
OCULOPLASTIC TRAINING AND ITS ROLE IN EYE CARE SERVICES IN A NIGERIA TERTIARY HOSPITAL

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ABSTRACT

Oculoplasty subspecialty in Ophthalmology was barely 7 years in Nigeria. National statistics show increased number of cases that should have benefitted from this expertise that is rare. As a result of this deficit, a consultant ophthalmologist was sent to Sankara Nethralaya Eye Hospital, Chennai, India for 3 months oculoplastic training with the help of International Council Ophthalmology (ICO).

To evaluate the role of oculoplastic training in eye-service care in our hospital, all patients seen at our oculoplastic unit during the 8 months period from April to November 2017, had information extracted from their medical record. The data obtained was analysed using SPSS version 20.

Out of 53 patients seen 30 (56.6%) were males and 23 (43.4%) were females. Majority 10 (18.9%) were diagnosed with a traumatic irreparable ruptured globe, while 10 (18.9%) had congenital nasolacrimal duct obstruction. Page 7 of 23 <https://mc.manuscriptcentral.com/sljbr> Sierra Leone Journal of Biomedical Research Oculoplastic training and its role in eye care services in a Nigeria tertiary hospital for Review Only 2 Thirty-six (67.9%) patients had surgery and 10 (18.9%) were successfully managed with lacrimal sac massage for congenital nasolacrimal duct obstruction in children. Majority 10(18.9%) of the surgery were evisceration with primary ocular implants. One patient with clinically significant orbital floor fracture was referred. Four cases of congenital ptosis declined surgery. This expertise resulted in increased patient turnout by 30% and income to the department, while it saves cost to patients who need not be referred.

The skills acquired from oculoplasty training have help in rendering oculoplasty services to the people of Kebbi State and its environs at a reduced cost. Also, there is improved internally generated revenue to the hospital. The importance of skill transfers and subspecialty training is underscored. Keywords: oculoplasty; subspecialty training; Kebbi State; tertiary hospital

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INTRODUCTION

Oculoplasty is a subspecialty of ophthalmology that deals with surgical and medical management of abnormalities and deformities of eyelid, lacrimal system and orbit (1). It's also known as Ophthalmic Plastic and Reconstructive Surgery. Oculoplasty services was not in existence in Nigeria until 7year ago despite large number of cases seen daily across the country. At the Ophthalmological Society of Nigeria (OSN) meeting in 2012 in Abuja Nigeria, efforts were geared towards the development of this important aspect of ophthalmology in the country. Our hospital is the only tertiary hospital in Kebbi State where eye care services is being rendered, catering for the population of over 4 million and surrounding states and countries (Benin and Niger republics) (2). But because oculoplasty specialist services were not available, we do refer all oculoplasty cases to the National eye centre in Kaduna which is 7 hours travel by road. In order to curb this, the hospital management with the help of International Council Ophthalmology (ICO), sent one consultant ophthalmologist for 3 months oculoplasty training at Sankara Nethralaya Eye Hospital Chennai India from December 2016 to February 2017. On his return, the oculoplasty unit

was established. The aim of this study is to evaluate the role of oculoplastic training in eye-service care in our hospital.

Materials and Method

This is 8 months (1st April - 30th November 2017) auditing (retrospective study) of all cases seen at oculoplastic unit of Federal Medical Centre (FMC), Birnin Kebbi, Nigeria. All the patients' folder was retrieved. The following information were extracted: sociodemographic characteristics, diagnosis, treatment offer, type of surgery, whether patient was referred and the reason for the referral. The Internal Generated Revenue (IGR) in the department before and after the commencement of oculoplastic services was documented. The total number of patients seen in the department during the study period was also documented. The data was double entered into Microsoft Excel and analysed using SPSS version 20 statistical software (SPSS Inc., Chicago, IL, USA). Frequency tables and diagrams in form of charts were generated for relevant variables. Means, standard deviations, proportions and percentages was determined as appropriate. The means and standard deviation (SD) were calculated for continuous variables. The ethical approval for the

study was obtained from Ethical and Research Committee of FMC Birnin Kebbi.

RESULTS

For Review Only Out of the 53 patients seen in the unit during the 8 months period, there were 30 (56.6%) males and 23 (43.4%) females, M:F 1.3:1 with mean age of 26 years (Std =20.4) and age range

between 6months – 77years. Majority 19 (35.8%) were in the age group of 17years-33years (table 1), mostly Hausa 32 (60.4%) and full time house wives 14 (26.4%). Traumatic irreparable rupture globe 10 (18.9%) and congenital nasolacrimal duct obstruction 10(18.9%) were the major oculoplasty cases see during the study periods (figure 1).

