

# Assessment of satisfaction and utilization of health-care services by National Health Insurance Scheme enrollees at Aminu Kano Teaching Hospital, Kano, Nigeria

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## Abstract

The National Health Insurance Scheme (NHIS) aims at universal health coverage through access to high-quality health-care to all enrollees. To achieve this goal, it is necessary to incorporate feedbacks from periodic patient-surveys into service improvement plans. This study therefore, assessed satisfaction and utilization of health-care services by enrollees of a Nigerian tertiary hospital. This was a cross-sectional study of 399 respondents randomly selected from enrollees attending the NHIS-clinic of Aminu Kano Teaching Hospital, Kano. Using an interviewer-administered questionnaire, it assessed their sociodemographics, medical history, number of and reason for clinic visits, satisfaction with- access to care, patient-provider relationships and hospital facilities/environment. Respondents' mean age was 38.3 ± 9.2 years and females accounted for 55.9% of respondents. Most respondents (60.4%, 69.8%, 96.0%) were satisfied with the ease of accessing care, waiting-time and hospital facilities/environment respectively. Most respondents (94.8%, 81.1%, 73.3%, 74.5%, 83.1%, 91.1%) were satisfied with their relationship with physicians, nurses, laboratory staff, pharmacists, record officers and other hospital-staff respectively. Overall, 80.5% of respondents were satisfied with the hospital's services. All respondents had visited the clinic at least once in the preceding 12-weeks. Although 49.1% visited for non-communicable diseases, more respondents who were for antenatal-care (followed by non-communicable and communicable diseases) had had ≥ 2 clinic visits (c<sup>2</sup>

=15.5%, df=2, P=0.0001). This study observed a high utilization of and overall-satisfaction with the hospital's services; however, there is a need for service improvement plans to address the challenges of patient access to care and waiting-time.

## Introduction

The National Health Insurance Scheme (NHIS) of Nigeria, a social health insurance scheme is a social health security system in which the health-care of an employee is paid for by both the employer and the employee.<sup>1</sup> The scheme guarantees the provision of a benefit package of health-care services paid from funds created by pooling the contributions of participants resulting in effective sharing of health risks among participants.<sup>2,3</sup> The main objective of the NHIS is to achieve equitable access to health-care in Nigeria towards universal health coverage (UHC); it is as an alternative source of funding for a rapidly extending and increasingly costly health-care system.<sup>4</sup> To meet this objective, regular assessment of indicators of health system performance and quality becomes essential.

Patients' satisfaction is one of the basic objectives of healthcare service provision and often directly related to quality of services provided by healthcare providers.<sup>1</sup> It has been defined as patients' pleasure with offered services,<sup>5</sup> patients' feelings related to consumption of health services and its outcomes,<sup>6</sup> and patients' feeling of pleasure or displeasure regarding the services offered by healthcare providers by comparing them with their expectations,<sup>7</sup> which often results in consumer loyalty and retention.<sup>8</sup> In the current competitive healthcare industry, health service quality is often rewarded by increased profit margin due to increased market share.<sup>9</sup> Certain factors like medical staff attitude, prompt services, effective communication with patients and availability of latest, functioning equipment have been associated with patient's satisfaction.<sup>10</sup> Furthermore, when healthcare services are not utilized, its purpose of reducing morbidity and mortality become negated. Studies have shown that commencement of health insurance increased utilization of non-urgent, and prenatal and antepartum care services in Baltimore USA and Taiwan respectively.<sup>11,12</sup> Similarly, there was a 300% increase in service utilization between 2004 and 2011 in health insurance staff clinic in Kano following commencement of the NHIS in Nigeria.<sup>13</sup> Health insurance reduces out-of-pocket healthcare

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Key words: clinic utilization, health insurance, patient satisfaction, primary care, waiting-time.

Acknowledgements: the authors would like to thank all Clinical Assistants of Family Medicine department.

Contributions: AY, Conception, literature review, design of methodology, data collection, results/statistical analysis, manuscript preparation/editing/review and final authorization of completed; AMJ, Conception, literature review, design of methodology; SA, Results/statistical analysis, manuscript preparation/editing/review and final authorization of completed; BAG, Literature review, design of study, data/statistical, manuscript preparation/editing/review, discussions and final authorization of completed work; AUG, Manuscript preparation/editing/review and final authorization of completed; GCM, Data/statistical analysis, manuscript preparation/editing/review and final approval of completed work.

