

## Original Research Article

# Comparison of patients' satisfaction with eye care and family medicine services at a primary health centre in Ogun State, Nigeria

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## ABSTRACT

**Background:** Patient satisfaction need to be assessed to enable the health care provider assess the quality of care from the patients' perspective. This study aimed to assess and compare the level of patient satisfaction with the two main health services (primary eye care and family medicine services) at primary health centre (PHC), Pakoto, Ifo local government area of Ogun State, Nigeria.

**Methods:** This study was a descriptive cross-sectional study. A total of 280 adult patients attending the eye clinic and family medicine clinic at the PHC, Pakoto were recruited. A structured, interviewer-administered questionnaire-the patient satisfaction questionnaire (PSQ-III) was used. Data analysis was done using Epi Info 7.0.9.7 version.

**Results:** The average overall mean score was higher in the eye clinic ( $3.7 \pm 0.4$ ) than the family medicine clinic ( $3.5 \pm 0.3$ ) and mean difference was statistically significant ( $p=0.004$ ,  $t=-2.876$ ). Most listed areas of dissatisfaction by respondents in the eye clinic were waiting period (17.2%) and number and visiting days of doctors (19%). However, at the family medicine clinic the most listed areas of dissatisfaction were all aspects of medical care (17.7%), electricity (17.7%) and toilet facilities (14.7%). There was significant association between income and general satisfaction ( $p=0.001$ )

**Conclusions:** Most patients were generally satisfied with medical care at both clinics studied at the PHC, Pakoto. However, areas of dissatisfaction included waiting period, number of doctors and visiting days and provision of basic amenities. The study recommends that doctors should be encouraged to reside at the PHC, Pakoto and there should be provision of good basic amenities.

**Keywords:** Patient satisfaction, Eye care, Family medicine

## INTRODUCTION

The function of health care services is to improve the health status of the population.<sup>1</sup> Improvement in the quality of health care in health institutions is important because patients' expectation of quality health care is increasing.<sup>2</sup> Different characteristics are emphasized in the definition of quality in health care. These include efficiency, efficacy, effectiveness, equity, accessibility,

comprehensiveness, acceptability, timeliness, appropriateness, continuity, privacy and confidentiality. Provision of health education, inclusion of the patients and their families in treatment planning and decision-making, and patient satisfaction are other indicators of quality health care.<sup>2</sup>

Patients' satisfaction has been a major component of measuring health outcomes and quality of care globally

over the last decade.<sup>3</sup> Similarly, health care facilities are also concerned with satisfying the users of its products or services who are referred to as clients, consumers, customers or patients.<sup>4</sup> Satisfaction, like many other psychological concepts, is easy to understand but hard to define. The concept of satisfaction resonates with similar themes such as happiness, contentment and quality of life.<sup>5</sup> Satisfaction is a subjective phenomenon and could be elicited by asking simply how satisfied or not patients may be with service provided.<sup>6</sup> Studies have shown that satisfied patients have a higher likelihood of developing cordial relationships with the health system, resulting to improved adherence, continuity of patronage, better health outcome and improved health status.<sup>7</sup> The indicators for measuring patient satisfaction include waiting time, accessibility and ease of services, affordability of services provided, technical quality of the providers, interpersonal skills, financial status of patients and the physical environment where services are rendered.<sup>8</sup>

In Nigeria, the federal ministry of health (FMOH) provides health services at the primary, secondary and tertiary levels. The PHC serves as the community entry point into the health care system, however, over 60% of patients reportedly bypass the PHC facilities to self-refer to the secondary and tertiary levels in Nigeria.<sup>9,10</sup> Primary prevention of common eye diseases and early detection of sight-threatening eye diseases are possible with the existing primary health care system.<sup>11</sup> Primary eye care is the primary health care approach to prevention of blindness. However, studies have suggested that patients find it difficult to access eye health services in Nigeria especially at the primary level of healthcare which is a critical indicator for patients' satisfaction of health care services.<sup>12,13</sup> Moreover, family physicians (FPs) in Nigeria provide patient-centred, coordinated and integrated, longitudinal and holistic care to patients in the context of their family, cultural and environmental factors.<sup>14</sup> They provide primary care to patients in PHC settings, district hospitals and specialist or teaching hospitals using the principles of PHC (equity, appropriate technology and self-reliance, community participation, intersectoral collaboration and integrated services).<sup>15</sup> Previous studies have shown relatively high level of patients' satisfaction with health care services in Nigeria.<sup>16-18</sup> However, none of these compared patients' satisfaction of eye care and family medicine services in PHC facilities. Therefore, the aim of this study was to assess and compare the level of satisfaction of patients with primary eye care services and family medicine services at PHC, Pakoto, Ifo local government area of Ogun State with a view to improving clinical and other services at the PHC, Pakoto.

