2016

www.jmscr.igmpublication.org Impact Factor 5.244 Index Copernicus Value: 83.27 ISSN (e)-2347-176x ISSN (p) 2455-0450 crossref DOI: http://dx.doi.org/10.18535/jmscr/v4i10.06



Journal Of Medical Science And Clinical Research

Choice of Eye Care Giver in A Rural Community of Ebonyi State Nigeria

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ABSTRACT

Background: The Federal Teaching Hospital Abakaliki Nigeria was formulating a primary eye care plan for Igbeagu Development Centre as part of the comprehensive primary health care plan for the development centre.

Objectives: To assess the choice of eye care giver by the people of Nchokko in Igbeagu development centre in Izzi LGA of Ebonyi State, Nigeria.

Methodology: This is a total population study. Respondents were visited in their households and interviewed using the interviewer- administered questionnaire design.

Results: There were 402 respondents of which 269 (68.9%) reported ever having eye symptoms. The common eye complaints were: red eye 135 (50.2%), eye trauma 56 (20.8%), reduced vision 56 (20.8%), itching 5 (1.9%) and others 17 (6.3%). Majority (183 or 68.0%) practiced self-medication, 84 (31.2%) visited eye clinics while 2 (0.7%) did nothing. Respondents used eye drops 71.5% and 'capsule powder' 8.2%, from patent medicine shops; and also sugar water (8.2%), urine (3.3%), Breast milk (2.2), 'Holy water' (1.1%) and unspecified other (8.2%). Some of the respondents 98 (24.4%) used spectacles, of which only 24.5% were prescribed. The rest (75.5%) were procured without prescription.

Conclusion: The residents in Nchokko community were found to resort to self medication more than orthodox eye care services. Higher educational level and male gender influenced choice of orthodox eye care.

Recommendation: It is recommended that health education campaigns be carried out in this community with a view to discouraging self medication and increasing the utilisation of the available orthodox eye care services.

Keywords: Choice of eye care giver, self medication, Igbeagu, Ebonyi State, Nigeria. symptom definition^{.[1], [2]} The eventual choice of

INTRODUCTION

Health seeking behaviour has been defined as the sequence of remedial actions taken by an individual to rectify perceived ill health, usually initiated by symptom definition^{[1], [2]} The eventual choice of treatment is influenced by several factors related to the perceived illness type and severity, pre-existing beliefs about the cause of the illness, the range and accessibility of available therapeutic options, and

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their perceived efficacy, convenience, opportunity costs, quality of service, staff attitudes as well as the age, gender and social circumstances of the sick individual.^[2]

In spite of the successes recorded by the VISION 2020 initiative on the elimination of avoidable blindness^[3], several studies still reveal a low level of utilization of available eye care services by potential beneficiaries.^{[3]-[6]} The Baltimore eye survey^[7], had in 1996, highlighted the fact that available services are sometimes not utilised as expected, even in the developed countries. In that survey it was noted that within a five-mile radius of the Wilmer Institute (Johns Hopkins Hospital), 35.8% of people older than 45 years were still needlessly disabled by curable cataracts, 6.6% by diabetic retinopathy, and 4.7% by glaucoma; at the time of the study.^{[5],[7]} This buttresses the influence of other factors, other than availability of services, on utilization of available services for eye care. In Nigerian communities, utilization of existing eye care infrastructure has been said to be as low as 25% compared to the optimum target utilization set at 90%.^[4] Factors such as cost, lack of awareness, cultural beliefs and personal factors have been identified as barriers to eye care utilization.^{[3]-[5]}

The Federal Teaching Hospital Abakaliki (FETHA) has an outpost in Igbeagu development centre of Izzi Local Government Area (LGA) of Ebonyi State. This outpost, the primary Health care (PHC) Centre Nwezenyi, has an Eye clinic run by the department of Ophthalmology FETHA as part of its Community Ophthalmology programme. As part of needs assessment, there is a need to assess the eye care-seeking behaviour of the target population.