Conflict of interest: the authors declare no conflict of interest.

Funding: none.

Received for publication: 17 August 2018.

Revision received: 3 October 2018.

Accepted for publication: 5 October 2018.

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Pyramid Journal of Medicine 2018; 1:20

doi:10.4081/pjm.2018.20

expenditure however, high utilization results in long queues and prolonged waiting times.<sup>13,14</sup> Though a previous study assessed satisfaction of enrollees of the staff clinic (a subset of the NHIS clinic) in 2015,<sup>15</sup> no study had assessed patients' satisfaction and utilization of services of the entire hospital under the NHIS. This study became necessary because of the need to incorporate feedback from periodic patient satisfaction surveys into service improvement plans of Aminu Kano Teaching Hospital - a major referral centre located in the most populous Nigerian state inhabited by over 9 million people.<sup>16</sup>

## Materials and Methods

### Study area/population

This was a descriptive cross-sectional study at the NHIS-Clinic of Aminu Kano Teaching Hospital (AKTH), Kano. Kano State lies in North-Western part of Nigeria with Kano city as its capital. AKTH is a tertiary hospital in Tarauni L.G.A. of Kano State. It is a 500 bed-capacity hospital with 17 departments including the department of Family Medicine. The NHIS Clinic is one of the clinics under the Family Medicine department (others are general outpatient-and retainership clinics). The NHIS-Clinic operates from 8 a.m. to 9 p.m. from Mondays to Fridays, and from 8 a.m. to 2 p.m. on weekends and public holidays. It is run by consultant family physicians, residents in family medicine and medical officers. It also caters for primary care clients of the National Health Insurance Scheme (NHIS) and staff of the hospital. The clinic offers outpatient, antenatal, pharmacy, nursing, records, accounts services. It also has a desk office which addresses enrolees' administrative complaints and SERVICOM unit that addresses patients' rights complaints. Deserving patients are referred to the specialist clinics of the hospital. The NHIS services in Aminu Kano Teaching Hospital (AKTH) commenced in late 2005 with fortified resources which supported the existing infrastructures, equipment's and services. As at 2010, just over five thousand (5,739) enrolees were enlisted under the scheme from 24 different Health Maintenance Organisations (HMOs). However, by 2015, over thirty-three thousand (33,313) enrolees were enlisted under the scheme from 38 HMOs.

The study population consisted of all adult NHIS-enrolees attending the NHIS-Clinic of AKTH during the six-week study period (June 1<sup>st</sup> to July 14<sup>th</sup> 2016).

### Selection criteria

NHIS enrolees (18 years and above) who had been enrolled for at least six months before the study and who gave consent were included in the study. Enrolees who were critically ill were excluded.

### Sample size estimation

The sample size was calculated using the formula:  $n = z^2pq/d^2$ ,<sup>17</sup> where  $n$  = the desired minimum sample size (when population is > 10,000),  $z$  = the standard normal deviate, set at 1.96 which corresponds to 95% confidence level,  $p$  = prevalence of health service utilization under the NHIS programme in Oyo state = 58.9%;<sup>4</sup>  $q = 1 - p = 0.411$ , and  $d$  = level of precision usually

set at 5% = 0.05. Therefore,  $n \approx 372$  participants. Ten percent of the calculated minimum sample size (37) was added to account for possible missing or incomplete data. Thus, the study's total sample size was 409 (372 + 37).

### Sampling technique

The study's sampling frame derived from the approximately 175 adult enrolees that attend the NHIS-Clinic daily (from clinic records). This gives a total of 7350 (175×7×6) enrolees over the six-week study period. With a sample size of 409, the sampling interval of 1:18 (409/7350) was obtained. At registration (at the medical records unit, which registers patients for all the clinic sessions) on each day, a list of all adult patients was made in the order they were registered; from this list the first 18 patients were selected, and one (the first participant) was then picked by balloting. Subsequently, every 18<sup>th</sup> patient on the list was selected. Where the 18<sup>th</sup> patient did not meet inclusion criteria, the next (*e.g.* the 19<sup>th</sup>) was selected. An average of 10 participants were recruited daily until sample size was reached.

