

HEALTH SERVICES IN BAHRAIN SERIES

INTRODUCTION

THE editorial board of the Bahrain Medical Bulletin has decided to publish a series of articles on various health services in Bahrain. These are intended to provide information on the existing facilities, various activities of each department and the most recent statistical data. Departmental services of the Salmaniya Medical Centre will be started with; other health services like public health, primary care etc. will be dealt with later.

Eye care is delivered primarily by the ophthalmology department of the Salmaniya Medical Centre for the whole of Bahrain. The following descriptions of the ophthalmic services is based on the departmental annual report for 1979.

Staffing	Number
Consultants	3
Senior Residents	3
Residents	5
Refractionist	1
Orthoptist	1

With the current population of Bahrain being around 330,000, there is one ophthalmologist for every 30,000.

FACILITIES

a. Out Patient

The ambulatory eye care is delivered in the out patient clinics of the Salmaniya Medical Centre daily except Fridays. Referred,

I. Ophthalmic Services

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'walk-in-patients' as well as emergency cases are seen in this clinic. The source of referral is primarily from the health centres. A total of 35,017 cases have been seen in the out patient clinic in 1979. Of these 12,179 were 'new' cases attending the clinic for the first time and the rest, 22,838 cases were 'old' for follow-up visits.

The following facilities are incorporated in the out-patient clinic :

Refraction section which is handled by a refractionist. A dispensing ophthalmic pharmacy. Orthoptics and visual field section which is handled by an orthoptist. In 1979 an ophthalmic bacteriology laboratory was established. This has facilitated the processing of eye culture and smears and has been valuable in the diagnosis of infectious eye conditions.

b. In-patients :

The in-patient section consist of 44 beds out of a total of 620 beds for the whole of Salmaniya Medical Centre.

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The retina section is provided with Zeiss Fundus photography and Fluorescein angiography unit in addition to Zeiss Xenon are photocoagulator. This section has enabled us to manage most of the retina cases in Bahrain.

The departmental library is well equipped with recent books, references, Video and tape cassetts.

A photography section has been established as part of the library to classify and store pictures that are taken in the department for documentary, reference and teaching purposes.

The total number of eye cases admitted to the hospital were 874 (Table 1). The following are the four major categories :

Diagnosis	Number	%
Cataract	246	28.1 %
Glaucoma	149	17.0 %
Trauma	124	14.2 %
Corneal lesions	116	13.3 %

Ocular trauma accounts for 14.2% of the eye admissions. The majority are either the result of domestic or industrial accidents. This is a major cause of preventable blindness in Bahrain.

Theatre

One theatre room is used exclusively for ophthalmic surgery. It is fitted with a ceiling mount Zeiss microscope with attachments for movie and static photography.

A total of 842 surgical procedures were performed during 1979

(Table II). Of these 450 were major and the rest, 392 were minor in nature. Cataract extraction is the most commonly performed surgery (242 operations), followed by surgery for glaucoma (48 Trabeculectomies and 32 Iridectomies). Glaucoma is a problem as early detection is rare. Medical management is not feasible in the majority of the cases because of low compliance. This necessitates surgical intervention in a large number of cases.

In 1979, 11 cases of penetrating keratoplasty were done. We started doing keratoplasties in Bahrain starting June 1979 after arrangements were made with Sri Lanka International Eye Bank which has been providing us with donar material on regular basis. Corneal opacities account for high number of blind eyes in Bahrain. There is therefore need to continue this service.

109 tarsectomy procedures were performed indicating the mag-

nitude of cases of trachoma complications in the old generation.

In 1979 retinal detachment surgery was performed on 9 cases. This service is expanding with the addition of photocoagulation facilities.

ACADEMIC ACTIVITIES

A comprehensive continuing education programme was started in April 1979. The basic material used are series of manuals provided by the American Academy of Ophthalmology. The manuals are up-dated every two years and provide the most recent information in ophthalmology. The resident staff members are asked to prepare the material for presentation. The consultants' role is elaboration, discussion and comments. The meeting is held bi-weekly on Monday and Thursday 7.30 — 8.30 a.m.

A weekly grand ward round is held on Sunday 7.30 — 9.30 a.m.

All hospitalized cases are presented by the resident staff. Complicated and interesting cases are discussed by the consultants.

A weekly journal club is held on Tuesday 7.30 — 8.30 a.m. Interesting and recent articles are presented by the consultants.

A weekly meeting for the presentation of interesting cases from the out-patient clinic is held on Wednesday 7.30 — 8.30 a.m.

