=nytnow&_r=2. 2015].

Witter S and Garshong B. (2009): Something old or something new? Social health insurance in Ghana. *BMC International Health and Human Rights,* 9**,** 20.

Xu K., Evans D. B., Carrin G., Aguilar- Rivera A. M., Musgrove P. and & Evans T. (2007): Protecting households from catastrophic health spending. *Health affairs,* 26**,** 972-983.

Xu K., James C., Carrin G. and Muchiri S. (2006): An empirical model of access to health care, health care expenditure and impoverishment in Kenya: learning from past reforms and lessons for the future. Geneva: WHO, Department of Health Systems Financing, Health Financing Policy, Discussion paper.