



**International Journal of TROPICAL DISEASE  
& Health**  
4(5): 595-607, 2014



SCIENCEDOMAIN *international*  
[www.sciencedomain.org](http://www.sciencedomain.org)

---

## **Users' Satisfaction with Services Provided Under National Health Insurance Scheme in South Western Nigeria**

**Kayode O. Osungbade<sup>1\*</sup>, Taiwo A. Obembe<sup>1</sup> and Abidemi Oludoyi<sup>1</sup>**

<sup>1</sup>*Department of Health Policy and Management, Faculty of Public Health, College of  
Medicine, University of Ibadan, Ibadan, Nigeria.*

### **Authors' contributions**

*This work was carried out in collaboration between all authors. Authors AO and KOO developed the research questions, reviewed existing literature and designed the methodology. Author AO collected the data and ran preliminary analysis. Author AO wrote the first draft of the manuscript while authors TAO and KOO were responsible for proof-reading and approving the final manuscript.*

**Original Research Article**

**Received 30<sup>th</sup> September 2013**  
**Accepted 18<sup>th</sup> February 2014**  
**Published 14<sup>th</sup> March 2014**

---

### **ABSTRACT**

**Aims:** National Health Insurance Scheme became operational in Nigeria over eight years ago; yet, population coverage is below 20% and healthcare services are provided ineffectively and inefficiently. Satisfaction surveys might be part of useful interventions required to increase universal healthcare coverage and improve optimal access and success of the scheme.

**Study Design:** A cross-sectional, exploratory study.

**Place and Duration of Study:** Federal Secretariat, Ibadan, Nigeria. 4 weeks of the month of July, 2011.

**Methodology:** 380 eligible federal staff completed a self-administered modified SERVQUAL questionnaire, which assessed satisfaction domains of healthcare provider services (competence), staff attitude and waiting time. Clients' experiences were related to a health facility visit in the last three months preceding the survey and assessed on a 5-point Likert scale of "very poor = 1", "poor = 2", "good = 3", "very good = 4" and "excellent = 5". Associations between dependent and independent variables were subjected to Chi-square test and logistic regression at P-value of 0.05.

---

\*Corresponding author: Email: [koosungbade@yahoo.com](mailto:koosungbade@yahoo.com);

**Results:** 201 (52.8%) male and 179 (47.2%) female participated in the study. Their mean age was 42.5±8.0 years. Most frequently health conditions for which services were sought were malaria (52.9%), medical check-up (5.8%) and dental problem (2.9%). 55.6% of participants were satisfied with drug services, 56.2% with healthcare provider services, 77.8% with waiting time and 51.7% with staff attitude. Education and type of health facility were predictors of satisfaction with healthcare provider services. Length of years of enrolment was a predictor of satisfaction with waiting time while length of years and grade level attained in service were predictors of satisfaction with staff attitude.

**Conclusion:** Periodic documentation of experiences of enrollees in relation to satisfaction domains of social insurance is useful as it could help identify and prioritise appropriate interventions required to improve its effectiveness and efficiency.

*Keywords: Users' satisfaction; National health insurance scheme, health care provider services; waiting time; staff attitude; drug services.*

## 1. INTRODUCTION

The National Health Insurance Scheme (NHIS) was introduced in Nigeria as a means to improving access to healthcare services at affordable costs [1]. However, demand for medical care is irregular and this is because it is either determined by illness or risk of death [2]. Therefore, this creates a dire need for everyone to have access to basic medical care which should not be determined by an individual's socio-economic status. This is because the price of medical care, if high, can promote under-utilization of healthcare services and consequent suboptimal health status [3]. In realization of this and in line with global trend, NHIS commenced with the Formal Sector Social Health Insurance Programme in 2005 [4]. This is a social health security system in which the health care of employees in the formal sector is paid for with funds created through a pool of contributions from employees and employers [1]. The contributions cover a prescribed healthcare package for the employee, a spouse and four biological children below the age of 18 years [5].

