EYE COMPLAINTS IN SCHOOL CHILDREN OF A RURAL BLOCK OF HARYANA

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BACKGROUND

Ocular morbidity is the spectrum of eye diseases regardless of resultant visual loss experienced by a population. The primary eye care is a vital component of the primary healthcare system.

As per Vision 2020- The Right to Sight- Refractive errors are a priority within the global initiative for the elimination of avoidable blindness. Most of the children having uncorrected refractive errors in rural area have poor access to the eye hospitals. Also, the children usually do not complain of their poor vision upfront. Due to lack of awareness amongst the parents and school teachers, only a handful of cases are detected at an early stage where appropriate treatment is helpful. Children in the school going age (6 - 14 years) represent over 25% of the population. Avoidable blindness in children is more important considering the number of potentially productive years that lies in front of the child.[1]

An estimated 285 million people are visually impaired worldwide: 39 million are blind and 246 have low vision and an estimated 19 million children are visually impaired. Of these 12 million children are visually impaired due to refractory errors, a condition that could be easily diagnosed and corrected.[2] In India, an estimated national prevalence of childhood blindness/low vision was 0.8 per 1000.[3]

In case of school children, it is therefore important that the teachers are able to recognise changes in a child such as rubbing of eyes frequently, blinking excessively and holding books close to face which might suggest underlying eye diseases. In these cases, parents should be informed timely. School going children therefore form an important large target group, which is easy to approach and also effectiveness of health education imparted is good.

MATERIALS AND METHODS

The study was conducted with an objective to know about eye complaints of school children in Lakhanmajra Block of district Rohtak (Haryana). Out of total 16 schools in the block, 4 (two boys and two girls) were chosen randomly. Total study subjects were 1265 students (40.3% boys and 59.7% girls). All the students between 6 - 15 years of age, studying in class 1st to 10th were included in the study. All concerned principals, teachers and students were briefed about the study. Each student was interviewed individually by the author in their local language, so that they can understand questions easily. The students present on day of visit were included in the study. No followup visits were done.

After collection, the whole data was compiled, analysed (SPSS), and appropriate statistical tests like percentages and chi-square ($\chi 2$) tests were applied.

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RESULTS AND DISCUSSION

Table shows 63.9% boys and 68.9% girls had eye complaints. Most common complaint was watering from the eyes (26.96%) followed by headache (24.19%), difficulty in vision in bright light (8.62%), difficulty in vision in dim light (2.61%), foreign body sensation (2.45%) and diplopia (2.06%).

Complaints	Sex		Total n=1265 [%]	x^2 value (df-1)	P-Value
	Boys n=510 [%]	Girls n=755 [%]			
Watering	144 [28.2]	197 [26.1]	341 [26.96]	0.710	0.400
Headache	109 [21.4]	197 [26.1]	306 [24.19]	3.698	0.054*
Visual Difficulty in Bright Light	43 [8.4]	66 [8.7]	109 [8.62]	0.037	0.847
Visual difficulty in Dim Light	11 [2.2]	22 [2.9]	33 [2.61]	0.087	0.407
Foreign Body Sensation	14 [2.8]	17 [2.3]	31 [2.45]	0.310	0.578
Diplopia	5 [0.98]	21 [2.8]	26 [2.06]	4.905	0.027*
Total	**326 [63.9]**	**520 [68.9]**	**846 [66.9]**		

Sex Wise Distribution of Presenting Complaints of Students

It was observed that the percentage of boys was less as compared to girls in Govt. Schools. It may be because the people prefer to send the boys for study in urban private institutions.

In the present study, different types of complaints were recorded. Out of 1265 students interviewed, 516 (40.8%) had one or more type of complaints regarding eyes. Except watering and foreign body sensation, all the complaints were more common in girls as compared to boys. Diplopia was significantly associated with girls. The association of headache with girls was found to be borderline significant. Except defective vision, all diseases were more prevalent in boys.

Interestingly, it was observed that percentage of complaints were much more than actual morbidity. This shows the health seeking behaviour of school children. More interestingly, complaints were more in girls and actual morbidities were more in boys.

According to Linda V et al[4] patients may use words like "cloudy vision," "a veil over my eyes" or "fuzziness" to describe diminished vision. Some may report black areas within their visual field; others may have a loss of peripheral vision or total vision loss in one eye or possibly even both.

Nirmalan PK et al[5] conducted focus group discussions to determine awareness and perceptions of eye diseases in children among parents and guardians of children in a rural south Indian population. They concluded that the five most common eye problems/diseases identified by participants were hordeolum externum, pain in the eyes, watering, redness and discharge from the eyes. Interestingly, vision impairment did not figure in the top 10 problems cited by participants. Five most common expectations by participants included organisation of more community outreach programmes, provision for free treatment of eye disorders, establishment of eye care services locally, education on eye health and nutrition at the community level and distribution of medications for eye problems at the primary level.

Senthilkumar D et al[6] found in their study that parents' perception was that eye problems can be treated with food such as eggs or carrots and exercises. Most of the parents perceived squint as a sign of good luck and spectacle correction as a social stigma.

Balasubramaniam SM et al[7] observed that squint, redness or watering of eyes, eye irritation, headache, family history of ocular diseases, severity and repetitiveness of symptoms facilitate parents seeking eye care for their wards/children.

William[8] described in an article that some conditions as headache in the absence of other localising neurological signs or symptoms (eg, diplopia or papilledema), rarely require referral and the parents can often be reassured as to the benign nature of these conditions.

CONCLUSION

Eye checkup should be done at the time of entry to school and periodic evaluation of eye screening programme should be done. A good functioning referral system should be attached to the school health services. School health records should be maintained for followup. Many ocular diseases have their origin in childhood and the morbidity may go unnoticed and may adversely affect the ocular health.

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