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Research Article

Pattern of Paediatric Dermatoses: Cross sectional study from a Tertiary Care Center of Maharashtra

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ABSTRACT

Background: Skin diseases (30% of outpatient visits) are a major health concern in children associated with significant morbidity. The spectrum of diseases range from transient physiological to chronic debilitating conditions. The pattern of dermatoses varies worldwide influenced by socio-cultural, hygiene, climate and geographic factors.
Aims: To study the prevalence and pattern of paediatric dermatoses in our area**.**
Study design and Setting: This was a cross-sectional study conducted in the Dermatology OPD of a Tertiary Referral Hospital of Maharashtra between January 2021 to June 2022.
Material and methods: Patients below 18 years with dermatological manifestations were included afterEthical approval. The demographic data was recorded along with detailed clinical evaluation. **Statistical Analysis:** The details were recorded in IBM SPSS software. Results were analysed and expressed in percentages.
Results: Among 300 patients, male preponderance was noted. Majority belonged to school- going age (154, 51.33%), followed by pre-school (53, 17.67%) and neonates(6, 2%). Most patients belonged to lower middle class (121, 40.33%). Infections and infestations (138,45.70%) were the most predominant dermatoses followed by eczemas (50,16.56%), Fungal infections were most commonly encountered (36.95%). Rare disorders like Pemphigus, Incontinentia pigmenti, Parry Romberg syndrome were noted. Infections and Infestations were the most common dermatoses among Infants(8,34.78%), preschool(35,66.03%) and school-age(80,51.94%) similarly eczemas(16,42.10%) predominated in toddlers, acne(10,38.46%) in adolescents and Erythema toxicum neonatorum (5, 83.33%) among neonates.
Conclusion: Our study provides comprehensive information regarding epidemiological and clinical pattern of dermatoses among paediatric age group, demonstrating infections and infestations as the commonest dermatoses.

Keywords: *Paediatric Dermatoses, Pattern, Infections and Infestations, School Age*.

INTRODUCTION

Paediatric dermatology is an important branch of dermatology that deals with the diagnosis, treatment, and prevention of skin diseases occurring in infancy, childhood, and adolescence[1,2]. Paediatric dermatology requires distinct view from adult dermatoses from the perspective of clinical approach, diagnosis, management and prognosis. The skin diseases in paediatric age group can range widely from physiological transient conditions like erythema toxicum neonatorum, Mongolian spots, mild innocuous conditions like skin infections to severe disorders like Steven Johnson syndrome, pemphigus vulgaris etc. Few chronic disorders like psoriasis, eczema can cause chronic psychological impact.

Paediatric population presenting with dermatologic disorders is one of the major health concerns encountered across the world. Dermatological problems in paediatric population constitute at least 30% of all outpatient visits to dermatology OPD[1,3]. Skin diseases are one of the major health problems in children and are associated with significant morbidity[4]. The prevalence of paediatric dermatoses in various parts of India has ranged from 8.7% to 38.8% in different studies, usually school-based surveys[5].

The child's health reflects the standard of child health care facility provided. Also status of health, hygiene and personal cleanliness of a society can be judged from the prevalence of certain skin diseases in children of the community [5]. In developing countries like India poor socio-economic conditions, hygienic practices, malnutrition, poor access to health care services contribute to various dermatoses. Therefore, study of pattern of dermatoses helps us to understand burden of various diseases, factors attributing in the disease causation. The data aids in formulating and implementing various preventive measures and community-based health guidelines, policy making and improvement of health sectors [6].

Various studies have been conducted worldwide to understand the epidemiological factors of paediatric dermatoses[7,8,9]. However due to ever changing population dynamics, ecological factors, social factors, the incidence of various diseases keep changing constantly. The prevalence and pattern of dermatoses in paediatric age group has been documented in epidemiological studies and institutional research in various geographical areas. This study was undertaken to address the paucity of epidemiological data pertaining to paediatric dermatoses in our area. The objective of the study was to evaluate the prevalence and epidemiological and clinical pattern of paediatric dermatoses in the given area which in turn can aid in formulating preventive measures and health policies thereby improving holistic child health in the community.

