

PATTERN OF SKIN DISEASES IN URBAN SCHOOL CHILDREN

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In a survey of 3697 children from 4 urban schools, 529 (14.3%) were found to be having skin diseases. Of these, 286 (53.6%) had communicable dermatoses and nutritional deficiencies. This highlights the importance of imparting proper health education and introduction of mid-day meals to school children.

Key words : Prevalence, Skin diseases, School children.

Status of health, hygiene and personal cleanliness of a society can be judged from the prevalence of certain skin diseases in the children of the community. In our country, 100-150 million children are of school-going age.^{1,2} School survey is a useful tool of investigation as it is easy to conduct, less time-consuming and a large number of apparently normal children can be screened for the presence of diseases. A survey was undertaken to know the prevailing pattern of skin diseases in school children of the area.

Materials and Methods

Children of 5-14 years age group from 4 urban schools in the city and cantonment area were included in the study. A proforma providing information regarding the socio-economic status, family history of disease etc, was got filled by the parent(s) of each child and their consent obtained for examination. Each child was examined in the school premises in bright day-light after appropriate uncovering to look for any change(s) in the skin. Cutaneous sensations were tested whenever considered necessary. The children were examined by a team of junior doctors class-wise in the presence of their respective class teachers. Diagnosis of skin disease was confirmed on subsequent examination by the consultant. Relevant investigations were done whenever required.

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Results

A total of 3697 children comprising 2547 boys and 1150 girls were examined. Of these 529 were found to have skin disease. No statistically significant correlation was noticed between the presence of disease and socio-economic status. Communicable dermatoses, were seen in 198 children, 141 had congenital and hereditary disorders, 88 nutritional deficiencies, 7 allergic disorders and remaining 95 had miscellaneous diseases.

Amongst the communicable dermatoses, pyoderma was seen in 39, fungal infections in 35, pediculosis in 34, leprosy in 27 and scabies in 17 children.

Of the 27 patients having leprosy, 11 had borderline (BB), 6 had borderline tuberculoid (BT), 5 localised tuberculoid (TT), 3 borderline lepromatous (BL), and the remaining 2 had lepromatous (LL) type of the disease.

Out of 141 patients who had congenital and hereditary diseases, 59 were having pigmented nevi, 21 ichthyosis, 9 pigmented nevi with excessive hair, 3 capillary hemangioma and 1 nevus flammeus. Forty eight children had nevus achromicus.

Phrynoderma, seen in 58 cases, was found to be the commonest nutritional deficiency disorder. Angular cheilitis was seen in 20. None of the patients with phrynoderma was found to be having any finding suggestive of vitamin A deficiency e.g. night blindness or eye involvement.

Forty one children had post-traumatic scars.

Among 7 children who had allergic disorders, 4 had contact dermatitis, 3 developed it following use of nitrofurazone cream after injury and 1 due to the use of rubber foot-wear. Three children were having intractable urticaria. The details are given in table I.

Table I. Prevalence of various skin diseases.

Disease	Number of patients	Percentage
1. Pigmented nevi	59	11.15
2. Phrynoderma	58	10.96
3. Nevus achromicus	48	9.07
4. Post-traumatic scars	41	7.75
5. Pyoderma	39	7.37
6. Fungal infections	35	6.61
7. Pediculosis	34	6.42
8. Angular cheilitis	30	5.67
9. Pityriasis simplex	28	5.29
10. Leprosy	27	5.10
11. Molluscum contagiosum	26	4.91
12. Ichthyosis	21	3.96
13. Verruca vulgaris	19	3.59
14. Scabies	17	3.21
15. Lichen simplex chronicus	11	2.07
16. Pigmented nevi with hair	9	1.70
17. Vitiligo	8	1.51
18. Contact dermatitis	4	0.75
19. Urticaria	3	0.56
20. Capillary hemangioma	3	0.56
21. Psoriasis	3	0.56
22. Alopecia areata	2	0.37
23. Actinic dermatitis	1	0.18
24. Herpes zoster	1	0.18
25. Linea albicans	1	0.18
26. Nevus flammeus	1	0.18

Comments

In the present study 14.3% of school children were found to have skin disease while in other studies from different parts of the country, the incidence varied from 8.7% to 35%.¹⁻⁵ Schools from rural areas showed relatively higher prevalence of skin disease.^{1,3,4}

Twenty six percent children in present study, were found to be having congenital, nevoid and hereditary diseases, and 18% had relatively uncommon miscellaneous problems. It is also

significant that 5.1% of these children had leprosy. There is no mention of these diseases in earlier reports. This could be due to the fact that skin specialists were not associated with those surveys because of which certain uncommon diseases and asymptomatic skin lesions might have been overlooked.

Children often sustain abrasions during play and other physical activities. For this, some common antiseptic creams and ointments are used which could result in contact allergy.⁶ In the present study, 41 children had post-traumatic scars and 3 contact dermatitis following use of nitrofurazone cream.

Communicable dermatoses were found to be the most common (37.4%) skin problem and a significant proportion (16.2%) had nutritional deficiency. This is in agreement with the general observations made in other studies on the subject.¹⁻⁵ In view of this, imparting health education with adequate emphasis on personal hygiene and environmental sanitation and universal adoption of mid-day meal programme with nutritional supplements, can go a long way in minimising these diseases.

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