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Original Research

Assessment of infectious skin disorders in children

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ABSTRACT

Background: In many places of India, the pattern of skin illness is a result of social backwardness, poverty, malnutrition, overcrowding, inadequate hygiene, and illiteracy. The present study was conducted assess infectious skin disorders in children.

Materials & Methods:120 children with skin diseases of both genders were selected. Diagnosis of skin diseases were made by trained dermatologists. The infectious skin diseases were categorized into bacterial, fungal, viral disorders and infestations

Results: Out of 120, 58 were males and 62 were females. Infectious skin disorders in maleand female were scabies in 6and 14, Tinea Corporis in 8 and 11, Pediculosis Capitis in 8and 10, Tinea Capitis in 4 and 7, Tinea manum in 3 and 6, Pityriasis Versicolor in 4 and 5, Tinea Cruris in 2 and 3, Verruca Vulgaris in 5 and 4, Impetigo in 3 and 2, Folliculitis in 7 and 3 and Cellulitis in 8 and 7 respectively. The difference was significant (P< 0.05).

Conclusion: The most common infectious skin disorders among children were Scabies, Tinea Corporis and Pediculosis Capitis.

Keywords: Tinea Capitis, children, skin

Introduction

In many places of India, the pattern of skin illness is a result of social backwardness, poverty, malnutrition, overcrowding, inadequate hygiene, and illiteracy. For everyone, including children, the assessment of skin conditions is a crucial part of primary care practice.[1] A society's state of health, hygiene, and personal hygiene can be assessed by looking at the frequency of specific skin conditions in the local children.Dermatological problems account for about 30% of primary and secondary reasons for Pediatric clinic visits and 30% of all visits to dermatologists involve patients of Pediatric age group. The incidence of skin diseases in children has been reported to be 9%-37% in various studies.[2,3]

The most common conditions were bacterial infections, which fluctuated between 0.2 and 35%. Tinea capitis, which affected 1–17% of cases, and scabies, which affected 0.2% to 24% of cases, were next in line. Viral infections, primarily molluscum contagiosum, caused 0.4–9% of cases, pediculosis capitis, between 0 and 54% of cases, and insect bite reactions, which affected 0-7.2% of cases.[4] The prevalence of skin illnesses in those studies ranged from 21 to 87%; although being so common globally, skin diseases have not been taken into account when public health initiatives are being developed. Therefore, in order to create strategies for their control and prevention, it is crucial to establish national estimates of these diseases.[5,6]The present study was conducted assess infectious skin disorders in children.

Materials & Methods

The present study was conducted on 120 children with skin diseases of both genders. All parents were informed regarding the study and their written consent was obtained.

Data such as name, age, gender etc. was recorded. History of skin diseases and type of skin disease was diagnosed. Diagnosis of skin diseases were made by trained dermatologists. The infectious skin diseases were categorized into bacterial, fungal, viral disorders and infestations.

Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

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Results

Table: I Distribution of patients

Total- 120		
Gender	**Male**	**Female**
Number	58	62

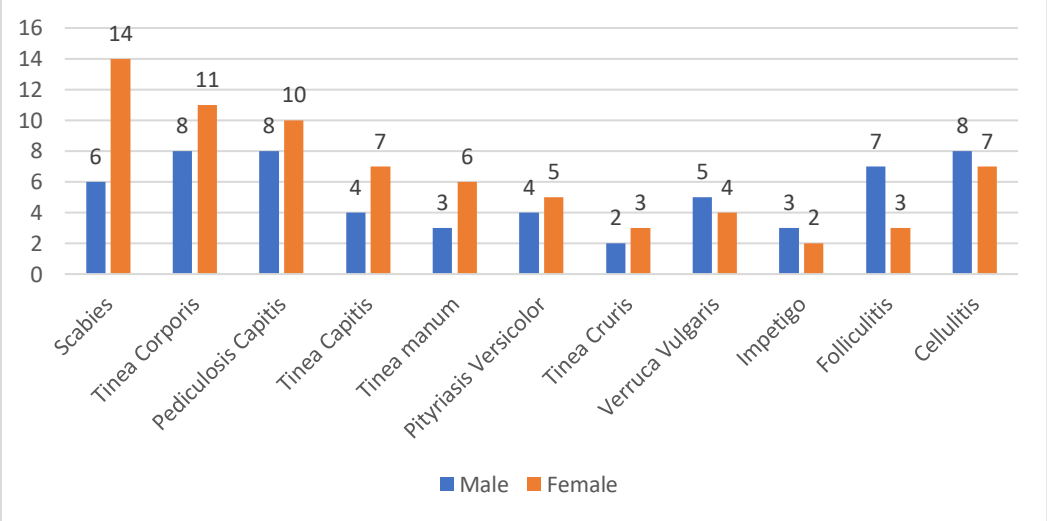
Table I shows that out of 120, 58 were males and 62 were females.

