

Pattern of dermatological disorders in paediatric patients of Faisalabad

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Abstract

Objective To determine the pattern of various skin disorders in Paediatric patients of Faisalabad for improving health care planning and management.

Methods Patients of both genders and ages up to 14 years, presenting to the Outpatient Department of Paediatric Dermatology Children hospital / Institute of Child Health, Faisalabad over a period of one year, were included in this cross-sectional study. Their detailed history and cutaneous examination were carried out. Skin biopsies and relevant investigations were performed, where indicated, for the confirmation of diagnoses.

Results A total of 24,342 children presented to the Dermatology Department. Out of those, 11,245 (46%) patients were females and 13,097 (54%) were males. Mean age noted was 6.2 ± 5.3 years. Total number of dermatoses observed was 183. Out of them, 16 dermatoses were most commonly seen and involved 89.31% of patients. Papular urticaria was the commonest disorder seen in 26.21% cases, followed by Scabies (18.29%), Folliculitis (9.1%), Impetigo (7.56%) and Atopic eczema (6.07%). Rest of the dermatoses were divided into Miscellaneous (8.23%) and Rare dermatoses (2.52%).

Conclusion Dermatological disorders of paediatric patients have been overlooked for long. Better management and timely prevention of these diseases can greatly reduce burden on health care system and population at large.

Key words

Pattern of dermatological disorders, healthcare planning, management, prevention.

Introduction

Skin diseases constitute a major proportion of disease burden worldwide. Prevalence of these disorders is often underestimated. Their distribution varies in different parts of the world and even within the same country.¹ They are responsible for significant physical and psychosocial disability. Their clinical

consequences range from troublesome itching to death. No age is immune to these disorders.² Assessment of their patterns is important as many of these diseases are preventable.^{3,4} The pattern of cutaneous disorders in any country is affected by its environmental, ethnic, economic and social factors as well as literacy levels.⁵ Paediatric dermatology is an emerging subspecialty that deals with skin diseases of children, since they require a different approach from adults because of variations in clinical manifestations, management and prognosis.⁶ Information obtained from Hospital based

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surveys can provide useful data on the trends of various diseases. A better knowledge of the disease burden is inevitable for health care

planning.⁷ This creates a pathway for improving

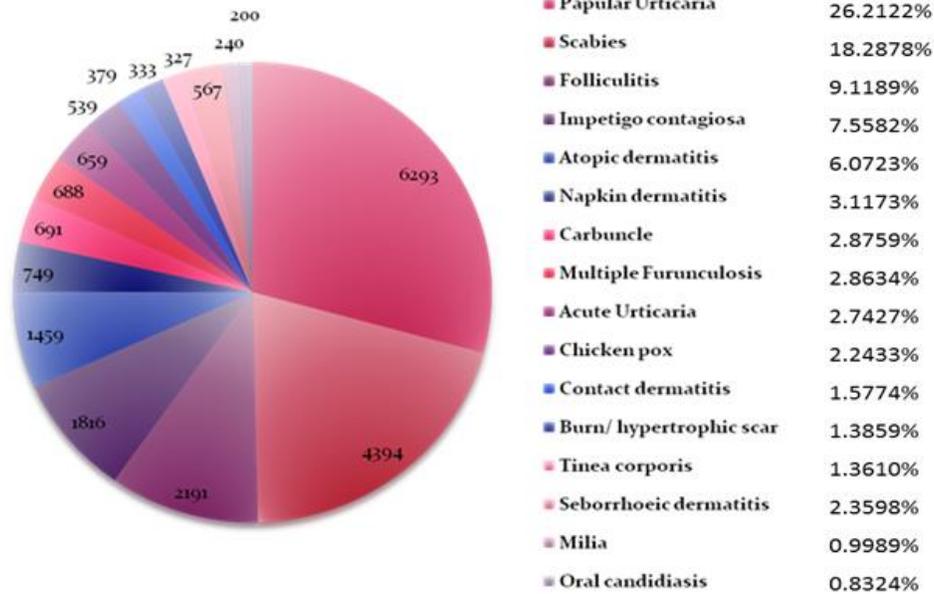


Figure 1 Pattern of commonly observed dermatoses (n=21,725).

strategies for management and prevention of skin diseases. Therefore, this study was planned and carried out to document the spectrum and pattern of skin diseases in different age groups of children of Faisalabad.