AIM AND OBJECTIVE

To study the pattern of various skin diseases with age wise distribution among paediatric age group (<18 years)

MATERIAL AND METHODS

This was a cross-sectional study conducted in the Dermatology OPD of Government Medical College attached to a Tertiary referral hospital. The study was conducted over a period of 18 months from January 2021 to June 2022. The study group included the patients belonging to paediatric age group (day 1 to 18 years) with dermatological manifestations. Total of 300 children were included in the study. Written informed consent was taken from the guardian of the patient. The demographic details were noted along with detailed history . The diagnosis was made based on thorough clinical examination. Tests like potassium hydroxide mount, Gram stain, Woods lamp examination, Tzanck smear, diascopy, dermoscopy, skin biopsy for histopathology and other relevant investigations were performed to reach the diagnosis wherever necessary. The children were categorized into 6 groups based on their age as neonates (0-28 days), infants (upto 1 year), toddler (1-3 year), pre-school (3-6 year), school age (6-12 year) and adolescents (12- 18 years). The dermatological conditions were classified as infections and infestations, eczema and dermatitis, adnexal, papulosquamous disorders, pigmentary disorders, hair disorders, nevoid disorders, hypersensitivity disorders, vascular malformations, nutritional disorders, keratinization disorders, connective tissue disorders, drug reactions, genodermatoses, nail disorders and vesiculobullous disorders. Conditions not belonging to above groups were enrolled under miscellaneous conditions. The data was tabulated in IBM SPSS software. The pattern of paediatric dermatoses with age wise distribution was studied. Statistical analysis was done using Categorical variables (age, gender, socioeconomic status and skin diseases) and results were expressed in percentage.

RESULTS

During the study period of 18 months, total of 2700 patients attended Dermatology OPD, of which 300 paediatric patients(11.11%) were enrolled. Two children were noted to have more than one dermatoses therefore 302 dermatoses were documented. 154 (51.33%) patients belonged to school age followed by pre-school 53 (17.67%) with neonates accounting for smallest proportion with (6, 2%) (Table 1). Among them maximum were males185 (61.37%) with 115(38.33%) females. Male: Female ratio was 1.16 :1. Majority of the patients belonged to lower middle class (121,40.33%).

The various dermatoses observed were classified into 13 groups (Table 1). Infections and Infestations (n - 138, 45.70%) were the most common type of dermatoses followed by eczematous dermatoses(n-50 ,16.56%). (Table 1)

Among Infections and Infestations, fungal infections(n-51, 36.95%) were predominant, followed by parasitic(n-43, 31.15%%), viral (n-36,26.08%) and bacterial infection (n-8, 5.79%).School age group (80, 51.94 %)was the major group noted to be affected followed by preschool age group(35,66.03%) in infections and infestations group.Among fungal infections, dermatophytosis(72.54%) was most common followed by pityriasis versicolor(23.52%) and intertrigo(3.92%). Dermatophytosis were maximally seen in school age(17, 45.94%) and preschool age(10, 27.02%) children whereas pityriasis versicolor in school age(10, 83.33%).Molluscum contagiosum(41.66%) were maximally noted among viral infections followed by warts(33.33%), less common diseases were hand foot mouth disease(11.11%), herpes zoster (11.11%) and herpes labialis(2.77%). Molluscum contagiosum was maximally seen in preschool(8, 53.33%) age group and warts in school(9, 75%) age group. Bacterial infections contributed to 5.79% of the cases which included Impetigo(37.5%) and erythrasma(37.5%) followed by leprosy(12.5%) and scrofuloderma(12.5%). An 8 year old female child presented with erythematous plaque with chronic discharge over sternal area. Detailed evaluation led to the

diagnosis of scrofuloderma with evidence of Potts spine. Scabies (97.67%) predominated over the pediculosis capitis(4.32%) among the Infestations and school age(24, 57.14%) group was found to be affected maximally.

Eczemas were the second most prevalent dermatoses contributing to 16.65% of the total cases after infections and infestations. 6 types of eczemas were seen. Among them pityriasis alba (36%) was the most common disease followed by nummular eczema(28%) and atopic dermatitis(20%).Less common were diaper dermatitis(6%), seborrheic dermatitis(6%) and perioral dermatitis(4%). Pityriasis alba was predominantly noted in preschool(6, 33.33%), toddler(5, 27.77%) and school age group(5, 27.77%) whereas Atopic dermatitis were maximally noted in toddler(6, 60%) age group.

