

Profile of Ocular Surgery in a Secondary Level Hospital of Bangladesh

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To find out the profile of ocular surgery in a secondary level hospital of Bangladesh a retrospective study was conducted from 1st December 2015 to 30th November 2016 at 250 Bedded General Hospital, Tangail. A total of 1053 operations were done at ophthalmology department of 250 Bedded General Hospital, Tangail. Among them 438 (41.60%) male and 615 (58.40%) were female. Majority of the patients belongs to 50 and above 50 year of age, most of the operation were cataract surgery (SICS with PC 10L) 689 (65.43%), Pterygium excision and conjunctival grafting 40 (3.80%), Only pterygium excision 12 (1.14%), DCR 10 (0.95%), DCT 4 (0.38%), Chalazion incision and curettage 37 (3.51%), Injury repair 35 (3.32%) others 226 (21.46%), (Foreign body removal, Lacrimal abscess drainage and excision of some growth etc.). Most of the ocular surgery done in secondary level hospital are SICS with PC 10L which are curable and prevent blindness which is main target of vision 2020. There are lacking's of proper planning and statistic, insufficient man power, standardized MIS in eye care in our country, which are very essential for proper planning and management of eye health services for prevention of blindness.

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Introduction

Ophthalmology is one of the important specialties in Medicare services. Eye health is including a sense of well-being and other consideration including whether people feel a burden to their families, have trouble in performing daily duties. It is a common problem both in rural and urban areas. Also equally spread in developed and undeveloped countries. In our country most people are poor, landless, day labor, and they cannot afford to pay surgical expenses available in the private sector. These poor people usually attend government, non-government charitable hospital and clinic where ophthalmic surgical services are very poor and inadequate both in respect of equipment and manpower in rural area.²

Screening for eye diseases is important in identifying those patient at risk of getting blind and providing the right treatment to them and also give a chance to be treated for those who have logistic problem.³

The morbidity is multi-factorial: Infection, poor nutrition and certain socio-culture factors are important in its causation. Poor hygiene and sanitation are important predisposing factors and the climatic conditions can further aggravate the ocular surgical complications. Therefore there is a need to control the above mentioned factors for checking ocular surgical complications. Necessary treatment, if given in early stages, many times prevents permanent visual disability.⁴

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Blindness is one of the many problems which hinder our economic development. Blind people become burden not only to the family but also to the society and to the nations.⁶

The present study was conducted with the aim of determining the ocular surgery in a secondary level public eye care facility and to formulate proper planning and to prevent avoidable blindness. Patients come here from district town, upazila and village level. Majority of the patients received surgical treatment successfully. A small number of patients were referred to specialized hospital in Dhaka for proper diagnosis, investigation and treatment.

Methods

A hospital based retrospective study was done in the ophthalmology department of 250 Bedded General Hospital, Tangail. The study period was one year from 1 December, 2015 to 30 November, 2016. All the surgery was done in Eye OT with all aseptic precautions under local anaesthesia and were recorded in a registrar book by OT in-charge (Senior Staff Nurse). Then that were recorded in computer Microsoft Word by me and my junior consultant. Then it was compiled by me with tabulated form for calculation. During operation one Sub Assistant Community Medical Officer assisted me.

Result

A total of 1053 operations were done at ophthalmology department of 250 Bedded General Hospital, Tangail. Among them 438 (41.60%) male and 615 (58.40%) were female. Female are predominant. Majority of the patients belongs to 50 and above 50 year of age, most of the operation are Cataract surgery (SICS with PC IOL) 689 (65.43%). Right eye operations were more than left eye.

Maximum operation were done in the month of October 2016, 121 (11.43%) and list operations were done in the month of February 2016, 47 (4.46%). Number of operation done was gradually increasing (Table I). Most of the operations were cataract surgery (SICS with PC IOL, Table II). Among cataract senile cataract were more 668 (96.95%), Presenile 10 (1.45%), Traumatic 4 (0.58%) complicated 5 (0.73%) and congenital or developmental were 2 (0.29%, Table III). Pterygium excision and conjunctival grafting 40 (3.80%), Only pterygium excision 12 (1.14%), DCR 10 (0.95%), DCT-4 (0.38%), Chalazion Incision and curettage 37 (3.51%), Injury repair 35 (3.32%) others 226 (21.46%), (Foreign body removal, Lacrimal abscess drainage and excision of some growth etc.).

