

# Eye Care Seeking Behaviours of Patients in Rural Cross River State, Nigeria

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## Abstract

The major causes of blindness in Cross River State, Nigeria are refractive error, glaucoma and cataract. The World Health Organization had estimated that about 145 million people have significant distance refractive errors and at least 13 million of these were children. About 80% of these causes of blindness are avoidable at the primary level of care. The aim of this study was to determine factors responsible for the eye care seeking behaviour of patients in three rural communities of Cross River State, Nigeria. A 39-item structured questionnaire was used to interview 290 patients who visited selected primary health centers (PHC). Most patients, 40.7% were 20 – 29 years and 44% walked to the center. Reasons for clinic visit included, fever, 44.5%; immunization, 30.7%; antenatal care, 13.1%; and eye care, 4.5%. About 51% had a history of eye problems, of these; only 29.7% visited a hospital while 42% visited either a patent medicine vendor or traditional healers. About 49% had family history of spectacle use, of these; 34.5% got glasses from lay eyeglass sellers, 33.8% from hospital/eye clinic, 25.4% from outreach eye screening, and only 4.2% from PHC. Due to reported unavailability of eye care services at the PHC, patients tend to use available albeit questionable eye care services closest to them before visiting secondary health facilities when symptoms persist. The PHC's proximity to the patients may likely increase access to blindness prevention services if made available at the primary care level.

**Keywords:** Eye-care, health seeking behaviour, rural health, primary health care

## 1. Introduction and Background

According to the World Health Organization (WHO) current figures, worldwide, about 285 million people are visually impaired; 39 million blind and 246 million have low vision with about 90% of these living in developing countries and about 65% are over 50 years of age. Globally, the principal causes of visual impairment are uncorrected refractive errors, cataract, glaucoma, age related macular degeneration, diabetic retinopathy, trachoma and corneal opacities (Abdul, 2002; Pascolini & Mariotti, 2010).

The results of the National blindness and visual impairment survey conducted from 2005 – 2007 puts the prevalence of blindness and visual impairment at 4.2% for people 40 years and above and 0.78% in people of all ages. Because of the size and structure of the country's health system, eye care programmes are developed at state level (Abdull et al., 2009).

Cross River State has a comprehensive eye care plan for the State Eye Care Programme supported by Sight Savers International. The major causes of blindness in Cross River State, according to the report of the State population-based survey on blindness and visual impairment, are refractive errors, glaucoma and cataract, while the prevalence of blindness among all age groups is estimated at 0.8%. It is therefore projected that there are about 21,000 blind persons in Cross River State from avoidable causes of blindness (Nkanga, Asana, Duke, Ekpenyong, & Etim, 2007). The number will continue to increase unless more preventive action is taken at the primary health care level.

The primary health care system has been identified by the WHO as the frontline of defense in tracking health care problems and many countries including Nigeria have adopted this. The development and implementation of primary eye care activities will depend on the existing primary health care system, available

human resources and training programme/s for health care workers on eye care. The availability and distribution of human and material resources for eye care have a direct bearing on the quality of eye care delivery, its uptake and therefore on blindness prevention (Prozesky, 2007).

Primary eye care services are essential for common ocular problems and elimination of avoidable blindness. These include provision of essential, affordable, accessible, practical and sustainable eye health care to the general population. Basic primary eye care involves eye health promotion, treatment of simple eye diseases, identification of persons needing specialist eye care followed by prompt referral. The delivery of these services uses the horizontal integration matrix model proposed by the WHO to incorporate Primary Eye Care (PEC) programmes into the existing Primary Health Care (PHC) structure, (WHO, 1978, 2000, 2002). The main objectives of this study therefore were to determine the primary eye health care services provided at the primary health care centers in CRS and to identify the reasons for use and non-use of eye care services by the people at the primary health care centers.

