NATIONAL HEALTH INSURANCE SCHEME: PERCEPTION AND PARTICIPATION OF FEDERAL CIVIL SERVANTS IN IBADAN

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ABSTRACT

Introduction: The National Health Insurance Scheme is a social health insurance programme designed by the Federal Government of Nigeria to complement sources of financing the health sector and to improve access to health care for the majority of Nigerians. Presently, the enrolment level on the Scheme is majorly among those in the formal sector and user experiences have been different. This study seeks to determine the perception and participation of Civil Servants regarding the National Health Insurance Scheme in Ibadan.

Methods: A descriptive cross-sectional study was conducted among 273 civil servants working at the Federal Secretariat, Ikolaba, between October and November 2015. An interviewer-administered questionnaire was used to collect information on socio-demographic characteristics, awareness, and membership of the NHIS, perception of NHIS, and health-seeking behaviour. Participation was defined as the number of civil servants registered or enrolled under the scheme, in other words, members of the scheme. Information on perceptions was sought using a 3-point Likert scale. Descriptive statistics and chi-square tests were used for data analysis at a 5% level of significance.

Results: About 60.1% of the respondents were males. The average age was 39.7±9.1 years, with 85.0% of the respondents being married. The majority (65.2%) of the respondents were mid-level cadre workers, 17.62% were working as senior-level workers and the remaining 17.6% were low cadre workers. The majority (88.9%) completed tertiary education, while just 11.1% completed basic education. The mean household size was 2.5±0.6. Awareness of the National Health Insurance Scheme was very high (95.2%) with 83.5% enrolled under the scheme. About (50%) of the respondents joined the scheme because it is cheap and affordable. There was a significant association between awareness, level of education, knowledge of NHIS, and registration into the scheme by respondents. The majority of the respondents (87.3%) claimed that NHIS is a better means of settling healthcare costs than Out-of-pocket-payment. The majority of the respondents thought that health insurance is a viable programme.

Conclusion: The perception of health insurance among civil servants was varied while participation was high. Relevant intervention should be introduced to remove bottlenecks to accessing and operating the scheme.

Keywords: National Health Insurance Scheme, Perception of health insurance, Civil servants.

INTRODUCTION

The wealth of any country depends on the health of its citizens. Therefore, any country seeking to develop its economy should strive to improve the health of its citizens so they can contribute to economic development.¹ Health, as a social service, is very important to the teeming population of any country as the health sector in any country has been recognized as the primary engine of growth and development.

However, health care in Nigeria is financed by a combination of tax revenue, out-of-pocket payments, donor funding, and health insurance.² Nigeria’s health expenditure is relatively low, even when compared with other African countries.² The total health expenditure (THE) as a percentage of the gross domestic product (GDP) from 1998 to 2000 was less than 5%, falling behind THE/GDP ratio in other developing countries such as Kenya (5.3%), Zambia (6.2%), Tanzania (6.8%), Malawi (7.27%) and South Africa (7.5%).³ Limited institutional capacity, corruption, unstable economy, and lack of political will have been identified as factors why some financing mechanisms of financing health care have not worked effectively.⁴
Further, insurance is a risk transfer mechanism in which the insured makes small periodic payments called premiums to another (the insurer), in return for the payment of benefit packages on the occurrence of a specified event. Therefore, health insurance involves the pooling of health risks and funds. The National Health Insurance Scheme (NHIS) in Nigeria was designed to provide minimum economic security to workers with regards to unfavourable losses resulting from accidental injury, sickness, old age, unemployment, etc. It is based on a pre-payment system where both the employer and employee make contributions to the scheme and the employee accesses the scheme whenever he/she is ill. The scheme was officially launched on June 6, 2005, and services to enrollees started later in 2005. According to Osae-Brown, 2013, over four million identity cards have been issued, 62 HMOs (Health Maintenance Organisations) have been accredited and registered and more applications are being processed. The NHIS is unarguably an indispensable strategy for improving the poor health indices of the country and reducing out-of-pocket expenditure for quality health care services. Since the implementation of NHIS, about five million Nigerians can readily access care through the NHIS. The NHIS benefits packages are very comprehensive, covering virtually all the medical needs of the enrollees from consultation, to drugs, consumables, and other minor surgeries.

Undoubtedly, civil servants play a very significant role in the economic development of the country. In desiring a better public service workforce and an effective and efficient delivery of public services, the provision of good, quality healthcare should be considered a top priority to civil servants. The NHIS would be of great importance to civil servants because it has attractive packages. Some of its packages include out-patient care, medical consumables, drugs, and diagnostic tests. Free in-patient care in a standard ward for fifteen cumulative days per year is also inclusive.