The aim of this study was therefore to know the eye care –seeking practices in Nchokko, one of the catchment communities of the PHC Nwezenyi Igbeagu. This will inform evidence-base ed measures to provide services that are socially and culturally acceptable; and address felt needs of that community. of the department of Ophthalmology of FETHA, situated in the Primary Health Centre (PHC) Nwezenyi. This PHC is the practice centre for the department of Community Medicine, FETHA. A health needs assessment (including eye care needs) was carried out within target population by the department of community Medicine, in collaboration with the department of ophthalmology; as part of the need to formulate the primary health care plan for Igbeagu development centre. This study is part of a wider study that looked at the ocular health of the Nchokko community. The details of the study location, the methodology, study design, sampling technique, sample size, study instruments and ethical approval, have been described. ^[8]

Data Collection

Data was collected using medical students during their 7-week community medicine rural posting exposure, during which the department of ophthalmology collaborated with the department of Community Medicine in eye care campaigns. The students lived in the community during the rural posting and were able to go from house to house to administer the questionnaires to consenting residents; as part of their community medicine posting.

This particular study focused on the choice of eye care giver by the residents in this rural community. Respondents were asked if they have ever had any eye problem (complaint), types of eye symptoms they experienced, what actions they took to relieve their symptoms, where they visited to obtain eye treatment and the type of self-medication used (for those who used un-prescribed/unorthodox treatment). Respondents, who use spectacles, were asked where they obtained their spectacles.

For the purpose of this study, self-medication includes all non-prescribed medications and unorthodox treatment as follows: treatment by the patent medicine dealers ('chemist'), alternative/ herbal medicines as well as all forms of traditional eye medications (TEM).

METHODOLOGY

Nchokko village is part of the Igbeagu development centre, which hosts the community eye care services

Data Analysis

After cleaning and coding, data was keyed into the data editor of SPSS version 22. Descriptive statistics

was performed using frequency tables and charts as well as simple percentages. Inferential statistics was performed using bivariate analysis, exploring relationships between socio-demographic variables and various aspects of treatment-seeking behaviour. Chi square test was used to assess the strength of association between categorical variables. All tests was set at P < 0.05

RESULTS

There were 402 respondents out of which 228 (56.7%) were females and 174(43.3%) were males. The age range was 64 (11, 75) years with a mean and standard deviation of 31.7±11.9 years. Those aged ≤ 40 years were 319 (79.4%). The educational status of respondents show that majority of the respondents (41%) had secondary education followed by those who had primary education (34.1%). The commonest religion was Christianity (89.8%). Over half of the population (53%) were married. Occupation varied widely among this population as follows: Farming 38.1 %, civil servants 21.4%, private sector employees (9.2%), traders 9.7%, artisans/apprentice 8.7%, health workers 5.0%, and businessmen/traders (14.4%). See Table 1.

Of the 402 respondents; 269 (68.9%) reported ever having eye symptoms. Among this group 126 (46.8%) were males, 143 (53.2%) were females and majority (215 or 79.4%) were aged \leq 40 years.

The common eye complaints were: red eye 135 (50.2 %), eye trauma 56 (20.8%), reduced vision 56 (20.8%), itching 5 (1.9%) and unspecified others 17 (6.3%). Among those who had eye problems, 183 (68.0%) resorted to self-medication; 84 (31.2%) visited the orthodox eye clinics while 2 persons (0.7%) did nothing. The substances used during self medication were eye drops and 'capsule powder' obtained from patent medicine dealers (71.5% and 8.2% respectively), sugar water (8.2%), urine (3.3%), breast milk (2.2%), 'holy water' (1.1%) and unspecified others (8.2%)

Among the respondents, 98 (24.4%) persons use spectacles. Out of this, only 24.5% were prescribed. The rest (75.5%) were obtained without prescription (65.5% were purchased from the market and 10% obtained as gifts).

The relationship between socio-demographic variables and the choice of care giver shows that educational level significantly influenced choice of eye care giver as a higher proportion of those with \geq secondary education (36.5%) patronised the eye clinics compared to 25.2% of those with \leq primary education. The difference in these proportions is statistically significant (X² = 4.33; P =0.037).

Similarly, gender was significantly related to choice of care giver as more males (38.9%) than females (24.5%) patronised the orthodox eye clinics. The difference in these proportions is statistically significant ($X^2 = 6.48$; P = 0.01).