Despite the introduction of NHIS over eight years ago, current coverage is below 20% of the intended population [6]. Furthermore, healthcare services are yet to be provided to those enrolled in the scheme effectively and efficiently. For example, users have complained about how some healthcare providers charge extra fees for certain services as these are not covered under the benefit package [1]. Another study had also reported unsatisfactory experiences of enrollees in the scheme; these include inadequate drug supplies, poor prescriptions of drugs, poor attitudinal disposition of some health workers, poor registration services, poor referral system and delays in receiving required services [7]. Generally, evidence abounds that waiting time, attitude of health staff and type of health facility are predictors of users' satisfaction with health care services, including NHIS [8,9]. All these combined could make the insured dissatisfied with the scheme and result in poor utilization of services rendered, seeking for healthcare in alternative places and consequent increase in out-of-pocket expenditures.

The above reports depict a dysfunctional social health insurance scheme. These concerns might be partly responsible for the recent findings which showed that over 90% of healthcare services are paid for through direct user fees. For example, 69% of respondents in a study reportedly relied on out-of-pocket payment in order to pay for healthcare services at the time of seeking for medical treatment for themselves or their dependants; whereas 28.4% relied

on a prepayment package (NHIS) and 2.6% borrowed money [10]. The high rate of out-of-pocket payment could have been responsible for alternative health seeking behaviours demonstrated by participants in the study; these include self medication (47.7%), delayed seeking for health care (28.4%), patronage of herbalists (17.1%) and ignoring illness (6.8%) [10]. In view of the above, reversing this trend and scaling up universal healthcare coverage might require periodic assessment of enrollees' satisfaction as part of interventions aimed at improving optimal access and success of the scheme. The findings of such assessment would not only help sustain the interest of current and prospective enrollees but also useful for re-energizing the system by decision or policymakers.

## **2. METHODOLOGY**

A descriptive cross sectional survey was conducted among the staff of the Federal Government Secretariat, Ibadan, southwest of Nigeria in July 2011. A total of 417 staff were found eligible to participate in the study; eligibility criteria were (i) having been enrolled in NHIS for at least one year preceding the study (ii) having accessed service in a NHIS-designated facility at least once in the three months preceding the study and (iii) possession of an enrolment card which was verified by sighting. A sample size of 376 was derived from Leslie–Kish formula ( $n = Z_{\alpha}^2 pq/d^2$ ) for descriptive studies and using 42.5% as the proportion of enrollees in a federal teaching hospital, who were satisfied with NHIS in a previous survey [11]. All the eligible staff were recruited for participation in the study. Ethical approval to conduct the study was obtained from the University of Ibadan/University College Hospital (UI/UCH) Ethical Review Board.

Exit interviews were conducted using a semi-structured satisfaction survey questionnaire adapted from the SERVQUAL questionnaire [12] to assess the satisfaction domains of healthcare provider services (competence), staff attitude and waiting time. The instrument was modified to accommodate other objectives of the study and pretested among enrollee staff of a federal ministry in another location but within the study setting. Internal consistency was validated with Cronbach's  $\alpha$  estimated as 0.82. The questionnaire was self-administered except in about 18% of participants in whom it was interviewer-assisted; clarifications were provided as necessary. Prior to administration of questionnaire, verbal informed consent was obtained from each participant following a detailed description of study procedure; privacy of participants and confidentiality of information was ensured during field work.

Information was collected on socio-demographic characteristics, pattern of utilization of services under the scheme, and experiences with satisfaction domains such as waiting time (defined as time spent between arrival and exit of a client from a NHIS facility), staff attitude (elicited through interactions of a client with all healthcare providers with whom the client reportedly had a contact during a visit), healthcare provider services (how well the health staff performed tasks as perceived by clients) and availability of prescribed drugs or otherwise. With respect to staff attitude and competence, experiences of participants with each professional health staff (doctor, nurse, laboratory scientist and pharmacist) were rated separately. These experiences were related to a NHIS facility visit in the last three months preceding the survey and assessed on a 5-point Likert scale of "very poor = 1", "poor = 2", "good = 3", "very good = 4" and "excellent = 5"; each study participant rated the experiences by ticking the most appropriate option.

