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PATTERN OF OCULAR MORBIDITIES IN PEDIATRIC OUTPATIENT POPULATION AT TERRITORY CARE HOSPITAL BAHAWALPUR

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Abstract:

Objective: *To assess the pattern of eye diseases in children presenting at Basic Health Unit, Hassan Mandi Bahauddin.*

Methods: *This cross sectional study was conducted at Department of Ophthalmology, Quaid-e-Azam Medical College, Bahawalpur from September 2018 to March 2019 over the period of 6 months. Total 1000 patients with ophthalmologic disorders was enrolled for the study from outpatient department of the Bahawal Victoria Hospital Bahawalpur. Pattern of eye diseases was assessed in selected children.*

Results: *Mean age of the patients was 9.52 ± 4.6 years. Out of 1000 patients 460 (46%) patients were male and 540 (54%) patients were female. Most common 422 (42.2%) age group was 11-14 years. Most common disorder was refractive errors 334 (33.4%) followed by congenital cataract 243 (24.3%), VKC 221 (22.1%) and squint 118 (11.8%).*

Conclusion: *Male and female children were almost equally affected with ocular disorder and refractive error was the most common disorder in this study.*

Key Words: *Refractive errors, ophthalmology, consanguineous marriages, congenital, childhood blindness,*

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INTRODUCTION:

In medical services, Ophthalmology is most very important speciality.[1] Ophthalmology unfortunately lags behind in this field of quality of life assessment even though our discipline and the organ with which we deal have a major impact on quality of life.[2] Ophthalmology disorders are equally prevalent in under developed and developed countries.[1]

The high incidences of consanguineous marriages together with maternal infections and environmental factors are responsible for the significant proportion of congenital/developmental abnormalities in children. Other causes of childhood blindness include trauma and nutritional factors.[3] In Saudi Arabia the prevalence of blindness in children is 7.8% as reported by one study.[4]

In poor countries of the world corneal scarring due to vitamin A deficiency, ophthalmia neonatrum trachoma and use of harmful traditional practices (TP) predominates.[5]

Increasingly, refractive errors is being recognized as an important cause of visual impairment in both children and adults, the type and magnitude of refractive errors clearly changes with advancing age and also appears to be changing overtime , with recent cohort having higher prevalence than earlier one. Visual acuity is the most appropriate screening test to identify individual with visual impairment due to uncorrected refractive errors.[6]

MATERIAL AND METHODS:

This cross sectional study was conducted at Department of Ophthalmology, Quaid-e-Azam Medical College, Bahawalpur from September 2018 to March 2019 over the period of 6 months. Total 1000 patients with ophthalmologic disorders was enrolled for the study from outpatient department of the Bahawal Victoria Hospital Bahawalpur. An approval was taken institutional review committee and informed written consent form the parents of children was taken. A standard proforma was designed to collect the data. On the anatomical basis the ophthalmic disorders were divided into disorders affecting conjunctiva, cornea, whole globe, retina, lens, uvea, nerve, optic ocular muscles, nasolacrimal and refractive system. Detailed ocular examination was done for decision making, training and teaching purposes. Refraction was performed routinely under cycloplegia. Anterior segment examination was done with torch and slit lamp. Examination of the posterior segment was performed after dilating pupil using direct and indirect ophthalmoscope and fundus contact lenses. Intraocular pressure (IOP) was checked with Perkins tonometer. Assessment of the squint was done in detailed way by using prisms and tests for steropsis. All the collected data were entered in SPSS version 16 and analyzed. Mean and SD was calculated for numerical i.e age, categorical data was presented as frequency and percentage.

RESULTS:

Total 1000 having ophthalmic disorder were enrolled in the study. Mean age of the children was 9.52 ± 4.6 years. Out of 1000 patients 460 (46%) patients were male and 540 (54%) patients were female. (Figure 1)

Out of 1000 patients 295 (29.5%) patients belonged to age group 0-5 years, 283 (28.3%) patients belonged to age group 6-10 years and 422 (42.2%) patients belonged to age group 11-14 years (Table No.1). As shown in table No.2 refractive errors were present in 334 (33.4%) patients, retinitis pigmentosa was present in 27 (2.7%) patients, congenital cataract 243 (24.3%), VKC 221 (22.1%), squint 111 (11.8%), congenital glaucoma 22 (2.2%) and NLD Block in 35 (3.5%).