Age group had no influence on choice of care giver in this study as 30.7% of those ≤ 40 years and 33.3% of those ≥ 40 years patronised the eye clinics. The difference was not statically significant (X2=0.14; P = 0.710). None of the socio-demographic characteristics influenced the source spectacles

 Table 1:
 Socio-demographic
 characteristics
 of

 respondents

respondents		
Characteristics	Frequency	Percentage
Gender		
Male	174	43.3
Female	228	56.7
Age Groups:		
\leq 40 years.	319	79.4
>40 years	83	20.6
Educational Level:		
No Formal Education	69	17.2
Primary	137	34.1
Secondary	165	41.0
Tertiary	31	7.7
Religion		
Christianity	361	89.8
African traditional	35	8.7
Islam	5	1,2
Other	1	2
Marital status:		
Married	213	53.0
Single	156	38.8
Widow	29	7.2
widower	4	1.0
Occupation:		
Farming	153	38.1
Civil servant	86	21.4
Businessman/Trader	58	14.4
Public servant (private sector)	37	9.2
Artisan/Apprentice	35	8.7
Health worker	20	5.0
Student	13	3.2

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Table 2: Eye care-seeking Practices			
Have you ever had an	Frequency	Percentage	
eye 'problem?	N=402		
Yes	269	66.9	
No	133	33.1	
What type of eye problem did you have?	N=269		
Red Eye ('Apollo')	135	50.2	
Reduced vision	56	20.8	
Eye trauma	56	20.8	
Itching	5	1.9	
Other	17	6.3	
When you had eye 'problem' what did you do (choice of care- giver)?	N = 269		
Self-medication	183	68.1	
Visited an eye clinic	84	31.2	
Did Nothing	2	0.7	
What did use as self- medication? $(N-183)$			
Eve drops	131	71 5	
Capsule powder	151	8 2	
Sugar water	10	5.5	
Urine	6	3.3	
Breast milk	4	2.2	
Holy water	2	1.1	
Other	15	8.2	
Do you use ave glasses			
Do you use eye glasses	98	24.4	
No	304	2 4 .4 75.6	
110	507	10.0	
Where did you obtain your eye glasses?	N = 98		
Market	64	65.3	
Eye clinic	24	24.5	
Gift	10	10.2	

Table 3: Relationship Between Socio-Demographic
Characteristics And The Choice Of Care Giver

	Choice of caregiver				
Socio-	Eye	Self	Total	X^2 ; P	2
demographic	clinic	Medication		value	
characteristic					
Education:					
\leq Primary	33	98 (74.8)	131	$X^2 =$	=
education	(25.2)	87 (63.1)	138	4.33;	
≥Secondary	51			P =	=
	(36.9)			0.037	
Gender:					
Male	49	77 (61.1)	126	$X^2 =$	=

Female	(38.9) 35 (24.5)	108 (75.5)	143	6.48; P = 0.01
Age group: ≤ 40 years > 40 years	66 (30.7) 18 (33.3)	149 (69.3) 36 (66.7)	215 54	

DISCUSSION

This study assessed the choice of eye care giver by the residents of Nchokko community for their eye care needs. Self medication was the commonest mode of care. This observation compares with the findings in many other studies done in Nigeria^{5, 6, 8}, and other developing countries.^{[4],[7],[10],[11]} Majority of our respondents (79.7%) who resorted to self medication purchased eye drops and 'capsule powder' from the patent medicine vendors ('Chemist'), while the rest used traditional eye medications (TEM).

Visual impairment and blindness due to ocular diseases remains a significant public health problem; particularly in developing countries. ^{[3],} ^{[5],[7],[8]} Communities are observed to evolve their own ways of managing various diseases based on their belief system about the cause of the disease as well as available services for treatment.^{[4],[9]} Unfortunately, the eventual choice of care giver and treatment, especially for eye disease, has direct implications for sight preservation. It has been observed in several studies that the choice of eye care provider by patients is influenced by s factors such as ignorance, socio-economic status, nonavailability of well-equipped health facilities, and uneven spread of trained manpower within the community and convenience. ^{[1], [14], [15], [16]}

