## Original Article

# Influence of occupational status on patronage and choice of eye care services

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#### Abstract

**Background:** Occupational status can be regarded as a proxy variable indicating the socioeconomic status and therefore level of enlightenment and awareness of an individual. This can be reflected in attitude towards and patronage as well as ultimate choice of eye care services. The aim of this study was to assess the effect of occupational status on patronage and choice of eye care services in patients attending a rural outreach eye clinic in Giwa Local government of Kaduna State, Nigeria.

*Methods:* Information was collected using a validated questionnaire, from a total of 357 patients seen over a six month period from January 2002 to June 2002 at a rural outreach eye clinic in Giwa Local Government Area, Kaduna State.

**Results:** Significant P-values obtained on comparing the proportions of patients belonging to each occupational group and their patronage and choice of eye care services led to rejection of the null hypothesis that there was no difference in use of services between patients of different occupations. This suggests that type of occupation influences patients patronage of eye care services for western remedies to eye care problems.

*Conclusion:* It is necessary to identify strategies to overcome lack of awareness as a result of socioeconomic background of the population in the rural areas where eye care services are to be provided in order to provide services to all. These strategies need to be gender sensitive. Further studies in form of randomised controlled educational interventions are necessary to properly assess the success of these strategies.

Key words: Occupation, rural eye care, choices, gender, interventions.

#### Introduction

Part of the global initiative for elimination of avoidable blindness has been in the form of outreach clinics. The primary aim being to provide primary eye care services, reduce the cataract backlog, carry out school eye screenings, workshops for community health workers and teachers as well as training in surgical techniques for resident ophthalmologists in cataract surgery<sup>1</sup>. These services are provided free and most drug prescriptions are available from the supply provided by Sight Savers International.

The outreach eye clinic is one of the eye clinics manned by the Guinness eye clinic of Ahmadu Bello University Teaching Hospital covering the northeastern part of Kaduna state in collaboration with Sight savers International. It is manned by an ophthalmic nurse who runs daily activities such as clinics, refractions and minor operations and ophthalmologists from the base hospital at Guinness eye clinic who visit at regular intervals to review difficult cases, carry out refractions and perform cataract surgeries.At the outset, patient attendance was low so the researchers set about doing a preliminary survey to identify factors influencing uptake of services. One of the key questions was influence of the occupation on patronage of eye care services and choice of eye care service. In areas of the developing world such as Nepal, studies on factors affecting uptake of cataract surgery in the Gandaki zone came to the conclusion that the cataract service marketing, eye health education disseminating the information on cataract and its curability was not adequate <sup>2</sup>. In addition to this Nepal had developed a comprehensive national network of eye hospitals but the surgical coverage for the treatment of cataract blind was still low, below  $60\%^3$ . Further investigations showed reasons for poor uptake of surgery to be economic, logistical, fear of surgery and lack of time in that order.

In Mexico South America, socioeconomic factors have been identified as probable markers of limited access to health care services and were linked to uncorrected refractive error in spite of services available<sup>4</sup>.

In Africa, the experience in Ethiopia found the main barrier to seeking eye care to be related to the indirect medical costs of the service 5.

The experience of researchers in the south-west of Nigeria in three rural communities has found the main barriers to hospital presentation to be cost of surgery and the distance to the hospital<sup>6</sup>.

In north-eastern Nigeria cost was the commonest reason for not seeking treatment for cataract <sup>7.</sup>

#### Materials and methods

This is a preliminary experience at Giwa outreach eye clinic)

Demographic and other information was collected from a total of 357 patients seen over a six month period from January 2002 to June 2002 at a rural outreach eye clinic in Giwa Local Government Area. Inclusion criteria included all attending patients who consented to be interviewed. Verbal consent was

sought in all cases. No patients were intentionally excluded unless they were too ill or had any condition such as deafness or dementia that precluded them from answering the questionnaire. A total of nine patients did not participate in the study leaving a total of 348 who answered the questionnaire. Out of the nine, one was deaf, two were too ill to be interviewed and six did not want to be interviewed as they were pressed for time. All attending patients were interviewed using a simple questionnaire delivered in Hausa (The local Language) or in English language depending on the patients understood language. The questionnaire was administered by two trained ophthalmic nurses manning the outreach clinic at the time. The questionnaire was piloted and translated into Hausa from English and back into English to be sure the translation was accurate. During the study, inter and intra observer checks were carried out to ensure interviews were carried out efficiently. Refusals were encouraged to return at a more convenient time to be interviewed but were lost to follow up. It was not possible logistically to seek them out and interview them in their homes, due to the distance and transportation difficulties in the area. Information was collected on demographics and

factors affecting uptake of eye care services, including occupational status of patients attending.

