

Pattern of dermatological disorders in paediatric patients of DHQ Teaching Hospital, Gujranwala

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Abstract

Objective To identify the pattern of various clinical presentations of skin disorders in pediatric patients of DHQ teaching hospital, Gujranwala for improving health care planning and management.

Methods The query describes a descriptive, cross-sectional hospital-based study that included the patients of all genders and ages upto 14 years who visited the Dermatology Outpatient Department within a year. The diagnoses of patients were confirmed after detailed history, examinations and necessary investigations.

Results 9,526 children presented to the Dermatology Department. Out of those, 43% were males and 57% were females. Mean age noted was 5.5 years with standard deviation of 3.2 years. Scabies (32.2%), eczema (16.6%), tinea (13.4%), seborrheic dermatitis (4.3 %), furunculosis (4.0%), impetigo (3.7%), urticaria (3.0%), vitiligo (2.8%), diaper candidiasis (2.6%), viral exanthemas (2.0%), carbuncle (1.9%), atopic dermatitis (1.7%), molluscum contagiosum (1.5%), alopecia areata (1.5%) and pityriasis versicolor (1.3%) were included in the group of more common dermatoses. Rest of dermatoses were divided into less common (6.3%) and rare dermatoses (1.2%).

Conclusion There should be collaboration between pediatrician and dermatologist for the early diagnosis and management of most commonly observed dermatoses. It will reduce a lot of burden on our health care system.

Key words

Pediatric; Dermatoses; Health care planning; management; Prevention.

Introduction

Skin diseases continue to be a significant contributor to global disability and their prevalence is frequently underestimated. The distribution of these disorders varies across different regions of the world and even within a single country.^{1,2} Although skin disorders are common, there is little information about their distribution in various age groups.³ An understanding of their distribution pattern is

necessary to manage preventable disorders.^{2,4} An understanding of skin diseases in children is important, as they require unique management compared to adults because of variations in their clinical spectrum.⁵ Only few studies are available on the dermatological diseases of pediatric population. Hospital based surveys can yield a useful data on trends of various diseases that can be used for health care planning.⁶ For this, there should also be a close collaboration between pediatrician and dermatologist so that they can work for well-being of pediatric population.⁷ This creates a pathway for better understanding of common pediatric diseases that will allow proper allocation of resources for

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their treatment and prevention Therefore, this Study was carried out to ascertain the pattern of skin diseases in different age groups of children coming to DHQ teaching hospital, Gujranwala.

Methods

A hospital-based study was conducted for one year from January 1st, 2022 to December 31st, 2022 to determine the different patterns of skin disorders in patients who visited the Dermatology Outpatient Department of DHQ Teaching Hospital in Gujranwala. The study was approved by Ethical Review Board and the patients who signed an informed consent were enrolled. The patients underwent detailed history, cutaneous examinations, skin biopsy and relevant investigations were performed where needed for the diagnosis. The collected data was analyzed using SPSS version 22 and mean along-with SD were calculated for quantitative variables such as age.

Frequency and percentages were used to analyze qualitative variables like gender and diagnoses of skin disorders. This study followed a descriptive cross-sectional design. Dermatoses were categorized into three groups named as more common group, less common and rare dermatoses.

Results

A total of 9,526 children presented to the Dermatology Department. Out of those, 43%

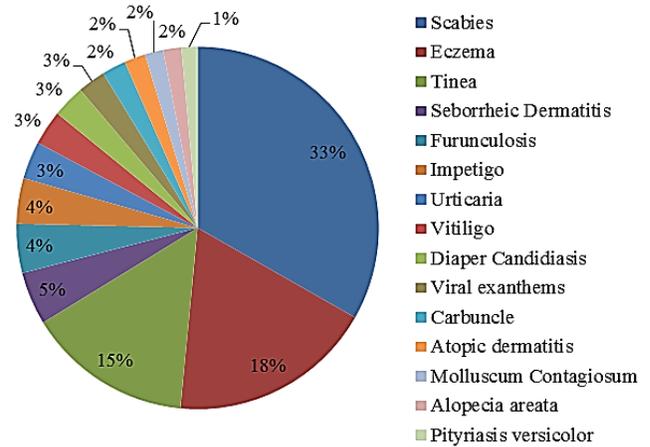


Figure 1 Pattern of commonly observed dermatoses (n = 9526).

were males and 57% were females. Mean age noted was 5.5 years with standard deviation of 3.2 years. Scabies (32.2%), eczema (16.6%), tinea (13.4%), seborrheic dermatitis (4.3 %), furunculosis (4.0%), impetigo (3.7%), urticaria (3.0%), vitiligo (2.8%), diaper candidiasis (2.6%), viral exanthems (2.0%), carbuncle (1.9%), atopic dermatitis (1.7%), molluscum contagiosum (1.5%), alopecia areata (1.5%) and pityriasis versicolor (1.3%) were included in the group of more common dermatoses.

Less common skin disorders were seen in 842 patients. These included erythroderma (1%), pityriasis alba (0.9%), oral thrush (0.9%), erythema multiforme (0.7%), herpes labialis (0.7%), mucormycosis (0.6%), burn/hypertrophic scar (0.6%), angular cheilosis (0.4%), brittle nails (0.3%) and infected pediculosis etc.

Table 1 Various rarely seen dermatoses.

Leishmaniasis	Erythema multiform	Colloidion baby
Port-wine stain	Iatrogenic cushings syndrome	Shabbir syndrome
Hemangioma	Blueberry muffin syndrome	neurofibromatosis
Giant molluscum contagiosum	Peutz-Jeghers syndrome	Purpura due to meningococemia
Nevus flamus	Aplasia cutis	Xeroderma pigmentosum
Kindler syndrome	Cutis marmorata	Neonatal acne



Figure 2 Different dermatological disorders in paediatric patients.

Discussion

There are various factors that can influence the pattern of dermatological conditions in children such as climate, external environment, habits and socio-economic status. A study conducted in DHQ Teaching Hospital, Gujranwala focused on the pattern of pediatric dermatoses observed in hospital and highlighted the inadequacies in primary health care facilities and poor socio-economic status that contribute to this pattern. In our present study more diseases were noted in females than males. This trend was similar to some studies⁹ while different from other studies¹⁰ probably due to social and cultural variations in study populations.

Scabies was the most common pediatric dermatosis in our present study like studies conducted in north east India¹¹ and Kuwait¹² regions. This may be due to poor socio-economic status and over-crowding. This trend was not seen in other studies¹³⁻¹⁸ conducted in other

regions with different climate and better sanitation facilities.

After scabies, eczemas and fungal infections were commonly seen in our patients like studies in Saudi Arabia,¹³ Lybia,¹⁴ North Kerala¹⁵ and Western Nepal.¹⁶ However in other studies^{17,18} there is higher incidence of Mongolian spots and erythema toxic neonatorum respectively. The reason for the difference observed may be attributed to variations in ecological profiles and literacy rates of the population under study.

The findings of present study highlight the need for the diagnosis and management of the most commonly observed dermatoses at the earliest possible stage to prevent their spread and further complications on a large scale. It is worth mentioning to strictly train primary health care providers, including pediatricians and general practitioner, about the management of commonly observed dermatoses according to the latest guidelines. The health policy makers need

to understand the magnitude and accurate distribution of these dermatoses for proper planning and allocation of resources.

Conclusion

The collaboration between pediatrician and dermatologist is crucial for the timely management and prevention of frequently occurring skin disorders in children. Many of these dermatoses can be managed by raising public awareness, improving hygiene and by enhancing nutrition.

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