## METHODS

This study was a descriptive cross-sectional study conducted at Pakoto model PHC. The study setting is an outstation of the Lagos university teaching hospital

(LUTH) Idi-Araba, Lagos State. It is situated at kilometre 50 Lagos-Abeokuta expressway, within Ifo LGA. The centre was established in 1987. The Eye clinic started officially in December 2006 and caters for the primary eye care needs of the community. The family medicine clinic caters for the family medicine services. The study population comprised of 280 adult patients aged 18 years and above attending the eye clinic and family medicine clinic at the PHC centre, Pakoto. Every consecutive consenting patient attending each clinic were included in the study till the desired number of respondents per clinic was obtained. Patients who were staff at the PHC and patients attending or have attended the other clinics apart from the eye clinic or family medicine clinic being surveyed were excluded. A structured, interviewer-administered questionnaire adopted from a validated questionnaire-the patient satisfaction questionnaire (PSQ-III) was used.<sup>19i</sup>

Data analysis was done using Epi Info 7.0.9.7 version. The frequencies and means were reported in tables. Chi Square, student t-test, and ANOVA were used to determine the association between dependent and independent variables. A p value of less than 0.05 was considered to constitute a statistically significant difference. Ethical approval for this study was obtained from the LUTH health research and ethics committee and the Helsinki declaration was adhered to throughout this study.

## RESULTS

### *Sociodemographic characteristics of respondents*

A total of 280 respondents were interviewed. The mean ages of respondents from the eye clinic and family medicine clinic were  $38.3 \pm 16.2$  years and  $28.1 \pm 9.2$  years respectively. Thirty-seven (26.4%) respondents who attended the eye clinic were between 30-39 years while 89 (63.6%) who attended the family medicine clinic were between 20-29 years. There were 129 (92.1%) females and 91 (65.0%) females in the family medicine and eye clinics respectively. More than half (52.1%) and 38.6% of those who attended the family medicine and eye clinics had tertiary education respectively. Thirty-nine (27.9%) respondents who attended the eye clinic were unskilled while 40 (28.6%) of those who attended the family medicine clinic were students (Table 1).

### *Comparison of mean patient satisfaction between eye clinic and family medicine clinic*

Table 2 showed that the mean satisfaction score for technical quality ( $3.8 \pm 0.6$ ) at the eye clinic was relatively higher than the mean at the family medicine clinic ( $3.5 \pm 0.4$ ). The mean difference was found to be statistically significant ( $p < 0.001$ ). Also, respondents in the eye clinic were more satisfied with interpersonal manner, financial aspect and accessibility, availability and convenience than those in the family medicine clinic.

As regards respondents' opinion of the physical setting of the health centre, the mean satisfaction score was higher among respondents attending family medicine clinic ( $4.5 \pm 0.5$ ) than among those attending eye clinic ( $4.3 \pm 0.7$ ). This mean difference was found to be statistically significant ( $p=0.006$ ,  $t=2.772$ ). Supporting services had the lowest score in the eye clinic ( $3.3 \pm 0.9$ ) while interpersonal manner had the lowest score in family medicine clinic. The average overall score was higher in the eye clinic ( $3.7 \pm 0.4$ ) than the family medicine clinic ( $3.5 \pm 0.3$ ) and the mean difference was statistically significant ( $p=0.004$ ,  $t=-2.876$ ).

#### **Comparison of waiting periods of respondents in the eye and family medicine clinics**

As shown in Table 3, more than two-third (85.7%) of the respondents in the family medicine clinic reported a waiting period of 30 minutes or less while only 30.7% in eye clinic reported the same waiting period. Sixty-one (43.6%) respondents in the eye clinic waited for more than one and half hours before the doctor attended to them while no respondent waited for more than one and half hour at the family medicine clinic.

The mean waiting period in the eye clinic was  $98.6 \pm 85.3$  minutes while the mean at the family medicine clinic was  $19.5 \pm 19.2$  minutes. The mean difference was found to be statistically significant ( $p=0.013$ ,  $t=2.492$ ).