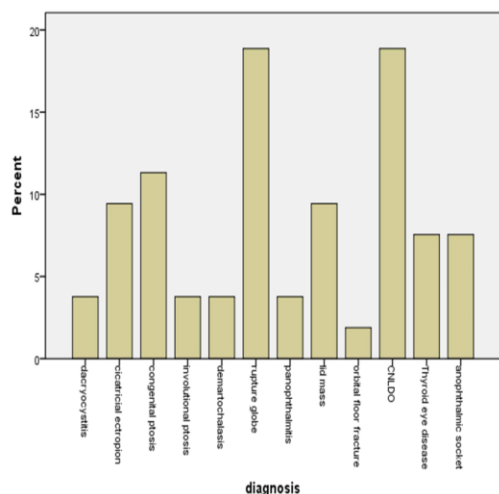


Figure 1: Clinical diagnosis of the patients

Table1: Socio-demographic characteristic of the patients (n=53)

Sex		
Male	30	56.6
Female	23	43.4
Age groups(years)		
0-16	18	34
17-33	19	35.8
34-50	9	17
51-67	4	7.5
68+	3	5.7
Tribe		
Hausa	32	60.4
Fulani	4	7.5
Yoruba	17	32.1
Marital status		
Married	23	43.4
Single	11	20.8
Divorce	2	3.8
Child	17	32.1
Occupation		
Farmer	3	5.7
House wife	14	26.4
Civil servant	8	15.1
Child	12	22.6
Student	10	18.9
Business man	6	11.3

Thirty-six (67.9%) patients had surgery and 10 (18.9%) were successfully managed with lacrimal sac massage for Congenital Nasolacrimal Duct Obstruction (CNLDO) in children age 6months-12months (table 2).

Table 2: Treatment offered the participants

Type of treatment	Fequency	%
Surgical	36	67.9
Medical	3	5.7
Lacrimal sac Massage	10	18.9
Conservative management	4	7.5
Total	53	100

Majority 10(27.7%) of the surgery were evisceration with primary ocular implants (figure 2). One patient with clinically significant orbital floor fracture was referred because of non-availability of surgical material to perform the surgery. Four cases of congenital ptosis declined

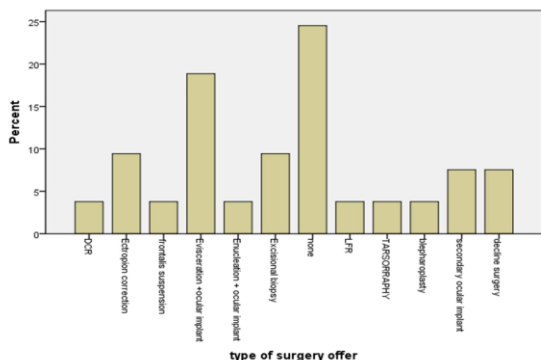


Figure2: Type of operation performed on the patients

Table 3: Oculoplasty cases operated at our centre which would have referred to another centre before the establishment of oculoplasty unit.

SURGERY	FREQUENC Y	%
DCR	2	3.8
Ectropion correction	5	9.4
Frontalis suspension	2	3.8
Levator aponeurosis advancement	2	3.8
Blepharoplasty	2	3.8
Secondary ocular implant	4	7.5
Total	17	32.1

surgery because of cost (2) and fear (2). Seventeen cases (32.1%) of oculoplasty (cases table 3) was operated at our clinic which would have referred to other hospital (National eye centre Kaduna) before the commencement of oculoplasty services at our centre. The monthly average IGR before commencement of oculoplasty services was 250,000 naira and increase to monthly average of 352,000 naira after the commencement of the oculoplastic unit. This has accumulated into the generation of 1 million naira to the department from the surgery and other services during the study period. The services have also increase the number of patients attending our clinic and other surgical services especially cataract surgery by 30% Discussion The preponderance of males in this study matched many previous studies (3- 5) on eye care services seeking behaviour (6) but different from

those of rural South India (5) where there was no sex preponderance and those of other studies (7-10) where females were preponderant over males. In this our study, majority (26.4%) were full time house wives. This was different from most studies (3-5) from other parts of Nigeria, and this was possibly so because polygamy is been practised in the northern Nigeria, hence house wives are more conscious of their look in other to be their husband favourite and to get his attention. Majority of the surgery were evisceration with ocular implants, and this was in agreement with previous report by Norris (11). The reason for evisceration was due to traumatic irreparable eye injury which matched previous studies (4, 11). Lacrimal sac massage is a conservative management of CNLDO in an infant, less or equal to 1year. It works by increasing the hydrostatic pressure in the nasolacrimal duct leading to the rupture of membranous obstruction. This conservative management was successful in all our patients so treated. The success of this lacrimal sac massage was in agreement with previous report (12-14). One patient with clinically significant orbital floor fracture was referred because of non-availability of surgical material and equipment to perform the surgery. Non availability of surgical materials and equipment due to cost of purchasing remains a challenge in low income countries include Nigeria

(15). Encouraging the hospital management to purchase the needed oculoplasty instrument and materials for surgery will reduced the hardship faced by patient and relative in term of cost and convenience. It will also enhance the development of oculoplastic services. Four cases of congenital ptosis declined surgery because of cost and fear. This was in agreement with previous studies in Nigeria (16-18), Kenya (19), Gambia (20) and India (21) as important reasons why patient declined ocular surgery. The cost of procedure can be reduced by different pricing mechanism, bulk purchasing of consumable materials, inclusion of oculoplasty procedure in National Health Insurance Scheme (NHIS) and possibly propagate a law to offer for free oculoplasty surgery. Fear of surgery can be reduced by health education.

CONCLUSION

The skills acquired from oculoplasty training, a subspecialty in ophthalmology, have help in establishing and offering oculoplasty surgical services to the people of Kebbi State and its environs. Also, there is improved income to the hospital. The importance of skill transfers and subspecialty training is underscored

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