

## Reasons for non-utilisation of eye care services among adults in a rural West African population.

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### Abstract

**Background:** To describe the reasons for non-utilisation of eye care services among adults aged 40 years and above in a rural population of West Africa.

**Methods:** During a population-based cross-sectional survey, an interviewer administered questionnaire was used to obtain information on respondents' demographic characteristics, personal medical history, previous use of eye care services, ocular symptoms and reasons for not utilising eye care services.

**Results:** A total of 643 participants were studied. Majority of the respondents (547; 85.1%) had a history of ocular symptoms, either in the past or at the time of the study. One hundred and twenty-two respondents (19.0%) had previously consulted orthodox facilities to seek eye care; and 23.9% of the respondents with presenting visual acuity worse than 6/18 in the better eye had previously sought eye care. Reasons given by the respondents with ocular symptoms for not seeking eye care included a perception that the problem was not important in 188 (44.2%) respondents and financial constraints in 139 (32.7%) respondents. Barriers encountered by respondents who had sought eye care include financial constraints in 30 (24.6%) respondents, long distance in 21 (17.2%) and strikes by hospital workers in 3 (2.5%) respondents.

**Conclusion:** A significant proportion of people in need of eye care services in this rural adult population are not utilising or seeking eye care services. Reasons given for non-utilisation include the perception that the eye problem was not important, financial constraints, ageism, fear and not knowing where to go for help. Barriers encountered were long distance, long waiting time, repeated appointments, strikes by hospital staff and poor service delivery.

**Keywords:** *Barriers, Eye care services, Utilisation, Rural community, West Africa.*

### Résumé

**Contexte:** Pour décrire les raisons de la non-utilisation des services de soins oculaires chez des adultes âgés de 40 ans et plus dans une population rurale de l'Afrique de l'Ouest.

**Méthodes:** Au cours d'une enquête transversale, un questionnaire administré par un intervieweur a été utilisé pour obtenir des informations sur les caractéristiques démographiques, les antécédents médicaux personnels, l'utilisation antérieure des soins oculaires, les symptômes oculaires et les raisons à ne pas utiliser les services de soins oculaires.

**Résultats:** Un total de 643 participants ont été étudiés. La majorité des répondants (547, 85,1%) avaient des symptômes oculaires antécédents, soit dans le passé, ou au moment de l'étude. Cent vingt-deux répondants (19,0%) avaient auparavant consulté des établissements orthodoxes pour obtenir des soins oculaires; et 23,9% des personnes interrogées présentant une acuité visuelle inférieure à 6/18 dans le meilleur œil avaient précédemment consulté pour des soins oculaires. Les raisons fournies par les répondants ayant des symptômes oculaires pour ne pas avoir consulté pour des soins oculaires étaient que le problème n'était pas important chez 188 répondants (44,2%) et des contraintes financières chez 139 répondants (32,7%). Les obstacles rencontrés par les répondants qui ont demandé des soins oculaires comprennent les contraintes financières chez 30 répondants (24,6%), les longues distances chez 21 (17,2%) et les grèves des agents hospitaliers chez 3 (2,5%) répondants.

**Conclusion:** Une proportion importante de personnes ayant besoin de services de soins oculaires dans cette population adulte rurale n'utilisent pas ou ne recherchent pas de services de soins oculaires. Les raisons données pour la non-utilisation incluent la perception que le problème oculaire n'était pas important, les contraintes financières, l'âgeisme, la peur et ne sachant pas où aller chercher de l'aide. Les obstacles rencontrés étaient les longues distances, les longs délais d'attente, les rendez-vous répétés, les grèves des agents hospitaliers et la mauvaise prestation de service.

## Introduction

Health care utilisation is an important factor that influences the level of health or otherwise of a population. If available health care facilities are not utilised by the population, the level of health remains low irrespective of any efforts to provide more well-equipped facilities. It is therefore important to ensure that available health facilities are utilised maximally by reducing barriers to the barest minimum. In developing countries, where availability of health care facilities and resources are sub-optimal [1], it is even more imperative to understand the reasons for non-utilisation of health care facilities.

