

OCULOVISUAL PROBLEMS IN ALAYI COMMUNITY OF ABIA STATE, NIGERIA

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ABSTRACT

Five hundred and eight seven subjects aged between 18 and 73 made up of 229 males and 358 females were seen during a community outreach clinic exercise carried out by the Department of Optometry, Abia State University Uturu. A battery of optometric tests such as case history, Snellen's visual acuity tests, ophthalmoscopy, tonometry and penlight were carried out. Data analysis showed that 192 (32.71%) subjects of the total number of those who presented themselves for eye examination had cataracts, 97 (16.52%) had allergic conjunctivitis. Other ocular problems discovered were refractive errors (19; 3.24%), presbyopia (69; 11.75%), glaucoma (72; 12.27%), bacterial conjunctivitis (41; 6.98%), Age-related Macular Degeneration (28; 4.77%, Low vision (28; 4.77%), eye injuries (25; 4.26%), and corneal opacities (6; 2.73). It is suggested that eye care services be made available to people in the rural areas and proper awareness created on ocular protection and hygiene.

KEYWORDS: Cataract, community outreach clinic, allergic conjunctivitis refractive error, outreach clinic.

INTRODUCTION

Vision is an essential tool for our survival within our environment in the pursuance of our activities of daily life. These activities of life are dependent upon the efficient, healthy and proper functioning of our visual organs. The prevalence of oculovisual problems varies in different places and where eye care facilities have not yet reached an adequate level, such problem reach proportion of overburden¹.

Primary healthcare which primary eye care is one of its component, has been described as the foundation of a nation's healthcare delivery and essential to its economic, social and political development². Primary eye care is a community based outreach clinic run in the spirit of primary health care and has helped to redirect the thinking and belief of most of the rural people and has propelled them to seek eye care services³. Cataract is an increasingly important cause of blindness in developing countries and is associated with physico-chemical changes within the crystalline lens and could be as a result of age, infection/eye diseases, hereditary influences, congenital events, physical or chemical injury to the eye and exposure to intense heat or radiation⁴.

MATERIALS AND METHOD

A community-based outreach programme was carried out in Alayi community in Bende Local Government Area of Abia State, Nigeria in 2003 by the Department of Optometry, Abia State

University, Uturu. Consent was got from the traditional ruler of the community and the programme was given a wide publicity. Town criers, announcement in the churches and schools were used to publicize the exercise.

A total of 587 subjects who presented themselves for the exercise were examined using basic Optometric diagnostic instruments/equipment such as Snellen visual acuity charts, Heine Ophthalmoscopes, Heine retinoscopes, Schiottz tonometer, American Optical trial case and penlight. Data obtained were tabulated and their percentage frequencies were determined.

The most prevalent oculovisual problem was cataract (192; 32.71%); followed by allergic conjunctivitis (97; 16.52%), Presbyopia (69; 11.75%), glaucoma (72; 12.27%) and bacterial conjunctivitis (41; 6.98%). Others were corneal opacity (16; 2.73%), retinopathy and low vision (28; 4.77% respectively), eye injuries (25; 4.26%) and refractive errors (19; 3.24%) as shown in table 1. Table 2 shows that majority of the subjects examined were farmers (289; 49.23%) followed by labourers (91; 15.50%), artisans (74; 12.78%), traders (57; 9.71%) and civil servants (38; 6.47%). Out of 587 subjects examined, 229 (39.01%) were males while 358 (60.99%) were females; all within various age groups (see table 3).

Table 4 shows that those within age group of (58-67) were more in number (198; 33.73%) and were predominantly females; followed by the age

group 38-47 (129; 21.98%) while the least was age group 68-77 (38; 6.47%) who were mostly males. It was only in the age group of 48-57 that males were more in number (9.03%) compared to females (8.00%).

DISCUSSION

Five hundred and eighty seven subjects who presented themselves for eye examination at Alayi Community in Bende Local Government Area of Abia State, Nigeria were examined. This constitutes 358 females and 229 males within the age range of 18 and 77.