Figure No.1

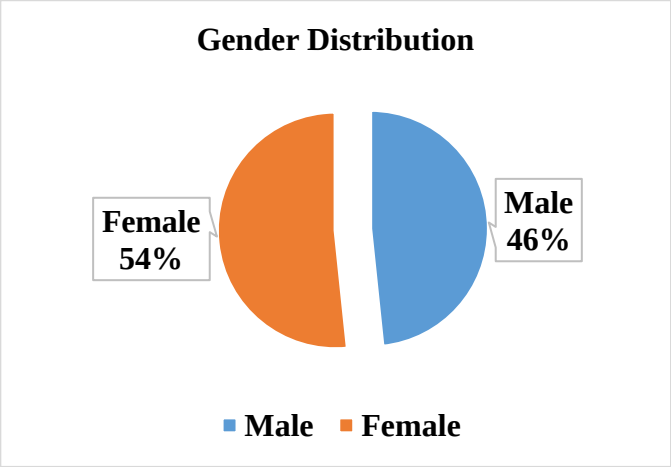

Table No.1: Age distribution of study subjects

Age Group	Frequency	Percentage
0-5	295	29.5
6-10	283	28.3
11-14	422	42.2
Total	**1000**	**100**

Table No.2: Classification of ophthalmic disorders

Disease	Frequency	Percent
Refractive errors	334	33.4
Retinitis Pigmentosa	27	2.7
cong. cataract	243	24.3
VKC	221	22.1
Squint	118	11.8
Cong. Glaucoma	22	2.2
NLD Block	35	3.5
Total	1000	100.0

DISCUSSION:

In our study male patients were 46% and female patients were 56%. Fasih et al[7] reported in their study male patients as 59.50% and female patients were 40.5% which is in favor of study. But in one study, frequency of male patients with ophthalmic disorders was 68.9% and female patients was only 31.8% which is in contrast with our study.[8] This difference may be due to socio-economic factors of our society.

Uncorrected refractive errors have a direct effect on learning capabilities of the children and their education.[9] Most frequently reported disease in our study was refractive errors which was found in 33.4% children. Iqbal et al[10] reported 62.9% children with refractive errors in his study. This is almost double than our finding. In another study by Fasih U et al refractive errors was found in 8.11% children.[7] Studies by Sethi S et al[8] and Khan MA et al[11] was also in contrast with our study. Refractive errors were the commonest in children and adolescents. They predominate but their number at OPD clinics varies from day to day.

Congenital cataract disorder was found in 24.3% children in our study. This high percentage found in our study is due to many factors one of them is that patient's parents pay many visits to OPDs before taking decision of surgery.[12]

VKC is an immunopathological disorder of which the number of mast cells in substantia propria increases. Activation of mast cells by IgE bound receptor crosslinking by allergen promotes the release of many mediators like histamine, prostaglandins and cytokinase, all of which contribute to the symptoms of VKC. The mast cell is considered to play a pivotal role in producing symptoms and signs of VKC.[13]

Vernal conjunctivitis which is an allergic form of conjunctivitis was found in 22.1% patients in our study. Similar 21.1% results were reported by Hassan M et al.[14] Results of Ajayeoba *et al*[12] *and* Iqbal Y et al[10] were in contrast with our study. This disease usually results from allergic materials such as dust. Also chemical conjunctivitis could result from inappropriate instillation of eye drugs from self-medication. Also traditional eye remedy which had been found to be dangerous is usually on display in open market.[15] Many publications had documented the role of traditional healers and their medications in most African communities and had observed that harmful traditional eye medication could lead to blindness.[16]

In our study 11.8% found with strabismus. Sethi et al[17] found similar results 13.5% in North West Frontier Province. Onakpoya OH et al[18] found strabismus as 15.9% which is also comparable with our study.

