

A Review of Ocular Surgeries Performed in 2020 and 2021 at Tertiary Care Hospital

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Abstract

Objective: To review the types and total number of ocular surgeries performed at Tertiary Care Hospital in two consecutive years i.e., 2020 & 2021. This study will also indicate the pattern of ophthalmic diseases in the catchment area of the hospital.

Methods: It was retrospective study. Study center was Tertiary Care Hospital. Study duration was two years i.e., 1-1-2020 to 31-12-2021. Data was obtained from eye department of Tertiary Care Hospital. Collected data was analyzed by using SPSS version 25. Tables and graphs were made which presented total number and percentage of all data.

Results: Only one ocular surgery i.e., enucleation was carried out in 2020 upon a female 31 years of age. In next year total number of ophthalmic surgeries performed was 60. 66.6 % surgeries were performed due to cataract. 60% of males were operated for cataract and 40% were females. 53.3 % of total surgeries were performed upon females. 10% of total surgeries were performed for squint, predominantly in females, 83.3 % of total squint surgeries. 60% of patients belonged to age group of 60-75 years.

Conclusion: Number of surgeries carried out in 2020 was only one. In 2021 it increased upto 60 surgeries.

Keywords: Tertiary Care Hospital, cataract, glaucoma

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Introduction

The incidence of various eye diseases differs in different months of the year. But most commonly occurring diseases of eye prevailing in different areas are cataract, glaucoma, NLD blockage, trachoma¹. A world wide data about various eye diseases occurring was collected in 2015. According to which thirty-six million people had lost their power to see things permanently. Two hundred and sixteen million people had got permanent disability due to eye diseases. That survey also concluded that pattern of eye disease occurrence differed in various areas of the world. Females

more suffered than the males². Multiple factors effect upon incidence of different ophthalmic diseases. These include financial condition, availability of health facility, literacy and health education³. Ophthalmic diseases cause a lot of financial burden upon society as well as country⁴. Most of the ophthalmic diseases are influenced by weather.⁵ Ophthalmic conditions like pain, itching and decreased visual acuity are more common in women.⁶ Pakistan is one of the thickly populated country in the globe. According to a survey of 2017, presbiopia was a most prevalent disease followed by retinal detachment and cataract. The incidence of all these were more in women than men.⁷ People from villages suffer with cataract more than persons living in cities.⁸ The patients with diabetes and hypertension present with retinal complications. Diabetes leads the hypertension in causing retinal complications.^{9,10} Ophthalmic health improvement can be studied by looking critically the eye health indicators. Ocular surgeries were decreased in 2020 as compared to 2019.¹¹

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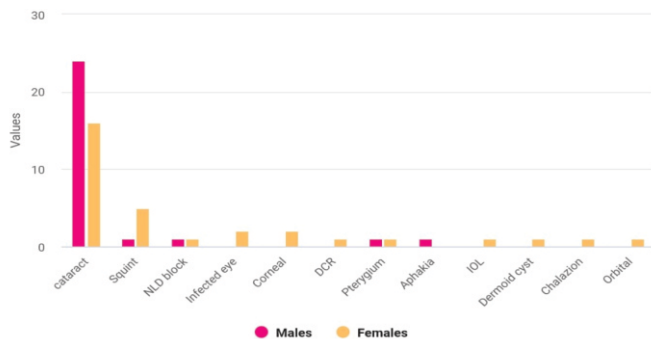
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Material & Methods

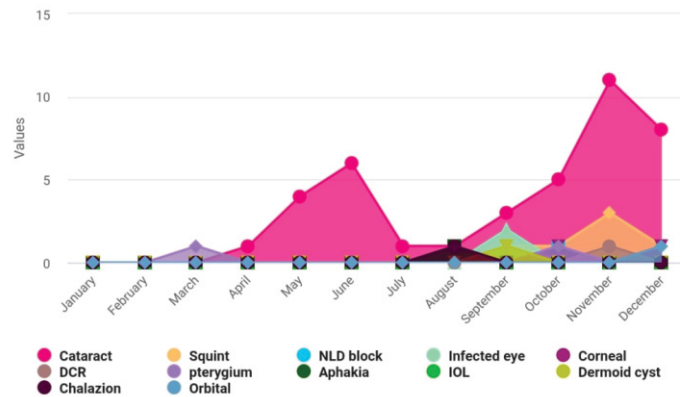
Study center was Tertiary Care Hospital. It was retrospective study. Data regarding diseases, surgery performed was obtained from eye department. The data was collected for 2 consecutive years i.e., 2020 & 2021. SPSS version 25 was used to perform statistical analysis. Tables & graphs regarding number, percentage were formed.

