# PERCEPTIONS AND FACTORS AFFECTING UTILIZATION OF HEALTH SERVICES IN A RURAL COMMUNITY IN SOUTHERN NIGERIA

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#### **ABSTRACT**

Good utilization of health services improves the health status of the population. However, the presence of health facilities alone is not enough to guarantee use as other socioeconomic factors could influence access and utilization. This study assessed the community perceptions and factors affecting the utilization of health services in a rural community in Southern Nigeria. A descriptive cross-sectional study was carried out in Anegbette, a rural community in Etsako Central Local Government Area (LGA) of Edo State, Nigeria in 2011. Data was obtained through a structured, interviewer-administered questionnaire administered to adult respondents in two selected settlements in Anegbette using cluster sampling method. Over three-quarters of respondents, 219 (76.8%) utilized the health facilities. There was no statistical significant association in the utilization of health services with regard to gender (p=0.889, OR=1.04; 0.55-2.00), educational level (p=0.707, OR=1.16; 0.50-2.79) and age (p=0.839, OR=0.94; 0.51-1.72). Community perceptions of poor quality and inadequacy of available services, however, determined largely the level of use of the primary health care facility. The utilization of the primary health facility was good, community perceptions of poor quality and inadequacy of available services were identified barriers to satisfactory use of primary health services. Identified barriers to access and effective use of qualitative health care services in rural communities should be tackled by the relevant Local Government and State health authority.

#### Introduction

Good utilization of health services serves to improve the health status of the population. Studies have shown that the presence of health facilities alone is not enough to guarantee their use as other socio-economic factors could influence access and thus utilization. Low health facility utilization is

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often a reflection of poor quality of services and poor attitude of staff.<sup>1-4</sup>

A study done in a rural community in Plateau State, Nigeria among 360 mothers revealed that high cost of drugs (29.0%), service charges (19.0%), easy access to traditional healers (39.0%) and difficulty in getting transport to a health facility (30.0%) were the major factors that caused non attendance at the health facility.1 Another cross-sectional household survey assessing the utilization of primary health care (PHC) facilities in a rural community in southwest Nigeria showed that 40.0% of respondents who were ill in the preceding six months visited a PHC facility for treatment, while others relied on selfmedication. Education was positively associated with utilization of PHC services.

Maternal and child health (45.4%), prompt attention (23.0%) and appropriate outpatient services (20.5%) attracted respondents to use PHC services<sup>3</sup>. Also, a cross-sectional descriptive study in four rural health centres in Mbeere district, Kenya showed that the proportion of mothers who utilized health services for antenatal and maternity services were 97.5% and 52.0% respectively.<sup>5</sup>

Perceived factors that were identified as barriers to utilization of heath facilities as documented in the Nigerian studies<sup>1,3</sup> and other studies in Ghana<sup>6,7</sup>, Ethiopia<sup>8</sup>, Kenya<sup>5,9</sup>, Tanzania<sup>10</sup>, India<sup>11</sup> and Greece<sup>12</sup> include poor education about when to seek care; poverty; perceived high cost of services; inadequacy of available services such as lack of drugs, basic laboratory services; inadequate number of healthcare workers; poor quality of care; and proximity to the facility.

Age, gender differences, educational status and income level have been identified in some studies to determine frequency of use and comprehensiveness of healthcares packages. <sup>13-16</sup> Identification of such factors and community healthcare priorities vary from community to community and is usually an important step in designing interventions tailored to community needs. <sup>17,18</sup>

## Objective

This study sought to identify community perceptions and factors affecting the utilization of health services in a rural community in southern Nigeria, with a view of designing appropriate interventions for improvement. Our hypothesis was that age, gender and educational status determined significantly the use of health services in the rural community.

## Materials and methods

This descriptive cross-sectional study was carried out in Anegbette a rural community

in Etsako Central Local Government Area (LGA) of Edo State, Nigeria, in 2011. Anegbette is made up of six settlements namely: Imiaze, Unuedor, Imiasabomhele, Imiagele, Ukpeko-Orle and Ugbatto. At the time of the study, the community had a population of 8180 with 1799 women of child bearing age and 3894 children that are less than 15 years respectively. The community has one PHC facility and is also served by a Comprehensive Health Centre in a nearby town, Ekperi, in the same LGA.