## 2.1 Data Analysis

Data analysis was done with SPSS version 16.0. Composite satisfaction scores obtained by each participant in the different domains were computed; for the domains of staff attitude and competence, rated scores for all healthcare providers encountered by a participant were aggregated to a composite score. Means of these scores were calculated per domain. Participants with a score greater than or equal to the mean of a domain were cross-classified into '*satisfied group*' and participants with a score less than the mean as '*dissatisfied group*'. Socio-demographic characteristics and type of healthcare provider patronised were compared with variables related to satisfaction domains using the Chi-square test. The satisfaction domains in which significant findings were found were the ones regressed to adjust for socio-demographic variables in a multiple logistic regression. All analyses were done at  $P = .05$ .

## 3. RESULTS

Out of 417 eligible participants, 380 (91.0%) agreed to be interviewed; 201 (52.8%) and 179 (47.2%) were male and female respectively. Their mean age was  $42.5 \pm 8.0$  years. Majority, 315 (83.3%) were married, 46 (12.2%) were single while 17 (4.5%) were either divorced or widowed. Majority, 326 (85.3%) had a tertiary education and 61.9% reported having 3 to 4 children. Their length of years in service ranged from less than 5 years to over 26 years.

### 3.1 Satisfaction with Availability of Prescribed Drugs and Healthcare Provider Services

Out of 380 completed questionnaire, 333 (87.6%) were found suitable for inclusion in the analysis. One hundred and eighty-five (55.6%) and 187 (56.2%) participants were satisfied with availability of prescribed drugs and healthcare provider services respectively. Despite differential levels of satisfaction with availability of prescribed drugs or otherwise reported across certain socio-demographic characteristics such as age-groups, sex, marital status, levels of education, grade levels and type of healthcare provider, none of the characteristics was found to have significantly influenced satisfaction with drug services (Table 1). Regarding the domain of satisfaction with healthcare provider services, it was found that satisfaction improved with increasing level of education as participants with a tertiary education, 168 (58.5%) were satisfied compared to 16 (42.1%) with at least a primary education ( $P = .05$ ). On binary logistic regression, participants with at least a primary education were half as likely to be satisfied with healthcare provider services than participants with a tertiary education [Odds Ratio (OR) = 0.528; 95% Confidence Interval (CI) = 0.264-1.053] (Table 2). Likewise, clients who sought services at a public health facility, 47 (68.1%) were twice as likely to be satisfied with healthcare provider services compared to those who patronized a private health facility, 140 (53.0%) (OR = 1.987; 95% CI = 1.111 - 3.554).

### 3.2 Satisfaction with waiting time and Staff Attitude

Two hundred and fifty-nine (77.8%) and 172 (51.7%) participants were satisfied with waiting time and staff attitude respectively. With respect to waiting time experiences of participants, satisfaction was low among recent enrollees as 27 (79.4%), 17 (70.8%), 20 (62.5%) and 47 (78.3%) participants who had enrolled for one, two, three and four years respectively were

satisfied compared to 63 (90.0%) who had enrolled for five years ( $P = .04$ ). On multiple logistic regression analysis, participants who had enrolled for one, two, three and four years were about less than half as likely to be satisfied than participants who had enrolled for five years (Table 3). Satisfaction with staff attitude improved with increasing length of years spent in service and increasing level of grade of participants. Participants who had spent between 16 and 20 years in service 46 (74.2%) were four times as likely to be satisfied with staff attitude compared to respondents in other categories (OR = 4.078; 95% CI = 1.758 – 9.461). Likewise, participants on grade levels 11 to 13 (29, 65.9%) and 14 to 16 (16, 76.2%) were respectively twice and thrice as likely to be satisfied with staff attitude compared to participants on grade levels 5 to 10 (OR = 2.419; 95% CI = 1.097 – 5.338 and OR = 3.996; 95% CI = 1.281 – 12.460) [Table 4].

