THE PROBLEMS OF EYE CARE DELIVERY IN LAFIA, NASARAWA STATE NORTH CENTRAL NIGERIA

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Background: - Lafia, the state capital of Nasarawa State has a specialist hospital that serves the entire state and beyond. It is a referral centre for the primary health care centres and cottage hospitals, but is short of man-power to meet the health needs of the populace. There have never been any ophthalmologists employed to work in the Specialist Hospital, as such all eye problems were managed by either ophthalmic nurses or optometrists. Difficult cases were referred.

Aim: - To assess the problems of eye care delivery in Lafia.

Method: Records of patients seen between 1999 to 2003 were retrieved; Information on Sex, Age, and History, physical and eye examinations, investigation, diagnosis and treatment given were reviewed.

Results: A total of 5, 376 cases reviewed, 3,721 (69. 21%) were diagnosed with diseases of the anterior segment, while 273 (5.1%) were diagnosed with various diseases of the posterior segment.

1, 382 (25.71%) had other eye diseases that were not specific. Four thousand, one hundred and seventeen (78.58%) patients had treatment with traditional eye medicine before or after visiting the hospital

Conclusion: The absence of an ophthalmologist in this study has shown that due to inadequate knowledge of the diseases, proper management of cases was not done. Patients had to travel long distances to get adequate treatment even if it was an emergency. The problem of lack of ophthalmologist will remain with us for a long time. This might create a big vacuum that is filled in by other eye care providers who are not knowledgeable in providing eye care.

Key words: PROBLEMS, EYECARE. DELIVERY

INTRODUCTION

Eyecare delivery in any community should be affordable and accessible, but this is not the case with the Lafia community where eyecare is quite inaccessible as a result of lack of ophthalmolgists. All patients with cataract, retinitis pigmentosa, endstage glaucoma, and optic nerve atrophy were referred to centres like Kano, Jos or Kaduna (all in Northern Nigeria) where there are ophthalmologists for proper management. In some cases these patients were unable to travel all these long distances as this

involved money, and the need to take one or two escorts.

This discouraged them, as such may have to patronise other health providers as seen in other studies by Keefe et al [1] There is presently one ophthalmologist to one million people in Africa[2] and in Nigeria, there are 120 registered ophthalmologists to a population of over 120 million, these are concentrated in the urban areas or tertiary institutions only [3].

Just like the findings among a rural community in Kaduna[4] (Northern Nigeria) where there are no ophthalmologists, the commonest presentations in a study were allergic conjunctivitis (36.33%), bacterial conjunctivitis (18.76%), and cataract (16.31%).

The aim of this study is to analyse the records of eye patients seen in the DASH in the last 5 years, taking note of the problems encountered in managing the patients.

Patients and Methods

The Dalhatu Araf Specialist hospital is a new state specialist situated in the heart of Lafia town, the capital city of Nasarawa State. It has various departments including an eye clinic. It serves the surrounding areas, and is the referral center to other peripheral clinics.

The register of patients seen in the eye clinic between 1999 and 2003 were perused. Names of patients and their hospital numbers were obtained.

Information on age, sex, diagnosis, treatment and referral given to these patients were noted. The diagnosis of and treatment of patients were made by the ophthalmic nurses and optometrists, as such a lot of patients were not correctly diagnosed and subsequently mismanaged.

RESULTS

Table 1 shows sex and age distribution of the patients.

Two thousand, seven hundred and seven (50.35%) of the patients were males while 2,667 (49.65%) were females, giving a male to female ratio of 1:1.1. Of the total number, 1225 (22.77%) were children aged 0-14years.The age range of patients was from 0 to 86 years.

Table 2 shows a spectrum of anterior segment diseases. Allergic conjunctivitis was the most commonly diagnosed anterior segment disease accounting for 1,356 (36.33%). This is followed by bacterial conjunctivitis 698(18.76%), and cataract 607 (16.31%). Only 21 (0.56%) had facial nerve palsy, while 14 (0.38%) had dacryocystitis and ptosis accounted for only 6 (0.16%) patients.

Table 3 shows spectrum of posterior segment diseases. Glaucoma was diagnosed in 147 (53.85%), while chorioretinitis was seen in 47 (17.22%) cases. Seven (2.56%) patients had retinoblastoma.

Table 4 shows the distribution of non – specific diseases. Refractive error was recorded as the

highest with 545 (42.00%) patients while only 14 (1.10%) patients had squint. Figure I show treatment received. Four thousand, one hundred and seventeen (76.58%) were treated at one time or the other with traditional medicine while 1,258 (23.42%) had never used traditional medicine

Of the non specific diseases classified above refractive error was recorded as the highest with 545 (42.00%) patients.