## 2. Methods

A multistage random sampling method was used in this study to select primary health care centers (PHC) in communities in Cross River State and the health care consumers (patients). In the first stage, one Local Government Area was randomly selected from a list of LGAs in each of the three health zones in Cross River State. Using this process, Odukpani was picked for the South, Etung from Central and Yala from the North. In stage two, four Wards were selected per LGA using simple random sampling technique. In stage three, one Primary Health Center (PHC) was randomly selected, a total of 12 PHC centers were the study sites. Clients' distribution was based on clients flow in the 12 selected PHC facilities. All patients, 20 years and above who visited the centers within the period of the study were included in the study until the total required per center was complete. The researcher interviewed the clients at exit point after consultation and drug purchasing. This was to ensure that clients have passed through all the processes of care for proper assessment of services received at the center. A total of two hundred and ninety primary health care consumers/clients who visited the centers within the period of the study were interviewed using an interviewer-administered questionnaire. Ethical clearance was obtained from the Cross River State Ministry of Health Ethical Clearance Committee.

## 3. Results

### Socio demographic characteristics of health care consumers/ clients

Majority, 118 (40.7%) of the respondents were 20 – 29 years, 96 (33.1%) were 30 -39 years, 52 (17.9%) were 40 -49 years. Most 196 (67.6%) were married, 84 (29%) were single. A large proportion 126 (43.3%) completed secondary education, 61 (21%) completed primary education, 182 (28.3%) completed tertiary education. Eighty (27.6%) of the clients were farmers, 75(25.9%) were traders, 15(5.2%) were fishermen, 13(4.5%) engage in handcraft, and 79 (27.2%) were civil servants. Low income earners (less than N5, 500 monthly) were 96(33.1%) of the respondents, 99 (34.1) were medium income earners (N5,500 – N35,000 monthly), 32 (11%) were high income earners ( greater than N35,000 monthly) and 63 (21.7%) had no reliable source of income. Majority of the respondents were Christians 287(99%).

### Utilization of health care services at the PHC

Of the 290 patients interviewed, 129 (44.5%) came because they had fever, 89 (30.7%) came to immunize their children, 38 (13.1%) came for antenatal care, 13(4.5%) for eye problems, 10 (3.4%) ear problem. 8(2.8%) came for post natal care and 3(1.0%) for delivery. One hundred and twenty seven (43.8%) of the patients came on foot to the center, 126(43.4%) came by public transport and 37 (12.8%) came with their own car or motor bike. On whether they paid for service or not, 159(54.8%) of the 290 patients said they did not pay for services. Majority 211(72.8%) said that the fee for services was cheap, 69 (23.8%) moderate and 10(3.4%) said it is expensive. Majority of the client's 223 (76.9%) said the PHC center is not far(less than 2km) from their homes, those that said it was far were 54 (18.6%) while 13(4.5%) said that it is very far [Table 1].

### Use of eye care services by patients

Majority, 148 (51%) of the patients indicated that they had a history of eye problems while 142(49%) said they had no past history of eye problems. Of the 148 with previous history of eye problems, 44 (29.7%) visited the hospital/eye clinic for treatment of the eye problem, 40 (27%) visited the patent medicine vendor, 25 (16.9%) visited the traditional healers, 22 (14.9%) visited the PHC, 13 (8.7%) used traditional eye medication, 2 (1.4%) went to the market and 2 (1.4%) visited the prayer house for healing. On history of spectacle use by client and/or relation, 142 (48.6%) of the respondents gave positive history. Furthermore 49 (34.5%) of them got their glasses from market glass sellers, 48 (33.8%) got from hospital/ eye clinic, 36 (25.4%) from outreach eye screening, 6(4.2%) from PHC, 3 (2.1%) said it was a gift from close family member [Table 2].