**Table 1. Socio-demographic characteristics and satisfaction with NHIS drug services**

Variables	Total	Satisfied (%)	Dissatisfied (%)	X <sup>2</sup>	P-value
<b>Age group (years)</b>					
25-34	53	23 (43.4)	30 (56.6)	5.49	.06
35-44	103	65 (63.1)	38 (36.9)		
45+	153	85 (55.6)	68 (44.4)		
<b>Sex</b>					
Male	174	100 (57.5)	74 (42.5)	0.54	.46
Female	159	85 (53.5)	74 (46.5)		
<b>Marital Status</b>					
Single	32	14 (43.8)	18 (56.2)	2.08	.35
Married	287	162 (56.4)	125 (43.6)		
Widowed/divorced	13	8 (61.5)	5 (38.5)		
<b>Religion</b>					
Christianity	257	149 (58.0)	108 (42.0)	3.0	.83
Islam	75	35 (46.7)	40 (53.3)		
<b>Level of Education</b>					
Primary & Secondary	38	18 (47.4)	20 (52.6)	1.11	.29
Tertiary	287	162 (56.4)	125 (43.6)		
<b>Family Size</b>					
1-2	68	44 (64.7)	24 (35.3)	3.08	.21
3-4	180	98 (54.4)	82 (45.6)		
5-6	37	21 (56.1)	16 (43.9)		
<b>Grade level</b>					
5-7	97	56 (57.7)	41 (42.3)	5.96	.11
8-10	158	84 (53.2)	74 (46.8)		
11-13	44	26 (59.1)	18 (40.9)		
14-16	21	17 (81.0)	4 (19.0)		
<b>Type of HCP*</b>					
Private	264	149 (56.4)	115 (43.6)	0.4	.53
Public	69	36 (52.2)	33 (47.8)		

\*HCP: Health Care Provider

**Table 2. Socio-demographic characteristics and satisfaction with healthcare provider (HCP) services**

Variables	Total	Satisfied (%)	Dissatisfied (%)	X <sup>2</sup>	P-value	Odds Ratio (OR)	95% Confidence Interval (CI)
<b>Age group (years)</b>							
25-34	53	28 (52.8)	25 (47.2)	0.89	.64		
35-44	103	57 (55.3)	46 (44.7)				
45+	153	91 (69.5)	62 (40.5)				
<b>Sex</b>							
Male	174	101 (58.0)	73 (42.0)	0.53	.46		
Female	159	86 (54.1)	73 (45.9)				
<b>Religion</b>							
Christianity	257	145 (56.4)	112 (43.6)	0.72	.78		
Islam	75	41 (44.7)	34 (45.3)				
<b>Marital Status</b>							
Single	32	16 (50.0)	16 (50.0)	2.78	.25		
Married	287	160 (55.7)	127 (44.3)				
Widowed/divorced	13	10 (76.9)	3 (23.1)				
<b>Family Size</b>							
1-2	68	41 (60.3)	27 (39.7)	1.41	.49		
3-4	180	95 (52.8)	85 (47.2)				
5-6	37	22 (59.5)	15 (40.5)				
<b>Level of Education</b>							
Primary & Secondary	38	16(42.1)	22(57.9)	3.68	.05	0.528	0.264-1.053
Tertiary	287	168(58.5)	119(41.5)			1	
<b>Number of years of enrolment</b>							
5							
4	140		86 (61.4)	54 (38.6)	5.21	.39	
3	60		34 (56.7)	26 (43.3)			
2	32		15 (46.9)	17 (53.1)			
1	24		13 (54.2)	11 (45.8)			
	34		15 (44.1)	19 (55.9)			
<b>Type of HCP*</b>							
Private	264		140 (53.0)	124 (47.0)	5.17	.02	1
Public	69		47 (68.1)	22 (31.9)			1.111-3.554