The desired sample size was calculated using the Taylor's minimum sample size determination formula in a descriptive crosssectional study<sup>20</sup>,  $N = pq/(E/1.96)^2$  where E= 5% being the magnitude of error tolerable. A prevalence, p = 21% was used for this study which was the proportion of respondents that preferred the health centre for treatment in an earlier study<sup>21</sup> and q=100-p. The minimum sample size was 282 after allowing for a 10% non response rate. However 285 respondents participated in this study. Information on the respondents' socio-demographic status, level of education and the rate of utilization of health services were collected through a semi-structured, interviewer-administered questionnaire.

Respondents were recruited using the cluster sampling technique. Ugbatto and Imiasabomhele were selected out of the six settlements making up Anegbette using simple random sampling technique by balloting. All the adults in the settlements that consented to the study and were present as at the time of survey were recruited for the study.

Data was analysed using the Statistical Package for Social Sciences (SPSS) version 16 and StatCalc 3.0 software. Frequency tables and cross-tabulation were used to present respondents' socio-demographic profiles and level of education. Chi-square test was used

to test association between respondents' socio-demographic characteristics and other variables. Statistical significance was set at p < 0.05, at a 95% confidence interval (CI).

Approval to carry out the survey in the community was obtained from the Local Government Chairman and the Clan Head of the community. Informed verbal consent was obtained from the respondents after explaining the purpose of the survey. The respondents were there after health educated on the benefits of good health seeking behaviour and utilization of health services.

## **Results**

Two hundred and eighty five respondents participated in this survey. The mean age of respondents was  $39.7~(\pm\,16.2)$  years, over two-thirds were female 201 (70.5%), almost half of the respondents had primary level of education 142~(49.8%), majority were Christians 218~(76.5%) and married 207~(72.6%). (Table 1)

Over three-quarters of respondents 219 (76.8%) utilized the health facility in the community. Respondents' view of the factors that adversely affected utilization of health services included inadequate staff, 200 (77.5%), lack of drugs, 157 (60.7%), high cost of services, 134 (51.9%), long waiting time, 122 (42.8%) and incompetent staff, 114 (40.0%). (Table 2)

Over three-quarters of respondents, 233(81.7%) and 218(76.6%) reported that health services could be improved through provision of staff and availability of drugs respectively. Almost half of the participants, 139(48.8%), 133(46.7%) and 126(44.2%) perceived that reduced waiting time, better attitude of staff and opening of the facility for 24 hours daily would improve the services in the healthcare facility respectively. (Table 3) A cross tabulation of selected sociodemographic factors with reported

utilization of health services showed that there was no statistically significant association with respect to gender (p=0.889, OR=1.04; 0.55-2.00), educational level (p=0.707, OR=1.16; 0.50-2.79) and age (p=0.839, OR=0.94; 0.51-1.72) of respondents. (Table 4)

#### Discussion

With respect to the socio-demographic profile of the respondents, over three-quarters of them had at least primary level of education which is in line with the fact that Edo State has one of the highest levels of enrollment rates in education in Nigeria<sup>2</sup>. Also, more than two-thirds of the respondents are married which is similar to findings of the National Demographic Health Survey 2013<sup>22</sup>.

Majority of the respondents were aware of the health facilities in the community and they utilized the available health services provided. Inadequate numbers of staff, lack/high cost of drugs were some of the factors identified as affecting the use of the primary health facility. Availability of skilled health workers and appropriateness of service administered serve to improve quality of health service. 18,23 A key indicator for evaluating performance of primary healthcare centres is access to essential drugs<sup>1</sup>. Lack of drugs and high cost of drugs are factors that can influence the choice of seeking healthcare among respondents, this may be attributed to poverty<sup>4</sup>. Provision of staff and availability of drugs are essential to promote the utilization of the health facilities. Long waiting time and attitude of health care workers were also reported as affecting utilization of the health facility. In most rural communities with PHC facilities, other orthodox options of care may be absent coupled with financial constraints which will make rural dwellers make do with what

**Table 1: Socio-demographic profile of respondents** 

Variable	Frequency(n=285)	Percent
Ago		
Age	11	2.0
< 20	11	3.9
20-39	163	57.2
40-59	67	23.5
60	44	15.4
Gender		
Male	84	29.5
Female	201	70.5
<b>Educational status</b>		
None	43	15.1
Primary	142	49.8
Secondary	94	33.0
Tertiary	6	2.1
Religion		
Christianity	218	76.5
Islam	59	20.7
AfricanTraditionalReligion	8	2.8
Marital status		
Single	38	13.3
Married	207	72.6
Divorced	3	1.1
Separated	7	2.5
Widowed	30	10.5