Eye care services are not exempted from this phenomenon, and indeed, several studies have been carried out to evaluate the factors that affect the uptake of eye care services [2-14]. Understanding these factors is expected to contribute towards the goal of reducing the burden of avoidable blindness significantly by the year 2020 (VISION 2020: The Right to Sight). This is due to the fact that people must first utilise the available eye care resources before preventable blindness can be minimized [15]. Moreover, monitoring and evaluation which are important components of the VISION 2020 initiative, involve the assessment of the uptake of services offered to the communities.

When ophthalmic services in different populations are being planned, the level and types of services required by the target population are based primarily on estimates of the prevalence and incidence of eye disease in the community. It is usually assumed that all the people with ocular morbidity will attend for treatment. It is clear that in practice not all those requiring evaluation and treatment attend [16], but the reasons for non-attendance are poorly understood [17].

If programmes for blindness prevention are to be effective then the reasons for suboptimal utilisation need to be identified and appropriate strategies implemented to improve utilisation. Providing such information would assist in the design of programs that may supply more meaningful services to those who have underutilised them [18]. Therefore, this study was designed to describe the reasons for non-utilisation of eye care services among adults in a rural community in South Western Nigeria.

## Methods

This was a descriptive cross-sectional survey conducted in Akinyele Local Government Area of Oyo State in the southwestern region of Nigeria. It has a population of 211,359 people and is divided

into 12 political wards, 10 of which are made up of rural settlements. The local government area has an agriculture based economy and farming is the main occupation. With regards to health facilities, there are 15 health districts, each with a primary health centre; and one government owned general hospital. None of these facilities is well equipped for eye care service delivery. They offer only basic primary eye care services and patients who require secondary care are referred to a tertiary hospital, University College Hospital, Ibadan, which is about 15 kilometres away.

Ethical approval for the study was obtained from the University of Ibadan/ University College Hospital Institutional Ethical Review Board. Consent was obtained from the local government authority, community heads as well as the participating individuals. Using a multistage sampling technique and probability proportional to size procedure, 660 participants were selected from 40 settlements in the 10 rural wards. Eligible participants were individuals aged 40 years and above who had been living in the study area for a period of at least one year and were willing to participate in the study.

Data collection was preceded by a house to house enumeration and registration of eligible participants. Thereafter, a face to face interview was conducted by trained research assistants using a structured questionnaire to obtain information including sociodemographic data, medical history, previous use of eye care services and past or present ocular symptoms. Reasons for non-utilisation were sought from respondents who had never used eye care services while enquiry was made about barriers encountered by those who had sought eye care services. Visual acuity testing was then performed using a Snellen chart or an Illiterate E chart. The chart was placed at 6 metres from the participant in a shaded open space in the daylight with each eye tested separately. The last completely read line on the chart was recorded as the visual acuity for that eye. The visual acuity of each eye was then tested with a pin hole for those with presenting visual acuity less than 6/9.

Ocular examination was subsequently conducted by an ophthalmologist (BO) in a darkened room inside the subject's house or a suitable alternative place. Each subject's ocular adnexae and anterior segment were examined using a pen torch and direct ophthalmoscopy was performed to ascertain lens clarity and to examine the posterior segment. Pupillary dilatation was performed when there were media opacities precluding a good view of the fundus or if the pupils were too small.

Dilatation was achieved with the use of 1% tropicamide and 2.5% phenylephrine eye drop.

Collected data was entered into a data base and analysed using Statistical Package for Social Sciences (SPSS version 17; IBM Corp., New York, NY, USA). Proportions and means were used to summarise the data.

## Results

A total of 643 people aged 40 years and above completed the face to face interview and ocular examination out of the 660 people who were enumerated and registered giving a response rate of 97.4%. The mean age of the respondents was 58.9  $\pm$  12.3 years (Range: 40 - 120 years). There were 340 males (52.9%), the remaining 303 respondents were females.

