



A CROSS SECTIONAL STUDY ON OCCURRENCE OF SKIN DISEASES AMONG SCHOOL GOING CHILDREN IN PUDUCHERRY

Dermatology

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ABSTRACT

Introduction: Infectious skin diseases are most common in school going age children because of poor hygiene and immunity.

Objectives: a) To analyse the prevalence of skin infection among the school children (b) To study the various causes attributing to skin infections.

Material and Methods: A cross-sectional study done amongst school going children in Puducherry from October 2018 to November 2018. Statistical analysis was done by SPSS version 17 and Chi-square test.

Results: Amongst the skin infections, majority of the cases were of pityriasis alba with prevalence of 17 % followed by impetigo 16 % and scabies 14.6 %.

Conclusion: Most of the children examined had history of poor personal hygiene practices. So it is mandatory to provide regular health education to parents and children in an effort to reduce the menace of skin infections.

KEYWORDS

Personal hygiene, School children, Skin infection

INTRODUCTION

School going children are mostly susceptible to infections owing to their crowded environment. Over crowding can lead to easy spread of infections like scabies and pediculosis.

Skin diseases might be a reflection of internal diseases in many conditions like malignancy, nutritional deficiencies, autoimmune conditions or any systemic infections. Health education regarding personal hygiene, nutrition intake can play an essential role in the prevention of diseases. Foremost is the personal hygiene which includes educating them the importance of taking bath regularly, changing the clothes, cleanliness in all regards¹. Health education can be offered to the school children along with the improvement of personal hygiene practices can lead to reduction in occurrence of skin diseases. The persistence of skin infections can lead to psychological trauma in many especially acne vulgaris at young age.²

Owing to various other factors that might be associated with skin infections, the study has been done in order to find the pattern and occurrence of skin infections among school children in Pondicherry.

MATERIAL AND METHODS

The study was conducted among the school children during the period of October 2018 to November 2018 in Puducherry.

It was a community-based cross sectional study.

3 schools were selected randomly in this study. 100 students were selected from each school by simple random sampling technique.

Inclusion Criteria: All the students who were willing to participate in the study.

Exclusion criteria: Students not willing to participate in the study.

All the Students were examined for the presence of skin diseases and details were noted down.

Informed consent was taken from the school authorities.

STATISTICAL ANALYSIS

Criteria of significance was correlated with $P < 0.05$.

It was done using SPSS 17 and variables done using Chi-square test.

RESULTS

Out of 300 school children, 235 children had various skin disorders. Majority of the cases were of pityriasis alba with prevalence of 17 % followed by impetigo 16 %, scabies with prevalence of 14.6 % (Table 1)

There was significant association between Personal hygiene of students with the prevalence of skin diseases (table-2).

Table 1: Percentage of various skin infections

Skin Infection	Total Number Of Cases	Percentage Affected
Pityriasis alba	51	17 %
Impetigo	48	16%
Scabies	44	14.6%
Pediculosis	27	9%
Acne vulgaris	11	3.6%
Pityriasis versicolor	21	7%
Nutritional deficiencies	15	5%
Seborrhea	5	1.66%
Tinea capitis	7	2.3%
Tinea corporis	6	2%

Table-2: Estimation Of Personal Hygiene Among The Children

Personal hygiene	Total number of persons
Good	87
Bad	213

Association Between Personal Hygiene And Occurrence Of Skin Infections:

According to this study, out of 87 patients who had good personal hygiene, only 22 had mild skin infections. Among 213 other children with poor hygiene, everyone had skin infections proving that there is significant association between personal hygiene and occurrence of skin infections. ($P \text{ value} < 0.05$)

DISCUSSION

The present study revealed that pityriasis alba was the most common skin disorder accounting for 17 %. Next most common was impetigo (16 %) followed by scabies (14.6 %).

A study conducted by Shravan Kumar³ in Telangana state showed that scabies (18.6 %) was the most prevalent disease among school children.

