

A Study on Prevalence of Skin Infections among School Children in Hyderabad, Telangana state

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ABSTRACT

Introduction: Skin disorders are the most frequent diseases among the school children in both developing and industrialized countries. Objectives: a) To study the prevalence of skin infection among the schoolchildren(b) To study the factors affecting skin infections among school children

Material and Methods: A community based cross-sectional study was done amongst the school children in Hyderabad city in Telangana state from November 2015 to December 2015 with the help of a predesigned and pretested proforma. Statistical analysis used: Data entry was done in Microsoft Excel and analysis by SPSS version 17 and association by using Chi-square test.

Results: Out of all skin Infections, Scabies was the major skin infection with the prevalence of 16.9% among the students, followed by pediculosis 10.7%. Prevalence of Acne vulgaris was found to be 10.2% and the prevalence of seborrhea infection among the children was 9.8%. The association between personal hygiene and skin infection is highly significant

Conclusion: In this study, prevalence of skin infection found to be associated with Poor personal hygiene practices. Hence, health education among the children as well as their parents and proper awareness regarding various skin-related health problems and to improve the personal hygiene of the children is necessary.

Key words: Personal hygiene, School children, Skin infection

INTRODUCTION

School life is the foundation for the future and have a major effect on host of issues including health. Providing easy access to hygiene, nutrition and health education and services to school children is a simple and cost effective tool that can go a long way in the prevention and control of communicable and non-communicable diseases.¹

The skin has major importance in our perception of body image so that the psychological disturbances induced by skin problems may be out of proportion to their medical significance. Very often, skin diseases offer diagnostic clues to major systemic disorders. Many skin diseases ex: Acne vulgaris, Psoriasis, Pityriasis alba, etc can be quickly diagnosed by their clinical features and need little or no further investigations.

In the process of active learning health education is an essential part. It includes personal hygiene, home, and environmental sanitation and nutritional hygiene. Personal hygiene education is one of the important aspects. If proper measures are not taken for keeping the body clean, the body is liable to various skin infections and it may hamper the physical well-being of the individual. Due to ignorance or lack of proper education, proper hygiene methods may not be practiced.²

Management of infinite variety of skin disorders range from simple reassurance to explanation through the gamut of tropical and systemic remedies. Harmful environmental factors may be associated with skin diseases and a public health approach is

particularly important

Keeping this in view, this study was done with the aim to find out the prevalence of skin infections as well as to assess the personal hygiene practices amongst the school children in Hyderabad, Telangana state with the objective to study the prevalence of skin infection among the schoolchildren and to study the factors affecting skin infections among school children.

MATERIAL AND METHODS

The study was conducted among the school children during the period November 2015 to December 2015 Hyderabad city, Telangana state. This study was a community-based cross-sectional study.

Schools are the primary sampling units in this study. The lists of primary schools are collected from the block office, and 10 schools are selected randomly for the study. Sample size was calculated by taking the prevalence rate as 30% and precision as 12%. 60 students were selected from each school by simple random sampling technique.

Inclusion Criteria: All the students present on the day of check-up and willing to participate in the study.

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

After obtaining relevant socio-demographic profile, students were clinically examined for the presence of skin disorders and details were noted down in pre-tested structured questionnaires individually. Informed consent was taken from the school authorities. Ethical clearance was taken from the Institutional Ethical Committee prior to the study.

STATISTICAL ANALYSIS

Analysis of data was done using SPSS package 17. Analysis of categorical variables was done using Chi-square test. Criteria of significance used in the study were $P < 0.05$.

RESULTS

Out of 605 school children, 29.54% have suffered from various skin disorders. Out of all skin Infections, majority was found to be Scabies with the prevalence of 16.9% among the students, followed by Pediculosis 10.7%. Prevalence of Acne vulgaris was found to be 10.2% and the prevalence of seborrhea infection

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How to cite this article: A. Shravan Kumar, B. Nirmala Devi, K. Jahnavi, Pavani Varma. A study on prevalence of skin infections among school children in Hyderabad, Telangana state. International Journal of Contemporary Medical Research 2016;3(6):1862-1864.

among the children was 9.8% (table-1).