Table 2: Respondents' perception of factors that affect utilization of health facility

Factor	Frequency* (n=285)	Percent	
Inadequate number of staff	200	77.5	
Lack of drugs	157	60.7	
High cost of drugs	134	51.9	
Long waiting time	122	42.8	
Incompetence of staff	114	40.0	
Attitude of staff	100	35.1	
Facility not open for 24hours	76	26.7	
Long distance to facility	59	20.7	

<sup>\*</sup>Multiple responses

Table 3: Perceived ways of improving services in the health facility by respondents

Variable	Frequency* (n=285)	Percent	
Provision of staff	233	81.7	
Drug availability	218	76.6	
More health care facilities	181	63.6	
Health education of clients	167	58.6	
Reduce waiting time	139	48.8	
Better attitude of staff	133	46.7	
Facility opening for 24hours	126	44.2	

<sup>\*</sup>Multiple responses

Table 4: Socio-demographic determinants and utilization of health services by respondents

Variable	Utilization		Total	Test	OR (95% CI)
	Yes (%)	No (%)	N (%) statistics		
Gender					
				$\chi^2 = 0.02$	1.04
Male	65 (77.4)	19 (22.6)	84 (100.0)	df=1	(0.55-2.00)
Female	154 (75.6)	47 (23.4)	201 (100.0)	p=0.889	
Educational					
level				$\chi^2 = 0.14$	1.16
None	34 (79.1)	9 (20.9)	43 (100.0)	df=1	(0.50-2.79)
≥ Primary	185 (76.4)	57 (23.6)	242 (100.0)	p=0.707	
Age (in years)					
< 40	133 (76.4)	41 (23.6)	174 (100.0)	$\chi^2=0.04$	0.94
≥40	86 (77.5)	25 (22.5)	111 (100.0)	df=1	(0.51-1.72)
				p=0.839	

they have.<sup>24,25</sup> Most of the perceived factors affecting utilization of health facilities are related to accessibility in terms of skilled manpower; cost; quality service and distance. Empowerment of community members through community-based health insurance scheme as evidenced in a study done in Vietnam<sup>26</sup> and absence of man-made barriers such as high cost of services and negative attitude of health workers including the availability of amenities to enable health facilities and the health system to perform optimally<sup>27</sup> will enhance the utilization of health facilities.

Socio-demographic variables such as age, gender and level of education were not statistically associated with utilization of the primary healthcare facility in the community. A

probable reason could be a similar pattern of healthcare seeking behaviour irrespective of these variables, among adults in the population. This was however in contrast to other studies where age, gender differences, educational status and income level were identified as determinants to the use and comprehensiveness of healthcare packages. 3,13-16

In the study, males utilized health services slightly more than females, however, there was no statistically significant difference between gender and level of utilization of health facility, and this was in contrast to findings from a previous study which showed that women used more health services than men due to gender differences in morbidity patterns<sup>13</sup>. This may be due to poverty which is higher

among women and worse in the rural areas with its consequences on health. Another reason could be socio-cultural beliefs and practices in Nigeria, which limit the ability of women to take decisions about their lives, including decision to seek appropriate healthcare. It is expected that women are more likely to report their health problems than men.<sup>2,28</sup>

With the reportedly high level of utilization of health services in the community, further research may show whether the level of maternal and under-five mortality was reduced compared maybe to the national or state average. Reports of other indicators of health status will show if the self reported high utilization translates to improved community health status.

### Conclusion

The utilization of the health facility was good, community perception of poor quality and inadequacy of available services determined largely the level of use of the primary health care services. Inhabitants in the rural community while aware of these services, and having little or no options but to use them, were dissatisfied with identified barriers to effective health delivery in the facility. This study did not show any significant association in the utilization of health services with regards to age group, gender or educational status.

#### Recommendations

We recommend service improvement at the facility level by the Local Government and State Health Authority. Further research could probe into these service barriers and prioritize effective interventions to improve client satisfaction with available services.

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## Conflict of interest

We the authors hereby declare that there is no conflict of interest with respect to this study. References

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