

# PREVALENCE OF VARIOUS DERMATOSES IN SCHOOL CHILDREN

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*In a school survey of 1161 children from 2 different schools studying in 1st to 5th standard between the age of 6 and 12 years, 890 (76.65%) students were found to have disorders of skin and its appendages. Most of the dermatoses were asymptomatic and were diagnosed in the routine examination. Nevoid conditions were seen in 255 (21.96%) students. Communicable dermatoses were noted in 221 (19%) students and nutritional deficiencies were seen in 78 (6.71%) students. Rest of the students had miscellaneous conditions. Health education and good personal hygiene will definitely help to improve the health status of the school children.*

*Key Words : Dermatoses, School survey*

## Introduction

In our country, 100-150 million children are of school going age.<sup>1,2</sup> School survey is a useful yardstick as it is easy to conduct, less time-consuming and a large number of children of a particular age group can be screened for the presence of disease. This type of survey helps in detecting infectious diseases in the early stage.

## Materials and Methods

This study was conducted in Mangalore in the month of January, 1998. Total of 1161 students of two different schools studying in 1st to 5th standard between the age of 6 and 12 years were taken into the study. Consent was obtained from the heads of the institutions. Each child was examined in the school under bright light to look for any changes in the skin and its appendages.

## Observations and Results

A total of 1161 students upto the age of 12 years

comprising of 828 males and 333 females were examined. Among these 890 (76.65%) students were found to have skin disorders. Out of 828 males examined, 652 (78.74%) had skin disorders and of 333 females examined, 238 (71.47%) had dermatoses. Most of the dermatoses were asymptomatic and were diagnosed in the routine examination. Nevoid conditions were seen in 255 (21.96%) students. Communicable dermatoses were noted in 221 (19%) students and nutritional deficiencies were seen in 78 (6.71%) students. Out of 78 nutritional deficiencies, 73 had phrynoderma and 5 had angular cheilitis. The details are given in Table I.

Rest of the students had miscellaneous disorders like pityriasis alba, post-inflammatory scars and pigment changes, hyperlinear palms, keratolysis exfoliativa and insect bite reactions.

## Discussion

This survey recorded a high percentage of dermatological disorders (76.65) in comparison to 8.7% to 49.1% recorded by other studies.<sup>1-4</sup> This is because nevoid conditions were also included in this study as one of the

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dermatological disorders which is seen in almost every individual.

**Table I. Common dermatoses in school children**

| No. | Dermatoses                  | M            | F           | Total        |
|-----|-----------------------------|--------------|-------------|--------------|
| 1.  | Pigmented melanocytic nevus | 178 (21.49%) | 74 (22.22%) | 252 (21.70%) |
| 2.  | Nevus depigmentosus         | 2 (0.24%)    | 1 (0.30%)   | 3 (0.25%)    |
| 3.  | Tinea versicolor            | 66 (7.97%)   | 31 (9.30%)  | 97 (8.35%)   |
| 4.  | Warts                       | 20 (2.41%)   | 7 (2.10%)   | 27 (2.32%)   |
| 5.  | Pyoderma                    | 20 (2.41%)   | 4 (1.20%)   | 24 (2.06%)   |
| 6.  | Pediculosis capitis         | 10 (1.20%)   | 38 (11.41%) | 48 (4.13%)   |
| 7.  | Scabies                     | 6 (0.72%)    | 6 (1.80%)   | 12 (1.03%)   |
| 8.  | Dermatophytic infections    | 4 (0.48%)    | 2 (0.60%)   | 6 (0.51%)    |
| 9.  | Molluscum contagiosum       | 4 (0.48%)    | 2 (0.60%)   | 6 (0.51%)    |
| 10. | Hansen's disease            | 1 (0.12%)    | 0 (0%)      | 1 (0.8%)     |
| 11. | Phrynoderma                 | 66 (7.97%)   | 7 (2.10%)   | 5 (0.43%)    |

Nevoid conditions were the commonest problem noted which were asymptomatic and diagnosed routinely. Communicable diseases were the next common problem. This study showed a low incidence of pediculosis capitis (4.13%) compared to the study done in Pondicherry where it was seen in 50.2% of children.<sup>4</sup> This may be because of the health awareness of the parents. Tinea versicolor and pediculosis capitis were seen in the students of the same class which confirms the spread of these diseases in close contacts. Nutritional deficiencies like phrynoderma was seen in 73 (6.28%) students which is less compared to the

previous study done in Meerut where it was found to be 10.96%.<sup>3</sup>

In the miscellaneous conditions, post-traumatic scars and post-inflammatory pigment changes were seen in 294 (25.32%) students because, students sustain abrasions during their physical activities. A single case of Hansen's disease was detected which was later confirmed with biopsy to be indeterminate type, which is less compared to the previous study where it was 5.10%.<sup>3</sup> This is probably because the incidence of leprosy is lesser than what it was a decade ago.

Even though most of the dermatoses were asymptomatic, routine school survey should be carried out every year for the early diagnosis and treatment of communicable and nutritional diseases. Health education and good personal hygiene will definitely help to improve the health status of the school children.

### References

1. Mukherjee PK, Sen PC. Health status of school children in rural West Bengal. *J Indian Med Assoc* 1962; 38:421-426.
2. Patodi RK, Sharma SK, Patodi SK. Health status of school children in primary school of Indore city, *Indian J Pub Health* 1977; 21: 71-77.
3. Sharma NK, Garg BK, Manoj Goel. Pattern of skin diseases in urban school children, *Indian J Dermatol Venereol Leprol* 1986; 52:330-331.
4. Kumar V, Garg BR, Baruah MC. Prevalence of Dermatological diseases in school children in a semiurban area in Pondicherry, *Indian J Dermatol Venereol Leprol* 1988; 54:300-302.