However, in Nigeria, there is inadequate knowledge, awareness, and capacity regarding an insurance-based health system. The level of corruption, lack of transparency, and accountability in the country are still very high which has negatively impacted the effectiveness of NHIS. The provision of quality, accessible and affordable healthcare remains a serious problem. This is because the health sector is continuously faced with a gross shortage of personnel, inadequate and outdated medical equipment, poor funding, policies inconsistent health policies, and corruption. Other factors that impede quality healthcare delivery in Nigeria include the inability of the consumer to pay for healthcare services, gender bias due to religious or cultural beliefs, and inequality in the distribution of healthcare facilities between urban and rural areas. Therefore, this study sought to determine the perception and participation towards NHIS among civil servants working in the federal civil service system at Ibadan.

**METHODOLOGY**

**Study Design**

A descriptive cross-sectional study was conducted between October and November 2015.

**Study Site**

This study was conducted among the civil servants at the Federal Secretariat Complex, Ikolaba, Ibadan, Nigeria. The complex consists of 8 ministries and 13 agencies having a staff population of 853 (as of September 2015).

**Sample Size**

A minimum sample size of 246 was calculated at a 5% level of significance and 20% prevalence of people who utilise formal healthcare providers.

**Sampling Technique**

The selection of respondents was through systematic random sampling. Three ministries and six agencies were selected randomly out of the seven ministries and 15 agencies in the secretariat by balloting. The selected ministries and agencies had a total strength of 425. The required number of respondents were then proportionally allocated into the different ministries according to their staff strength after which required respondents were selected at regular intervals of the sampling fraction. The sampling fraction was obtained by dividing the required number of respondents in the ministry or agency by the total number of staff in there.

**Inclusion and Exclusion Criteria:** This study included all federal civil servants working within the Secretariat who have been employed for at least two years as at the time of the study. However, the study excluded all temporary or contract staff under the employ of any of the agencies or ministries.

The respondents were divided into three categories based on their salary grade level. The junior cadre workers were those who belonged to salary grade level 6 and below, while those belonging to salary grade level between 7 and 10 were considered as mid-level workers. Finally, those whose salary grade levels were higher than 10 were considered senior workers.

Ethical clearance for the study was obtained from the UI/UCH Ethical Review Committee (Reference...
number: UI/EC/15/0415). Permission to administer the questionnaires was obtained from the Heads of Departments. Informed consent was obtained from participants before the administration of the questionnaires. Participation was voluntary and data collected were kept strictly confidential.

**Data Collection Tool**
The instrument used to collect data for the study was a semi-structured, self-administered, questionnaire. The majority of the questions were pre-coded while some were open-ended. The questionnaire was divided into four sections: Section A consisted of 8 questions aimed at assessing the socio-demographic characteristics of the respondents; Section B comprised of 12 questions on the awareness and membership of the National Health Insurance Scheme; Section C included 6 questions on the attitudes of the respondents towards NHIS and Section D consisted of 5 questions on the health-seeking behaviours of the respondents. The research instrument was pre-tested among civil servants in the state secretariat in Agodi, Ibadan, after which ambiguous questions were rephrased.

**Data Analysis**
Descriptive statistics were used to present the results, and the chi-square test was used to test for associations between categorical variables at a 5% significance level. Data were analysed using the Statistical Package for Social Sciences (SPSS) version 21.

**RESULTS**
About three out of every five of the respondents were males (60.1%), and 41 (15.0%) were single. Over half of the respondents (50.5%) had completed tertiary education, and the majority were mid-level cadre workers (178, 65.2%) as shown in Table 1.

The self-reported awareness of the respondents towards NHIS was high as 260 (95.2%) of them reported being aware of the Scheme. Only 13 respondents reported being unaware of the scheme. When asked about their primary source of information about the Scheme, the response with the highest response was from radio/TV programs (29.3%). Other information sources included: through a health worker (25.6%), another enrollee of the Scheme (25.3%), and from a manager of the Scheme (16.5%).

Concerning their perception of NHIS, the majority (87.3%) of the 260 enrolled respondents posited that NHIS is a better means of settling healthcare costs than OOPE (Out of pocket expenditure). Only 14 respondents (5.5%) believed OOPE to be a better payment option to NHIS. However, 9 (3.5%) respondents believed that NHIS would not succeed even if it was implemented properly. Also, 233 (89.6%) respondents thought the Scheme will succeed if implemented properly, while 19 (6.9%) were neutral. The same pattern of responses was observed regarding their perception of the NHIS about being able to deliver improved access to healthcare, protection from debts and other forms of catastrophic health