Results

Only one surgery of tumor of eye was performed in 2020. In 2021, 60 ophthalmic surgeries were performed. Their description is shown in table no 1.



Graph No 1: Frequency of different ophthalmic conditions in different months of year 2021



Graph No 2: Frequency of different surgeries in different age groups

Discussion

Among the ophthalmic surgeries, surgery for the opacity of the lens has been maximally performed throughout the world. Its number will go on increasing day by day¹². In the current study surgery for squint was second to cataract surgery. Squint is an ocular condition leading to binocularity. It also effects negatively upon beauty and may lead to depression, shyness, social avoidance and inferiority complex¹³. In current study cataract surgery was maximally carried out. 66.6% of total ocular surgeries were that for cataract. This percentage is in accordance with a previous study carried out in Karachi¹². Another

Table 1: Descriptive data indicating ocular surgeries with their percentage in both sexes.

Ocular surgeries	Males	Percentage	Females	Percentage	Total	Percentage
Cataract	24	60%	16	40%	40	66.6%
Squint	1	16.66	5	83.33	6	10%
NLD Block	1	50%	1	50%	2	3.3%
Infected Eyes	0	0%	2	100%	2	3.3%
Corneal	0	0%	2	100%	2	3.3%
DCR	0	0%	1	100%	1	1.7%
Pterygium	1	50%	1	50%	1	3.3%
Aphakia	1	100%	0	0%	1	1.7%
IOL	0	0%	1	100%	1	1.7%
Dermoid cyst	0	0%	1	100%	1	1.7%
Chalazion	0	0%	1	100%	1	1.7%
Orbital	0	0%	1	100%	1	1.7%
Total	28		32		60	100%

Table 2: Descriptive data indicating number of patient in different age groups

Age	1-15	15-30	30-45	45-60	60-75	Total	Percentage
Male	2	1	3	2	20	28	60%
Female	6	4	5	1	16	32	40%
Total	8	5	8	3	36	60	
Percentage	13.3%	8.4%	13.3%	5%	60%		100%

study conducted in India among 560, 348 were patient of cataract¹⁴. 60% Males underwent cataract surgery and 40 % females got rid of cataract. Although in a previous study this percentage is tilted to females¹⁵. Another study performed in Rawalpindi 92% of overall patients was females who underwent ophthalmic surgeries¹⁶. In a study in Egypt this percentage was 52% for males and 48% for females¹⁷. Age group which most commonly got the surgery belonged to 60-75 years (60%). This result was in accordance with a study carried out in Nigeria¹⁸. Most of the cataract surgeries were performed in October, November and December 2021. In 2020 only one surgery was performed in the hospital. That was a tumor surgery. Comparative study indicates huge increase in the number of surgeries performed during 2021. In Punjab people enjoy four seasons ranging from very warm to very cold. This variation in season effects human life and disease incidence¹⁹.

A scholarly work performed at Lahore show that 3rd, 10th and 11th months of the calendar were the months having the most number of cataract patients²⁰. Glaucoma also shows different incidence rate in different months²¹. The results of another study carried out in Lahore indicate that glaucoma was the second most common disease causing visual impairment preceded by cataract²². Health care facilities related to ophthalmic surgeries has a lot been increased with altered improvement for the last decade. But the credence related to undergo ocular surgeries in specific months especially in March and October, has not been altered²³. Ocular injuries are one of the leading causes of low vision^{24,25} but in current study only one case of eye trauma was operated.

Conclusion

The most common ocular surgeries carried out in Tertiary Care Hospital in the African region. 2017. McCormick I, Mactaggart I, Resnikoff S, Muirhead D, Murthy G, Silva JC, et al. Eye health indicators for universal health coverage: results of a global expert prioritisation process. *British Journal of Ophthalmology*. 2022;106(7):893-901.

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Authors Contribution

SAB, MA: Conceptualization of Project

MA, HA: Data Collection

RM, SAB: Literature Search

HA, MA: Statistical Analysis

TAC, MA: Drafting, Revision

MA, SAB: Writing of Manuscript