### Data collection

A designed, structured, pretested questionnaire was administered by trained research assistants (medical doctors) after consent had been obtained from each participant. The questionnaire consisted of three sections viz; sociodemographic data (section 1), satisfaction with healthcare services (access to care, patient-provider relationships and hospital environment in section 2) and respondents' diagnoses on index visit (*e.g.* cardiovascular, diabetes mellitus, gastrointestinal and obstructive airway diseases, etc; section 3).

Respondents were considered senior cadre if they were of grade level 7 and above, whereas those with grade level below 7 were considered junior cadre. Respondents' diagnosis on the index visit was grouped into communicable diseases, non-communicable diseases and antenatal care. Satisfaction was assessed using a Likert scale scoring system. The respondents rated the satisfaction with received services into excellent (5), very good (4), good (3), fair (2) and poor (1). Responses of excellent, very good and good responses were considered satisfied whereas fair and poor were considered dissatisfied. Overall satisfaction with the hospital's services was derived from pooling the responses of excellent, very good and good across the categories of services assessed. Similarly, all responses of fair and poor were also pooled to obtain the overall dissatisfaction.

The respondents' number of hospital visits in the preceding three months were obtained from the respondents and or his/her medical records.

### Data management

All data were entered in Microsoft Excel sheet and were analysed using SPSS Statistical software version 21. Categorical variables such as sex, presenting complaints, family type was reported as absolute numbers and simple percentages while continuous variables such as age, number of dependents were described using measures of central tendency (mean) and measures of dispersion (range, standard deviation) as appropriate. The chi-square test was used to assess the significance of associations between categorical variables such as the number of clinic visits and pattern of presentation, number of clinics visit and socio-demographic characteristics, pattern and determinants of utilization respectively.

### Ethical approval

Ethical approval was obtained from the medical research ethics committee of AKTH. Informed consent was sought and obtained from each participant and all provisions of the Helsinki Declaration were respected.

## Results

### Respondents' sociodemographic characteristics

Of the 409 enrolees recruited, 10 provided minimal data; therefore, data for the remaining 399 respondents (representing a response rate of 97.6%) were used for analysis. Two hundred and twenty-three respondents (55.9%) were female. Their mean age was 38.3 years ( $\pm 9.2$ ), ranging from 18 to 68 years. Table 1 shows that the respondents' modal age-group was 20-44 years (75.2%). Most respondents resided in urban areas 392 (98.2%), were Muslims 365 (91.5%) of the Hausa/Fulani ethnic groups 326 (81.7%) and had tertiary education 240 (60.2%). Most respondents were married 391 (98%), although 7 (1.8%) were single and 1 (0.3%) was a widower. They were from predominantly monogamous families 322 (80.7%); 214 (53.6%) were principal enrolees with 167 (41.9%) of them having 5 dependents. Most respondents 321 (80.5%) were of the senior staff cadre.

### Respondents' satisfaction with healthcare services

Table 2 shows respondents' satisfaction

with various aspects of healthcare services at the hospital.

**Easy access to care:** Most respondents (60.4%, which includes the 15.7%, 20.9%, and 23.8% of respondents who reported excellent, very good and good respectively) were satisfied with hospital's easy access to services.

**Waiting time:** Most respondent (69.8%, including the 13%, 21.6% and 35.2% who reported that waiting time was excellent, very good and good respectively) were satisfied respondents.

**Patient-provider relationship:** With respect to physicians, most respondents 378 (94.8%) were satisfied (this comprises of 43.5%, 33.2% and 18.1% that selected excellent, very good and good respectively); for the nurses, 324 (81.1%) respondents were satisfied (comprising 20.7%, 29.0% and 31.4% of respondents that selected excellent, very good and good respectively); for the laboratory staff, 292 (73.3%) respondents were satisfied (comprising 10.7%, 24.4% and 38.2% that reported excellent, very good and good respectively); for pharmacists, 297 (74.5%) respondents were satisfied (this included 17.5%, 23.5% and 33.5% who selected excellent, very good and good respectively); for the record officers, 332 (83.1%) respondents were satisfied (comprising 21.6%, 30.3% and 31.2% respondents who chose excellent, very good and good respectively); for other hospital staff, 363 (91.1%) of them were satisfied (comprising 25.0%, 38.1% and 28.0% who selected excellent, very good and good respectively).