#### 4. Discussion

A total of 290 health care consumers/clients who visited the centers within the period of the study participated in the study. The response rate was (100%) across the 12 selected primary health care centers in Cross River State. Majority of the clients' 193(67%) were female. This reflects the pattern of primary health care center utilization in Cross River State. This finding is similar to a study by (Abdulraheem, 2007), who also found women to be the more frequent users of health care services than men. It was also reported in Nigeria that women have a higher need to access health care especially at the primary health care level (Ogunkelu 2002). Additionally, females being the healthcare seekers of their families may not necessarily be patients themselves but are more likely to accompany other patients especially children or spouses. Another possible reason could be due to prevalence of free health care services for women at the primary health care centers. A reason, most males tend to think the PHC is a facility for women and children only. In this study, 27% of respondents reported visiting the patent medicine vendor for their eye care. This is similar to findings by Ndep, Inuesokan, Akpan, Etuk and Nkanga (2014), where residents of Ikot Ishie, a suburb of Calabar, reported self-medication as a first point of action against any ailment. They reported that the main source of medication was from patent medicine vendors. Easy access to these patent medicine vendors seem to fuel self-medication and level of education seem to be the main factor influencing the use of patent medicine vendors (Afolabi, 2008; Ndep, Inuesokan, Akpan, Etuk, & Nkanga, 2014). According to Ekpenyong and Ikpeme (2009), patients tend to visit the patent medicine vendors, traditional healers and use traditional eye medication first before visit to the orthodox hospitals or eye clinic for treatment of eye problems. The community members could be at risk of blindness if they continue to use unorthodox sources of eye care. Blindness from glaucoma for instance can be prevented if detected early (Ekpenyong & Ikpeme, 2009; Isawumi, Ubah, Olomola, & Afolabi, 2014) and by providing quality eye care services at the Primary health care level (Ekpenyong, Ndep, Aruotu, & Osuchukwu, 2015).

#### 5. Conclusion

Basic eye care services such as Visual acuity test; pen torch examination, eye health education, diagnosis and management of minor eye conditions are not routinely provided at the PHC level. In addition even when patients with eye problems present at the PHC, there is a weak referral system and no follow up services available to them.

#### 6. Recommendations

The following recommendations were based on the findings of this study.

##### 1. Policy on Primary Eye Care

There is need for a policy on primary eye care in the country with the goal to provide comprehensive eye care services that are affordable, accessible and available to the communities at the community level.

##### 2. Establishment of Eye care units/departments

There is a need to establish eye care units/ department at all levels of care; Federal, State and Local Government. The goal is to ensure coordination of eye care units at all levels and ensure implementation of eye care policies and activities especially at the Local Government level; the level of care that is closest to the people. The services at the PHC level should include the following;

- a. Eye health education and promotion routinely done alongside that for other health conditions
- b. Visual acuity assessment done for every patient who visits the health center as part of vital assessment.
- c. Proper cleaning and examination of new born babies' eyes with pen torch soon after delivery
- d. Diagnoses and treatment of minor eye conditions like conjunctivitis
- e. Identification of cataracts and establishment of proper referral processes.

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**Table 1: Respondents' utilization of health care services at the PHCs**

Variables	Frequency n= 290 n (%)
<b>Reason for visiting PHC</b>	
Fever/headache	129 (44.5)
Immunization	89 (30.7)
Antenatal	38 (13.1)
Eye Problem	13 (4.5)
ENT Problem	10 (3.4)
Post Natal	8 (2.8)
Delivery	3 (1.0)
<b>Means of transport</b>	
Foot	127 (43.8)
Public transport	126 (43.4)
Private transport	37 (12.8)
<b>Service fees</b>	
Fee for service	131 (45.2)
Free	159 (54.8)
<b>Cost of service</b>	
Cheap	211 (72.8)
Moderate	69 (23.8)
Expensive	10 (3.4)
<b>Distance traveled to health center</b>	
< 2km	223 (76.9)
2km-4km	54 (18.6)
4km-6km	13 (4.5)

**Table 2: Respondents' utilization of eye care services**

<b>Variables</b>	<b>Frequency n (%)</b>
<b>Ever had eye problem (n=290)</b>	
Yes	148 (51.0)
No	142 (49.0)
<b>Facility visited to treat eye problem (n=148)</b>	
Hospital/eye clinic	
Patent medicine vendor	44 (29.7)
Traditional healer	40 (27.0)
Primary Health centre	25 (16.9)
Used TEM	22(14.9)
Market	13(8.7)
Prayer house	2 (1.4)
	2 (1.4)
<b>History of spectacle use (n=290)</b>	
Yes	142 (49.0)
No	148 (51.0)
<b>Source of spectacles (n=142)</b>	
Lay eye-glass sellers	49 (34.5)
Hospital/eye clinic	48 (33.8)
Eye care outreach services	36 (25.4)
Primary Health Centre	6 (4.2)
Gift	3 (2.1)