\*HCP – Health Care Provider

**Table 3. Socio-demographic characteristics and waiting time experiences of participants**

<b>Variables</b>	<b>Total</b>	<b>Satisfied (%)</b>	<b>Dissatisfied (%)</b>	<b>X<sup>2</sup></b>	<b>P-value</b>	<b>Odds Ratio (OR)</b>	<b>95% Confidence Interval (CI)</b>
<b>Age group (years)</b>							
25-34	53	42 (79.2)	11 (20.8)	1.13	.56		
35-44	103	83 (80.6)	20 (19.4)				
45+	153	115 (75.2)	38 (24.8)				
<b>Sex</b>							
Male	174	132 (75.9)	42 (24.1)	0.7	.37		
Female	159	127 (79.9)	32 (20.1)				
<b>Religion</b>							
Christianity	257	197 (76.7)	60 (23.3)	0.73	.39		
Islam	75	61 (81.3)	14 (18.7)				
<b>Marital Status</b>							
Single	32	25 (78.1)	7 (21.9)	0.009	.9		
Married	287	224 (78.0)	63 (22.0)				
Widowed/Divorced	13	10 (76.9)	3 (23.1)				
<b>Level of Education</b>							
Primary & Secondary	287	220 (76.6)	67 (23.3)	2.01	.15		
Tertiary							
<b>Grade Level</b>							
5-7	97	77 (79.4)	20 (20.6)	1.71	.63		
8-10	158	125 (79.1)	33 (20.9)				
11-13	44	31 (70.5)	13 (29.5)				
14-16	21	16 (76.2)	5 (23.8)				
<b>Number of Years of Enrolment</b>							
5	70	63 (90.0)	7 (10.0)	12.2	.04	1	
4	60	47 (78.3)	13 (21.7)			0.4	0.15-1.08
3	32	20 (62.5)	12 (37.5)			0.19	0.06-0.53
2	24	17 (70.8)	7 (29.2)			0.27	0.08-0.86
1	34	27 (79.4)	7 (20.6)			0.43	0.14-1.32
<b>Type of HCP*</b>							
Private	264	209 (79.2)	55 (20.8)	1.42	.23		
Public	69	50 (72.5)	19 (27.5)				

\*HCP – Health Care Provider

**Table 4. Socio-demographic characteristics and staff attitude experiences of participants**

<b>Variables</b>	<b>Total</b>	<b>Satisfied (%)</b>	<b>Dissatisfied (%)</b>	<b>X<sup>2</sup></b>	<b>P-value</b>	<b>Odds Ratio(OR)</b>	<b>95% Confidence Interval (CI)</b>
<b>Age group (years)</b>							
25-34	53	42(79.2)	11 (20.8)	1.13	.56		
35-44	103	83(80.6)	20 (19.4)				
45+	153	115 (75.2)	38 (24.8)				
<b>Sex</b>							
Male	174	132(75.9)	42 (24.1)	0.7	.37		
Female	159	127 (79.9)	32 (20.1)				
<b>Religion</b>							
Christianity	257	197(76.7)	60(23.3)	0.73	.39		
Islam	75	61(81.3)	14 (18.7)				
<b>Marital Status</b>							
Single	32	25(78.1)	7(21.9)	0.009	.9		
Married	287	224(78.0)	63(22.0)				
Widowed/Divorced	13	10 (76.9)	3 (23.1)				
<b>Level of Education</b>							
Primary & Secondary	38	33(86.8)	5(13.2)	2.01	.15		
Tertiary	287	220 (76.6)	67 (23.3)				
<b>Grade Level</b>							
5-7	97	77(79.4)	20(20.6)	1.71	.63		
8-10	158	125(79.1)	33(20.9)				
11-13	44	31 (70.5)	13(29.5)				
14-16	21	16 (76.2)	5(23.8)				
<b>Number of Years of Enrolment</b>							
5	70	63(90.0)	7(10.0)	12.2	.04	1	
4	60	47(78.3)	13(21.7)			0.4	0.15-1.08
3	32	20(62.5)	12(37.5)			0.19	0.06-0.53
2	24	17(70.8)	7(29.2)			0.27	0.08-0.86
1	34	27(79.4)	7(20.6)			0.43	0.14-1.32
<b>Type of HCP*</b>							
Private	264	209(79.2)	55(20.8)	1.42	.23		
Public	69	50(72.5)	19(27.5)				

\*HCP – Health Care Provider



### 3.3 Satisfaction with other Components of NHIS

One hundred and forty-eight (45.3%) participants were satisfied with the process of enrolment while 161 (49.5%) were satisfied with the range of services covered under NHIS (Table 5). With respect to the choice of health care provider, 214 (66.0%) were satisfied while 120 (37.9%) were satisfied with the 10% co-payment plan for NHIS drugs; 166 (58.7%) were satisfied with the NHIS referral system and 129 (44.6%) with the process involved in changing a health care provider.