Adnexal disorders was the third most common dermatoses seen in 8.61% of the total cases. Acne constituted maximum number of cases(73.07%) with adolescents(52.63%) as the predominant age group. A single case of neonatal cephalic pustulosis was noted in a 20 day old neonate. Other dermatoses noted among adnexal group were milaria(7.69%) followed by hidradenitis suppurativa(3.84%), Fox Fordyce disease(3.84%), periporitis(3.84%) and rosacea(3.84%).

Papulosquamous disorders constituted 8.28% of the total cases. Among them lichen planus(44%) was most commonly seen. Most of the cases were generalised lichen planus and only 2 cases were oral lichen planus. Less common cases were psoriasis(20%), lichen striatus(20%) followed by lichen nitidus(12%) and pityriasis rosea(4%). No cases of lichen spinulosus, pityriasis rubra pilaris were seen.

Pigmentary disorders were seen in 5.3% of the cases. Vitiligo(81.25%) was common disease seen predominantly in school age group children. Vitiligo vulgaris(76.92%) was the predominant type followed by segmental vitiligo(15.38%) and least common type was lip tip vitiligo(7.69%). It was followed by congenital linear and whorled hypomelanosis(12.5%) and then guttate hypomelanosis (6.25%).

Hair disorders were noted in 3.97% of the total cases. Alopecia areata(91.66%) was the commonest dermatoses followed by trichotillomania(8.33%). Among alopecia areata, maximum cases were patchy type(72.72%) followed by alopecia universalis(27.27%). Nevoid disorders were seen in 3.64%. Becker nevus(36.36%) was the most common followed by nevus sebaceous(27.27%). Least common conditions were compound nevus(9.9%), congenital hairy melanocytic nevus(9.90%), halo nevus(9.90%) and linear verrucous epidermal nevus (9.90%). Hypersensitivity disorders were seen in total of 1.32% cases. Insect bite reactions(50%) and urticaria(50%) were seen in equal proportion.

Vascular malformations were seen in 1.32% of the total cases. Out of which 3 cases were haemangioma belonging to infants, toddler and school age group each. A 3 year old female child presented with port wine stain involving oral mucosa. Nutritional disorders were seen in 0.99% of the total cases. All the 3 cases were phrynoderma occuring in school age group. Keratinization disorders were seen 0.66% of the total cases. A 2 year male old child presented with icthyosis vulgaris. The second case of was a 5 year old male child with severe lamellar icthyosis with features of ectropion and contracture of fingers.

A single case of Parry Romberg Syndrome was noted in 6 year old male child with facial hemiatrophy. Depth of sclerosis extended upto muscles without evidence of bony involvement. Drug reactions were noted 0.33% of total cases which constituted single case of Fixed drug eruption. Genodermatoses were noted in 0.33% of the cases with single case of Incontinentia pigmenti. A single case each of nail psoriasis and nail lichen planus were found in nail disorders. A single case of childhood pemphigus vulgaris was noted 8 year old female child who presented with multiple vesicles and erosions all over the body with involvement of oral and genital mucosa. 5 neonates with erythema toxicum neonatorum were included in the study (miscellaneous group).

In our study school age group(154, 51.33%) was the predominant age group followed by pre school(53, 17.67%), toddler(38, 12.67%), adolescents (26, 8.67%), infants (23, 7.67%) and neonates(6,2%) being least. Among the neonates Erythema toxicum neonatorum(5, 83.33%) was the most common condition observed. Infections and Infestations was the major dermatoses noticed in Infants(8,34.78%), preschool(35,66.03%) and school age(80,51.94%) group. Eczemas(16,42.10%) were the most common dermatoses seen in toddler group. Adolescent age group encountered maximum cases of adnexal disorders like acne(10,38.46%).

Males (97, 70.28%) outnumbered females(41, 29.71%) in infections and infestations group whereas females(28, 56%) were more affected than males(22, 44%) with eczemas. Adnexal group of disorders showed more females(14,53.84%) than males(12,46.15%).