**Hospital facilities and environment:** most respondents 383 (96.0%) were satisfied with the cleanliness of the hospital environment and facilities (comprising 44.4%, 32.8% and 18.6% who chose excellent, very good and good respectively).

### Overall satisfaction with services

Table 3 shows that 321 (80.5%) respon-

dents was overall satisfied with the services received from the hospital, while the remaining 78 (19.5%) were dissatisfied.

### Number of hospital visits by respondents

Of the 399 respondents, 255 (63.9%) had only one visit to the clinic in the preceding three-months. One hundred and forty-four (36.1%) had two or more visits (Figure 1).

### Reason for hospital visit

Most of the respondents 196 (49.1%) had non-communicable disease as reason for index clinic visit (Figure 2). This was followed by communicable diseases in 185 (46.4%) respondents while antenatal clinic (ANC) was reason for clinic visit in 18 (4.5%) respondents.

### Relationship between number of clinic visits and reason for clinic visit

The proportion of respondents who had at least two visits were more among women who came for antenatal clinic 64 (47.4%) than among those for non-communicable 65 (34.0%) and communicable diseases 15 (20.5%) [ $\chi^2=15.5$ ,  $P=0.0001$ ](Table 4).

### Relationship between sociodemographic variables and number of clinic visits

Table 5 shows the relationship between respondents' sociodemographic variables and the number of clinic visits in the preceding 12 weeks. Though, more visits ( $\geq 2$  visits) were made by dependents 73 (39.5%), principal enrolees with 3 dependents 29 (43.3), senior staff 119 (37.1%), those who took >1 hour to hospital 21 (47.7%), those whose transportation cost to hospital were > ₦400 (11, 50%), and those reported that hospital services were affordable 127(36.3%), none of these sociodemographic variables were significantly associated with the number of clinic visits.

**Table 1. Socio-demographic characteristics of respondents (n=399).**

Characteristic	N.	Percentage
Age group (years)		
< 20	1	0.3
20-44	300	75.2
45-59	93	23.3
$\geq 60$	5	1.2
Sex		
Male	176	44.1
Female	223	55.9
Place of residence		
Urban	392	98.2
Rural	7	1.8
Marital status		
Married	391	98.0
Unmarried	8	2.0
Tribe		
Hausa/Fulani	326	81.7
Non Hausa/Fulani	73	18.3
Family type		
Monogamous	322	80.7
Polygamous	77	19.3
Religion		
Islam	365	91.5
Christianity	34	8.5
Education		
None	2	0.5
Quranic	7	1.8
Primary	28	7.0
Secondary	122	30.6
Tertiary	240	60.1
Enrolee status		
Principal	214	53.6
Dependant	185	46.4
Dependants in household		
1	24	6.0
2	56	14.0
3	67	16.8
4	85	21.3
5	167	41.9
Enrolee cadre		
Junior	78	19.5
Senior	321	80.5

**Table 2. Respondents' satisfaction with different aspects of healthcare at the hospital.**

Aspect of care	Respondents' satisfaction				
	Excellent n (%)	V. good n (%)	Good n (%)	Fair n (%)	Poor n (%)
Easy access to care	377 (15.7)	501 (20.9)	570 (23.8)	415 (17.3)	531 (22.2)
Perception of waiting time	260 (13.0)	431 (21.6)	702 (35.2)	407 (20.4)	195 (9.8)
Patient-Doctor relationship	867 (43.5)	662 (33.2)	362 (18.1)	87 (4.3)	17 (0.9)
Patient-Nurse relationship	412 (20.7)	579 (29.0)	626 (31.4)	275 (13.8)	103 (5.2)
Patient-Laboratory staff relationship	213 (10.7)	487 (24.4)	762 (38.2)	403 (20.2)	130 (6.5)
Patient-Pharmacist relationship	350 (17.5)	468 (23.5)	669 (33.5)	352 (17.6)	156 (7.8)
Patient-Record officer relationship	431 (21.6)	605 (30.3)	622 (31.2)	256 (12.8)	81 (4.1)
Patient-Other staff relationship	299 (25.0)	456 (38.1)	335 (28.0)	77 (6.4)	30 (2.5)
Hospital facility/ Environment	1229 (44.0)	924 (33.1)	528 (18.9)	83 (3.0)	29 (1.0)