A study in northern country⁴ revealed Acne to be the most common disorder (12.4%).

In one study conducted in Nagpur by Charuhas et al⁵, 236 (32.1%) school children were found to suffer with various skin disorders. 155 (21.1%) had pyoderma while scabies and pediculosis capitis was observed in 41 (5.6%) and 26 (3.5%) respectively.

In a school survey in Varanasi city by Valia et al.⁶ 54% children had one

or more skin diseases. The commonest being pediculosis capitis (35%), pityriasis alba (12%) acne vulgaris (8%).

In another study among primary school children in Baghdad by Khalifa et al⁷ the overall prevalence of skin disorder was 40.9%. There was significant association between education status of parents with the prevalence of skin diseases ($P=0.04$).

A study conducted in Wardha amongst tribal school children by Dongre et al.⁸ found that prevalence of head lice (42.8%), scabies (36.6%), and multiple boils (8.9%) amongst the school children.

In a study conducted among primary school children in Eastern Nepal by Shakya et al⁹, the prevalence of skin disease was 20%. Commonest of skin diseases were pediculosis (21%) followed by tinea (19.5%), scabies (14%), impetigo (11%) and eczema (10.5%).

CONCLUSION

According to this study, it has been proven that personal hygiene does matters with the occurrence of skin infections. So proper health education regarding the cleanliness, nutritional intake and awareness regarding other skin infections should be given to parents, teachers and students regularly. As a developing country, India has to implement proper health education strategies in order to maintain good overall health.

REFERENCES

1. Walvekar PR, Naik VA, Wantamutte AS, Mallapur MD. Impact of child to child programme on knowledge, attitude practice regarding diarrhoea among rural school children. *Indian J Community Med.* 2006;31:56.
2. Ministry of Health and Family Welfare. School Health Programme. Government of India. New Delhi: Ministry of Health and Family Welfare; 1984. p. 1.
3. Shravan Kumar A. A study on prevalence of skin infections among school going children. *International journal of contemporary medical research* : June 2016;3 (6)
4. Tamer E, Ilhan MN, Polat M, Lenk N, Alli N: Prevalence of skin diseases among pediatric patients in Turkey. *Journal of Dermatology.* 2008;35:413-8.
5. Charuhas AV, Sukhsahle ND, Sanjay KS, Chaudhary SM, Manjusha DA. Assessment of health profile of rural school children in central India. *Int J Sci Res.* 2013;2:2277-8179.
6. Valia RA, Pandey SS, Kaur P, Singh G. Prevalence of skin diseases in Varanasi school children. *Indian J Dermatol Venereol Leprol.* 1991;57:141-2.
7. Khalifa KA, Al-Hadithi TS, Al-Lami FH, Al-Diwan JK. Prevalence of skin disorders among primary-school children in Baghdad governorate, Iraq. *East Mediterr Health J.* 2010;16:209-13.
8. Dongre AR, Deshmukh PR, Garg BS. The impact of school health education programme on personal hygiene and related morbidities in tribal school children of Wardha district. *Indian J Community Med.* 2006;31:81-2.
9. Shakya SR, Bhandary S, Pokharel PK. Nutritional status and morbidity pattern among governmental primary school children in the Eastern Nepal. *Kathmandu Univ Med J (KUMJ).* 2004;2:307-14.
10. Meena S, Kendra KV, Panipat U. Impact of health education programme on the knowledge and practices of school children regarding personal hygiene in rural panipat. *Int J EduSci.* 2009;1:115-8.
11. Ganapathy K, Kumar A, Dongre AR, Purushothaman V. Nutritional status and personal hygiene related morbidities among rural school children 6-14 years in Puducherry, India. *Nat J Res Com Med.* 2012;1:96-100.
12. Kakkar R, Kandpal SD, Aggarwal P. Health status of children under school health services in Doiwala Block, Dehradun. *Indian J Community Health.* 2012;24:92-3.