Methods

It was a descriptive cross-sectional hospital based study of one year duration, from 18th July, 2017 to 17th July, 2018. After getting approval from Ethical Review Board, all patients presenting to Outpatient Department of Paediatric Dermatology Children hospital/ Institute of Child Health, Faisalabad were enrolled and written informed consents were signed. Their detailed history and cutaneous examination were done. Skin biopsies and relevant investigations were performed, where indicated, for the confirmation of diagnoses. Different patterns of skin disorders were noted and compared. The data was entered and analysed using SPSS ver 20. Means and

standard deviations were calculated for quantitative variables such as age. Frequency and percentages were used to analyse qualitative variables like gender and diagnoses of skin disorders.

Results

A total of 24,342 children presented to the Dermatology Outpatient Department. Out of those, 11,245 (46%) patients were females and 13,097 (54%) were males. Mean age noted was 6.2±5.3 years. Most of the patients were in the age range of 2 months to 6 years (67.05%), while remaining were up to 14 years old (32.95%). Total number of dermatoses observed was 183. Out of them, 16 dermatoses were most commonly seen and involved 21,725 (89.25%) patients (**Figure 1**). Remaining 167 different dermatoses were seen in 2,617 (10.75%) patients. These were further divided into Miscellaneous diseases: seen in 2003 (8.23%) patients and Rare dermatoses: seen in 614

(2.52%) patients (Table 1).

Papular urticaria was the commonest disorder

seen in 26.21% cases, followed by Scabies (18.29%), Folliculitis (9.1%), Impetigo (7.56%), Atopic eczema (6.07%), Napkin dermatitis

Table 1 Various Rarely seen Dermatoses (n=614).

Cockayne syndrome	Ainhum	Shabbir syndrome
Bullous ichthyosiform erythroderma	Multiple myeloma	Lamellar ichthyosis
Xeroderma pigmentosum	Aplasia cutis	Neurofibromatosis
Anhidrotic ectodermal dysplasia	Lipoid proteinosis	Syringocystadenoma papilliferum
Peutz-Jeghers syndrome	Collodion baby	Kindler syndrome
Erythrodysplasia verruciformis	Hidrotic ectodermal dysplasia	Blueberry muffin syndrome
Parry-Romberg syndrome	Cutis laxa	



Figure 2 Different dermatological disorders in paediatric patients.

(3.11%) and seborrheic dermatitis (2.35%), etc. Many uncommon and genetic disorders were also seen.

Miscellaneous skin disorders were seen in 2003 patients, 1052 were females while 951 were males. These included Psoriasis (3%), acute urticaria (3%), Neonatal lupus erythematosus (2%), Juvenile dermatomyositis (2%), Infantile haemangioma (2%), Salmon patch (2%),

Portwine stain (2%), Alopecia areata (2%), vitiligo (2%), infantile acne (1%), etc.

Discussion

It has been observed that a paediatrician encounters almost 30% of all his outpatient children having dermatological problems, while a dermatologist encounters about 30% of children visiting the outpatient department.⁸

Therefore, knowledge of pattern of dermatoses among children of various ages and ethnic groups is important for both paediatricians, dermatologists and general physicians in order to create awareness for prevention of these diseases.

More diseases were noted in male children than females (1.16:1). This trend was similar to some studies⁹ while different from others¹⁰ probably due to social and cultural variations in study populations.

Thomas et al¹¹ and other researchers^{12,13} also observed papular urticaria to be the commonest skin disease among paediatric patients like us. This can be attributed to poor sanitation and overcrowding in our part of the world. The temperate and humid climate of Faisalabad favours growth of mosquitos and similar vectors. This trend was not seen in studies¹⁴ conducted in other parts of the world with different climatic conditions or having better sanitation facilities.

After papular urticaria, infections were commonly seen in our patients, followed by eczemas. This pattern was also reported in certain studies,¹⁵⁻¹⁷ probably because of lower socioeconomic status, poor hygiene and lack of sanitation facilities. Children are more prone to infections and infestations especially in overcrowded slums. Contagious diseases like scabies were more frequently reported in patients coming from these areas. However, other studies^{9,16,18} reported higher incidence of eczemas followed by infections. This variation is probably due to differences in ecological profile, sample size, socioeconomic status and literacy rates of study populations.

We also observed many genodermatoses in many families (**Table 1**). This can be attributed to higher incidence of consanguineous marriages and larger family size of our community.

The results of this study strongly depict the need for adequate facilities for prevention and management of skin diseases in paediatric population. There is lack of specialised and dedicated facilities for Paediatric Dermatology in our part of the world. Efforts must be made to create awareness among masses about the importance of hygiene, sanitation, vaccination and fumigation. Primary healthcare physicians should be trained in diagnosing and treating these dermatoses in order to reduce burden on tertiary care facilities.

Conclusion

Skin diseases of children constitute a major burden on healthcare system of a country. Knowledge of their epidemiology, management and prevention is of utmost importance for betterment of community at large.

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