Only 237 (36.9%) respondents had attained at least primary school level education while the remaining respondents had not received any formal education. Majority of the respondents (547; 85.1%) had a history of ocular symptoms, either in the past or at the time of the study. The symptoms included poor vision in 467 (72.6%) respondents, eye pain in 133 (20.7%), itching of the eyes in 66 (10.3%) and red eye in 14 (1.2%) respondents. One hundred and eighty eight (29.2%) respondents reported difficulties with their daily routine activities as a result of poor vision. Ninety-six (14.9%) respondents had never had eye symptoms, neither in the past nor at the time of the study.

Fifty-eight (9.0%) respondents had presenting visual acuity less than 3/60 in the better eye, 87 (13.5%) had presenting visual acuity less than 3/60 in at least one eye, while 230 (35.8%) respondents had presenting visual acuity less than 6/18 in their better eye.

With regards to previous utilisation of eye care services, only 122 (19.0%) respondents had previously consulted any facility to seek eye care and 521 (81.0%) respondents reported that they had never sought eye care at any orthodox facility. Fifty-five (23.9%) respondents out of the 230 individuals with presenting visual acuity worse than 6/18 had previously sought for eye care.

Various reasons were given by the respondents for not seeking eye care despite having ocular symptoms (Table 1). They include the fact that the problem was not important in 188 (44.2%) respondents and financial constraints in 139 (32.7%) respondents. Forty-one (9.6%) respondents reported that they did not seek eye care because of their belief that eye problems are closely associated with ageing,

and should be accepted as an unavoidable feature of growing old.

**Table 1:** Reasons given by respondents for not seeking eye care

Reason	Number of respondents (n)*	Percent (%) (N = 425)
Problem not important	188	44.2
No money	139	32.7
Did not know where to go	72	16.9
Eye problems are associated with ageing	41	9.6
No time	28	6.6
Used OTC drugs <sup>†</sup>	20	4.7
Symptoms just started	14	3.3
Fear	12	2.8
Advised by others to do something else	12	2.8
No escort	10	2.4
Used local herbal remedies	2	0.5

\* 109 (25.6%) respondents gave more than one reason

<sup>†</sup> OTC drugs - Over the counter drugs

The respondents who had previously sought eye care services reported the various barriers they had encountered. These include financial constraints in 30 (24.6%) respondents, long distance in 21 (17.2%) and strikes by hospital workers in 3 (2.5%) respondents. Forty eight respondents (39.3%) out of those who had utilised services said that they did not encounter any barriers (Table 2).

**Table 2:** Barriers encountered by respondents who had previously consulted facilities for eye care

Barrier	Number of Respondents (n)*	Percent (N=122)
No barrier	48	39.3
Financial constraints	30	24.6
Long distance	21	17.2
Long waiting time	12	9.8
Poor service	6	4.9
Repeated appointments	4	3.3
Strikes by hospital staff	3	2.5
Difficult access	3	2.5
Fear	2	1.6
Lack of visual improvement	2	1.6
Too many patients	1	0.8

\*10 respondents encountered more than one barrier

Those respondents who had never had eye symptoms and did not seek eye care were asked about their thoughts on the need for routine eye check-up in the absence of perceived eye problems. Sixty-eight (70.8%) of them said that routine eye check-up was necessary while eight (8.4%) felt there was no need for such. The remaining 20 (20.8%) did not know if there was a need for routine eye check-up or not.

## Discussion

In this study the rate of utilisation of available eye care services, as evidenced by previous consultation for eye problems by respondents, was markedly low. This is similar to the findings of previous studies that the utilisation of eye care services among rural populations ranges from 7% to 35% [13, 14, 19]. Furthermore, the utilisation of eye care services among those with visual acuity less than 6/18 in the better eye (24%) is comparable to the World Health Organisation (WHO) estimate that only a quarter of those who need eye care globally actually utilise eye services [20].