Infections and Infestations were maximally noted in Lower middle socioeconomic class (62, 51.23%) followed by upper lower(38, 37.62%) and lower(33, 55.93%). Eczema was most commonly noted in upper lower class(11, 52.38%).

Table 1 – The pattern of Paediatric Dermatoses

Type of dermatoses	Total	
	No	%

Infections & Infestations	138	45.70
Eczemas	50	16.56
Adnexal disorder	26	8.61
Papulosquamous disorders	25	8.28
Pigmentary disorders	16	5.30
Hair disorders	12	3.97
Nevoid disorders	11	3.64
Hypersensitivity Disorders	4	1.32
Vascular malformations	4	1.32
Nutritional disorders	3	0.99
Keratinization Disorders	2	0.66
Connective tissue disorders	1	0.33
Drug reactions	1	0.33
Geno dermatoses	1	0.33
Nail disorders	2	0.66
Vesiculobullous disorders	1	0.33
Miscellaneous	5	1.66
Total	302	100.00

Table 2- Age wise distribution of dermatoses

Type of dermatoses	**Age Group**						**Total**	
	Neonates	Infants	Toddler	Pre School	School Age	Adolescents	No	%
Infection & Infestation	0	8	12	33	80	5	138	45.70
Eczemas	0	5	16	9	19	1	50	16.56
Adnexal disorder	1	2	1	0	12	10	26	8.61
Papulosquamous disorders	0	1	5	6	8	5	25	8.28
Pigmentary disorders	0	3	0	2	10	1	16	5.30

Hair disorders	0	1	0	0	9	2	12	3.97
Nevoid disorders	0	0	1	0	8	2	11	3.64
Hypersensitivity disorders	0	2	0	1	1	0	4	1.32
Vascular malformations	0	1	2	0	1	0	4	1.32
Nutritional disorders	0	0	0	0	3	0	3	0.99
Keratinization disorders	0	0	1	1	0	0	2	0.66
Connective tissue disorders	0	0	0	1	0	0	1	0.33
Drug reactions	0	0	0	0	1	0	1	0.33
Geno dermatoses	0	0	0	0	1	0	1	0.33
Nail disorder	0	0	0	0	2	0	2	0.66
Vesiculobullous disorder	0	0	0	0	1	0	1	0.33
Miscellaneous	5	0	0	0	0	0	5	1.66
Total	6	23	38	53	156	26	302	100.00

Table 3 – Sex wise distribution of dermatoses

Type of dermatoses	Gender		Total	
	Female	Male	No.	%
Infection & infestation	41	97	138	45.70
Eczemas	28	22	50	16.56
Adnexal disorders	14	12	26	8.61
Papulosquamous disorders	11	14	25	8.28
Pigmentary disorders	6	10	16	5.30
Hair disorders	2	10	12	3.97
Nevoid disorders	3	8	11	3.64
Hypersensitivity disorders	3	1	4	1.32

Vascular malformations	2	2	4	1.32
Nutritional disorders	1	2	3	0.99
Keratinization Disorders	0	2	2	0.66
Connective tissue disorders	0	1	1	0.33
Drug reactions	0	1	1	0.33
Geno dermatoses	0	1	1	0.33
Nail disorders	0	2	2	0.66
Vesiculobullous disorders	1	0	1	0.33
Miscellaneous	4	1	5	1.66
Total	116	186	302	100

Table 4- Pattern of Infections and Infestations

Dermatoses	Age Group						Total	%
	Neonates	Infants	Toddler	Pre School	School Age	Adolescents		
Infections and Infestations								
Fungal Infections								
Dermatophytoses	0	5	4	10	17	1	37	72.54
Pityriasis versicolor	0	0	0	1	10	1	12	23.52
Intertrigo	0	0	0	1	1	0	2	3.92
Total	0	5	4	12	28	2	51	100
Viral Infections								
Molluscum contagiosum	0	0	2	8	5	0	15	41.66
Warts	0	0	0	2	9	1	12	33.33
Hand foot mouth disease	0	1	1	1	1	0	4	11.11
Herpes zoster	0	0	0	1	3	0	4	11.11
Herpes labialis	0	0	0	0	1	0	1	2.77
Total	0	1	3	12	21	1	36	100
Bacterial Infections								
Impetigo	0	0	1	1	1	0	3	37.5

