

MEANS OF TRANSPORTATION AND ITS EFFECT ON EYE CARE SEEKING BEHAVIOUR OF PATIENTS IN A RURAL SETTING

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Abstract

Background: The observation of the frequency with which patients presented at the outreach clinic at Giwa General hospital with complications resulting from intervention by traditional healers led to an investigation regarding their preference for western or traditional solutions to eye ailments alongside the distance necessary to travel from home to the General hospital (outreach center) and the means of transport necessary to get there.

Methods: A total of 348 patients were seen over a 6-month period from January 2002- June 2002. These patients were interviewed using a simple questionnaire, the setting being the outreach eye clinic, Giwa general hospital, Giwa local Government Area of Kaduna State In Northern Nigeria.

Results: A total of 348 patients interviewed were found to use various means of transportation when seeking western medical or traditional medical assistance. Some had to use several modes of transport in order to arrive at the outreach eye clinic. Patients were seen from six districts in Giwa Local government Area. 27 patients (7.8%) lived less than 5km from the outreach center, while 56 (16.1%) lived 5-10 Km from the outreach center. 86 (24.7%) patients lived 11-15km away while 96 (27.6%) live 16-20km from the outreach center. A total of 83 (23.9%) had their homes greater than 20km away. Out of 348 patients, 233 preferred to seek western medication and they had to use several modes of transportation including trekking, motor vehicles, canoe, bicycle, and motorcycle to access medical eye care. The others preferred to seek traditional solutions to their problems.

Conclusion: It is clear majority of patients are aware of the benefits of western medicine and seek to access it. Nevertheless, the inconvenience of certain/necessity to take multiple modes of transport to do so may result in lack of uptake of western medical facilities leading patients to seek alternative medical attention close to home.

Key words: Transportation, eye seeking behaviour, rural setting

Introduction

In most developing countries, there is a scarcity of ophthalmologists in the rural areas. Ophthalmologists and medical eye care workers are concentrated in the urban areas. As a result of this, the global initiative for elimination of avoidable blindness found it beneficial to incorporate into primary eye care activities outreach clinics in the rural areas such as the one at Giwa Local Government, which is sited at the Giwa General Hospital. Resource training of resident ophthalmologists as well as community health workers, school screenings and cataract eye camps are part of activities taking place here.¹

The outreach center has one ophthalmic nurse resident and ophthalmologists from the base hospital which is a tertiary centre (namely the Guinness Ophthalmic Unit, Ahmadu Bello University Teaching Hospital Kaduna) visiting regularly to run clinics, carry out refractions and perform surgery.

Due to the frequent observation of complications arising from intervention by traditional healers, It was decided to run a survey to assess the effect of mode of transportation from the surrounding districts to the

outreach eye centre and its possible effect on eye care seeking behaviour of patients, with a view to understanding if adequate transport services contributed to uptake of western medical solutions and could be used as a tool in improving outreach services.

Materials and Methods

A total of 348 patients were seen over a 6-month period from January 2002 – June 2002. These patients were interviewed using a simple questionnaire. The setting was the outreach eye clinic, Giwa General Hospital, Giwa Local Government Area of Kaduna State in Northern Nigeria (Figure 1).

Results

A total of 348 patients were interviewed and found to use various means of transportation when seeking western medical or traditional medical assistance. Some had to use several modes of transport to arrive

at their chosen destination.

Table 1 shows distribution of patients by districts in Giwa Local Government Area.

Table 2 shows distribution of distance from patients home to Giwa General Hospital.

Table 3 shows distribution of means of transportation by eye care medical practice favoured.

Table 1: Distribution of patients by districts

Distribution	No.	(%)
Fatika	65	18.7
Gangara	43	12.4
Giwa	67	19.3
Kidandan	55	15.8
Shika	42	12.1
Wazata	59	17.0
Others	17	4.9
Total	348	100.0

The others category comprises of patients not from any of the specified districts listed above some of who came from other local governments or states.

Table 2: Distribution of distance from patient's home to Giwa General Hospital

Distance (km)	No.	(%)
<5	27	7.8
5 – 10	56	16.1
11 – 15	86	24.7
16 – 20	96	27.6
>20	83	23.9
Total	348	100.0

Figure 1: Map of Giwa (location of hospital)