#### **Comparison of perceived areas of dissatisfaction in the PHC by respondents in the two groups**

As shown in Table 4, the most listed areas of dissatisfaction by respondents in the eye clinic were waiting period 10 (17.2%) and the number and visiting days of doctors 11 (19%), other areas of dissatisfaction included number of equipment 6 (10.4%), number of cashiers 6 (10.4%) and pharmacy 6 (9.6%) and furniture at waiting area 5 (8.6%). However, at the family medicine clinic the most listed areas of dissatisfaction were all aspects of the medical care 6 (17.7%), provision of electricity 6 (17.7%) and the toilet facilities 5 (14.7%) at the PHC.

#### **Association between socio-demographic characteristics and general satisfaction with medical care in eye clinic**

Table 5, the respondents in age groups <20 years had the highest mean scores of  $4.5 \pm 0.9$  respectively while respondents in age group 40-49 had lowest mean score of  $3.9 \pm 1.0$ . Males also scored a higher mean than female though no statistical association was seen ( $p=0.338$ ).

The respondents who had tertiary education had the lowest mean score of  $3.9 \pm 0.9$  while those who had secondary education had the highest mean score. Respondents who were professionals scored the highest mean  $4.5 \pm 0.5$  while those who were semi-skilled scored the lowest mean  $3.9 \pm 0.7$ . The association between occupation and general satisfaction was not statistically significant ( $p=0.506$ ). Those respondents who earned no income were most satisfied with medical care. They had a mean score of  $4.5 \pm 0.9$  and there was significant association between income and general satisfaction ( $p=0.001$ ). Though respondents who attended the clinic for more than 5 years had highest mean score of  $4.3 \pm 0.5$  but this had no statistical significance association ( $p=0.290$ ). Respondents who perceived their health status as being very good had the highest mean score among its group. However, there was no statistically significant association ( $p=0.138$ ).

#### **Association between socio-demographic characteristics and general satisfaction with medical care in family medicine clinic**

As shown in Table 6, those respondents within the age groups <20 and 50 years and above had the highest mean scores of  $4.3 \pm 0.5$  though no statistically significant association was seen ( $p=0.740$ ). Females had a higher mean score  $4.2 \pm 0.6$  than males  $3.8 \pm 0.9$ .

Respondents who had tertiary education had the highest mean score  $4.2 \pm 0.7$  while those who had primary and secondary education had same mean 4.1. Those who attended clinic between 1-5 years were least satisfied. All respondents perceived their health status good and mean score was  $4.1 \pm 0.6$ . There was no significant association ( $p=0.898$ ).

**Table 1: Sociodemographic characteristics of respondents in the two groups, (n=140).**

Variables	Eye clinic, (%)	Family medicine clinic, (%)	Df	Test statistics	P value
<b>Age (years)</b>					
<20	21 (15.0)	8 (5.7)	278	$t=-6.406$	<0.001*
20-29	18 (12.9)	89 (63.6)			
30-39	37 (26.4)	21 (15.0)			
40-49	32 (22.8)	18 (12.8)			
50 and above	32 (22.9)	4 (2.9)			
Mean	$38.3 \pm 16.2$	$28.1 \pm 9.2$			
<b>Gender</b>					
Male	49 (35.0)	11 (7.9)	1	$\chi^2=30.630$	<0.001*
Female	91 (65.0)	129 (92.1)			

Continued.

Variables	Eye clinic, (%)	Family medicine clinic, (%)	Df	Test statistics	P value
Educational status					
Primary	31 (22.1)	12 (8.6)	3	18.721	<0.001*
Secondary	46 (32.9)	55 (39.3)			
Tertiary	54 (38.6)	73 (52.1)			
No formal education	9 (6.4)	0 (0.0)			
Occupation					
Unemployed	21 (15.0)	13 (9.3)	5	7.392	0.195
Student	29 (20.7)	40 (28.6)			
Unskilled	39 (27.9)	32 (22.8)			
Semi-skilled	10 (7.1)	7 (5.0)			
Skilled	26 (18.6)	37 (26.4)			
Professional	15 (10.7)	11 (7.9)			

\*Statistically significant at  $p < 0.05$ .**Table 2: Comparison of mean patient satisfaction between eye clinic and family medicine clinic, (n=140).**