Low eye care service utilisation would have an adverse effect on the achievement of the goals of Vision 2020 in this local government area as well as similar rural communities in Africa. Moreover, the burden of eye disease and blindness would likely increase rather than decrease in magnitude if appropriate measures are not instituted to improve uptake of services.

Barriers or obstacles to uptake of eye care services are those factors that prevent or militate against would be seekers of eye care from receiving such services. Numerous studies have been conducted to investigate these barriers in various populations, although majority of them were focused on the barriers to the uptake of cataract surgery [17, 21-31]. Most of these studies observed similar factors or reasons preventing utilisation of eye care services.

Dandona *et al* [21] classified these reasons as personal, economic, and social. The reasons directly related to the individual were classified as personal; those relating to family members were classified as social; and those directly related to money were classified as economic reasons. Lewallen and Courtright [23] grouped the barriers to cataract surgery as being related to cost of surgery; distance to the hospital, cultural and social barriers, knowledge of services and trust in outcome of surgery.

A significant proportion of those who knew they had eye problems felt that the problem was not important enough to seek help. These subjects may have adjusted to their disability with little evident

handicap or their responses may actually mask some hidden barriers such as problems with access and finances. It is also possible that this is a reflection of the existing gap between the medical community's perception of patient needs and patients' own perceptions of their needs. Eye care providers often assess patients' needs based upon visual acuity while the patients tend to assess their needs based upon their own perceived level of disability.

Currently, the explanation for the perception that the problem is unimportant is not clear, and requires further exploration. Nonetheless, increasing the level of awareness of the rural population about the importance and benefits of seeking treatment for visual impairment is essential in order to facilitate utilisation of services.

Financial constraints and the opportunity cost of seeking eye care are also important and the reduction of both the direct and indirect costs of accessing eye care services should result in increased utilisation.

Other reasons such as symptoms just starting, using alternative treatment options and not knowing where to go, all reflect the potential effect that awareness campaigns could have on increasing utilisation of eye care in this rural population. Fear, which relates mainly to surgical outcome, portrays the need for patient counselling as well as better monitoring and evaluation systems for cataract surgical services.

The belief that eye problems are inevitable with age and care for such is, therefore, unnecessary reflects a type of negative discrimination against elderly individuals which may impair the "felt need" for eye care services in old age [32]. This form of ageism has been previously reported as a barrier to the uptake of cataract surgical services [19, 20, 22, 33]. Awareness campaigns with specific emphasis on the importance and benefits of seeking treatment for eye problems in old age should lead to increase in utilisation of eye care services.

The other barriers encountered by respondents were related to the quality of service i.e. repeated appointments, waiting time, and strikes embarked upon by hospital workers. This emphasizes the role of poor quality service delivery as a barrier to uptake of services.

Limitations of this study include the fact that recall bias might have negatively influenced the accuracy of respondents' reports with respect to utilisation of services and medical history. Secondly, only previous visits of respondents to orthodox facilities were considered, and no enquiry was made regarding the utilisation of unorthodox methods of

health care. Consequently, it is possible that the efforts made by the respondents to seek eye care may have been underestimated, since it is known that people would most likely first seek help from alternative sources [34, 35]. Finally, the actual use of treatment remedies was not evaluated. Thus, subjects who had accessed the services may, in fact, not have utilised those services, in the real sense, if they did not use the remedies prescribed.

In conclusion, a considerable proportion of people in need of eye care services in this rural adult population of southwest Nigeria are not utilising the available services. Various reasons were given for not utilising eye care services. These include the perception that the eye problem was not important, financial constraints, ageism, fear and not knowing where to go for help. Barriers encountered were long distance, long waiting time, repeated appointments, strikes by hospital staff and poor service delivery. Therefore, during the planning and provision of eye care services in rural parts of West Africa, these reasons and barriers need to be addressed in order to optimise the utilisation of such services by the recipient communities.

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