There exists an association between Mothers educational status and skin infection but it was not statistically significant (figure-1, table-2).

There was significant association between Personal hygiene of students with the prevalence of skin diseases (table-3).

DISCUSSION

The present study revealed that Scabies was the most common skin disorder accounting for 16.9%. However the

Skin Infection	Number	Percentage
Scabies	102	16.9
Pediculosis	65	10.7
Seborrhoea	59	9.8
Acne vulgaris	62	10.2
Seborrhoea dermatitis	48	7.9
Taenia	30	5.0
Vitamin deficiency	23	3.8
Impetigo	23	3.8
Pytriasis alba	16	2.6
Worm infestation	1	0.2

Table-1: Distribution of children according to Skin infection

Mothers education	Skin infection		Total
	Yes	No	
Literate	61	140	201
Illiterate	117	287	404
Total	178	427	605

P value=0.724 Chisquare value=0.125

Table-2: Association of Mothers educational status with prevalence of skin infection.

Personal hygiene	Skin infection		Total
	Yes	No	
Yes	107	332	439
No	71	95	166
Total	178	427	605

P=0.000 Chisquare value=20.083

Table-3: Association of Personal hygiene with prevalence of skin infection

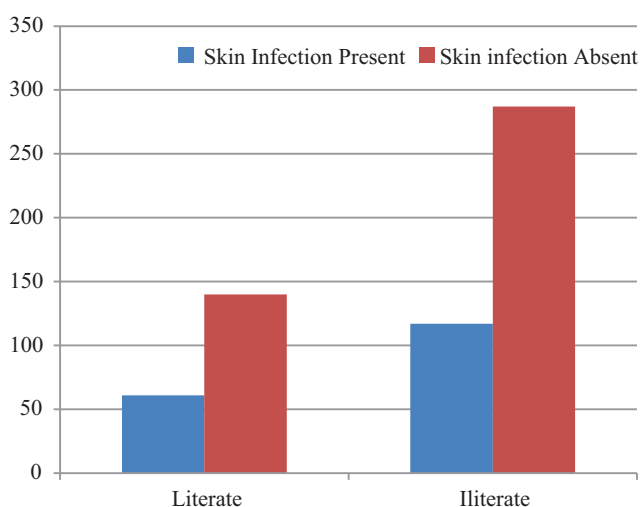


Figure-1: Association of Mothers educational status with prevalence of skin infection

study conducted in Turkey³ revealed Acne to be the most common disorder (12.4%). This could be because they took hospital based patient registry records for data collection and adolescents constituted the largest group in this study. A study in Varanasi revealed Pediculosis capitis to be the most common disorder(35%)followed by Pityriasis Alba(12%).

A study conducted in Wardha amongst tribal school children by Dongre et al.⁴ found that prevalence of head lice (42.8%), scabies (36.6%), and multiple boils (8.9%) amongst the school children. The study findings were dissimilar with the present study.

In a school survey in Varanasi city by Valia et al.⁵ 54% children had one or more skin diseases. The commonest being pediculosis capitis (35%), pityriasis alba (12%) acne vulgaris (8%).

In a study conducted among primary school children in Eastern Nepal by Shakya et al⁶, 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%).

In one study conducted in Nagpur by Charuhas et al⁷, 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 another study among primary school children in Baghdad by Khalifa et al⁸ 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). But in the present study, there exists no significant association between educational status of parents with the prevalence of skin diseases.

CONCLUSION

Health education among the school children regarding personal hygiene should be given. Regarding various skin diseases among the school children, proper education and necessary support should be given by the class teachers for maintaining health status and personal hygiene of the school children.

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Source of Support: Nil; **Conflict of Interest:** None

Submitted: 29-04-2016; **Published online:** 30-05-2016