Non-orthodox eye medications appear to be better patronized probably because they may be more readily available and cheaper. It has also been suggested that the rural dwellers have more trust and confidence in the traditional healers perhaps due to the presumed failure of modern medicine to cure certain eye diseases. This is worsened by communication gap between the rural dwellers and some health workers in the available health facilities. Thus the traditional healers and patent

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medicine sellers may have assumed the role of frontline health workers in those areas. ^{[14]-[16]}

The dangers of using un-prescribed medications and unorthodox treatment such as TEM have been documented. ^{[12], [13]} Apart from complicating the eye diseases by inappropriate treatment, some of the substances may actually be toxic to the eye and sometimes cause severe and uncontrolled eye infections which in extreme cases become an indication for surgical removal of the eye ball.^{15, 16}. In Africa, despite lack of sound scientific basis to justify the practice, the use of non-orthodox eye medications which are mostly injurious to the eyes is common; and could lead to increase in prevalence of avoidable blindness. ^{[9]-[14]}

The poor utilization of orthodox eye care services in this study agrees with most other studies in Nigeria and Africa ^{[17] - [21]}; but conflicts with the study conducted at Afon, a rural community in Kwara state, where most respondents (62.5%) used orthodox eye care services.^[9] It has been reported that utilization of existing eye care infrastructure in Nigerian communities is as low as 25% compared to the optimum target utilization set at 90%. ^{[5], [22]} Even when orthodox eve care services are available. they are under-utilized by potential beneficiaries. ^{[17]- [21]} This agrees with our finding as only 31.2 % of our respondents patronized the available eye clinic for treatment and 24.5% for spectacles. This is in spite of the fact that the Nchokko village is part of the Igbeagu community, which hosts the community eye care services of the department of Ophthalmology of FETHA, and is only 20 minutes drive away from Abakaliki the state capital where the teaching hospital is situated. Cost may be a key factor in the choice of eye care giver in this study population as suggested by Ebeigbe and Ovenseri-Ogbomo^[5], although there may be other sociocultural factors. However, this was not specifically investigated by our study.

As expected, education was found to have a positive influence on the choice of care giver in this study. This trend agrees with other studies ^{[8],[9],[15], [17],[21]} that observed that educated individuals had a greater likelihood of seeking orthodox eye care. However, we found out paradoxically that educational level did not influence the source of obtaining spectacles as majority of both those with less education and those with higher education used un-prescribed spectacles obtained from the market or obtained as a gift. Cost may be a factor in this. It is also possible that the frequent eye camps by both religious bodies and other groups where reading glasses are often distributed as gifts might have influenced this practice. However, a more detailed study focusing on the influence of free eye campaigns on choice of obtaining spectacles might be needed to elucidate on this.

Gender was significantly related to choice of care giver as more males (38.9%) than females (24.5%) patronised the orthodox eye clinics. This observation agrees with that of Olusanya et al ^[21] but differs from some other studies where women had better utilization of eye care services than men.^{[4] - [5]} This might be related to cost as males are traditionally more economically viable than females in our study environment.

CONCLUSION

The residents of Nchokko community of Igbeagu Izzi were found to resort more to self medication as their eye care practice. There was poor patronage of orthodox eye clinics. Higher educational level and male gender were found to positively influence the decision to patronise the eye clinics.

RECOMMENDATION

It is recommended that health education campaigns be carried out in this community with a view to discouraging self medication and increasing the utilisation of the available orthodox eye care services especially the health centre situated in their community. A further state-wide study is also recommended to unravel the effect of other possible factors such as cost, social class and belief system on the utilization of available eye care services.

LIMITATIONS OF THE STUDY

This study was carried out in a single rural community in Ebonyi state that was purposively selected because it hosts the community eye care post of the department of Ophthalmology of

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FETHA. It was part of the assessment of the primary healthcare needs of the rural practice centre of the department of Community medicine of FETHA. Therefore the findings should be interpreted with caution as it may not apply to all the rural communities in Ebonyi State.

ACKNOWLEDGEMENT

We wish to thank the leaders of Nchokko community for their cooperation in the course of this study. We are also grateful to the staff of the primary health care centre Nwezenyi for their cooperation. We also thank the medical students who served as research assistants for this study.

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