**Table 5. Satisfaction with other components of NHIS**

Items	Satisfied (%)	Dissatisfied (%)	Total
Registration/ Enrolment process	148 (45.3%)	179 (54.7%)	327
Range of services provided	161 (49.5%)	164 (50.5%)	325
Choice of HCP*	214 (66.0%)	110 (34.0%)	324
Co-payment plan	120 (37.9%)	197 (62.1%)	283
Referral system	166 (58.7%)	117 (42.3%)	283
Change of HCP process	129 (44.6%)	160 (55.4%)	289
Overall Scheme	271 (83.6%)	53 (16.4%)	324

\*HCP – Health Care Provider

## 4. DISCUSSION

Clients' satisfaction surveys are by no means veritable tools required in identifying gaps and challenges in the provision of health services; this is with a view to maintaining quality and ensuring optimal utilization. This study showed varying levels of satisfaction and dissatisfaction with different domains of the National Health Insurance Scheme (NHIS) among the participants. For example, it was found that participants who were satisfied with NHIS drug services were more than the dissatisfied group; however, this difference was not statistically significant but agreed with findings of a similar study [13]. There is significant association between year of enrolment into the scheme and participants' satisfaction with waiting time where participants who registered at the inception of the programme were more satisfied than those who registered recently. This trend was also observed with satisfaction with health care provider services, though not significant.

Clients' satisfaction in certain domains and dissatisfaction in others were also characteristic of findings in many previous similar surveys. For example, a variation in satisfaction levels of domains has been demonstrated where overall satisfaction was highest with patient-provider relationship and lowest with waiting time [13]. Findings of other studies in Ghana, which assessed respondents' perception of the effect of NHIS on quality of care reported that respondents were satisfied with drug availability under the scheme and they also indicated

that the quality has improved [14]. Furthermore, clients were reportedly satisfied with the emergency services received under the National Health Insurance Scheme [15]. In other surveys, respondents had attributed their lack of satisfaction with NHIS drug services to absence of drugs, poor prescriptions and attention which was in agreement with another study [7].

The undulating nature of satisfaction levels in this kind of survey is an indication of ineffectiveness and inefficiency in certain areas of operation of the scheme. Undoubtedly, this situation depicts poor quality of services from the patients' perspective which may portend a loss of confidence and ultimately result in attrition of enrollees. It could also translate to a laxity in dispensation of health care services by providers in the scheme. These are crucial issues requiring proper and targeted interventions if satisfaction with the scheme is to be improved upon. Thus, promoting best practices through specific interventions targeting the domains in which study participants were reportedly less satisfied might improve service delivery and clients' satisfaction. Nonetheless, promoting best practices is not a one-off effort; it requires that the scheme is periodically and holistically evaluated against its objectives; such evaluation usually draws on lessons derived from the management and suggests how the services can be improved for the benefit of future clients. Thus, it is recommended that the prioritized interventions aimed at improving service delivery are subjected to periodic auditing as this would ensure that standards for quality of care are maintained at all times.

Choice of health care providers when left to the discretion of the clients without any significant external influences had been observed to be associated with better clinical outcomes. This study showed significant association between participants' choice of public healthcare facility and satisfaction with services received. This is in contrast to another study done in Ghana where enrollees revealed that they were not pleased with the service provision in a similar healthcare facility and reasons for the dissatisfaction included reports that providers discriminated against them thereby causing delays in accessing medical care and providers issued prescription forms for them to buy drugs outside of the facilities [16]. Dissatisfaction with services received in private healthcare facility by participants in this study might be partly due to its disproportionate overwhelming patronage of about four times the number of clients seeking services in the public healthcare facility. This is brought about by the bureaucratic disposition and organization of public health facilities in the study setting, which discourage patronage and tend to drive clients towards private health facilities where services are perceived to be available promptly and with less cumbersomeness.