Congenital glaucoma was found in 2.2% children. Similar results 0.81% were found by Fasih U et al[7] in their study. Sethi S et al[8] also found congenital glaucoma in 0.99% children.

The prevalence of congenital glaucoma varies among different ethnic groups and geographic locations with the highest recorded prevalence found in the Nomadic population of Slovakia followed by the general populations of the Middle East and the western nations.[8]

CONCLUSION:

Male and female children were almost equally affected with ocular disorder and refractive error was the most common disorder in this study.

REFERENCES:

1. Murad MAU, Alam MS, Miah AKMA, Akter MS, Kabir MH. Pattern of eye diseases in a tertiary hospital in a suburban area: A retrospective study. ORION Med J 2007;28:492-494.
2. Lichter. Quality of life as an Indicator.Highlights of Ophthalmology. 1994;22(8):10.
3. Mahdi Z, Munami S, Shaikh ZA, Awan H, Wahab S. Pattern of eye diseases in children at secondary level eye department in Karachi. Pak J Ophthalmol. 2006; 22: 145-51.
4. Obeidan SA Al, Dewedar A, Osman EA, Mousa A. The profile of glaucoma in a Tertiary Ophthalmic University Center in Riyadh, Saudi Arabia. Saudi Journal of Ophthalmology. 2011 Oct;25(4):373–9.
5. Pakistan National Programme for the prevention of blindness. First five year plan 1994-1998, National Committee for the prevention of blindness, Ministry of health, special education and social welfare Islamabad.
6. Elimination of avoidable visual disability due to refractive errors; Report of an informal meeting Geneva 3-5 July 2000 WHO/PbL/0079; 6-10.
7. Fasih U, Rahman A, Shaikh A, Fahmi MS, Rais M. Pattern of Common Paediatric Diseases at Spencer Eye Hospital. Pak J Ophthalmol. 2014;30(1):10-14.
8. Sethi S, Sethi JM, Saeed N, Kundi KN. Pattern of common eye diseases in children attending outpatient eye department Khyber Teaching Hospital. Pak J Ophthalmol. 2008;24:166-70.
9. Negral AD, Maul EP. Pokheral, Zhap Refractive error study in children: Sampling and measurement methods for a multicountry survey. Am J Ophthalmol.2000;129:421-6.
10. Iqbal Y, Niazi FK, Niazi MAK. Frequency of Eye Diseases in School Age Children. Pak J Ophthalmol [Internet]. 2009 [cited 2014 Jul 11];25(4). Available from: http://www.pjo.com.pk/25/4/Index-2.pdf.
11. Khan MA, Gullab A, Khan MD. Prevalence of blindness and low vision in North West Frontier Province of Pakistan. Pak J Ophthalmol.1999;15:1-2.
12. Ajaiyeoba AI, Isawumi MA, Adeoye AO, Oluleye TS. Pattern of eye diseases and visual impairment among students in southwestern Nigeria. Int Ophthalmol.2007 Oct;27(5):287–92.
13. Shoja MR, Besharaty MR. Comparison of efficacy and safety of topical Ketotifen (Ketotifen fumerate) with Cromolyn sodium in the treatment of Vernal keratoconjunctivitis. J Res Med Sci.2005;10(2):87-92.
14. Hassan M, Adeleke N, Akinleye C, Adepoju E, Olowookere S. Patterns of presentations at a free eye clinic in an urban state hospital. NJCP. 2013;16(2):145.
15. Ajaiyeoba AI, Scott SCO. Risk factors associated with eye diseases in Ibadan, Nigeria. Afr. J. Biomed. Res. 2002: 5(1-2): 1 – 3.
16. Tabbara KF, El-Sheikh HF, Shawaf SS. Pattern of childhood blindness at a referral clinic in Saudi Arabia. Ann Saudi Med 2005;25:18-21.
17. Sethi S, Khan MD. Pediatric ophthalmic disorders. J Postgrad Med Inst 2001; 15: 144-50.
18. Onakpoya OH, Adeoye AO. Childhood eye diseases in southwestern Nigeria: a tertiary hospital study. Clinics (Sao Paulo). 2009;64(10):947–52.