| Characteristics               | Frequency (n) | Percentage (%) |
|-------------------------------|---------------|----------------|
| **Age group**                 |               |                |
| ≤ 30 years                    | 46            | 16.8           |
| 31-40 years                   | 110           | 40.3           |
| 41-50 years                   | 87            | 31.9           |
| >50 years                     | 30            | 11.0           |
| **Gender**                    |               |                |
| Male                          | 164           | 60.1           |
| Female                        | 109           | 39.9           |
| **Marital Status**            |               |                |
| Single                        | 41            | 15.0           |
| Living with partner           | 232           | 85.0           |
| **Religion**                  |               |                |
| Christianity                  | 194           | 71.1           |
| Islam                         | 79            | 28.9           |
| **Highest educational level** |               |                |
| Secondary school              | 30            | 11.0           |
| Tertiary                      | 243           | 99.0           |
| **Salary grade Level**        |               |                |
| Junior Cadre                  | 47            | 17.2           |
| Mid-level Cadre               | 178           | 65.2           |
| Senior Cadre                  | 48            | 17.6           |

Table 1: Sociodemographic characteristics of respondents.
expenditure (CHE), and improved quality and affordability of health services.

Regarding their participation in the NHIS, the majority (83.5%) of the respondents were enrolled in NHIS. The major reason most of the participants (50.5%) joined the Scheme was for the cheap and affordable health care services and free access to medical care (27.8%). The most mentioned reason for not participating in the Scheme was stated as poor enlightenment about the Scheme (35.3%) while the inability to afford the premium charges (29.4%) followed closely. Only 24.4% of the respondents experienced barriers to NHIS registration with the most common barrier being cumbersome registration processes (53.1%) and delays in the issuance of the identity card (35.9%). See Table 2.

Concerning their knowledge of the NHIS, 189 (86.7%) of the total respondents believed that they were well informed about the scheme. Approximately three out of every five respondents (59.9%) had attended a lecture on the NHIS.

Table 3: Health-seeking behavior of the civil servants.

| Characteristics                              | n   | %   |
|----------------------------------------------|-----|-----|
| Suffered health conditions in the past 6 months |     |     |
| Yes                                          | 167 | 60.8|
| No                                           | 106 | 37.7|
| Method of diagnosis (N=167)                   |     |     |
| Formal health system                          | 81  | 48.5|
| Informal health system                        | 86  | 51.5|
| Choice of health care facility (N=167)        |     |     |
| Formal health care system                     | 161 | 97.8|
| Informal health care sources                  | 6   | 2.2 |
| Type of illness                               |     |     |
| Fever and acute illnesses                     | 139 | 83.2|
| Surgery/Natal services                        | 12  | 4.4 |
| Chronic illnesses                             | 16  | 5.9 |
| Reason for choice of health facility          |     |     |
| Friendly health workers                        | 80  | 29.3|
| Availability of drugs                         | 14  | 5.1 |
| Prompt attention                              | 22  | 8.1 |
| Close proximity                               | 43  | 15.8|
| Cheap services                                | 11  | 4.0 |
| Others                                       | 5   | 1.9 |

From Table 3, about three out of every five respondents (167, 60.8%) suffered a form of health condition within the past 6 months. Of this population, almost half (48.5%) reported using the formal health care system. This includes laboratory tests, confirmation from qualified health personnel. On the other hand, almost all (161, 97.8%) of the respondents used the formal health system when seeking health care services. The formal health care facilities included government hospitals, private hospitals, and comprehensive health centres. Fevers and other acute illnesses such as slight pain and stomach disorders formed the majority of the diseases reported by the respondents. Concerning the reason for their choice of health facility, the most common response was friendly workers and quality services (29.3%) followed by proximity (15.8%) and prompt attention (8.1%).

**DISCUSSION**

The results of this study revealed that most employees of the Federal Civil Service in Ibadan were aware of NHIS activities as the majority of them already registered in the scheme. This is not surprising as it is expected that government employees should be aware of all the activities of the government. The awareness of respondents on NHIS is very high, which agrees with studies by Ibiwoye and Adeleke, and Agba. A higher level of awareness about NHIS was found in our study compared with the report by Ibiwoye and Adeleke, but slightly lower than that of Agba. This is probably due to the various awareness campaigns carried out in the media by the federal government regarding the scheme as well as the different population groups i.e. state and federal civil servants.

However, the current participation levels might be a result of reported corruption in the public sector, lack of accountability, poor management of available resources, management and running of schemes by non-professionals, and poor financing by the government. Efforts should be made by all the stakeholders to reduce and remove these reported bottlenecks in the scheme.

