International Journal of Community Medicine and Public Health
Anthony EC et al. Int J Community Med Public Health. 2022 Feb;9(2):550-558
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20220211

Original Research Article

Relationship between knowledge, attitude and practice of adults to the National Health Insurance Scheme and their health seeking behaviour in Unguwar soya, Kabong ward of Jos north LGA, Plateau state-Nigeria

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Received: 29 August 2021
Accepted: 12 October 2021

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ABSTRACT

Background: Health seeking behaviour includes all those behaviour associated with establishing and retaining a healthy state, plus aspects of dealing with the departure from that state, which can generally be improved by health care financing and insurance. The objective of the study was to evaluate the knowledge, attitude and practice of National Health Insurance Scheme (NHIS) of the people of Unguwar soya community and its relationship to their health seeking behaviour.
Methods: The study one was a cross sectional community based descriptive study carried out using a multi stage sampling process in Unguwar soya community, Plateau state, Nigeria. An interviewer administered structured questionnaire was utilized and administered to 252 eligible respondents for a period of 3 months (September-November, 2019).
Results: Majority of the respondents were aged 20-29 years (33.7%), females (63.5%), with majority earning above 30,000 naira (25.8%). Most respondents (59.5%) had heard about NHIIS. Most (70.7%) had good attitude towards NHIS and had the desire to enroll under NHIS (70.3%), mostly because of Subsidization of health care cost. Only 13.3% of the respondents are registered with NHIS. The most of the population visit chemist shops when ill (31.2%), however, majority of NHIS enrollees go to hospitals to seek care. None of those enrolled go to health centers, pharmacies, and home of health workers. 90.1% agreed that their health seeking behaviour will improve if enrolled under NHIS.
Conclusions: Index population has inadequate awareness and low practice of the NHIS also with long run impact on the health seeking behaviour of residents of Unguwar soya community.

Keywords: Awareness, Behaviour, Community, Index population, NHIS, Participation

INTRODUCTION

Good health (health being the state of complete physical, mental, social and spiritual wellbeing, and not merely the absence of disease or infirmity) is desirable by every well-meaning Nigerian. It not only contributes to better quality of life but is also absolutely essential for a virile labour force for the creation and maintenance of a nation's wealth.[1,2] Health depends on the perception of individuals because the definition of well-being to