Variables	Eye clinic	Family medicine clinic	Df	T value	P value
Technical quality	3.8±0.6	3.5±0.4	278	-4.896	<0.001*
Interpersonal manner	3.7±0.6	3.3±0.4	278	-6.887	<0.001*
Communication	4.1±0.6	3.9±0.5	278	-1.709	0.089
Financial aspects	3.6±0.8	3.4±0.6	278	-3.425	0.001*
Time spent for patient	3.7±1.0	3.6±0.8	278	-1.311	0.191
Accessibility, availability and convenience	3.4±0.5	3.6±0.4	278	4.376	<0.001*
Supporting services	3.3±0.9	3.7±0.9	278	4.358	<0.001*
Opinion of nurses and nursing care	4.2±0.7	4.5±0.5	278	0.203	0.839
Physical setting of health centre	4.3±0.7	4.5±0.5	278	2.772	0.006*
Overall mean satisfaction	3.7±0.4	3.5±0.3	278	-2.876	0.004*

\*Statistically significant at  $p < 0.05$ **Table 3: Comparison of waiting periods of respondents in the eye and family medicine clinics, (n=140).**

Waiting period (Hours)	Eye clinic, (%)	Family medicine clinic, (%)	Df	Test statistics	P value
≤ ½	43 (30.7)	120 (85.7)	278	t=2.492	0.013*
>½-1	32 (22.9)	17 (12.1)			
>1-1½	4 (2.8)	3 (2.2)			
>1½	61 (43.6)	0 (0.0)			
Mean (minutes)	98.6±85.3	19.5±19.2			
Range (minutes)	5-240	5-90			

\*Statistically significant at  $p < 0.05$ **Table 4: Comparison of perceived areas of dissatisfaction in the PHC by respondents in the two groups.**

Areas of dissatisfaction	Eye clinic, (n=52)	Family medicine clinic, (n=31)
All areas	1 (1.7)	6 (17.7)
Toilet facilities	3 (5.2)	5 (14.7)
Waiting period	10 (17.2)	2 (5.9)
Environment	0 (0.0)	3 (8.8)
Electricity	1 (1.7)	6 (17.7)
Staff impoliteness	1 (1.7)	2 (5.9)
Furniture at waiting area	5 (8.6)	3 (8.8)
Hours of service and emergency	3 (5.2)	1 (2.9)
Cost of service	2 (3.4)	1 (2.9)
Number of cashiers	6 (10.4)	4 (11.8)
Pharmacy	6 (10.4)	1 (2.9)
Equipment	6 (10.4)	0 (0.0)
Doctor's office	2 (3.4)	0 (0.0)
Number and visiting days of doctors	11 (19.0)	0 (0.0)
Patient-doctor relationship	1 (1.7)	0 (0.0)
Total responses*	58 (100.0)	34 (100.0)

\*Multiple responses allowed.

**Table 5: Association between socio-demographic characteristics and general satisfaction with medical care in eye clinic.**

Characteristics	SA	A	U	D	SD	Total	%	Mean	Df	P value*
Age (years)										
<20	15	4	0	2	0	21	15.0	4.5±0.9	139	0.338
20-29	6	10	0	2	0	18	12.8	4.1±0.9		
30-39	13	16	5	3	0	37	26.4	4.1±0.9		
40-49	11	13	4	3	1	32	22.9	3.9±1.0		
50 and above	14	13	3	2	0	32	22.9	4.3±0.9		
Gender										
Male	23	16	5	5	0	49	35.0	4.2±1.0	138	0.853**
Female	36	40	7	7	1	91	65.0	4.1±1.0		
Educational status										
Primary school	15	11	0	4	1	31	22.1	4.1±1.1	139	0.051
Secondary school	26	16	2	2	0	46	32.9	4.4±0.8		
Tertiary institution	15	25	8	6	0	54	38.6	3.9±0.9		
No formal education	3	4	2	0	0	9	6.4	4.1±0.8		
Occupation										
Unemployed	8	8	4	1	0	21	15	4.1±0.9	139	0.506
Student	14	8	3	3	1	29	20.7	4.1±1.2		
Unskilled	21	11	2	5	0	39	27.9	4.2±1.0		
Semi-skilled	1	8	0	1	0	10	7.1	3.9±0.7		
Skilled	7	14	3	2	0	26	18.6	4.0±0.8		
Professional	8	7	0	0	0	15	10.7	4.5±0.5		
Monthly income (Naira)										
<18,000	18	14	4	1	0	37	26.4	4.3±0.8	139	0.001
18,000	6	10	1	1	1	19	13.6	4.0±1.1		
>18,000	6	21	5	7	0	39	27.9	3.7±1.0		
No income	29	11	2	3	0	45	32.1	4.5±0.9		
How long been attending PHC (years)										
<1	20	14	3	3	0	40	28.6	4.1±0.1	139	0.290
1-5	12	6	1	4	1	24	17.1	4.2±0.8		
>5	27	36	8	5	0	76	54.3	4.3±0.5		
Perception of health status										
Good	54	47	10	9	1	121	86.4	4.2±0.9	139	0.138
Bad	5	9	2	3	0	19	13.6	3.8±1.0		