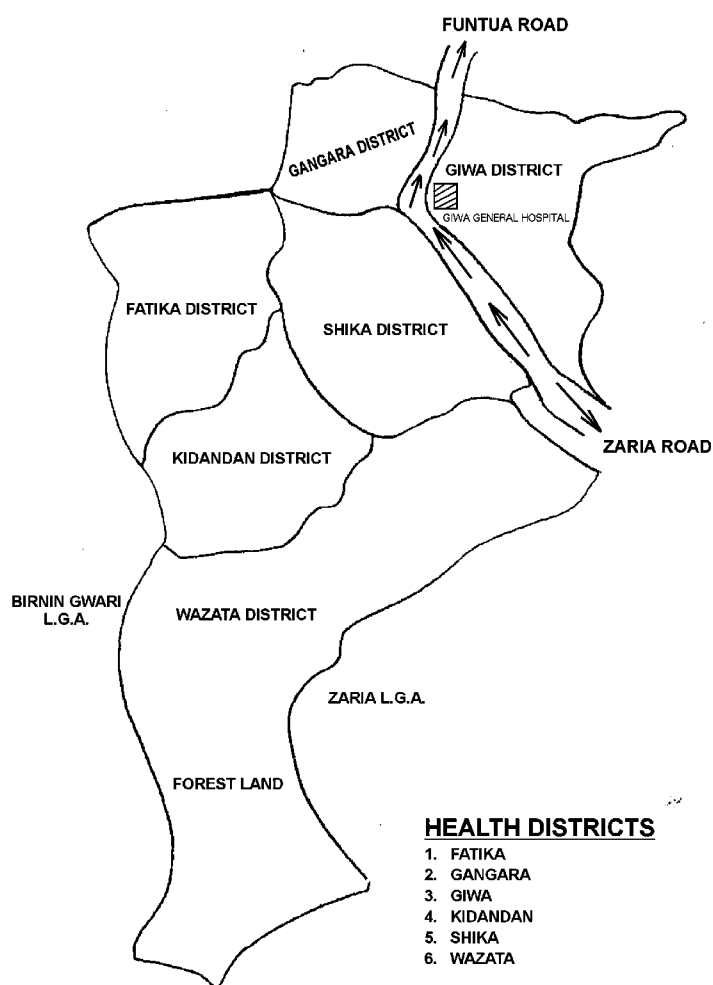


Table 3: Distribution of means of transportation by eye medical practice favoured

Mode/means of transportation	Eye Practice Favoured				Total
	Traditional	(%)	Western	(%)	
Motorcycle	12	10.4	28	12.0	40
Canoe	2	1.7	0	0.0	2
Trekking	2	1.7	13	5.6	15
Motor vehicle	62	53.9	134	57.5	196
Bicycle	1	0.6	3	1.3	4
Motorcycle and Donkey	0	0.0	2	0.9	2
Motorcycle and trekking	2	1.7	5	2.1	7
Motorcycle and motor vehicle	9	7.8	21	9.0	30
Motorcycle and bicycle	2	1.7	0	0.0	2
Canoe and trekking	1	0.6	0	0.0	1
Canoe and motor vehicle	20	17.4	17	7.3	37
Trekking and motor vehicle	0	0.0	2	0.9	2
Trekking and Bicycle	0	0.0	4	1.7	4
Motorcycle, canoe and motor vehicle	0	0.0	2	0.9	2
Motorcycle, trekking and bicycle	1	0.6	0	0.0	1
Canoe, trekking and motor vehicle	1	0.6	2	0.9	3
Total	115	100.0	233	100.0	348

$X^2 = 27.76$ $df = 15$, P value = 0.03. There is a significant difference, meaning that means of transportation affects the Eye care seeking behaviour of patients.

Discussion

There are several districts in Giwa Local Government Area. The map of health districts shows the location of the general hospital in relation to these districts. Table 2 shows the distance from patients homes to Giwa General Hospital, and illustrates the fact that patients needing medical assistance are ready to travel in a fairly large numbers from as far as 20km away to the eye clinic to access this service.

Table 3 shows the distribution of the various means of transportation, which include, trekking, motorcycle, canoe, bicycle, motor vehicle by eye practice favoured, the choice being between traditional and Western eye medical practice. The means of transportation affects the eye care seeking behaviour of patients. Where motorized and more convenient modes of transport were available, the majority sought western medicine even in spite of the distance form the eye clinic. On the other hand almost one third of the total patients interviewed preferred use of TEM (traditional eye medication) found in their local environments. This may be as a result of inconvenient modes of transportation or the tedium of having to take several modes of transport to get to their final destination. It may be pertinent to mention here that the presence of numerous traditional healers in rural areas of Africa suggest that Eye care programmes could benefit greatly by including traditional healers in primary eye care programmes.²

It is crucial in developing strategies for prevention of blindness to understand the existing barriers to eye care in each environment and transportation is one of these. Dandona et al identified that understanding how the people perceive eye health and the barriers to accessing eye care are factors vital in the development of strategies for prevention of blindness.³

Recommendations therefore, should be targeted at Eye care delivery at Giwa Local Government Area.

1. Co-operation with traditional health workers in the delivery of eye health care to avoid complications from these to those patients who will seek traditional remedies.
2. Sufficient training and education of primary eye care workers, community extension workers, and the community is needed to cater for all the Local Government Area especially those without ready access to the general hospital.
3. Increased awareness creation on eye health matters with attention to more remote areas and an attempt to use mobile clinics to carry regular eye care to such areas.
4. Transportation of patients from the far flung areas to the General Hospital for cataract eye camps. This can be arranged with proper planning and with the cooperation of the local government officials especially the Health councilors.

Acknowledgements

The above work was made possible by the contribution of Sight Savers International to the outreach eye clinic at Giwa Local Government run in collaboration with the Guinness Ophthalmic Unit.

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