different individuals is similar but different. The future of any nation has a direct relationship with the health of her people as the health of the people is an asset for the growth and development of the nation.[3] Health-seeking behaviours (HSB) are also closely linked with the health status of a nation and thus its economic development.[4] Health seeking behaviour includes all those behaviour associated with establishing and retaining a healthy state, plus aspects of dealing with the departure from that state. It involves first, end-point utilization of formal system, or health care seeking behaviour, and second, the process of illness response or health seeking behaviour.[5] Healthcare seeking behaviour (HSB) has been defined as, "any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy".[6] It includes health behaviour and illness behaviour which includes attention to pain and symptomatology. Health promotion programmes worldwide have long been established on the idea that providing knowledge about the causes of ill health and choices available will go a long way to help promote a positive individual attitude towards a more beneficial health seeking behaviour. However, there is a growing understanding that education and knowledge of an individual regarding a disease is not sufficient to promote a good/positive health seeking behaviour. They also have a dynamic, collective, interactive element. The decision to engage with a particular medical channel is greatly influenced by a variety of factors that include; socio-economic variables, sex, age, the social status of women, the type of illness, access to services and perceived quality of the service.[6] Once a person assumes a sick role, it is observed that he/she seeks medical advice and cooperate with medical experts and seek for medical care. Health seekers in Nigeria, like any developing country, tend to do so based on the resources at the disposal of the family every citizen is entitled to enjoy good health, protection.[7,8] Several other factors are involved in health seeking behaviour among households in Nigeria. These factors include; the severity of the symptoms of illness, socio-cultural influences, distance, place and cost of treatment, income, level of education and quality of health care facilities.[8,9] Health seeking behaviour is preceded by a decision-making process that is further governed by individuals and/or household behaviour, community norms, and expectations as well as provider-related characteristics and behaviour.[10] The National Health Insurance Scheme (NHIS) although responsible for financing of health care for all Nigerians covers <10% of the Nigerian Populations, some studies put it at about 3%, which means that the most (vulnerable) of Nigerians are without any social and financial risk protection.[11,12] The WHO reported that private spending on health as a percentage of total health expenditure was 63.3% and up to 70.2% were reported to be living on less than $1.00 per day, with no insurance coverage.[13-15] WHO states that 100 million people are pushed into poverty each year because they must pay out of pocket for health care they cannot afford.[16] This is likely to affect the ability of average Nigerians to patronize the health system; and thus, their health (care) seeking behaviour, and reflects in their health profile and general quality of their health. A study conducted by Tanimola and Julius on "healthcare-seeking behaviour in Anyigba, North- Central, Nigeria" in 2009 among households in Anyigba, North Central, Nigeria.[17] For the place of first consultation as reported by the respondents; 54.6% sourced drugs from pharmacies and patent medicine stores or visited private health clinic or hospital and 39.0% sought consultation from public health facilities like government hospitals, primary health centers and comprehensive health centers while only 4.5% had traditional healers or spiritualists as first point of consultation. Reasons given by respondents for the choice of first place of consultation include: quality of service (35.5%), proximity (31.4%) and inexpensive treatment (23.1%). Less than a third (29.1%) of the respondents reported that they could not afford spending 500 naira on drugs for an episode of illness, while about half (54.7%) could afford between 500-2,499 naira and only 4.6% could afford to spend between 2,500 and 4,999 naira on drugs for an episode of an illness. The results also showed that a significantly higher proportion of the low income than high income people patronize drug sellers for treatment and higher proportion of the high income people than low income patronize private health facilities. This is similar to finding in another study done among head of households in a rural community in Southern Nigeria.[18]

In 2018, a study done in Ibadan titled factors influencing health seeking behaviour among civil servants in Ibadan Nigeria revealed that a greater proportion of insured respondents (81.6%) used formal healthcare system as opposed to only 13.7% of individuals without insurance.[19] Out-of-pocket payments for health care services limit the poor from accessing and utilizing basic healthcare services.[20-23]

The objective of the study was to evaluate the knowledge, attitude and practice of National Health Insurance Scheme (NHIS) of the people of Unguwar soya and its relationship/impact to their health seeking behaviour.

METHODS

This was a cross sectional descriptive survey, to at a glance appreciate the National Health Insurance Scheme (NHIS) uptake in Jos North, Plateau state.[24] Two hundred and fifty-two questionnaires (252) were administered to eligible and willing respondents in Unguwar soya area at the time of the study in September, 2019.

Study design

There were four hundred and fifty households in the area and systematic sampling technique was employed to enter 20% of the households. This was a cross-sectional descriptive study of households over a period of 3 months (September-November, 2019).

Study site

Unguwar soya community/settlement of the Kabong Ward of Jos North LGA, Jos, Plateau state is the area of interest for study, and was selected following a multi-stage sampling process. Jos North is one of the seventeen local government areas in Plateau state. It is situated in the Jos township city centre 9˚55'N 8˚54E. It has an area of 291 km^2 and a population of 429,300 at the 2006 census with 266,660 (62%) being urban dwellers and 163,134 (38%) rural dwellers.[25] Unguwar soya is a densely populated semi-urban settlement under Kabong (Tudun Wada) ward in Jos North LGA of Plateau state. Its populace is mainly of low and medium literacy levels and socio-economic status. They are a mixed community, made up of people from different ethnic groups both within and outside Plateau state.

Sampling method/Instrument of data collection

A multi-stage sampling technique/process was used. Data was collected using a structured interviewer administered questionnaire, formulated based on the objectives of the study, adapted from the work of Ekwuluo et al.[26]

Statistical analysis

The Data collected was entered and analyzed using the SSPS version 20 computer software. Significant relationship and associations were determined using the chi square (χ^2) test. Associations were drawn for complications and risk factors with a p value of ≤0.05 was taken as statistically significant. Tables and charts were appropriately used.