Erythrasma	0	0	0	0	3	0	3	37.5
Scrofuloderma	0	0	0	0	1	0	1	12.5
Leprosy	0	0	0	0	1	0	1	12.5
Total	0	0	1	1	6	0	8	100
Infestations								
Scabies	0	2	4	10	24	2	42	97.67
Pediculosis capitis	0	0	0	0	1	0	1	2.32
Total	0	2	4	10	25	2	43	100
Eczemas								
Pityriasis alba	0	1	5	6	5	1	18	36
Eczema	0	0	1	2	11	0	14	28
Atopic dermatitis	0	3	6	0	1	0	10	20
Diaper dermatitis	0	1	2	0	0	0	3	6
Seborrheic dermatitis	0	0	2	1	0	0	3	6
Perioral dermatitis	0	0	0	0	2	0	2	4
Total	0	5	16	9	19	1	50	100
Adnexal Disorders								
Acne	1	0	0	0	8	10	19	73.07
Syringoma	0	0	0	0	1	0	1	3.84
Hidradenitis suppurativa	0	0	0	0	1	0	1	3.84
FoxFordyce disease	0	0	0	0	1	0	1	3.84
Milaria	0	1	1	0	0	0	2	7.69
Periporitis	0	1	0	0	0	0	1	3.84
Rosacea	0	0	0	0	1	0	1	3.84
Total	1	2	1	0	12	10	26	100
Papulosquamous Disorders								
Lichen planus	0	0	1	1	6	3	11	44

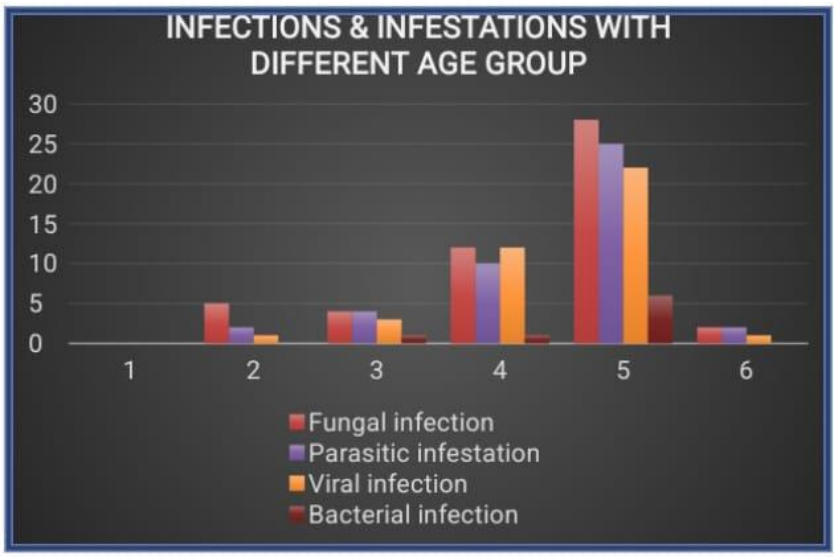
Lichen Striatus	0	0	2	2	1	0	5	20
Lichen nitidus	0	0	2	1	0	0	3	12
Psoriasis	0	1	0	1	1	2	5	20
Pityriasis Rosea	0	0	0	1	0	0	1	4
Total	0	1	5	6	8	5	25	100
Pigmentary Disorders								
Vitiligo	0	0	0	2	10	1	13	81.25
Congenital linear and whorled hypopmelaosis	0	2	0	0	0	0	2	12.5
Guttate hypomelanosis	0	1	0	0	0	0	1	6.25
Total	0	3	0	2	10	1	16	100
Hair disorders								
Alopecia areata	0	1	0	0	9	1	11	91.66
Trichotillomania	0	0	0	0	0	1	1	8.33
Total	0	1	0	0	9	2	12	100
Nevoid Disorders								
Becker nevus	0	0	0	0	2	2	4	36.36
Nevus sebaceous	0	0	0	0	3	0	3	27.27
Compound nevus	0	0	0	0	1	0	1	9.90
Hairy melanocytic nevus	0	0	1	0	0	0	1	9.90
Halo nevus	0	0	0	0	1	0	1	9.90
Linear verrucous epidermal nevus	0	0	0	0	1	0	1	9.90
Total	0	0	1	0	8	2	11	100
Hypersensitivity Disorders								
Insect bite reaction	0	1	0	0	1	0	2	50
Urticaria	0	1	0	1	0	0	2	50
Total	0	2	0	1	1	0	4	100