#### Results

#### Table 1: Age by sex distribution of patients interviewed

Age	Male	%	Female	%	Total	
0-20	35	(16.7)	31	(22.5)	66	
21-40	27	(12.9)	28	(20.3)	55	
41-50	61	(29.0)	22	(16.0)	83	
51+	87	(41.3)	57	(41.3)	144	
Total	210	(100)	138	(100)	348	

#### Table 2: Distribution of patients by occupation

Occupation	Number of patients	%		
Farming	117	33.6		
Civil Servant	72	20.7		
Student	47	13.5		
Housewife	88	25.3		
Children and infants	15	4.3		
Others	9	2.6		
Total	348	100		

\*Other category refers to the following: Arabic teachers (3), begger (1), running self- owned business (2), Mechanic (1), pensioneer (1), missionary (1).

	Eye practice favoured					
Occupation	Traditional	%	Western	%	Total	
Farming	50	42.7	67	57.3	117	
Civil Servant	8	11.1	64	88.9	72	
Student	11	23.4	36	76.6	47	
Housewife	40	45.5	48	54.5	88	
Children & infants	5	33.3	10	66.7	15	
Others	1	11.1	8	88.9	9	
Total	115	33.0%	233	67.0%	348 (100%)	

Table 3: Distribution of occupation by eye practice favoured

 $X^2 = 30.68 df = 5 P$ -value = 0.001

#### Table 4: Distribution of occupation by type of eye care services

	Eye practice favoured					
Occupation	Surgical	%	Medical	%	Total	
Farming	60	53.1	53	46.9	113	
Civil Servant	20	32.8	41	67.2	61	
Student	3	7.5	37	92.5	40	
Housewife	45	55.6	36	44.4	81	
Children & infants	0	0.0	11	100	11	
Others	2	25.0	6	75.0	8	
Total	130	37.4	184	52.9	348	

 $\chi^2 = 42.53 \text{ df} = 5 \text{ P-value} = 0.0001$ 

More males than females presented in all other age groups except 21-40 year age group and 51+ years and above, where more or less equal proportions presented.

Occupational distribution showed 33.6% and 25.3% to be farmers and housewives respectively, while a proportion of 20.7% and 13.5% were civil servants and students. Children were in the proportion of 4.3%, while the category of "others" included an Arabic teacher, a beggar, two people who were self employed, a mechanic, a pensioner and one missionary.

Distribution of occupation by eye practice favoured showed western medication to be favoured over traditional in all occupation categories but with a marked difference in civil servants and students where 88.9% of civil servants and 76.6% of students favoured western medication as against 57.3% and 54.3% of farmers and housewives, the rest preferring traditional medication. A chi-squared test done to compare these proportions gave a result of  $\chi^2 = 30.68$ with df = 5 and a P-value = 0.0001 suggesting a significant difference between the two categories. This led the author to reject the null hypothesis that there was no difference in use of services between patients of different occupations, and suggests that occupation influences patients patronage of eye care services for western remedies to eye care problems.

Further analysis of distribution of occupation by type of eye care services used also showed a significant

#### Conclusion

It is necessary to identify strategies to overcome lack of awareness as a result of socioeconomic background effect of occupation on choices in eye care type accessed, (see table 4). Analysis obtained a  $\chi^2 = 4$  2.53 with df = 5 an a significant P-value of 0.0001.

#### Discussion

Occupational status can be regarded as a proxy variable indicating the socioeconomic status and therefore level of enlightenment and awareness of an individual. This can also extend to attitude and patronage as well as choice of eye care services. The findings of significant P-values support the hypothesis that occupational status has a bearing on patronage and choice of eye care services. This information is useful in planning strategies for information dissemination and enlightenment. Socioeconomic factors need to be considered in planning provision of such eye care services.

Limitations of the study included a small sample size, which may raise concerns of projection of these results to the population from which the sample was taken and the fact that the study period was only one season in the year. Unknown confounders may have biased the results. A larger sample size and perhaps a randomised controlled trial of an intervention such as an enlightenment/educational campaign with a comparison of before and after proportions of different occupational cadres and their patronisation of eye care is likely to give more reliable results.

of the population in the rural areas where eye care services are to be provided in order to provide

services to all. Socioeconomic status may also result in gender inequalities in being allowed access to eye care services and this should be borne in mind in information dissemination.

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