RESULTS

Socio-demographic outlay of the respondents in Unguwar soya

The socio-demographic outlay of the respondents is presented in Table 1.

Table 1: Socio-demographic outlay of the respondents in Unguwar soya

Socio-demographics (n=252)		Descriptive analysis
Age classification	**Number (%)**	
<20 years	18 (7.1)	Mean: 34.6 standard deviation: 13.9
20-29 years	85 (33.7)	
30-39 years	81 (32.1)	
40-49 years	32 (12.7)	
50-59 years	16 (6.3)	
>60 years	20 (7.9)	
Gender		
Females	160 (63.5)	Mean: 1.6 standard deviation: 0.5
Males	92 (36.5)	
Marital status		
Married	136 (54.0)	Mean: 1.7 standard deviation: 0.9
Single	102 (40.5)	
Widowed	10 (4.0)	
Separated	3(1.2)	
Divorced	1(0.4)	
Educational status		
Secondary	119(47.2)	Mean: 4.0 standard deviation: 1.0
Post secondary	80 (31.7)	
Primary	39 (15.5)	
None	13 (5.2)	
Quranic	1 (0.4)	
Occupation		
Artisan	81 (32.1)	Mean: 3.3 standard deviation: 1.8
None	69 (27.4)	
Self employed	42 (16.7)	
Private sector employee	29 (11.5)	
Civil servant	19 (7.5)	
Farming	8 (3.2)	
Others	4 (1.6)	

Table 2: Economic variables of respondents in Unguwar soya.

Income of respondents classified (in Naira) Number (%)		Descriptive analysis
Below 5000	39 (15.5)	Mean: 1.7 standard deviation: 0.9
5000-9999	42 (16.7)	
10000-14999	45 (17.9)	
15000-19999	21 (8.3)	
20000-24999	18 (7.1)	
25000-29999	22 (8.7)	
Above 30000	65 (25.8)	

Health seeking behavior

The Table 3 shows that treatment is mostly sought from the chemist accounting for about 31.2% while receiving treatment from the hospital accounts for 29.7%.

Table 3: Respondents' choice of first place of consultation.*

Where they receive treatment when ill	No. of persons	Percentage
Health centre	45	8.8
Private clinic	71	13.9
Hospital-	151	29.7
Chemist shop	159	31.2
Pharmacy	54	10.6
Traditional healer/vendors and spiritual healers	10	2.0
Home of health worker	16	3.1
Others	3	0.6
Total	509	100.0

*Respondents ticked more than once

Awareness

Awareness of respondents to the NHIS in Unguwar soya is shown in Figure 1.

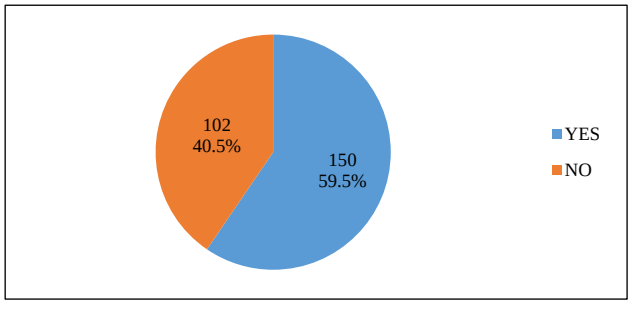

Figure 1: Awareness of respondents in Unguwar soya to the NHIS.

Attitude

Attitude of the respondents towards NHIS is shown in Figure 2.