Vascular Malformations								
Hemangioma	0	1	1	0	1	0	3	75
Port wine stain	0	0	1	0	0	0	1	25
Total	0	1	2	0	1	0	4	100
Nutritional Disorders								
Phyrnoderma	0	0	0	0	3	0	3	100
Total	0	0	0	0	3	0	3	100
Keratinization Disorders								
Ichthyosis vulgaris	0	0	1	0	0	0	1	50
Lamellar ichthyosis	0	0	0	1	0	0	1	50
Total	0	0	1	1	0	0	2	100
Connective Tissue Disorders								
Morphea	0	0	0	1	0	0	1	100
Total	0	0	0	1	0	0	1	100
Drug Reactions								
Fixed drug eruption	0	0	0	0	1	0	1	100
Total	0	0	0	0	1	0	1	100
Genodermatoses								
Incontinentia pigmenti	0	0	0	0	1	0	1	100
Total	0	0	0	0	1	0	1	100
Nail Disorders								
Nail lichen planus	0	0	0	0	1	0	1	50
Nail psoriasis	0	0	0	0	1	0	1	50
Total	0	0	0	0	2	0	2	100
Vesiculobullous Disorders								
Pemphigus vulgaris	0	0	0	0	1	0	1	100
Total	0	0	0	0	1	0	1	100

Miscellaneous								
Erythema toxicum neonatorum	5	0	0	0	0	0	5	100
Total	5	0	0	0	0	0	5	100

Graph Legends

Graph 1- Pattern of Infections and Infestations with different age group



Graph 2- Pattern of Viral infections with different age group

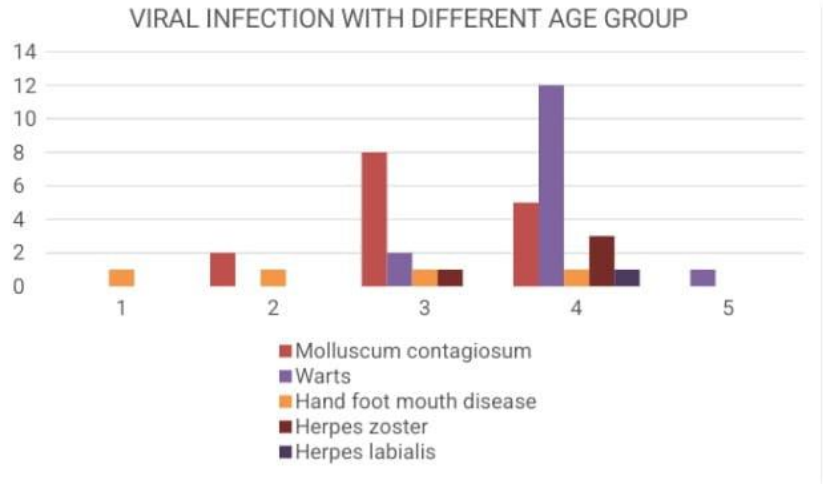
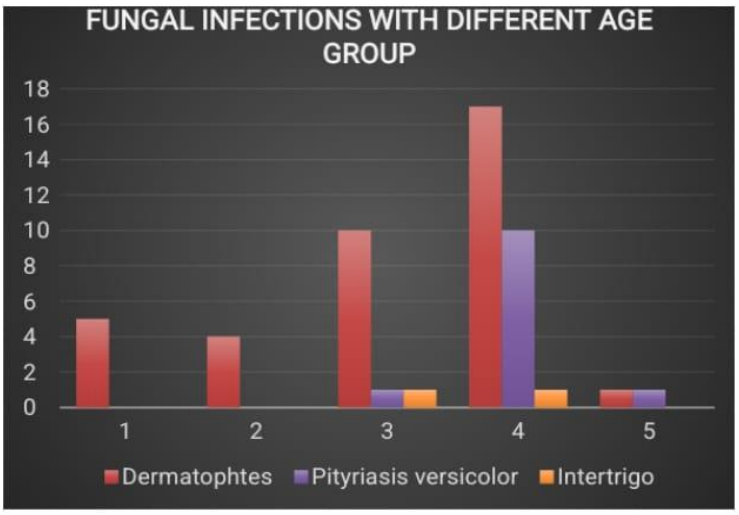