The majority of the respondents in this study were currently insured under the NHIS. The level of enrolment contrasts with existing literature that shows low enrolment among the poor to be a problem facing health insurance schemes in low-income countries including Ghana. These contrasting findings might have been as a result of increased education on the benefits of the scheme among the populace. The enrolment level in this study is higher than the 2006 enrolment rate of 31.6% reported by Ibiwoye and Adeleke, indicating almost a three-fold increase in enrolment of Federal civil servants within the period. However, it is to be noted that the majority of unenrolled respondents belonged to the junior level cadre. This is an indication that campaigns to sensitise civil servants need to be increased towards those in these cadres, especially as these cadres usually have civil servants with lower educational qualifications. Hence, they may require repeated and simpler enlightenment strategies.
As shown in this study, the effectiveness and attractiveness for participation in the scheme was somewhat a determinant of people’s decision to enroll or not to participate. This was evident as some respondents said the ineffectiveness of the scheme, the long registration process, lack of money, low level of awareness, and having alternative sources of care as reasons for not enrolling in the scheme. Some other reasons why some respondents did not enroll in the scheme include the high cost of premiums, poor enlightenment about the scheme, and lack of confidence in the scheme. However, as shown by other studies, trust is a sine-quanon for enrolment. Previous studies reported that demand for health care is sensitive to the quality of service provided and that poor households limit their demand for health care when the services are poor quality, but they are less sensitive to changes in quality of service.26,27

As the entry-level qualifications for civil service require some level of education, the health-seeking behaviour of civil servants in this study was remarkably better than that of the general population.26,27 This study showed that the majority of respondents utilised the formal health sector when seeking treatment. This is higher than reported by Onwujekwe28 and Onah.29 These studies reported that only about 30% to 40% of the population sought health care from formal health centres. This is not surprising though as these studies were carried out either wholly or in part within the rural populace in South-eastern Nigeria. The figures reported in this study are however consistent with findings by Ujunwa,30 and other studies that used federal civil servants as their study population. The high proportion of formal health system use reported in this study is considerably higher than what other studies found where values ranged from between 8% and 30%.26,36 This is a further indication of better health-seeking behaviour among federal civil servants than the general population.

In this study, the majority of the respondents agreed that joining the scheme will benefit them and this perception significantly influenced the decision to enroll in the NHIS. Other respondents also believe that the scheme offered some form of financial protection in terms of their health care expenditure and this influenced their decision to enroll in the scheme. Similarly, respondents from other studies reported similar reasons for enrolling in NHIS.37 This was supported by evidence from a study in Rwanda which reported that insurance membership has significantly decreased out-of-pocket spending for sick members and at the same time has substantially improved members’ access to the modern health care system.38 The decision to participate in a given health insurance scheme is influenced by health care expenditure.39 Some respondents in this study expressed their dissatisfaction with the technical processes of the scheme. These included the cumbersome process for the collection of NHIS cards. These issues regarding the technical processes have also rendered the scheme unattractive to some people as stated earlier in this discussion. The price of insurance is another factor influencing the demand for health insurance. In this study, the decision to enroll in the NHIS was significantly influenced by perception about the premium package for the insurance and the registration fee. Respondents who disagreed that the premium package was not too high were significantly more likely to enroll in NHIS. Affordability of premiums or contributions is often mentioned as one of the main determinants of membership in other studies.40,41,45 For instance, in the Nkoranza scheme in Ghana, the estimated cost of contributions varied from 5% to 10% of annual household budgets,40,41 and it was recognised that such contributions could be a financial obstacle to membership. A review of the premium perhaps with regards to work cadres may be an option for consideration going forward to improve participation. The quality of services offered under the scheme goes a long way to boost clients’ confidence in the scheme and make the scheme more attractive to prospective clients. Providing quality health care increases the trust of clients in the health system and insurance in general. Mladovsky and Mossialos,42 from a health system perspective, proposed that trust decreases the likelihood of adverse selection and moral hazard and increases willingness to pay for health care. This include improving behaviour of medical staff to patients such as increased level of politeness, improving quality of care, through strategic purchasing, transparency, and accountability among those managing the scheme; recourse to justice to punish fraud, and increased community participation in the scheme’s management. Finally, to enhance the renewal and retention of members, the NHIS policy should allow flexibility of premium payments to make the insurance scheme more affordable.

Like any cross-sectional study, this study did not attempt to establish a causal relationship between participants’ perceptions and participation in the NHIS scheme. Also, although patients were reassured of the confidentiality data collected and their use for research purposes only, social desirability bias and recall bias were still possible.

CONCLUSION
National Health Insurance Scheme (NHIS) in Nigeria is unarguably an indispensable strategy for ameliorating the poor health indices of the country and reducing...
out-of-pocket expenditure for quality healthcare services. The findings from this study brought to the fore the fact that perception of health insurance among civil servants was varied while participation was high. The majority of the respondents were aware of the benefit packages under NHIS and were enrolled under NHIS. Relevant intervention should be taken to remove bottlenecks to accessing and operating the scheme.

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