Table: II Types of infectious skin disorders

Infectious skin disorders	Male	Female	P value
Scabies	6	14	0.05
Tinea Corporis	8	11	
Pediculosis Capitis	8	10	
Tinea Capitis	4	7	
Tinea Manum	3	6	
Pityriasis Versicolor	4	5	
Tinea Cruris	2	3	
Verruca Vulgaris	5	4	
Impetigo	3	2	
Folliculitis	7	3	
Cellulitis	8	7	
Total	58	62	

Table II shows that infectious skin disorders in male and female were scabies in 6 and 14, Tinea Corporis in 8 and 11, Pediculosis Capitis in 8 and 10, Tinea Capitis in 4 and 7, Tinea Manum in 3 and 6, Pityriasis Versicolor in 4 and 5, Tinea Cruris in 2 and 3, Verruca Vulgaris in 5 and 4, Impetigo in 3 and 2, Folliculitis in 7 and 3 and Cellulitis in 8 and 7 respectively. The difference was significant (P< 0.05).

Graph: I Types of infectious skin disorders



Discussion

Skin diseases represent an important part of the morbidity among children and are possibly influenced by geographic, racial, social, cultural, and economic factors.[7,8] In developing countries, skin diseases constitute a significant public health problem because of certain climatic conditions such as high temperatures, humidity, poor hygiene, scarce access to water, and family households that may contribute to the development of these diseases.[9,10]The present study was conducted assess infectious skin disorders in children.

We found that out of 120, 58 were males and 62 were females.Sudhir Kumar[11]determined the infectious Skin Disorders Encountered in Children. A total of 250 children aged less than 18 years were seen in the Dermatology clinic over the 1-year period. The mean age of children with ISDs was 8.12±6.3 years with a male to female ratio of 1.22:1. ISDs were diagnosed in 100 (40%) of these children. Types of ISDs Fungal skin infections were seen in 45 (45%) patients. Parasitic skin infections were diagnosed in 30 (30%) patients. Viral and Bacterial skin infections were observed in 15 (15%) and 10 (10%) children respectively. The most frequent ISDs according to a

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etiologic group were: Scabies in 30 (30%), Verruca Vulgaris in 12 (12%), Tinea corporis in 12(12%) and Impetigo in 5 (5%). 3.1.7 Relationship of age and gender occurrence of ISDs Age and Gender showed no significant association with the occurrence of skin diseases.

We found that infectious skin disorders in maleand female were scabies in 6and 14, Tinea Corporis in 8 and 11, Pediculosis Capitis in 8and 10, Tinea Capitis in 4 and 7, Tinea manum in 3 and 6, Pityriasis Versicolor in 4 and 5, Tinea Cruris in 2 and 3, Verruca Vulgaris in 5 and 4, Impetigo in 3 and 2, Folliculitis in 7 and 3 and Cellulitis in 8 and 7 respectively. Dei-Cas I et al[12] in their study ISDs were diagnosed in 1680 (67.9%) of the skin consultations (M/F: 1.1; mean age: 4.4 ± 3.7 years). Bacterial infections were observed in 932 (55.5%) cases. Viral infections were seen in 604 patients (35.9%). Fungal and parasite skin infections were diagnosed in 33 (2%) and 111 (6.6%) children, respectively. The most frequent ISDs according to the etiology group were impetigo 377 (22.4%), varicella 397 (23.6%), tinea capitis 10 (0.6%), and scabies 109 (6.5%). A higher frequency of ISDs were reported during the summer (38.4%) and spring (38.2%) months. Bacterial skin infections were more frequent during the summer months, while viral skin infections were more prevalent during spring. Parasitic skin infections were diagnosed more frequently during the winter months. No differences were seen for mycotic skin infections. Hospitalization rate was 1% (all for bacterial skin infections).

Balai M et al[13]evaluated the magnitude of skin diseases, pattern of various dermatoses, factors contributing to these dermatoses and concurrent systemic disease among children up to five years of age.Consecutive 1000 children, aged up to five yearswere the subjects of this study. One thousand twenty- seven (1027) diagnoses were made in 1000 children. Etiological analysis revealed that majority (417; 40.60%) of dermatoses belonged to infection and infestation group followed by eczematous (358; 34.86%) and hypersensitivity (105; 10.22%) groups. Of the infection and infestation group, bacterial infection (141; 13.72%) was the most common entity followed by scabies (107; 10.42%), fungal (67; 6.52%), and viral infection (35; 3.40%).

The shortcoming of the study is small sample size.

Conclusion

Authors found that most common infectious skin disorders among children were Scabies, Tinea Corporis and Pediculosis Capitis.

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