SA-Strongly agree, A-Agree, U-Uncertain, D-Disagree, SD-Strongly disagree, p-ANOVA, \*\*p-value based on independent t-test

**Table 6: Association between socio-demographic characteristics and general satisfaction with medical care in family medicine clinic.**

Characteristics	SA	A	U	D	SD	Total	%	Mean	Df	*P value
Age (years)										
<20	2	6	0	0	0	8	5.7	4.3±0.5	139	0.740
20-29	26	56	4	3	0	89	63.6	4.2±0.7		
30-39	4	14	2	1	0	21	15.0	4.0±0.7		
40-49	3	13	2	0	0	18	12.8	4.1±0.5		
50 and above	1	3	0	0	0	4	2.9	4.3±0.5		
Gender										
Male	2	6	2	1	0	11	7.9	3.8±0.9	138	0.080**
Female	34	86	6	3	0	129	92.1	4.2±0.6		
Educational status										
Primary School	4	6	1	1	0	12	8.6	4.1±0.9	139	0.898
Secondary school	11	41	2	1	0	55	39.3	4.1±0.5		
Tertiary	21	45	5	2	0	73	52.1	4.2±0.7		
No formal education	0	0	0	0	0	0	0	0.0		

Continued.



Characteristics	SA	A	U	D	SD	Total	%	Mean	Df	*P value
Occupation										
Unemployed	4	9	0	0	0	13	9.3	4.3±0.5	139	0.572
Student	12	22	5	1	0	40	28.6	4.1±0.7		
Unskilled	7	25	0	0	0	32	22.8	4.2±0.4		
Semi-skilled	1	5	0	1	0	7	5	3.9±0.9		
Skilled	9	23	3	2	0	37	26.4	4.1±0.7		
Professional	3	8	0	0	0	11	7.9	4.3±0.5		
Monthly income (Naira)										
<18,000	3	20	0	0	0	23	16.4	4.1±0.3	139	0.953
18,000	9	19	2	1	0	31	22.1	4.2±0.7		
>18,000	8	22	1	2	0	33	23.6	4.1±0.7		
No income	16	31	5	1	0	53	37.9	4.2±0.7		
How long been attending PHC (years)										
<1	7	21	4	0	0	32	22.9	4.2±0.6	139	0.686
1-5	8	19	1	1	0	29	20.7	4.1±0.7		
>5	21	52	3	3	0	79	56.4	4.2±0.6		
Perception of health status										
Good	36	92	8	4	0	140	100	4.1±0.6	139	0.843
Bad	0	0	0	0	0	0	0	0		

SA-Strongly Agree, A-Agree, U-Uncertain, D-Disagree, SD-Strongly Disagree, \*p value based on ANOVA, \*\*p value based on independent t-test.

## DISCUSSION

The demand for quality health care by patients is increasing. Health care providers need to improve on the quality of care. Patients' satisfaction is highly subjective but it remains an important tool used to assess quality of service since patients are the users of these services. Determining patients' satisfaction allows evaluation of health services from the patient's perspective. The patient is the best judge and can effectively provide the necessary feedback needed for improvement of health services. Psychological, social-economic and cultural factors may affect patients' use of health services and they may influence patients' satisfaction.

The present study was carried out to assess satisfaction of patients comparatively between eye care and family medicine services at the PHC, Pakoto. When respondents were simply asked if they were satisfied with medical care received, majority of the respondents in the two clinics agreed that they were satisfied with the medical care received. The two clinics surveyed were noticed to have the same mean satisfaction score for this particular question. However, when the different aspects of medical care were assessed, the overall mean satisfaction score reduced. This is similar to what Al-Eisa et al.<sup>20</sup> found in their study. The general level of satisfaction was high but when questions which dealt with more detailed and specific aspects of care were assessed a lower level of satisfaction was seen. Hence, patient satisfaction cannot be assessed by simply asking if patient was satisfied or not with services received.