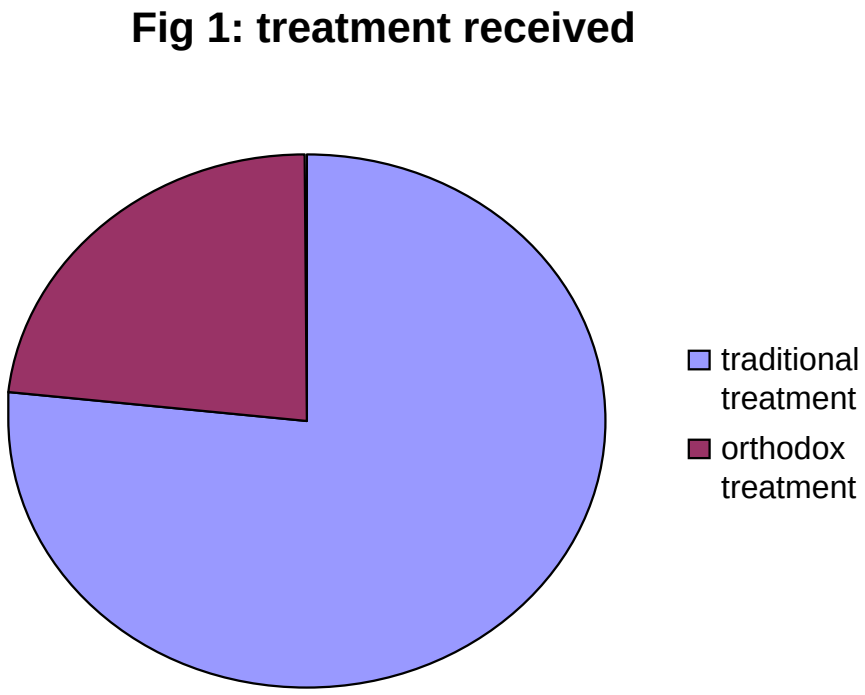

Figure I: Treatment Received

Table 1 show the sex and age distribution of the patients seen.

AGE (YRS)	MALES	FEMALES	TOTAL	PERCENTAGE
<1	24	18	42	0.78
1-4	122	117	239	4.44
5-14	546	398	944	17.56

15-24	714	577	1291	24.01
25-34	273	423	696	12.95
35-44	192	224	416	7.74
45-54	238	275	513	9.54
55-64	237	234	521	9.69
65>	**311**	**403**	**714**	**13.2**
TOTAL	**2,707**	**2,669**	**5,376**	**100-_**

TABLE 2 – SPECTRUM OF ANTERIOR SEGMENT DISEASES

	DISEASES	**NUMBER**	**PERCENTAGE**
1.	Allergic Conjunctivitis	1,356	36.33
2.	Bacterial Conjunctivitis	698	18.76
3.	Cataract	607	16.31
4.	Pterygium	287	7.71
5.	Ophthalmia Neonatorum	238	6.40
6.	Cornea Ulcer	202	5.43
7.	Trachoma	119	3.20
8.	Stye	73	1.96
9.	Chalazion	48	1.29
10	cleritis/episcleritis	29	0.75
11.	Anterior Staphyloma	24	0.64
12.	Facial nerve palsy	21	0.56
13.	Dacryocystitis	14	0.38
14.	Ptosis	6	0.16
		3721	**100**

Table 3: Spectrum of posterior segment diseases.

DISEASES		**NUMBER**	**PERCENTAGE**
1.	Glaucoma	147	53.85
2.	Chorioretinitis	47	17.22

3.	Optic Atrophy	26	9.52
4.	Retinitis pigmentosa	20	7.33
5.	Retinal Detachment	14	5.13
6.	Diabetic Retinopathy	12	4.40
7.	Retinoblastoma	7	2.56
		273	**100**

Table 4: The distribution of non-specific diseases

DISEASES	**NUMBER**	**PERCENTAGE**
1. Refractive Error	545	39.44
2. Trauma	484	35.02
3. Foreign Body	178	12.88
4. Uveitis	161	11.65
5. Squint	14	1.01u
	1,382	**100**

DISCUSSION

Eye care delivery in rural areas has become a major problem due to inadequate ophthalmologists, and the few available are concentrated in urban areas. There is one ophthalmologist to about one million people in Africa[2] and about 120 ophthalmologists in Nigeria. More than half of these are found in Lagos and other major cities in the southern parts of Nigeria. The few opthalmologists in the North are unevenly distributed. Some state capitals with specialist hospitals do not have an ophthalmologist. This is the case of Lafia the capital of Nasarawa, with a specialist hospital meeting or serving the health needs of the whole state. Until 2003, there were no ophthalmologists.

