Analysis of Eye Disease in Private Practice

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SUMMARY

The pattern of eye disorders of 1, 584 consecutive new patients presenting at a private hospital in a sub-urban area of southwestern Nigeria was analysed. Nine hundred and twenty seven were males(58.5%) and 657 females (41.5%); (25.8%) of patients were under 20 years of age, while 45.5%) were over 40 years. Common ocular presentations were refractive error (16.9%), allergic conjunctivitis (15.9%) cataract (15.9%), trauma (12.0%) and glaucoma (7.3%). One hundred and fifty eight patients (10.5%) were blind i.e. visual acuity (VA) less than 3/60 in the better eye;315(21.0%) were unilaterally blind and 178(11.9%) had low vision (VA< 6/18 but > 3/60). Eye care needs of patients presenting to private practice in suburban Nigerian town can be met by the provision of inexpensive optical correction, large volume cheap cataract surgery, health education and maintenance of peace.

KEYWORDS: *Eye Disease, private practice,Nigeria, blindness*

INTRODUCTION

In 1996, a private hospital was established to meet the health needs of Modakeke-Ife, a Sub-urban community that felt marginalised by government in the provision of health care services. Difficulties often arose in accessing government medical facilities in the neighbouring university town of Ile-Ife because of an existing age-long feud between the two communities.[1] The hospital caters for general health conditions and the outpatient eye clinic is run 3 days a week. Patients are self-presenting or referred from other private hospitals. As much as possible, hospitals fees are not much higher than in government subsidized hospitals. A 2-tier costing system is used, charging the wealthier patients higher fees than the poorer ones. Studies on private eye care services are not available for comparison but related hospital based studies revealed that new patient presentation at eye clinics were mainly due to seasonal allergic conjunctivitis, cataract and refractive error[2,3,4,5]. Apart from a population based survey of blindness in the neighbouring Akinlalu-Ashipa ward[6], no previous study on eye diseases has been conducted in Modakeke-Ife community.

The Objectives of this study were

(i) to determine the pattern of eye diseases that present to the private clinic;
(ii) to identify the major causes of ocular morbidity and
(iii) to provide relevant baseline data for the planning of an eye care delivery system in the community.

PATIENTS AND METHODS

The Study of 1,584 new consecutive patients presenting in the eye clinic of Lighthouse Hospital, Modakeke-Ife, over a 4-year period (June, 1996 to May, 2000) was conducted. All patients were seen by an ophthalmologist who examined each patient with a Snellen's chart, pen torch, direct ophthalmoscope, slit lamp biomicroscope and Goldmamann's applanation tonometer as deemed necessary. At the end of daily consultation, data on presenting clinical features of all patients were recorded. Such data include name, age, sex, occupation, visual acuity, intraocular pressure and diagnosis. A single diagnosis in each eye was noted and coded in accordance with the World Health organization's classification of diseases[7]. For the purpose of this study, patients with different diagnosis for each eye had the more sight-threatening one recorded. Data were analysed by means of descriptive statistics, using SPSS software package.

RESULTS

A total of 1,584 patients presented with eye complaints over the study period. There were 927 males (58.5%) and 657 females (41.5%) with a male:female ratio 1.4:1 (Table I). The mean age was 38.6 years +_ 22.07 s.d. Over a quarter (25.8%) were under 20 years of age while 45.5% were over 40 years. The largest number of males appeared in the 20-29 years age group and females in the 10-19 years age group.

Table II shows that students from primary to tertiary levels constituted the largest number of patients, accounting for 24.0% of all patients with eye disorders. This was followed closely by traders/business men and women (21.8%), then farmers (20.0%). Others were artisans, including apprentices (8.0%), civil servants (6.5%), infants (5.2%) and teachers, including university lecturers 94.9%). Pensioners (4.0%), drivers (2.5%) and medical personnel (1.3%) also presented. However, 12 clergymen, 7 unemployed, 6 housewives, 2 traditional rulers and only one military man attended the clinic.

The leading eye disorders were refractive error (16.9%), allergic conjunctivitis (15.9%), cataract (15.9%), trauma (12.0%) and glaucoma (7.3%). Three persons were found to have normal eyes. Less common causes of ocular morbidity were age-related macula degeneration (0.6%), strabismus (0.4%) and congenital conditions like essential iris atrophy and albinism which accounted for just 0.2% (Table III).

The presenting visual acuity (VA) was not recordable in 83 patients (5.2%) under 5 years of age. Of the remaining 1,0501 patients, 836 (55.7 %) had VA of 6/18 or better, in the affected eye.

Almost half of the patients (44.3%) had significant visual loss (VA <6/18) in the affected eye. Three hundred and fifteen patients (21.0%) were blind in one eye (VA< 3/60), while 158 (10.5%) were blind in both eyes (VA< 3/60 in the better eye). Another 178 (11.9%) had low vision (VA< 6/18 but > 3/60).

DISCUSSION

Ophthalmic private practice in Nigeria has been on the increase since 1992 when the private practice Decree was repealed to stem the wave of brain drain[8]. Now ophthalmologists can practise in government hospitals while running a private practise or consultancy service on a part-time basis. Although most practise in urban areas, a few have established good eye hospitals in rural areas, thus ensuring good quality, steady and accessible eye care to rural dwellers[9].