The lower overall mean satisfaction score in the family medicine clinic compared to the eye clinic was not expected. The higher mean overall satisfaction score seen

in eye clinic may be due to eye care being a specialized health care and people generally regard vision as very important. Any improvement in vision is well appreciated hence this may influence patients' satisfaction. Also, younger patients were seen more at the family medicine clinic than the eye clinic and this may cause some bias. Young people may be less likely satisfied than older people who tend to be more appreciative and satisfied. Though the overall mean score was higher at the eye clinic it was however lower than the mean found by Ziaei et al and Al-Eisa et al in their studies. This may be due to the less detailed questionnaire (PSQ 18) used in their studies.<sup>20,21</sup>

More females were seen at the two clinics surveyed but the number of female respondents was higher at the family medicine clinic than the eye clinic. This is similar to what Campbell et al found in their study. However, other studies done in India and Nigeria had more males than females.<sup>20,22,23</sup> Women readily seek and use the health facilities more for themselves and their children.<sup>20</sup> Majority of the respondents who attended both clinics had formal education and this may be due to the growing education level in the country especially in the south western part of Nigeria. Also, the study was carried out at a PHC in a semi-urban area.

In this present study, patient satisfaction varied among the different aspects examined in the questionnaire. High mean scores were obtained for physical setting in both clinics and this was similar to what Ziaei et al found in their study.<sup>21</sup> Physical setting of the hospital in terms of cleanliness, and provision of basic amenities also contribute to health care. Opinion of nurses and nursing care also had high mean score but more satisfaction score was obtained at the family medicine clinic because the

patients had more contacts with the nurses at this clinic than the eye clinic. Accessibility, availability and convenience subscale had the lowest mean score at the eye clinic while interpersonal manner had the lowest mean score in family medicine clinic. This is different from what Ziaei et al found in their study, where interpersonal manner had the highest mean score while accessibility and convenience had the lowest mean scores.<sup>21</sup> In the study conducted by Al-Eisa et al physicians' relationship with patient had the highest score while physicians' medical skills had the lowest score.<sup>20</sup> Respondents in the eye clinic were more satisfied with technical quality, interpersonal manner, communication and financial aspect. These aspects of health care may have contributed to the higher satisfaction score observed in respondents from the eye clinic. The respondents from the family medicine clinic are also seen by nurses for consultation and this may be responsible for the lower mean satisfaction score especially for technical quality and interpersonal manner. Mean score in communication was high at the eye clinic and this shows that the patients understood explanations given to them by the doctors. Supporting services such as pharmacy services are areas of concern in the eye clinic at the PHC, Pakoto. Inadequate provision of drugs at the pharmacy may be responsible for the score observed. Patients assume that drugs available at the hospital are genuine and easier to purchase. So when these drugs are not available, the patients may not be satisfied. Most respondents in the two clinics found the location of the PHC convenient and easily accessible because the health centre is easily accessible by road and cost of transportation is affordable.

Although there are discrepancies in different studies on the effect of socio-demographic characteristics on patients' satisfaction, this study made an attempt to establish the effect of these characteristics on patients' satisfaction.<sup>20,21,23,24</sup> This study showed that age, educational status, occupation did not influence patients' satisfaction. However, it showed that patients' satisfaction in eye clinic was indirectly related to income i.e., as income decreased the level of patient's satisfaction increased. The reason for this may be due to high appreciation of the low cost of service by those patients who are low-income earners. The general mean satisfaction among the different income groups at the family medicine clinic were almost the same and no significant association was seen. Eighteen thousand naira was used as benchmark in this present study because it is the minimum wage being in Ogun State and Nigeria as at the time of data collection. Among the respondents from the eye clinic, those less than twenty years appear to be most satisfied. However, they made up fifteen percent of the respondents and no significant association was seen. This is similar to findings at the family medicine clinic. Professionals at the eye and family medicine clinics had the highest mean general satisfaction score in the respective clinics because educated people may be more aware of the limits of the primary health care. Hence, it may be assumed that these respondents are more satisfied

but one must be careful in such assumption as this set of respondents constitute about a tenth of the respondents in these clinics. Moreover, no significant association was seen between occupation and general satisfaction score in the two clinics. Those who viewed their health status as good were more satisfied at the eye clinic than those who did not, though the association between health status and general satisfaction was not significant. This is different from Ziaei et al study where an association was seen.<sup>21</sup>

