

A PROFILE OF OCULAR DISEASES AMONG SCHOOL CHILDREN IN SLUM AREAS OF KANPUR

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A prevalence study of ocular diseases carried out among 584 School Children in Kanpur slums revealed the overall prevalence of 37.84%; 46.67% in females and 34.37% in males. Younger age group children were more affected. The major diseases were refractive errors, trachoma, vit. A deficiency and conjunctivities.

INTRODUCTION

Visual impairment is socio-economic problem, prevalent all over the world, it is more severe and complicated in developing countries due particularly to poverty, illiteracy, poor environmental sanitation and unsatisfactory personal and community hygiene⁷. In India, there are nine million blind persons and another 45 millions are visually handicapped⁹. Next to Egypt, India has the highest incidence of blindness in world, particularly in the younger age group³.

School children constitute approximately one fourth of total population of India, which is susceptible to various type of morbidity, particularly eye diseases. Ocular diseases affect physical and mental growth

more profoundly than any other cause of morbidity. Majority of these disease are preventable or curable in nature². Keeping in view the high ocular morbidity and its preventable nature, an effort was made to find out the extent of ocular diseases in school children of Kanpur slums.

MATERIAL & METHODS

The present study was carried out in school children of Katari Slum areas of Kanpur from September to December 1993. A total of 584 students in age group 5-17 years constituted the study population, 61.40% males and 38.60% females. During the survey, the school children were clinically examined by a medical team consisting of one eye Surgeon also. The findings

TABLE - I
AGE AND SEXWISE DISTRIBUTION OF OCULAR DISEASES IN SCHOOL CHILDREN.

Age in Years	MALE			FEMALE			TOTAL		
	Number Examined	No. with Eye Disease	Prevalence Rate %	Number Examined	No. with Eye Disease	Prevalence Rate %	Number Examined	No. with Eye Disease	Prevalence Rate %
5 - 7	70	40	57.14	26	16	51.54	96	56	58.33
8 - 10	62	34	54.84	28	14	50.00	90	48	53.33
11 - 13	190	51	26.84	80	35	43.75	270	86	31.85
14 - 17	97	19	19.59	31	12	38.71	128	31	24.22
	419	144	34.37	165	77	46.67	584	221	37.84

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of clinical examination were recorded on a pretested proforma and were analysed.

RESULTS & DISCUSSIONS

The present study in Kanpur slums reveal that 37.84% of school children suffered from one or the other eye disease, of which 35 children have more than one disease. This finding is similar to the observation of Kumar *et al* (28.40%) and Urmil *et al* (34.50%)¹⁵, but

higher percentage was reported by Amir Ali et al (47.98%)¹. The prevalence was high in females (46.67%) as compared to the males (34.37%), the similar trend was observed by Ali et al (60.46%) females and 41.11% males)¹, but Urmil et al¹⁵ noted high prevalence in boys (38.57%) as compared to girls (28.68%), Kumar et al⁶ observed equal prevalence in both the sexes. The eye diseases were more prevalent in younger children as compared to higher age group children, similar to the findings of Ali et al¹ (Table I).

The majority of children with eye diseases belonged to socio-economic group III, IV and V which is similar to the observations made by Mehrotra et al⁸ (Table II).

The major eye diseases identified in the school

children in order of frequency were - refractive errors, trachoma, vit. A deficiency and conjunctivitis (Table III). Among various diseases refractive error has shown maximum prevalence (12.50%), similar to the figures noted by Shah et al¹¹, while Ali et al¹ and Srivastava et al¹³ noted higher prevalence - 21.95% and 22.0% respectively. Its prevalence was found to be lower in the study by Pataudi et al (8.59%)⁹ and Urmil et al (5.84%)¹⁵.

The prevalence of trachoma in the present study was 10.27%, which closely resembles the findings of Srivastava et al (12.68%)¹¹, but Kumar et al⁶ and Urmil et al¹⁵ observed lower prevalence - 6.90% and 4.52% respectively. Amir Ali et al¹ observed higher

TABLE - II
DISTRIBUTION OF SCHOOL CHILDREN WITH EYE DISEASES ACCORDING TO SOCIAL CLASS.

Social Class	Number of Children Examined	Number of Children with diseases	Prevalence Rate %
I	—	—	—
II	10	2	20.00
III	122	37	30.33
IV	275	96	34.91
V	177	86	48.58
	584	221	37.84

TABLE - III
PREVALENCE OF VARIOUS EYE DISEASES IN SCHOOL CHILDREN
n = 584

Disease Conditions	Male	Female	Total	Prevalence Rate %
I. Disease of lide				
Blepharitis	4	8	12	2.05
Styl	3	6	9	1.54
Chalazion	4	1	5	0.85
II. Disease of				
Conjunctiva	26	12	38	5.51
Conjunctivitis	32	28	60	10.27
Trachoma				
III. Corneal				
Conditions	3	2	5	0.85
Corneal Opacity				
IV. Disease of Muscle Squint	3	1	4	0.68
V. Refractive Errors	48	25	73	12.5
VI. Nutritional Vit. A Deficiency	28	20	48	8.22

percentage (25.35%). The prevalence of Vit. A deficiency was 8.22% which is similar to the findings of Srivastava *et al* (9.15%)¹⁴, But Urmil *et al* (13.81%)¹⁵ recorded high prevalence. In the present study conjunctivitis has shown the prevalence of 5.15%, similar to the findings reported by Urmil *et al* (5.84%)¹⁵ & Kumar *et al* (4.9%)⁶, but higher prevalence was noted by Amir Ali *et al* and Khurana *et al*⁴ observed - 21.27% and 23.43% respectively.

Prevalence of blepharities (2.05%) is similar to the reports made by Khurana *et al* (1.85%)⁴. Stye has shown the prevalence of 1.54% similar to the figures given by Khurana *et al* (1.2%)⁴, but Srivastava *et al* (0.66%)¹⁴ and Urmil *et al* (0.33%)¹⁵ recorded low prevalence. Pataudi *et al*⁹ noted higher prevalence (2.80%) for stye in their study. In the present study the prevalence of chalazion (0.85%) closely resembles the percentage of squint was found to be 0.68% similar to the report given by Srivastava *et al* (0.66%)¹⁴ Prevalence of Corneal opacity (0.85%) is higher than the observation made by Kumar *et al* (0.21%)⁶.

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