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TO ASSESS THE PREVALENCE OF OCULAR MORBIDITY AMONG SCHOOL GOING CHILDREN OF AGE GROUP 6-15 YEARS UDAIPUR DISTRICT.

Community Medicine

Dr. Keerti Senior Professor, Dept Of Community Medicine, RNT Medical College, Udaipur, Rajasthan, India

Dr. Chhavi Shripat* Assistant Professor, Dept Of Community Medicine, RNT Medical College, Udaipur, Rajasthan, India *Correponding Author

Dr. Pushpendra Singh IIIrd Year Resident, Dept Of Community Medicine, RNT Medical College, Udaipur, Rajasthan, India

ABSTRACT

BACKGROUND- Mostly, ocular morbidity originates in childhood and if undetected may result in severe ocular disabilities, in addition to affecting development, educational performance, and learning abilities1. School children are affected by various eye disorders like refractive errors, squint (strabismus), Vitamin A deficiency and eye infections. Uncorrected refractive errors form the primary cause for visual impairment and blindness in India. This warrants early detection and treatment of these problems to prevent future blindness2.

METHODOLOGY- A cross sectional study was village Medta (Rural area) of Udaipur district. All the children of 6-15 years age in the school present at the time of survey.

RESULTS- Among total students of study group 23.6% students (142/600) had some form of ocular morbidity (any one or more than one type) while rest 76.4% students were free from the same. Among total students 19.17% (115/600) students were having refractive error, 6.1% students had conjunctivitis, 5.83% students had h/o floaters seen, 5.5% students had c/o eye strain, 5.3% students xerophthalmia, 3.5% students had color blindness of varying degree (majority had partial); 3.3% students had trachoma, 3.3% had nyctalopia, 2.3% students had eye lid infections, 2.1% students had bitot's spots ; strabismus was present in 1.5% students, 0.83% students had ptosis, and the minimum morbidity found was dacrocystisis at 0.16%.

CONCLUSION- The findings from Medta village, Udaipur, Rajasthan, suggested that a range of different eye morbidities affect a large number of students and highlight the need to proper implementation of appropriate eye care health programs.

KEYWORDS

INTRODUCTION-

Eyes are one of the most important sense organ of the body of all living organisms, including human beings. Right from the birth throughout life, Eyes are required in its well functioning state, to live the life efficiently, to make contact and communication with other persons, to work and earn the livelihood, to see the Nature and enjoy the privileges and pleasures of life. In humans, many diseases affect the functioning of eyes.

Mostly, ocular morbidity originates in childhood and if undetected may result in severe ocular disabilities, in addition to affecting development, educational performance and learning abilities[1]. School children are affected by various eye disorders like refractive errors, squint (strabismus), Vitamin A deficiency and eye infections. Uncorrected refractive errors form the primary cause for visual impairment and blindness in India. This warrants early detection and treatment of these problems to prevent future blindness[2].

During a child's first 12 years of life 80% of all learning comes through vision, and yet most children have not had a comprehensive eye examination prior to starting school[3]. School children fall in the best preventable blindness age group, and are a controlled population i.e. they belong to a certain age group and are easily accessible, so schools are one of the best plateform for imparting health education to the children, for screening of ocular morbidities in children and effectively implementing the comprehensive eye health care programme[4].

METHODOLOGY-

STUDY DESIGN:

A school based Cross Sectional Study was conducted in purposively selected village Medta (Rural area) of Udaipur district.

STUDY POPULATION:

All the children of 6-15 years age in the school present at the time of survey

SAMPLING PROCEDURE:

Sample size was calculated on the basis of previous study **Amol Khadse et. Al**[5], where prevalence of ocular morbidity was 40.38%. And allowable error was taken 10 % of the prevalence,

$n = 4pq / L^2 = 590$

Where 'n' = Sample size

p = Prevalence of ocular morbidity.

q = 1 – p

L = 10% (Allowable error of p).

To drop out the failure, we rounded up the sample size to 600.

To achieve desired sample size researcher purposively selected the village Medta which is adopted by RNT Medical college. Medta village has four government schools, of which one middle school and one senior secondary school in proper village and two middle schools in nearby falas (extension of village). All the schools were co-educational. All the four schools were included in the study.

