

# Frequency of Skin Disorders Among Paediatric Population of Charity Hospital of Lahore

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## ABSTRACT

**Aim:** To determine the pattern of skin disorders among paediatric patients in a charity hospital of Lahore.

**Method:** This study was carried out in the dermatology department of Akhtar Saeed Trust Hospital Lahore from 1<sup>st</sup> March 2017 to 1<sup>st</sup> March 2018 on consecutive paediatric patients, over a period of 1 year. Patients were enrolled with age group ranging from < 1 year to 14 years of age irrespective of gender. Skin diseases were diagnosed on the basis of clinical morphology and laboratory investigations, as required. All findings were recorded and analysed.

**Results:** 3869 patients were enrolled in the study. Infections and infestations were the most common skin condition accounting for 37% of the enrolled patients. Then eczema in 36% of patients, acne in 18% of patients. Urticaria was next in frequency present in 5% of patients and insect bite reaction in 4% patients.

**Conclusion:** Our study showed a high prevalence of infective dermatosis as compared to non-infective dermatosis. Bacterial infections and eczemas were most common in enrolled patients.

**Keywords:** Skin disorders, infections, infestations, eczema.

## INTRODUCTION

Pediatric dermatology is an important branch of dermatology that deals with the diagnosis, treatment and prevention of skin diseases which occur in infancy, childhood and adolescence.<sup>1,2</sup>

Skin diseases are common in children incidence 9 – 37% all over world.<sup>3,4</sup> Some skin diseases are only exclusive to childhood whereas others are found across all age groups though they may differ in manifestation and treatment.<sup>5</sup> Skin is the most exposed organ of body and thus is most vulnerable to external agents and can present with clinical features of many systemic diseases.<sup>6</sup> Ethnic, environmental and socioeconomic factors influence the incidence of skin diseases.<sup>7,8</sup>

Studies of pediatric population suffering from skin dermatosis can play a very important role in public health and thus policy making.<sup>9</sup>

In this study we aim to find frequency of different patterns of skin diseases in pediatric population.

## METHOD

This study was carried out in department of dermatology, Akhtar Saeed Trust Hospital from 1st March 2017 to 1st March 2018. Permission was taken from ethical committee. All the children with age ranging from <1 year to 14 years irrespective of their sex presenting in outpatient department of dermatology, as well as those referred from other departments for dermatological opinion were enrolled for the study by convenient sampling. Informed consent was taken from patients or their parents. The data obtained was analyzed through Microsoft SPSS.

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## RESULTS

A total of 3869 patients were included in study. The age range was from < 1 year to 14 years. Out of these 2399 patients were female and 1470 were males (Pie chart). Infections and infestations were the most common conditions constituting 1436(37%) of patients. Eczema was present in 1401(36%) of patients. Acne was next in frequency 677(17.5%) patients. Urticaria was present in 166(4.3%) of patients and insect bite reaction were present in 137(3.5%) patients. Pattern of different skin diseases can be seen in Table 1. In the category of infections and Infestations 3,869, bacterial infections were seen in 47(12%), scabies in 435(11%), fungal infections in 249(6.5%), viral infections in 188(4.8%) and candidal intertrigo in 27(0.7%) of patients. In the group of eczema, atopic dermatitis was the commonest 670(17.4%), followed by seborrheic dermatitis 547 (14%) and contact dermatitis in 184(4.8%) of patients. Lichen planus, psoriasis and ichthyosis in papulosquamous disorders were present in less than 1% of patients. Table 2 shows the distribution of dermatosis according to age group.

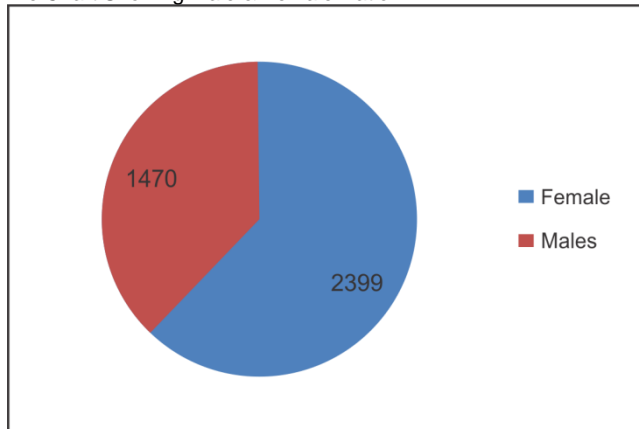
Table 1: Pattern of Different Disease Groups

Disease Group	Total Patients
Infestations	
Scabies	435
Pediculosis	59
<b>Infections</b>	
Bacterial	478
Viral	188
Fungal	249
Others	27
<b>Eczema</b>	
Seborrheic Dermatitis	375
Atopic Dermatitis	470
Contact Dermatitis	100
Papulosquamous Disorders	
Lichen Planus	34
Psoriasis	15

Table 2: Distribution of Dermatoses according to age group

Dermatosis	0-1 Year	1-10 Year	11-14 Year
Acne	1	29	647
Bacterial Infection	30	355	478
Fungal Infections	7	163	86
Condidal Infection	15	175	79
Viral Infections	5	116	67
Eczema	40	277	139
Scabies	67	277	91
Urticaria	4	82	80
Papulosquamous Disorders	0	19	30
Bite Reaction	18	98	21
Others	0	52	0

Pie Chart Showing Male & Female Ratio



**DISCUSSION**

Lahore is the most populous city of Punjab, its estimated population is around 11 million. The pattern of skin dermatosis is influenced by type of weather in area like in Lahore short winters and long , moist summers.

In current study 2399 patients were female and 1470 patients were males. This corresponds to findings of some other studies <sup>8,10</sup>. In these studies females were more as compared to males, unlike some other studies which reported male preponderance.<sup>1,11</sup>

In our study infections and infestations were the commonest 1436 (37.2%) like in Nigeria <sup>12</sup> and India <sup>13</sup> and unlike other studies like in Spain<sup>14</sup>. Bacterial infections were the most commonest of infections, followed by scabies (11. 2%) like study in South India <sup>15</sup> in which bacterial infection (47.13%) followed by scabies (14.2%) unlike other studies in which tinea capitis was the commonest infection 8.1 % and 19.1% <sup>16</sup>. This increased incidence of infections can be explained by the poor socioeconomic status of patients presenting in our hospital.

Eczema accounted to be 36.2% in our study. Out of which atopic dermatitis was the commonest followed by seborrhoeic dermatitis like in other studies<sup>15,17</sup> . Over the last few decades prevalence of atopic dermatitis has increased due to rural urban migration and so called western lifestyle adaptation <sup>18,19</sup>.

Eczema was followed by acne, present in 17.5% of patients mostly in adolescent period like in study by Ayanlowo et al<sup>20</sup>. Presence of acne in this period can have great effect on quality of life <sup>21,22</sup>.

In our study urticaria and insect bite reactions accounted for 4.3% and 3.5% of patients almost

comparable to study conducted by Thappa<sup>15</sup> and Poudyal<sup>1</sup> unlike some other studies Nigeria<sup>20</sup>.

Rest of disorders like papulosquamous disorders accounted for <1% of patients.

**CONCLUSION**

Overall infections and infestations , eczemas and acne accounted for three major dermatosis evolving in paediatric population . Nature of living conditions, climate and lack of awareness about role of personal and community hygiene is important for lowering the burden of skin disorders. By all this in the end quality of life will improve too. Thus such studies are needed to be done on large scale.

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