## Discussion

The overall satisfaction of patients with health-care services received at the NHIS clinic of AKTH, Kano, northwest Nigeria was high (80.5%). This is similar to findings by Iliyasu *et al.* (83%) for the entire hospital (both insured and non-insured populations),<sup>18</sup> but was higher than reports by Ofili *et al.* in Benin City, south-south Nigeria (71.8%),<sup>19</sup> Olusina *et al.* (75%)<sup>20</sup> and Eze (53%)<sup>21</sup> in Ibadan (southwest, Nigeria) and Enugu (southeast, Nigeria) respectively. Encouragingly, this result was an improvement over an earlier finding of 65.8% obtained at the Staff Clinic (a segment of the study site).<sup>15</sup> Variations in the way services are delivered, study populations and patients' expectations could be responsible for the various satisfaction levels. Patients expectations could be affected by socio-cultural differences and variation in levels of literacy.<sup>22</sup> The cultural milieu and relatively poor state of the local hospitals may have nullified the effect of high literacy level of our study population. High literacy level is associated higher patient expectation and lower satisfaction.<sup>22</sup> Measuring patient satisfaction has many purposes but prominently, such interviews help to evaluate the health care services from the patient's point of view, facilitate the identification of problem areas and help generate ideas towards solving them.<sup>23</sup>

A high proportion of our respondents (60.4%) were satisfied with the ease of accessing care from this centre. This is closely related to the 84% obtained by

Iliyasu and colleagues<sup>18</sup> and in contrast with findings from other studies with lower proportions such as 56% in Benin City,<sup>19</sup> 41.2% in Ibadan,<sup>24</sup> 49% in Ile Ife<sup>25</sup> and 53% in Enugu.<sup>21</sup> In addition, our findings were in contrast with those reported in Uganda<sup>26</sup> where only 13% of those referred to the district hospital attended because of the distance to the referral hospital. This could be because most of our study respondents lived within Kano metropolis thus making the hospital easily accessible. In addition, respondents, over time become familiar with the hospital complexity and the health-care providers which are important determinants of increased satisfaction.<sup>27-29</sup> However, 39.6% of our study respondents were dissatisfied. There is therefore the need for the clinic managers to investigate and address the factors associated with this level of dissatisfaction.

Patient waiting-time is often a major reason for patients' complaints in outpatient clinics.<sup>30</sup> Therefore, patient satisfaction with waiting-time plays a crucial role in the overall satisfaction with services. In this study, waiting-time had 30.2% of dissatisfied respondents; this proportion of dissatisfaction with waiting time may be attributed to the high clientele load of the hospital resulting in over-stretching of the personnel and facilities. Similarly, the appointment system used in many developed countries to allocate patients to different time schedules is yet to be introduced in our setting; this results in patients coming to the hospital long before opening hours and waiting for long periods before being seen. It is there-

fore important to explore, even on a pilot scale, the introduction of appointment system in this clinic. This system has been shown to substantially reduce patient waiting-time at a SERVICOM pilot site at Federal Medical Centre Keffi, Nigeria.<sup>31</sup> This study also found that a high proportion of respondents were satisfied with care provided by doctors, nurses, laboratory staffs, pharmacist, record officers and other health workers. Respondents were particularly satisfied with physician's advice and treatment, explanation and their listening abilities. Good communication between patients and care-providers has been described as the single most important components of good medical practice, not only because it identifies problems quickly and clearly, but it also defines expectation and help to establish trust between the clinician and the patient.<sup>27,32</sup> In contrast, bad communication, particularly, when the doctor appears indifferent, unsympathetic or short of time make most patients dissatisfied.<sup>33</sup> Good doctor-patient relationship is in itself therapeutic and successful consultation with a trusted and respected practitioner have beneficial effects irrespective of the therapy given.<sup>27,33</sup> This might be an important reason for the high level of satisfaction with services of the clinic.