INCLUSION CRITERIA:

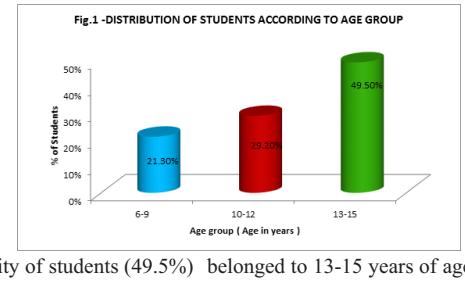
1. Children of 6 to 15 years of age.
2. Children present in school on the days of survey.

EXCLUSION CRITERIA:

1. Children below 6 years and above 15 years.
2. Children absent on the day of survey
3. Children refused to participate in study

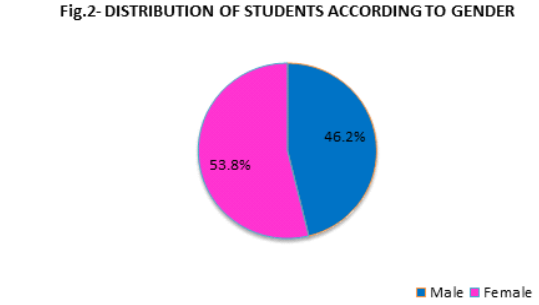
RESULTS-

Figure 1: Distribution Of Students According To Age Group-



Majority of students (49.5%) belonged to 13-15 years of age group, followed by 10-12 year age group (29.2%); then 6-9 year age group. (Mean Age - 11.85 yrs)

Figure 2: Distribution Of Students According To Gender.



Distribution of students according to gender transpired that 53.8% of them were females while 46.2% were male.

Table – 1; Distribution Of Students According To Their Religion.

RELIGION	NO. OF STUDENTS	PERCENTAGE
HINDU	574	95.7%
MUSLIM	12	2%
JAIN	9	1.5%
CHRISTIANS	5	0.8%
SIKH	0	0%
TOTAL	600	100%

Majority of students i.e. 95.7% were Hindu followed by Muslims i.e. 2%. While 1.5% students were Jain and only 0.8% were Christian.

Table - 2: Distribution Of Ocular Morbidity In Study Group Students

S. No.	Ocular Morbidity	No. Of Students	Percentage
1.	Total Ocular Morbidity	142	23.6%
2.	Refractive Error	115	19.17%
3.	Conjuctivitis	37	6.17%
4.	Floaters Seen Or Felt	35	5.83%
5.	Eye Strain	33	5.50%
6.	Xerophthalamia	32	5.30%
7.	Color Blindness	21	3.50%
8.	Nyctolopia	20	3.30%
9.	Trachoma	20	3.30%
10.	Eye Lid Infection	14	2.33%
11.	Bitot Spot	13	2.10%
12.	Strabismus	9	1.50%
13.	External Hordeolum	5	0.83%
14.	PTOSIS	5	0.83%
15.	Eye Lashes Affected	4	0.66%
16.	Diplopia	4	0.66%
17.	Chalazion	2	0.30%
18.	Cataract	2	0.30%
19.	Eye Ball Movement Affected	2	0.30%
20.	H/O Injury To The Eye With Residual Effect	2	0.30%
21.	Proptosis	1	0.16%

Among total students of study group 23.6% students (142/600) had some form of ocular morbidity (any one or more than one type) while rest 76.4% students were free from the same. Among total students 19.17% (115/600) students were having refractive error, 6.1% students had conjunctivitis, 5.83% students had h/o floaters seen, 5.5% students had c/o eye strain, 5.3% students xerophthalmia, 3.5% students had color blindness of varying degree (majority had partial); 3.3% students had trachoma, 3.3% had nyctalopia, 2.3% students had eye lid infections, 2.1% students had bitot's spots ; strabismus was present in 1.5% students, 0.83% students had ptosis, and the minimum morbidity found was dacrocystisis at 0.16%.

SUMMARY AND CONCLUSION-

The findings from Medta village, Udaipur, Rajasthan, suggested that a range of different eye morbidities affect a large number of students and highlight the need to proper implementation of appropriate eye care health programs eg. VISION 2020, having cost-effective strategies targeting to reduce the burden of visual impairment among the younger children. Health education activities should be intensified regarding signs and symptoms of ocular complications, and particular attention needed to be given for training to health care staff in supervision of skilled staff and adequate information (IEC) and referral systems to the locality. Poor vision in childhood affects performance in daily activities in school or at work and has a negative influence on the future life of children. Early detection and management reduce the disease progression and can prevent visual disability.

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