PLAN FOR FUTURE

The plan for the near future includes the following :

Training abroad of a Bahraini physician to specialise in ophthalmology and two Bahraini students to specialise in refraction. Establishment of Orthoptic — Pediatrics unit in the out patient clinic and procurment of Laser Photo-coagulator, Echography and ERG machines.

TABLE 1
Ocular Diagnosis of 874 Cases admitted to the Hospital in 1979

<i>Diagnosis</i>	<i>No. of Cases</i>	<i>Total</i>
CATARACT		264
Senile cataract	252	
Complicated cataract	8	
Congenital	4	
GLAUCOMA		149
Open angle glaucoma	75	
Narrow angle glaucoma	36	
Glaucoma associated with lens disorder	20	
Glaucoma associated with other disorder of the eye	4	
Congenital glaucoma	1	
Absolute glaucoma	9	
Low tension glaucoma	1	
Aphakic glaucoma	3	
CORNEA		116
Corneal ulcer	75	
Dendritic keratitis	11	
Corneal opacities & degenerations	22	
Chemical corneal burn	8	

<i>Diagnosis</i>	<i>No. of Cases</i>	<i>Total</i>
CONJUNCTIVA		22
Acute kerato conjunctivites	16	
Conjunctival cyst	5	
Squamous cell carcinoma of the conjunctiva	1	
HERPES ZOSTER OPHTHALMICUS	4	4
DISORDER OF THE EYE LID		49
Entropion and trichiasis	40	
Ptosis	4	
Coloboma	1	
Tumours of the lid	4	
DISORDERS OF THE LACRIMAL SYSTEM		24
Acute dacryocystitis	10	
Chronic dacryocystitis	8	
Adenocystic carcinoma	1	
Blocked canaliculi	5	
DISORDERS OF THE ORBIT		9
Abscess, cellulitis	8	
Endocrine exophthalmos	1	
DISORDERS OF THE NERVE		3
Papilloedema	1	
Ophthamoplegia	1	
Optic neuritis	1	
DISORDERS OF THE GLOBE		17
Endophthalmitis	10	
Bleb infection	7	
FOREIGN BODIES		13
I.O. Foreign bodies	9	
E.O. Foreign bodies	4	
RETINAL DETACHMENT & DEFECTS		34
Retinal detachment	21	
Retinoschisis	1	
Retinoblastoma	2	
Diabetic retinopathy	1	
Hypertensive retinopathy	1	
Retinal haemorrhage	2	
Vitreous haemorrhage	6	
CHOROIDAL DETACHMENT	1	1
DISORDERS OF THE IRIS, CILIARY BODY AND CHOROID		20
Uveitis	20	
PAINFUL BLIND EYE	14	14
TRAUMA TO THE EYE		124
Lid lacertation	13	
Traumatic iridocyclifis	10	
Traumatic hyphaema	25	
Traumatic mydriasis	5	
Traumatic conjunctival tear	1	

<i>Diagnosis</i>	<i>No. of Cases</i>	<i>Total</i>
Traumatic corneal abrasion	21	
Traumatic corneal perforation	47	
Traumatic retinal oedema	1	
STRABISMUS	7	7
RETINAL VASCULAR OCCLUSION	4	4
GRAND TOTAL	874	

TABLE II

Details of 842 Ocular Operations carried out in 1979

<i>Major Operations</i>	<i>Number</i>	<i>Minor Operations</i>	<i>Number</i>
Cataract extraction	242	Tarsectomy	109
Trabeculectomy	48	Pterygium excision	58
Iridectomy	32	Electrolysis	50
Corneal perforation suturing	30	E.U.A.	40
Intra ocular foreign body removal	13	Lid cyst & lid granuloma excision	39
Enucleation	12	Suturing of lid	24
Keratoplasty	11	Chalazion	23
Dacryocystectomy	10	Suture removal	19
Mucous grafting	10	Post-operative resuturing	10
Evisceration	9	Paracentesis	5
Retinal detachment	9	Carbolisation	4
Squint correction	7	Conjunctival flap	3
Dacryocystorhynchostomy	3	Corneal foreign body	2
Vitreous evacuation	3	Cryopexy	2
Capsulotomy	3	Tarsorrhaphy	2
Excentration of orbit	2	Cyclocryopexy	1
Needling of the lens	2	Cyclodiatherapy	1
Ptosis correction	2		
Choroidal detachment tapping	1		
Orbitotomy	1		
		Total	392
Total	450		