There are varying areas of dissatisfaction seen in this study. In the eye clinic, these areas included number and visiting days of doctors, waiting period and area, number of cashiers, equipment, emergency services and number of hours of consultation. In the family medicine clinic, areas of dissatisfaction included electricity supply, toilet facilities and number of cashiers. This is similar to what Sudhan et al reported in their study where respondents were mainly dissatisfied with waiting period, cleanliness and toilet facilities.<sup>26</sup> Respondents at the eye clinic were not happy with the number of doctors attending to patients at the clinic. One or two doctors with an optometrist attend to patients on a weekly basis. There is an ophthalmic nurse present at the clinic every day except weekends. Hence these patients are not provided with prompt eye care whenever they desire it.

Waiting time is an important area of dissatisfaction in the eye clinic which is similar to another study in Nigeria.<sup>22</sup> Waiting time is an important factor used in assessing quality of health care. It is very important to the patients and the less time patients spend in the hospital the happier the patients feel. Patients cannot afford to spend needless hours in the hospital. In this present study, patients experienced long waiting time at the doctor's office, record office, cashier's office, and pharmacy. Though overall, most patients are satisfied with medical care received in this study however they desired improvement in waiting time. The mean waiting time at the eye clinic was longer compared to family medicine clinic. More than two-third of the patients at the eye clinic experienced long waiting time greater than 30 minutes while only 14.3% of patients experienced same at the family medicine clinic. The waiting period in the family medicine clinic is better than the proportion reported in an earlier study by Campbell et al where 33.1% waited for 3-4 hours to access services at the same centre. This shows a slight improvement in waiting time compared to the findings of Campbell et al Reducing waiting time to 30 minutes was viewed by patients as an important factor in a study carried out in rural Bangladesh.<sup>22,27</sup> Most patients experienced long waiting time while waiting to see the doctor at the eye clinic, similar to what Ademola-Popoola et al noticed in their study.<sup>23</sup> Waiting time is one of the main reasons for dissatisfaction in patients. The major reason for the long waiting period at the eye clinic is late arrival of doctors from the Lagos university teaching hospital Idi-Araba due to traffic congestion and distance. The resident doctors attending to patients at the eye clinic travel all the way from Idi-Araba to Pakoto (a distance of

58 kilometres) to see these patients and usually do not get to the health centre on time because the journey takes about two hours. Most of the patients attending the health centre depend on daily income hence desire not to wait too long at the health centre. Moreover, this may also discourage them from utilizing the eye clinic at the health centre. Health care providers need to realize the importance of reduced waiting time in the hospital because patients may be discouraged from utilizing such facilities. At the family medicine clinic, the family medicine residents also arrive late because they come from Idi-Araba. However, the nurses attend to the patients before the doctors arrive and those who need further care would wait for the doctor. These nurses use a treatment manual specifically designed for them to assist in managing patients before the doctors arrive. At other areas such as record and registration point, long waiting time is due to the presence of reduced number of record officers available and hospital bureaucracy.

### Limitations

The responses of patients in this study may depend on patients' personality and mood. The ways one patient may strongly agree, agree, disagree or strongly disagree with the worded items in the questionnaire may differ and this will affect the patients' satisfaction.

### CONCLUSION

This study concludes that most patients were generally satisfied with medical care at both clinics studied at the PHC centre, Pakoto. Patients from the eye clinic were more satisfied with technical quality, interpersonal manner, communication, financial aspect and time spent with doctor. Waiting period was longer in the eye clinic than the family medicine clinic and this was a major cause of dissatisfaction. Other areas of dissatisfaction included number of doctors and visiting days, number of cashiers, toilet facilities and electricity supply. The only socio-demographic characteristic of respondents at the eye clinic found to be associated with general satisfaction was income. Assessment of patients' satisfaction is important in improving the quality of health care.

### Recommendations

Ophthalmic resident doctors should be encouraged to reside at the PHC, Pakoto to avoid late arrival at the health centre. There should be provision of basic amenities such as electric generating set as alternative power supply and clean toilet facilities at the PHC by the government. Training and re-training of all staff at the PHC, Pakoto should be done periodically; in patient-medical staff relationship especially at the family medicine clinic should be improved upon. Periodic evaluation of patient satisfaction is necessary for continuous improvement in eye care and family medicine services especially from the patient's perspective.

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