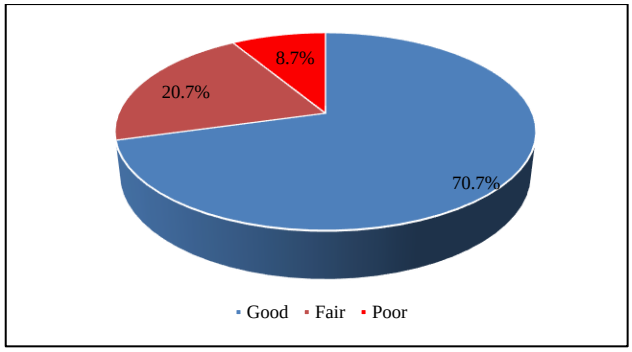

Figure 2: Attitude of the respondents to the NHIS.

Figure 3 shows respondents' desire for NHIS enrolment. Figure 4 shows reason for respondent's desire for NHIS enrolment.

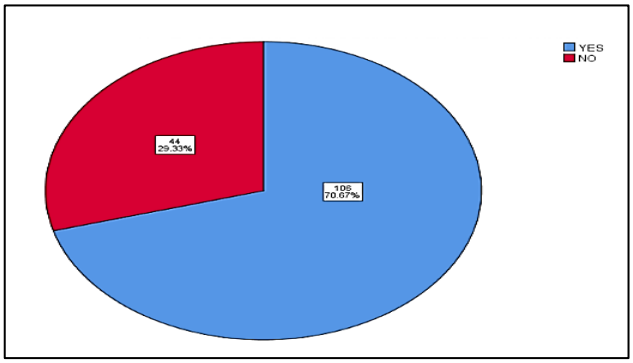

Figure 3: Respondents desire for NHIS enrolment.

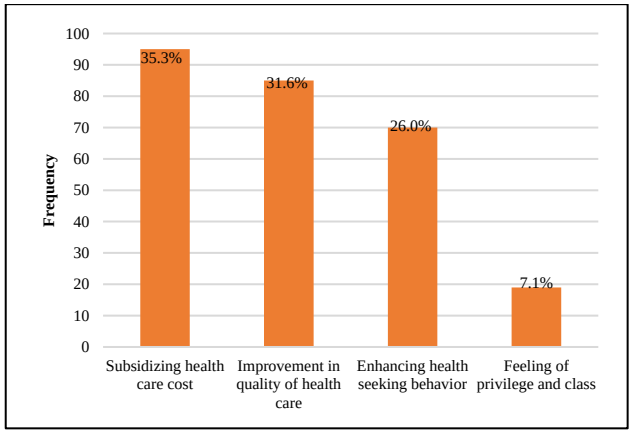

Figure 4: Reason for respondent's desire for NHIS enrolment.

Practice

The Table 4 shows that individuals with high average income of above 30000 naira go to hospitals, chemist shop and then private clinic and pharmacy (in that order) to seek for health care while persons who earn below 5000 naira they go to chemist shop, hospital and then private clinic (in that order) to seek for health care.

Table 4: Relationship between health seeking behavior and average household income in naira.

	Below 5000		5000-9999		10000-14999		15000-19999		20000-24999		25000-29999		Above 30000	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Ys	No	Yes	No
Health centre	10	29	9	33	11	34	6	15	2	16	1	21	6	59
Private clinic	12	27	9	33	16	29	7	14	2	16	7	15	18	47
Hospital	16	23	29	13	12	9	12	9	16	2	13	9	41	24
Chemist shop	26	13	26	15	32	12	12	9	8	10	15	7	40	25
Pharmacy	9	30	8	34	6	39	3	18	4	14	7	15	18	47
Traditional healer/vendor	0	39	1	41	3	42	3	18	0	18	1	214	2	63
Home of health worker	4	35	3	38	4	41	2	19	0	18	1	21	2	63
Others	0	39	0	42	1	44	0	21	0	18	1	21	1	64

*Respondents ticked more than once

Table 5: Relationship between practice of NHIS and health seeking behaviour among registered beneficiaries of NHIS.*

	Yes	No	Total
Health centre	0	20	20
Private clinic	7	13	20
Hospital	15	5	20
Chemist shop	11	9	20
Pharmacy	0	20	20
Traditional healer/vendor (native doctor)	O	20	20
Home of health worker	0	20	20