Some of the factors that attract patients to a health facility are the availability of facilities, qualified personnel and clean hospital environment. It can be responsible for recommending a hospital to friends and relatives. In this study, 95.8% of respondents were satisfied with the hospital's neatness

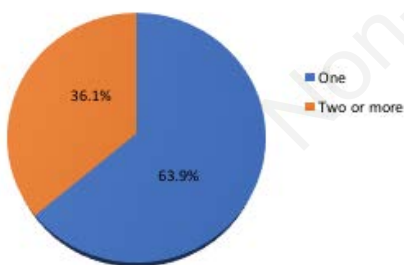


Figure 1. Number of Clinic Visits.

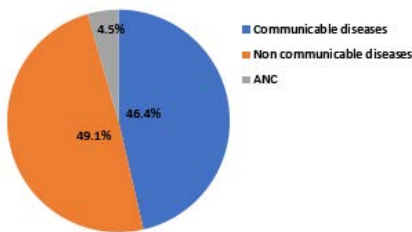


Figure 2. Reason for Clinic Visit.

Table 3. Respondents' satisfaction with healthcare services (Total = 399).

Variable	Satisfied (%)	Dissatisfied (%)
Easy access to services	241 (60.4)	158 (39.6)
Waiting time	279 (69.8)	120 (30.2)
Doctor	378 (94.8)	21 (5.2)
Nurse	324 (81.1)	75 (19)
Laboratory staff	292 (73.3)	107 (26.7)
Pharmacist	297 (74.5)	102 (25.4)
Record officer	332 (83.1)	67 (16.9)
All other staff	363 (91.1)	36 (8.9)
Hospital	383 (96.0)	16 (4.0)
Overall	321 (80.5)	78 (19.5)

Table 4. Relationship between number of and reason for respondents' clinic visits.

Reason for visit	Number of visits			Test statistics	
	1 n (%)	≥ 2 n (%)	Total	$\chi^2$	P value
Communicable diseases	58 (79.5)	15 (20.5)	73 (100.0)	15.5	0.0001
Non-communicable diseases	126 (66.0)	65 (34.0)	191 (100.0)		
ANC	71 (52.6)	64 (47.4)	135 (100.0)		

and cleanliness. This is in contrast with figures from other centres in Africa.<sup>24,34</sup> It is however, comparable with reports by Rubin and colleague<sup>35</sup> and Bain and colleague<sup>36</sup> in some developed countries.

Furthermore, the pattern of health services utilization by our respondents showed that the more frequent users were women seeking for antenatal care (47.4%). A similar finding was obtained in Taiwan where utilization of prenatal and intrapartum care rose after commencement of NHIS.<sup>12</sup> Perceived high-standard of care in a tertiary centre like ours and high cost of antenatal and delivery services in local private hospitals may be responsible for this finding. Also, fewer respondents (34%) with non-communicable diseases were found among those who had  $\geq 2$  clinic visits; this may be because their clinic visits are mostly based on appointment and some of them could have come with communicable diseases during the study period. In contrast, communicable diseases appeared to be more (79.5%) among those who had only one clinic visit over the period of the study. A similar result was observed in Jordan where insurance had a positive effect on utilization of curative care and significantly increased the number of visits per illness episodes.<sup>37</sup> In addition, health-care utilization is influenced by several factors worldwide; these include culture, age of the individual, educational level, gender, economic status, need and availability of the health care services and facilities.<sup>38</sup> However, there were no significant associations between studied sociodemographic variables (enrollee status, number of dependents, enrollee cadre, home distance from hospital, transportation cost, service affordability) and number of clinic visits in this study; one could say that health service utilization by the respondents were based on need which conforms with the aims and objectives of the scheme. Again, all study respondents had visited the clinic in the preceding 3-months. This is in variance with the 61.5% of respondents that utilized a segment of the NHIS-Clinic (Staff-Clinic) 12-weeks before a study in 2012;<sup>13</sup> this suggests an increase in the demand for health-care by the enrollees.