Table I: Month wise number of operations

Months	Number of operation	%
December 2015	65	6.17
January 2016	64	6.08
February 2016	47	4.46
March 2016	86	8.17
April 2016	100	9.50
May 2016	87	8.26
June 2016	111	10.54
July 2016	90	8.55
August 2016	107	10.16
September 2016	61	5.79
October 2016	121	11.49
November 2016	114	10.83
Total	1053	100

Table II: Types and number of surgery

Types of operation	Number	%
SICS with PC 10L	689	65.43
DCR	10	0.95
DCT	4	0.38
Excision of Pterygium and Conjunctival grafting	40	3.80
Only Excision pterygium	12	1.14
Incision and curettage of chalazion	37	3.51
Repair of injury	35	3.32
Others	226	21.46
Total	1053	100

Table III: Type of cataract

Cataract	Number	%
Senile	668	96.95
Pre-senile	10	1.45
Traumatic	4	0.58
Complicated	5	0.73
Dev. Cataract	2	0.29

Discussion

This retrospective study was done on 1053 patients at 250 Bedded General Hospital, Tangail a district secondary level Hospital of Bangladesh from 1st December 2015 to 30th November 2016 for 12 months. In this study we found female are predominant 615 (58.40%) than male 438 (41.60%). This is compatible with the study of Bose M. K et al in Khulna Medical College Hospital.¹ This is also compatible with the study of Kundu U.K et al in a secondary level Hospital of Bangladesh.² This is also compatible with the study of Hoque K. E. et al in a private chamber.³ and not compatible with other studies^{4,5,6,7} where male are predominant because those studies were done in a tertiary hospital in an urban area. Majority of the patients were 50 and above 50 years of age 789 (74.93%) which is almost compatible with others studies. Most of cataract patients were with senile cataract 668 (96.95%), Pre-senile cataract 10 (1.45%), Traumatic cataract 4 (0.58%), complicated cataract 05 (0.73%) and congenital/developmental 2 (0.29%). This is almost similar with the studies of Bose and Kundu^{1, 2} and not compatible with other studies because that studies were done in tertiary Hospital in an Urban area. Pterygium excision and conjunctival grafting 40 (3.80%). Only excision of pterygium 12 (1.14%). This is almost similar with the study of Hoque and

Khan where DCR was 10 (0.45%), DCT was 4 (0.38%).^{3,4} This is not compatible with other studies where numbers were more because of lack of manpower and fascination to cataract surgery to prevent blindness to gain vision 2020. Incision and curettage of chalazion 37 (3.51%), Repair of ocular injuries 35 (3.32%) and others surgery 226 (21.46%). These numbers were more than other studies in district level Hospital, because total numbers of operations were more than other district level Hospital. But less than the studies were done in tertiary level Hospital because of poor manpower. Most of cataract patient have good vision after surgery. Few have poor vision due to post operative complications which due to lack of proper post operative maintenances of hygiene and proper applications of medications and also per-operative complications.

Conclusion

Most of the ocular surgery in a secondary level hospital are satisfactory. So proper statistics, planning, standardized MIS, sufficient man-power are necessary to do more and better services for prevention of avoidable blindness to gain vision 2020.

References

1. Bose MK et. Al. Pattern of ocular morbidity in Khulna Medical College Hospital, JOSB, 2010; 37(4):51-54.
2. Kundu UK et. Al. Pattern of Ocular morbidity in a Secondary level Hospital of Bangladesh. JOSB, 2015; 42(1):57-62.
3. Haque KE et. Al. Pattern of Ocular morbidity in a private chamber: J-Bangladesh Acad. of Ophthalmology, 2007; 14(1) 47-50.
4. Khan AK et. Al. Study on Ocular disease pattern of peripheral district eye clinic; JOSB, 2006; 35:56-58.
5. Rahman M et. Al. Disease pattern of patients attended At National Institute of Ophthalmology and Hospital, Dhaka. JOSB, 2003; 30(1): 96-100.
6. Murad MAU et. Al. Pattern of eye diseases in tertiary hospital in a suburban area: A retrospective study. The ORION, 2007; 28: (www.orion-group.net/medicaljournal).
7. The Bangladesh National Blindness and Low Vision Survey Summer Report – 2003.