*Respondents ticked more than once

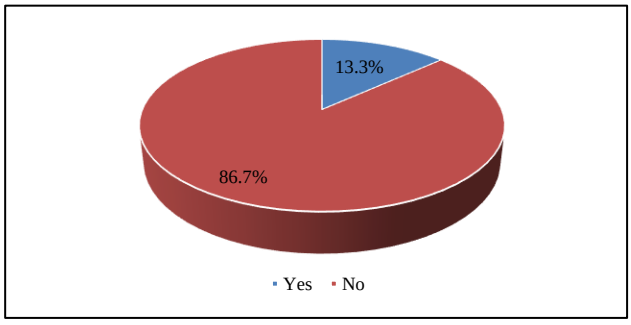

Figure 5: Registered beneficiaries of NHIS in Unguwar soya.

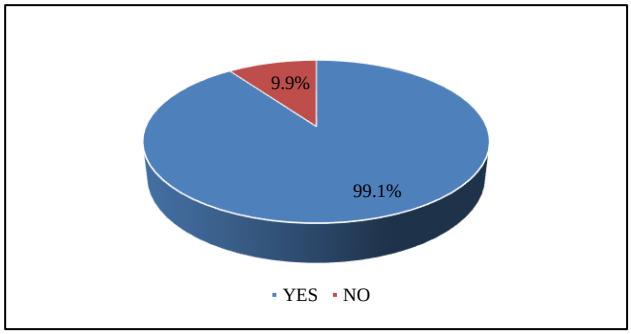

Figure 6: Respondents perception of change in health seeking behaviour if enrolled with NHIS.

DISCUSSION

Socio-demographic characteristics

Two hundred and fifty-two adults between the ages of 18years and greater than 60 years (76 years) were interviewed (Table 1). The mean age was 34.6 years. Most of the adults are within the ages of 20-29 years, followed by those within the age group of 30-39 years which corresponds with the Nigeria demographic survey of 2013 which indicates that Nigeria's population is young, a scenario typical of countries with high fertility rate. About half (47.2%) of the population have attained secondary level of education with about one third (31.7%) of the population attaining post-secondary level of education and about 5.2 % of the population have no form of formal education- Table 1, which does not correspond with the Nigeria demographic survey of 2013 that states that the percentage of men with no education ranges from 1 percent or lower in many states.[27] Majority of the population are artisans accounting for about 32.1%, followed by those unemployed accounting for 27.4% (which corresponds with 21.2% of urban dwellers that are unemployed as reported in the labour force statistics, and then about 7.5% Pare civil servants (Table 1).[28] Our study showed that 58.4% of the population earns less than 19,999- Table 2, which correspond with the 2006 annual

collaborative survey of socio-economic activities in Nigeria which had about 61.8% of people earning below 19,999 at the national level, and about 25.8% of the population earn above 30,000. In terms of marital status, our study showed that 54% of the population was married while 46% were unmarried (Table 1). This has a similar pattern with the 2006 annual collaborative survey of socio-economic activities in Nigeria which had about 56.1% of those married and about 35.5% who were never married.[29]

Health seeking behaviour

From our study, the most of the population visit chemist shops when ill (31.2%), 29.7% visit hospitals, 13.9% visit private clinics and 10.6% visit pharmacy outlets. Few visit traditional healers (2.0%) or home of health workers. This is almost similar to study reported by Tanimola and Julius, 2009 where the most population (54.6%) visited private health clinic, hospitals, pharmacies and patent medicine stores, and 4.5% visited traditional healers/spiritualists.[17] About 88.5% of the index population have out of pocket health expenditure and about 11.1% are under NHIS which has a similar pattern of about 66% in Cameroon and about 69% out of pocket payment and 2% under NHIS as stated in out of pocket payments, catastrophic health expenditure and poverty among households in Nigeria. This indicates that households contribute more to overall health expenditure than government.[30]