Figure 3- Pattern of Fungal Infections with different age group



Graph 4 – Pattern of Parasitic infestations with different age group

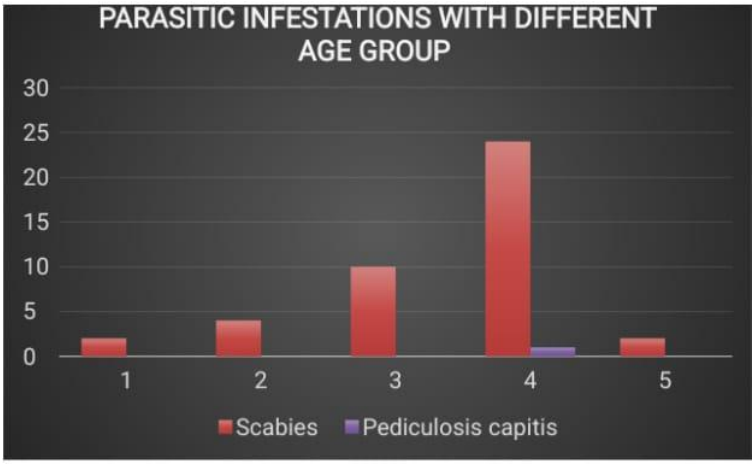


Figure legends

Figure 1 (Original) – Ichthyosis Vulgaris

Figure 2 (Original)- Atopic Dermatitis

Figure 3 (Original) – Impetigo

Figure 4 (Original)– Herpes Zoster

DISCUSSION

Multiple studies conducted worldwide have showed various pattern of dermatoses. In this study maximum of the children belonged to the school age group, 6-12 years(154, 51.33%). Similar finding was found in various studies by Karthikeya et al.[10], Sharma et al.[11]. Only 6 neonates were enrolled in the study. Among them 5 neonates had erythema toxicum neonatorum and only one baby had neonatal cephalic pustulosis. Similar to many other studies by Hassan et al.[12] a study from northern India, Dogra et al.[13]our study had more number of male children than female with male : female ratio 1.6:1.

In our study infections and infestations was the major group of dermatoses 45.70%. A study conducted by Gujarati et al.[14] in a Tertiary care center of Gujarat with study population of children below 5 years have shown 45.94% of the cases as Infections and Infestations which corroborated with our study. Similarly various studies by Sacchidanand et al.,[3]Bhatia et al.,[15] Karthikeyan et al.,[10]Nagarajan et al.[16] and Negi et al.[17] have documented infections and infestations as the major group. However few studies by Nanda et al.[18] and Vora et al.[19]have showed eczemas as the most common dermatoses. School age group was the most common age group found to have Infections and Infestations. This could be explained by the reason that young children are prone to develop infections easily by virtue of their frequent exposure to outside environment and nascent immune system. Other factors like overcrowding, poor hygiene, lack of awareness and inaccessible health services add to the increased rate of infectivity. This could be explained by the easy spread of infectious disorders among close contacts.

In our study Fungal infections was the most common dermatoses noted . A study conducted by Kandpal et al.,[20]Sayal et al.[21]among 300 children between age group of 1 to 17 years have reported fungal infections as the most common dermatoses. However few studies have shown that bacterial infections were most common in studies by Gujarati et al..[14]Awal et al.[22] and Balai et al.[23]. Among fungal infections dermatophytosis(72.54%) was the most common dermatoses followed by pityriasis versicolor(23.52%). The higher cases of fungal infections could be attributed to the hot climatic conditions in some regions.