The eye clinic which is adequately equipped with a slit lamp, electronic snellen charts, a number of ophthalmoscopes, retinoscopes, trial lens set and an optical unit has been managed by optometrists and ophthalmic nurses. Patients are referred from the primary health centers and cottage hospitals within the state to the Eye unit in the state specialist hospitals. During the period of study a total of

9,886 patients were recorded in the register but the files of only 5376 patients were retrieved, while the files or cards of 4510 (45.62%) patients could not be traced. This calls for proper record keeping.

Our study shows an equal number of males and females. Similar studies done in a rural population in Indonesia showed a higher female population,[5] this shows that eye diseases affect both males and females equally in our environment.

One thousand three hundred and thirty-four (26.67%) children age 0-16 years were seen with various diseases in this study. These included ophthalmia neonatorum seen in 238 (6.40%). Studies on ophthalmia neonatorum in the early 1980s[6] showed a prevalence of 12%. This maybe attributed to either improved antenatal care or poor hospital attendance resorting to use of traditional medicine. Other diseases seen in children were allergic conjunctivitis, trauma, refractive error, squint, congenital glaucoma and cataract.

The diseases diagnosed in this study were divided into those affecting the anterior and posterior segments. The most common anterior segment disease seen was allergic conjunctivitis, seen in 1,359 accounting for 36.33%. This agrees with the study at St. Thomas Hospital London where allergic conjunctivitis accounted for 35% of eye problems diagnosed.[7] This condition was treated mainly with steroids. Most patients were lost to follow up. It was either they continued on the steroids on their own or got better and never showed up. Prolonged use of steroids are known to cause cataract and steroid-induced glacoma[6] It is difficult to know if these patients were still on steroids or had stopped, since they could walk into any chemist to buy these drugs. An ophthalmologist would have explained the condition to these patients, and discouraged them from using steroids for a long time, and continue using antihistamines. Other diseases seen were bacterial conjunctivitis (18.765%), cornea ulcers and trachoma. No conjuctival swaps or corneal scrapings were taken to confirm diagnosis. These patients were treated with chloramphenicol and gentamicin eye drops. These drugs were not available at the hospital pharmacy and patients had to buy in the commercial pharmacy shops. These patients are exposed to problems of fake drugs or alternative drugs. Many of these patients live very far from the state capital and transportation may only be available on market days which is once a week. Other studies also show that cost, lack of information, fear, transport difficulties and lack of an escort, easy access to traditional healers [8, 9], may discourage these patients from coming back for follow up. This may account for poor follow up and subsequent use of traditional medicine. In this study, 4,117 patients (41.79%) admitted using traditional medicine, before or after they had been to the eye clinic. The use of traditional medicine is widespread in our environment due to a variety of factors including lack of access to modern medical facilities,

poverty and ignorance[10]. Glaucoma was the most frequently diagnosed and this was based on cupping of the discs, raised intraocular pressures taken with schiotz tomometer. Since there was no ophthalmologist, no gonioscopy was done to differentiate angle-closure and open angle glaucoma, and no records of visual fields were seen. Most of these patients were treated with topical and systemic drugs. Only those with very poor vision of less than 6/60 visual acuity were referred to Jos, Kaduna or Kano, at this stage it was difficult for any ophthalmologist to offer any help to any patient. Early diagnosis of glaucoma and quick intervention may preserve sight [11] hence reducing the prevalence of blindness in the society. Other diagnosis included chorioretinitis and optic atrophy. It was difficult to know the causes of these conditions which are usually secondary to primary eye problems like onchocerciasis, toxoplasmosis and other retinal dystrophies. Twenty patients seen with retinitis pigmentosa and 14 with retinal detachment were referred. The 20 patients with retinitis would not have been referred if there was an ophthalmologist who would have explained to the patients the incurable nature of the disease. The 12 patients with diabetic retinopathy and 7 with retinoblastoma were also referred to various centers.

Refractive error seen in 545 patients was not specific as one could not say if they were myopic, hypermetropic or astigmatic, since some refraction results were not recorded.

Four hundred and eighty four (25.71) patients had trauma. One could not say which part of the eye had injury as proper clerking was not done in most cases. An ophthalmologist would have documented which part of the eye was affected and quick intervention to prevent loss of the eye. These patients were referred for surgical repairs but no records of feedback from the referred hospitals. Foreign body seen in 178 was not specific as it was difficult to know which part of the eye had foreign bodies. This also applied to uveitis where 161 patients were diagnosed with it. It was not also differentiated into anterior, posterior or pan uveitis. Fourteen patients were said to have squint which were not classified into exotropia, esotropia, hypertropia or hypotropia as this was not also specified. Some conditions may either be misrepresented or under represented due to lack of manpower and understanding of the disease.

The problem of lack of ophthalmologists will remain with us for a long time. This has created a big vacuum that is filled in by other eye care providers who are not very knowledgeable in providing eye care. These categories are also not adequate and this has been taken advantage of by quacks that are mainly found in the rural areas[12]

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