Awareness of NHIS

Following the survey done in Unguwar soya amongst respondents, it was found out that 59.5% of the respondents were aware or had heard about the National Health Insurance Scheme, while 40.5% were unaware of the scheme (Figure 1). This reveals that a relatively larger number of residents of Unguwar soya were aware of the NHIS, compared to those who were unaware. Albeit, 40.5% is a significant percentage that is unaware of NHIS. The ratio of aware: unaware was 1.47:1, which means that out of every 1.5 persons who are aware of NHIS, there is 1 person who is unaware of the scheme. It is safe to infer that quite a significant number of the population need to be made aware of the NHIS. This is unlike a similar study conducted amongst health care consumers in Oyo state where as high as 87% of respondents were aware of the program, or in Cross River state where 92.3% respondents were aware of NHIS.[31,32]

In another study done in Osun state "knowledge and attitude of civil servants in Osun state, South-Western Nigeria towards National Health Insurance Scheme", only 40% of respondents were aware of NHIS.[15] This is less than the percentage of aware respondents in our study. Similarly, in a 2016 study done amongst traders in Abakiliki Main Market, South-Eastern Nigeria, only 30.3% of respondents were aware of NHIS.[33] Amongst artisans in Lagos, in another study done, 86.9% were unaware of the NHIS.[34] The reason for our result, which shows an almost equal ratio of those aware to those not aware (1.5:1), compared to awareness levels of other regions, could be related to the unique socio-demographic characteristics of the residents of Unguwar soya; it being a mix of artisans and civil servants; poorly educated and well educated, hence balancing out of awareness and unawareness.

The comparatively high lack of awareness of the NHIS (40.5%) however is unacceptable, especially for an urban setting (similar urban setting in Oyo had an unawareness level of only 13%). This high level of ignorance about NHIS in our study environment could be because of poor sensitization efforts in part of government and stake-holders.

Attitude

Majority of the respondents (70.7%) had a good attitude towards the National Health Insurance Scheme, 20.7% of the respondents had a fair attitude while only 8.7% had a poor attitude towards the insurance scheme (Figure 2). This is in keeping with a study done by Olugbenga- Bello and Adebimpe, 2011 which showed that most of the respondents were willing to participate in NHIS; and also, by a study done by Adewole et al which showed that majority of the respondents agreed that NHIS was better than out-of-pocket payment, it minimizes financial hardship, encourages access to health care, will encourage others and that it is a good idea.[15,35]

This research showed that more of the respondents (70.3%) had the desire to enroll under NHIS while only 29.3% did not have the desire to enroll under the Insurance Scheme, though it was not statistically significant (Figure 3). This is in keeping with a study done by Olugbenga-Bello et al which showed that most of the respondents were willing to participate in NHIS and also a study done by Oriakhi and Onemolease, 2012 which showed that almost 60% of the respondents indicated willingness to participate in Community-based Health Insurance (CBHI), 21.7% were not and 18.9% were unsure.[15,36] Most of the respondents (35.3%) who desired to enroll under NHIS wanted to because of Subsidizing health care cost followed by Improvement in quality of health care, Enhancing health seeking behaviour and only 7.1% of the respondents desired to enroll under NHIS because it would give them a feeling of privilege and class (Figure 4).

This contrasts to a study done by which showed that most of the respondents (51.7%) agreed that NHIS will promote improved health facilities and 39.1% agreed that NHIS reduces the burden of medical bills and also by a study done by Ekwuluo et al, which showed that 47.1% of the respondents agreed that with NHIS, there is improvement in quality of health care by individuals benefitting from the scheme.[26]

Practice

From the study, 13.3% of the index population are registered with NHIS. 30% of these were enrolled between 1-5 years ago and 70% enrolled more than 5 years (Figure 5). This shows that there is no much progress in the NHIS coverage so far. Although Nigeria's National Health Insurance Scheme was established in 1999 to ensure health insurance coverage for the general population, very few people have registered.[27] A 2017 report in United States showed the uninsured rates for adults in poverty and not in poverty were 25.7 percent and 10.5 percent, respectively, which is different from what is obtainable in Nigeria.[37]

From our results in Unguwar soya, 86.7% of respondents depend on out-of-pocket payment for taking care of their health expenditure. This poses great risk of impoverishment and discourages proper health seeking behaviour or visit to formal health care facilities when ill.