Among viral infections which constituted 26.08% of the cases, Molluscum contagiosum(41.66%) was the most common dermatoses observed followed by warts(33.33%). Similar observation has been recorded by Sayal et al.,[21] Karthikeyan et al.[10] and Sardana et al[24].However the study by Nanda et al.[18] have observed as warts to be the most common viral infections. The preschool(8, 53.33%) age group were found to have maximum cases of molluscum contagiousm whereas warts were predominant in school(9, 75%) age group.

Unlike few studies like Balai et al.,[23] Sharma et al.[25] where bacterial infections were found to be the most common dermatoses, in our study bacterial infection accounted only for small proportions of cases(5.69%). Studies by Sayal et al.,[21] Nanda et al.[18] have reported impetigo as the most common bacterial infection. However in our study only 3 cases of impetigo were recorded.

Among Infestations which were about 31.15% of the total cases among infections and infestations, Scabies(97.67%) was seen in maximum number especially in school going age group(57.14%) and only 4.32% of the cases were pediculosis capitis. However Balai et al.,[23] Negi et al.[17] have shown that pediculosis capitis as the most common infestations. This varied pattern of infections could be attributed to the changes in the environmental, hygienic practices and various other factors.

Eczemas were the second most common dermatoses constituting 16.56% of the total cases . Similar findings were observed in studies by Kandpal et al.,[20] Gujarati et al.[14]. Pityriasis alba (36%) was the commonest among them, similar to Gujarati et al.[14] in contrast to Kandpal et al.,[20] Awal et al.[22]and Balai et al.[23] where atopic dermatitis was commonest form of eczema. Lower incidence of atopic dermatitis could be because of hygienic practices, genetic and environmental factors. Hypersensitivity disorders has been noted to be the third most common dermatoses in various studies by Gujarati et al.[14] . however our study it was seen only in 1.32% of the cases which was in corroboration with Kandpal et al[20] .

The third most common group of disorders was adnexal group which constituted 8.61% similar to Kandpal et al.[20] . Acne(73.07%) was the most common finding noted in adolescent age group(52.63%) in contrast to the study by Kandpal et al.[20] where Milaria was the common disorder. Other cases noted were milaria(7.69%), hidradenitis suppurativa(3.84%), Fox Fordyce disease(3.84%), periporitis(3.84%) and rosacea(3.84%).

Papulosquamous disorders constituted 8.28% of the total cases which is more than that of Kandpal et al.[20] ,Gujarati et al.[14].Among them lichen planus was noted maximally in our study which was consistent with various studies [26,27] . However few studies have noted psoriasis as major papulosquamous dermatoses[10,28]. These chronic dermatoses can have childhood onset warranting early attention as they can be debilitating with significant psychological impact. 3 cases of phrynoderma were noted among the nutritional disorders which contributed to 0.99% of the total cases.

Our study has observed very few rare cases like Incontinentia pigmenti, Pemphigus vulgaris. These cases consanguinous marriages and can act as markers to take preventive measures for future pregnancies and thus reducing morbidity.
Our study highlights the pattern of paediatric dermatoses in our region with higher cases of infection. This can be controlled by preventive measures in form parental education regarding hygienic factors and community measures to improve sanitation. The other rare cases like genetic, nutritional disorders are also being documented.

Strength – This study Detailed clinical and epidmeological pattern of pediatric dermatoses

LIMITATIONS

1. Study was limited by relatively small sample size vowing to the covid pandemic.

CONCLUSION

In our study School age was most commonly involved group with male preponderance. Infections and infestations was the predominant pediatric dermatoses noted followed by eczema.

There is definite variation in pattern of dermatoses in different age groups. Infections are potentially controllable andpreventable conditions. Hence early diagnosis and treatment, educating parents, teachers about cleanliness and hygienic factors help in reducing the incidence of these diseases. Knowledge regarding various genetic disorders like ichthyosis, morphea helps in educating parents for early detection and treatment. A detailed knowledge about the pattern of dermatoses among children in this geographic area will help in creating awareness in the community. By understanding the frequency various dermatoses, appropriate changes in child health programme and disease control strategies can be implemented. Hence it helps in strengthening and improving the child health.

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