Cataract was found to be the major oculo-visual problem amongst these rural dwellers. This is in agreement with assertion of some authorities that it is common among people of low socioeconomic status⁶ (as those examined were mainly poor farmer and labourers; see table 2) and that it could be due to harmful radiation from the sun due to outdoor life styled and occupation^{7,8}.

Refractive errors (19; 3.24%) were mostly hyperopia. Presbyopia (69; 11.75%) was also very common because of the elderly population that turned out for the exercise. Allergic conjunctivitis (97; 16.52%) could mostly due to exposure to wind, intense sunlight, varying seasonal temperature and adverse environment factors⁹. Cases of bacterial conjunctivitis (41; 6.98%) could be due to the fact that some bacterial species are well known spore formers; whose spores are easily carried by wind and generally resistant to harsh environmental conditions hence could be found in several places¹⁰.

Corneal opacity (16; 2.73%) was mainly due to complication arising from poor or wrong management of corneal related ocular problems such as lacerations and abrasions with herbs and concoctions¹¹. Retinopathy (28; 4.77%) was also seen mostly amongst the elderly and this agrees with Yorston's assertion¹². Eye injuries (25; 4.26%) were mostly seen amongst farmers and artisans and this agrees with revelations of some authorities that eye injuries have assumed a greater percentage of occupational hazards amongst rural artisans¹³. Low vision (28; 4.77%) were as a result of oculo-visual problems that were not properly managed and led to severe visual impairment or low vision¹⁴. Glaucoma (72; 12.27%) and retinopathies (28; 4.77%) were also mostly seen amongst the elderly, this agrees with an earlier assertion that they are primarily geriatric diseases with the prevalence increasing with age¹⁵.

The major occupation of the people seen was farming (289; 49.23%), followed by artisans (74; 12.78%), traders (57; 9.71%) while transporters and civil servants were 38 (6.47%) respectively (see table 2). The age group with highest percentage frequency was 58-67 (198; 33.73%) from table 4.

Orientation, creation of awareness and provision of eye care services should be a top priority by government authorizes towards the achievement of Vision 2020 the right to sight programme of the World Health Organization. Involvement of NGOs and private sector could also be helpful in this direction.

TABLE 1: DISTRIBUTION OF OCULOVISUAL PROBLEMS

Oculo-visual problems	Frequency	% Frequency
Allergic Conjunctivitis	97	16.52
Bacterial Conjunctivitis	41	6.98
Corneal Opacity	16	2.73
Cataract	192	32.71
Glaucoma	72	12.27
Eye Injuries	25	4.26
Low Vision	28	4.77
Retinopathy	28	4.77
Refractive Errors	19	3.24
Presbyopia	69	11.75
Total	587	100%

TABLE 2: DISTRIBUTION OF ACCORDING TO OCCUPATION

Occupation	Frequency	% Frequency
Farming	289	49.23
Traders	57	9.71
Transporters	38	6.47
Labourers	91	15.50
Artisans	74	12.78
Civil Servants	38	6.47
Total	587	100%

TABLE 3: DISTRIBUTION OF SUBJECTS ACCORDING TO SEX

Sex	Frequency	% Frequency
Males	229	39.01
Females	358	60.99
Total	587	100%

TABLE 4: DISTRIBUTION OF SUBJECTS ACCORDING TO AGE GROUP

Age Group	Frequency	% Frequency	Males	Females
.. . .	50	8.50	82; 3.21	31; 5.28
28 ó 37	72	12.27	28; 4.77	44; 7.49
38 ó 47	129	21.98	38; 6.47	91; 15.50
48 ó 57	100	17.04	53; 9.03	47; 8.00
58 ó 67	198	33.73	69; 11.75	129; 21.98
68 ó 77	38	6.47	22; 3.75	16; 2.73
Total	587	100	229; 39.01	358; 60.99

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