The above finding might require a three-pronged approach to resolve. Firstly, provision of services in the public sector needs a re-organization to win the trust and confidence of clients, and consequently improve patronage. Secondly, in-depth analysis of areas of services in private sector where clients were found to be dissatisfied should be undertaken so that appropriate and specific interventions could be designed, prioritised and implemented to improve effectiveness and efficiency. Thirdly, practices which promote transparency such as enactment of standard clinical guidelines, reduction in autonomy of health care providers [17,18], publishing of commendable practices and value based purchasing such as pay-for-performance [19,20] are highly desirable for both sectors; these are various methods of improving performance which have been recommended in developed countries but yet to be explored in the study setting. On-going studies in several healthcare systems have shown modest improvements in specific outcomes and increased efficiency especially with the pay-for-performance initiative. The second Institute of Medicine report specifically recommended pay for performance programs as an "immediate

opportunity" to align incentives for performance improvement [20]. Unarguably, patient empowerment strategies in terms of choice of selection for the health care providers and general knowledge on management of clinical guidelines coupled with regulatory mechanisms such as value based purchasing are certainly very desirable in ensuring continued patient satisfaction. This would undoubtedly help to improve experiences during purchase of health care services and foster improved confidence or inter-personal relationships amongst providers and patients.

Participants on grade levels 14 and above were significantly more satisfied with staff attitude than others; however, this contradicted the findings of another study where most of the senior staff members were less satisfied with staff attitude [21]. Likewise, participants who had spent from 16 to 20 years in service were significantly more satisfied with staff attitude than other age groups. This is similar to the findings reported among staff of Ahmadu Bello University, Zaria where participants with longer length of employment were more satisfied with staff attitude than those with shorter length of employment [11]. These findings could be due to a potential hazard of adverse selection. New employees tend to be younger and 'healthier'; thus, there is tendency for them to seek for greater value for their premiums. Whereas older employees who have been in service for a long a period of time would tend to have some specific health issues; this might lower their thresholds in requesting or bargaining for quality service compared to the newer employees.

Though, the response rate was high and there is a NHIS health facility on site at the study setting, the experiences of enrollees reported in this paper could not be related to a particular type of health facility or health care provider in health systems structure of the study environment. This is due to certain inherent challenges facing the operation of the scheme; such challenges include its infantile stage of operation, paucity of eligible enrollees, mal-distribution of participating health facilities and healthcare providers in public and private sectors, and limited scope of services covered, among others. Consequently, the reported experiences could not be objectively validated through other means such as process observation, health staff interviews and inventory of medicines. Furthermore, homogeneity of the characteristics of study participants in terms of the type of health facilities and health care provider patronised was difficult to achieve. In view of this, the interpretation and use of the data presented should be considered within the context of the study settings. Further research which will combine qualitative and quantitative data is suggested; in addition, targeting such research on specific healthcare providers would enhance the objective assessment.

## **5. CONCLUSION**

From the foregoing, the satisfaction of federal enrollees with healthcare services provided in the NHIS in Nigeria is sub-optimal. Thus, perceived quality of services might be low; this could result in attrition, discourage new enrollees and consequently affect its objective of universal healthcare coverage. As suggested above, concerted and targeted efforts are required to address the specific areas in which users were found dissatisfied; this is with a view to sustaining the enthusiasm of current enrollees and arousing the interest of prospective clients.

## **CONSENT**

All authors declare that written informed consent was obtained from the study participants (or other approved parties) for publication of these findings.

## **ETHICAL APPROVAL**

All authors hereby declare that the study protocol was examined and approved by the appropriate ethics committee and has therefore been conducted in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

Approval was sought and obtained from the University of Ibadan/ University College Hospital (UI/UCH) ethical review board.