Patients who attend private hospitals do so because they can afford the cost of management and also because the waiting time is much less than what obtains in government subsidized hospitals. It is generally believed that private hospitals are patronized by wealthy business people. On the contrary, students constituted the largest group of patients in this hospital. This is probably due to the two-tier costing system resulting in regular attendance of poorer patients. The first tier charges are 50% lower than the second tier. The result of this study may not give a true picture of eye disease in the community, they however show the pattern of eye diseases in patients who present to a suburban private clinic.

TABLE I: AGE AND SEX DISTRIBUTION

Age group (Years)	Sex(%) Male	Female	Total All ages(%)
0-9	96(10.4)	73(11.1)	169(10.7)
10-19	128(13.8)	112(17.1)	240(5.2)
20-29	175(18.9)	96(14.6)	271((17.1)
30-39	97(10.5)	86(13.1)	183(11.6)
40-49	135(14.6)	92(14.0)	227(14.3)
50-59	95(10.2)	69(10.5)	164(10.4)
70-79	45(4.9)	28(4.3)	73(4.6)
80+	16(1.7)	9(1.4)	25(1.6)
Total	927(58.5)	625(41.5)	1584(100.0)

TABLE II. *OCCUPATION*

Occupation	No. of Patients	%
Student	380	24.0
Trader/Business	345	21.8
Farmer	317	20.0
Artisan	126	8.0
Civil Servant	103	6.5
Infant	83	5.2
Teacher/Lecturer	77	4.9
Aged/pensioner	64	4.0
Driver	40	2.5
Medical	21	1.3
Clergy	12	0.8
Unemployed	7	0.4
Housewife	6	0.4
Traditional ruler	2	0.1
Military	1	0.1
Total	1584	100.0

TABLE III. ***PRESENTING DIAGNOSES IN 1584 PATIENTS***

Diagnosis	**Number**	**%**
Refractive error	268	16.9
Allergic Conjunctivitis	252	15.9
Cataract	251	15.9
Trauma	190	12.0
Glaucoma	116	7.3
Uveitis	70	4.4
Infective Conjunctivitis	64	3.0
Retinal disorders *(retinal detachment, chloroquine retinopathy, retinitis pigmentosa, retinoblastoma, sickle, hypertensive, diabetic retinopathies),*	47	3.0
Lid disorders *(chalazion, blepharospasm, style, haemangioma, cellulitis, Herpes-zoster ophthalmicus, ptosis, dermatochalasis)*	46	2.9
Episcleritis	38	2.4
Pterygium	37	2.3
Onchocerciasis	30	1.9
Neuro-ophthalmic disorders *(Bell's palsy, toxic optic neuropathy, papillitis, retrobulbar neuritis, drug-induced mydriasis)*	20	1.9
Macula scar	19	1.2
Non-infective conjunctival disorders *(granuloma, cyst subconjunctival haemorrhage)*	19	1.2
corneal scar	19	1.2
Panophthalmitis	15	0.9
Orbital disorders (lacrimal gland tumour, orbital cellulitis, epiphora)	14	0.9
Age-related macula degeneration	9	0.6
Strabismus	6	0.4
Congenital disorders *(albinism, essential iris atrophy)*	3	0.2
Normal	3	0.2
TOTAL	1584	100.0

TABLE IV. ***PRESENTING VISUAL ACUITY IN 1,501 PATIENTS***

Visual acuity	Presenting eye Number(%)	Better eye Number(%)
6/4 - 6/6	424 (28.2)	711 (47.4)
6/9 - 6/18	412 (27.5)	454 (30.2)
<6/18 - >3/60	196 (13.1)	178 (11.9)
<3/60 - LP	359 (23.9)	152 (10.1)
NLP	110 (7.3)	6 (0.4)
TOTAL	1501 (100.0)	1501 (100.0)

KEY

LP = Light perception

NPL = No Light Perception

The common eye disorders are similar to those in Tebepah's study conducted in southern Nigeria[5]. Refractive error was also the commonest ocular disorder, unlike other studies in Britain where cataract and seasonal allergic conjunctivitis top the list[23]. The Proximity to a university, may be responsible for the high occurrence of refractive error. This condition limits the educational progress and career opportunities of sufferers; therefore, the provision of inexpensive, good quality frame and lenses is necessary to meet their optical needs. Frames must also be attractive enough to ensure regular wear. Screening of school children for early detection and correction of refractive error will prevent irreversible amblyopia.

Untarred and dusty rural and sub-urban roads promote air-borne allergens which exacerbate allergic conjunctivitis. Local government authorities need to address this problem. Cataract remains a prominent condition and major cause of treatable blindness in southwestern Nigeria[6]. Organized, well publicised large volume and cheaper cataract outreach programmes can reduce the backlog of unoperated cases.

Unlike other studies[2 3 5], trauma features as a major cause of eye morbidity in this study. Within the study period, two large scale communal conflicts occurred, when highly sophisticated weaponry was used, resulting in severe, blinding ocular gunshot injuries. Programmes for the establishment of sustainable peace between Modakeke-ife and Ile-Ife will reduce the incidence of ocular trauma. Provision of basic equipment for glaucoma screening of individuals aged 40 years and above, along with eye health education through communication media; incorporating primary eye care within the existing primary health centre will assist in alleviating the problems of eye disease.

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