### Policy implication

Increased utilization of the clinic should be used as an avenue for health education as this could result in reducing the risk of communicable and non-communicable diseases. There is a need to develop service improvement plans that will address the issues of waiting-time, ease in accessing care and enhance customer-care through more friendly staff attitude. Periodic patient satisfaction survey should be institutionalized to

provide feedback for continuous quality improvement.

### Limitations of the study

An important limitation of this study was the possibility of social desirability bias because a part of the study questionnaire depended on self-reported behaviour and perception.

### Conclusions

There was a high utilization of and overall satisfaction with services of the clinic. Frequent clinic users (those with  $\geq 2$  visits) were more likely to be women seeking for antenatal clinic services than non-communicable and communicable diseases. Therefore, there is a need for service improvement plans to address the challenges of patient access to care (39.6% of respondents were dissatisfied), waiting time

**Table 5. Relationship between respondents' sociodemographics and number of clinic visits.**

Variable	Number of clinic visits			Test statistic	
	One n (%)	$\geq 2$ n (%)	Total n (%)	$\chi^2$	P value
Religion				1.0	0.3
Islam	236 (64.7)	129 (35.3)	365 (100.0)		
Christianity	19 (55.9)	15 (44.1)	34 (100.0)		
Gender				1.9	0.2
Male	119 (67.6)	57 (32.4)	176 (100.0)		
Female	136 (61.0)	87 (39.0)	223 (100.0)		
Place of residence				FT*	0.4
Urban	246 (63.2)	143 (36.8)	389 (100.0)		
Rural	6 (85.7)	1 (14.3)	7 (100.0)		
Marital status					0.2
Married	247 (63.3)	143 (36.7)	390 (100.0)		
Not married	8 (88.9)	1 (11.1)	9 (100.0)		
Tribe				0.5	0.5
Hausa/Fulani	211 (64.7)	115 (35.3)	326 (100.0)		
Non-Hausa/Fulani	44 (60.3)	29 (39.7)	73 (100.0)		
Family type				2.3	0.1
Monogamous	199 (61.8)	123 (38.2)	322 (100.0)		
Polygamous	56 (72.7)	21 (27.3)	77 (100.0)		
Education				1.9	0.6
Informal	7 (77.8)	2 (22.2)	9 (100.0)		
Primary	18 (64.3)	10 (35.7)	28 (100.0)		
Secondary	73 (59.8)	49 (40.2)	122 (100.0)		
Tertiary	157 (65.4)	83 (34.6)	240 (100.0)		
Enrollee status				1.7	0.2
Principal	143 (66.8)	71 (33.2)	214 (100.0)		
Dependent	112 (60.5)	73 (39.5)	185 (100.0)		
Dependents in household				5.9	0.2
1	19 (79.2)	5 (20.8)	24 (100.0)		
2	40 (71.4)	16 (28.6)	56 (100.0)		
3	38 (56.7)	29 (43.3)	67 (100.0)		
4	51 (60.0)	34 (40.0)	85 (100.0)		
5	107 (64.1)	60 (35.9)	167 (100.0)		
Cadre of principal enrollee				0.7	0.4
Junior	53 (67.9)	25 (32.1)	78 (100.0)		
Senior	202 (62.9)	119 (37.1)	321 (100.0)		
Home to hospital time				2.9	0.1
$\leq 1$ hour	232 (65.4)	123 (34.6)	355 (100.0)		
$> 1$ hour	23 (52.3)	21 (47.7)	44 (100.0)		
Cost of transportation				2.0	0.2
$\leq \text{N}400$	244 (64.7)	133 (35.3)	377 (100.0)		
$> \text{N}400$	11 (50.0)	11 (50.0)	22 (100.0)		
Affordability				0.05	0.8
Affordable	223 (63.7)	127 (36.3)	350 (100.0)		
Not affordable	32 (65.3)	17 (34.7)	49 (100.0)		

\*Fisher exact test

(30.2% were dissatisfied), and increased utilization towards improving the proportion of satisfied enrollees.

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