## **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

## **REFERENCES**

1. National Health Insurance Scheme: NHIS Handbook. Abuja, Nigeria. 2006. Accessed 23 May 2011. Available: <http://www.nhis.gov.ng>.
2. Arrow KJ. Uncertainty and welfare economics of medical care. *Am Econ Rev.* 1963;53(5):941-973.
3. Collins SR, Davis K, Doty MM, Kris JL, Holmgreen AL. Gaps in Health Insurance. An all-American problem. The Commonwealth Fund Publication. 1963;920.
4. Onoka CA, Onwujekwe OE, Uzochukwu BS, Ezumah NN. Promoting universal financial protection: constraints and enabling factors in scaling-up coverage with social health insurance in Nigeria. *Health Res Policy Syst.* 2013;11:20. doi: 10.1186/1478-4505-11-20.
5. National Health Insurance Scheme: Operational Guidelines. Abuja, Nigeria. 2005. Accessed 23 May 2011. Available: <http://www.nhis.gov.ng>.
6. Lagomarsino G, Garabrant A, Adyas A, Muga R, Otoo N. Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *Lancet.* 2012;380(9845):933-43. doi: 10.1016/S0140-6736(12)61147-7.
7. Onyedibe KI, Goyit MG, Nnadi NE. An evaluation of the national health insurance scheme (NHIS) in Jos, a North-Central Nigerian city. *Glob Adv Res J Microbiol.* 2012;1(1): 005-012.
8. Nabbuye-Sekandi J, Makumbi FE, Kasangaki A, Kizza IB, Tugumisirize J, Nshimye E, et al. Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda. *Int J Qual Health Care.* 2011;23(5):516-23. doi: 10.1093/intqhc/mzr040. Epub 2011 Jul 19.
9. Wouters E, Heunis C, van Rensburg D, Meulemans H. Patient satisfaction with antiretroviral services at primary health-care facilities in the Free State, South Africa--a two-year study using four waves of cross-sectional data. *BMC Health Serv Res.* 2008;8:210. doi: 10.1186/1472-6963-8-210.
10. Oyibo PG. Out-of-pocket payment for health services: constraints and implications for government employees in Abakaliki, Ebonyi State, South East Nigeria. *Afr Health Sci.* 2011;11(3):481-5.
11. Mohammed S, Sambo MN, Dong H. Understanding client satisfaction with a health insurance scheme in Nigeria: factors and enrollees experiences. *Health Res Policy Syst.* 2011;9:20.
12. Francis B. SERVQUAL: Review, Critique, research agenda. *Eur J Mark.* 1996;30(1):8-31.

13. Iloh GU, Ofoedu JN, Njoku PU, Odu FU, Ifedigbo CV, Iwuamanam KD. Evaluation of patients' satisfaction with quality of care provided at the National Health Insurance Scheme clinic of a tertiary hospital in South- Eastern Nigeria. *Niger J Clin Pract.* 2012;15(4):469–74. doi: 10.4103/1119-3077.104529.
14. Blanchet NJ, Fink G, Osei-Akoto I. The effect of Ghana's National Health Insurance Scheme on health care utilisation. *Ghana Med J.* 2012;46(2):76-84.
15. Gobah FK, Zhang L. The National Health Insurance Scheme in Ghana: Prospects and Challenges: a cross-sectional evidence. *Glob J Health Sci.* 2011;3(2):90–101.
16. Dalinjong PA, Laar AS. The national health insurance scheme: perceptions and experiences of health care providers and clients in two districts of Ghana. *Health Econ Rev.* 2012;2(1):13.
17. Dupuis HM. Professional autonomy: a stumbling block for good medical practice. An analysis and interpretation. *Theor Med Bioeth.* 2000;21(5):493-502.
18. Sacchini D, Antico L. The professional autonomy of the medical doctor in Italy. *Theor Med Bioeth.* 2000;21(5):441-56.
19. The Institute of Medicine. "Preventing Medication Errors". The National Academies Press. 2006. Retrieved 2013-07-21.
20. The Institute of Medicine. "Rewarding Provider Performance: Aligning Incentives in Medicare". The National Academies Press. Retrieved 2013-04-15; 2006.
21. Odeyemi IA, Nixon J. Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: a review-based comparative analysis. *Int J Equity Health.* 2013;12(1):9.

---

© 2014 Alisi and Abanobi; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*  
*The peer review history for this paper can be accessed here:*  
<http://www.sciencedomain.org/review-history.php?iid=447&id=19&aid=3998>