Relationship between practice of NHIS and health seeking behaviour; income and health seeking behaviour

From the results, majority of those enrolled under NHIS go to hospitals to seek for health care accounting for about 15 persons, 11 go to chemist shop and 7 go to private clinic to seek for health care (Table 4). None of those enrolled under NHIS go to health centres, pharmacy, traditional healer and home of health care worker to seek for health care. Individuals with high average income of above 30000 naira go to hospitals, chemist shop and then private clinic and pharmacy (in that order) to seek for health care (Table 5). The index research has shown that those enrolled under NHIS have a good health seeking behaviour while those not enrolled have a fair or poor health seeking behaviour. It was also observed that those with low household income also have a fair or poor health seeking behaviour. This could be explained by the fact that cost is a major determinant of health seeking behaviour, according to several other findings.[4.38] The results also showed that a significantly higher proportion of the low income than high income people patronize drug sellers for treatment and higher proportion of the high income people than low income patronize private health facilities. This is similar to finding in another study done among head of households in a rural community in southern Nigeria.[18] In 2018, a study done in Ibadan titled "factors influencing health seeking behaviour among civil servants in Ibadan Nigeria" revealed that a greater proportion of insured respondents (81.6%) used formal healthcare system as opposed to only 13.7% of individuals without insurance. Individuals who have financial security through NHIS, or those who earn high are more likely to visit formal health care facilities, and have better health seeking behaviour than those who do not practice NHIS, or others who earn less. Taking ownership of such health financing strategy by state governments and aligning them with health system reforms will help in addressing the problem of poor quality of care and low utilization of healthcare services by poor households.[30]

Change in health seeking behaviour if enrolled under National Health Insurance Scheme (NHIS)

From our study, 90.1% of respondents agreed/opined that their health seeking behaviour will improve when enrolled under NHIS (following education for those previously unaware of the scheme)- Figure 6. Only 25 (9.9%) said "No"- their health seeking behaviour will never improve even if enrolled under NHIS. This appears to agree with a study done in Ibadan, by Latunji et al where cost constituted the second highest cause of poor health seeking behaviour amongst respondents, second only to proximity issues.[4] In a study done in Ghana by Feny et al, it showed again that cost (and proximity) was the most significant cause of poor health seeking behaviour amongst respondents. According to them, "overall, compared to the uninsured, the insured are more likely to choose formal health facilities than informal care including self-medication".[38] It is reasonable that with the social financial security that the NHIS offers, more persons will visit formal health care centers and experience a general improvement in their health seeking behaviour.

CONCLUSION

From our study, it was demonstrated that respondents have insufficient awareness of NHIS. Uptake in the index community was also shown to be very low as only 13.3% of the respondents are registered with NHIS. High income earners were more likely to have better health seeking behaviour than the low income earners. A strong association was observed between practice of NHIS and good health seeking behaviour. This study will enable Government, NHIS management and stakeholders, and members of the health sectors to appreciate the present state of awareness and uptake of NHIS, especially in the grassroots level and how this impacts on their health seeking behaviour.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Ethical approval with reference number NHREC/211/05/2005/00655 was obtained from the Ethical Committee of the Bingham University Teaching Hospital, Jos Nigeria, while verbal approval was obtained from the Mai Angwa of Unguwan Soya

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Cite this article as: Anthony EC, Abner J, Adediran BT, Ogundeko TO, Bassi AP, Ramyl CMS. Relationship between knowledge, attitude and practice of adults to the National Health Insurance Scheme and their health seeking behaviour in Unguwar soya, Kabong ward of Jos north LGA, Plateau state-Nigeria. Int J Community Med Public Health 2022;9:550-8.