### A STUDY ON PATTERN OF SKIN DISEASES AMONG CHILDREN PRESENTING TO RIMS, KADAPA, A. P.

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**ABSTRACT: BACKGROUND:** Little information is available about the prevalence of skin conditions among children in the general population in India. Low socioeconomic status, malnutrition, overcrowding and poor standards of hygiene are important factors accounting for the distribution of skin diseases in developing countries such as India. **AIM OF THE STUDY:** To study prevalence of skin diseases among children presenting to paediatric OPD. **METERIALS AND METHODS:** A predesigned and pretested questionnaire was used to gather information about socio-demographic profile, personal history, social history and all the children were thoroughly examined by detailed clinical examination depending on signs and symptoms. Suspected cases were subjected to bacterial cultures, KoH examination was done. **RESULTS:** In the present study, pyoderma was the most common frequent skin disorder accounting to 11.2% followed by Scabies 10.6%, Papular urtricaria 8.8%, Impetigo 6.8% and the least prevalent were Measles 0.8%, Acanthosis nigricans 0.4% and Psoriasis 0.2%. **CONCLUSION:** In the present study pyoderma, utericaria and scabies were highly prevalent among children's. Personal hygine, health education and periodic deworming measures will prevent majority of skin diseases.

**KEYWORDS:** Skin diseases, Children, Pyoderma, Scabies.

**INTRODUCTION:** Dermatological conditions account for a significant proportion of the global burden of disease in low and middle income countries.<sup>1</sup> the skin disease pattern in population is generally determined by different ecological factors like environment, economy, literacy and social custom. The pattern also varies from country to country and in various regions within same country. Prevalence of skin diseases may vary from country to country.<sup>2,3</sup> Studies done in India from two different ecological regions showed different patterns of dermatological diseases.

Studying the pattern of disease has importance in building healthcare strategies according to the requirement of population in specific area. Developing countries have a serious impact on people's quality of life. It is more so in India where climate, socio economic status, religions and customs are widely varied in different parts of the country. Occasionally skin diseases can be a manifestation of systemic diseases. Dermatological conditions account for up to 2% of consultations in general practice worldwide. Dermatological problem in India manifests as primary and secondary cutaneous complaints.

In India the most prevalent dermatological condition include but not limited to dermatitis, urticaria, fungal skin infection, acne, alopecia and conditions such as psoriasis, skin cancer and adverse drug reaction on the skin are less prevalent. Usually for peak level skin disorder, the therapy of skin problems is longer for complete removal of problems.<sup>4</sup> Individuals presenting to doctors tend to have more severe disease, thus this patient population represents the tip of the iceberg relative to ill-health at the community level.<sup>5</sup> Personal hygiene education is one of the important aspects.

If proper measures are not taken for making the body parts clean, the body is liable to various skin infections and it may hamper the physical wellbeing of the individual. Due to ignorance or lack of proper education, personal hygiene may not be taken care properly.<sup>6</sup>

Little information is available about the prevalence of skin conditions among children in the general population in India. Low socioeconomic status, malnutrition, overcrowding, and poor standards of hygiene are important factors accounting for the distribution of skin diseases in developing countries such as India. Keeping in view the above concept we decided to study the pattern of skin diseases prevalence among children presenting to Paediatric out Patient Department (OPD), Rajiv Gandhi Institute of Medical Sciences (RIMS), Kadapa, Andhra Pradesh, INDIA.

**AIM OF THE STUDY:** To study prevalence of skin diseases among children presenting to Paediatric out Patient Department (OPD).

**Study Design & Setting:** Hospital based cross-sectional study conducted at RIMS Paediatric OPD, Kadapa, Andhra Pradesh, INDIA.

### **METERIALS AND METHODS:**

**Study Subjects and Sample:** All children's (0-12 years) presenting with skin problems will be study subjects. A total of 500 study subjects were included in the study.

**Inclusion Criteria:** 0-12 years age group children's with skin diseases.

Exclusive Criteria: Non cooperative, not willing to give consent.

**Study Period:** 31<sup>st</sup> March 2014 to 28<sup>th</sup> February 2015 (1 year duration).

**Study Tools:** A predesigned and pretested questionnaire was used to gather information about socio-demographic profile, personal history, social history and all the children were thoroughly examined by detailed clinical examination depending on signs and symptoms. Suspected cases were subjected to bacterial cultures, KoH examination was done.

**Data Collection:** After taking oral consent data was collected by interviewee method and the information will be kept confidential.

**Ethical Consideration:** The proposal was forwarded to and subsequently cleared by institutional ethical committee.

**Statistical Analysis:** Data was entered and analyzed with EXCEL-2007, proportions were calculated.

#### **RESULTS:**



Chart 1: Sex wise distribution of study subjects

Number of Cases	TOTAL	%		
Infants (1 yr age)	128	25.60%		
Preschool (1-5 yrs.)	230	46%		
School (5-12 yrs.)	142	28.40%		
Table 1: Age wise distribution of study subjects				

Table-1 depicts that, 230(46%) study subjects belongs to 1-5 years age group followed by 142(28.40%) were in 5-12 years age group and 128(25.60%) were in 1 year age group.

Number of Cases	TOTAL	MALE	FEMALE	
	500	270	230	
Infants (1 yrs.)	128	69 (53.91 %)	59 (46.09%)	
Preschool (1-5 yrs.)	230	129 (56.09 %)	101 (43.91 %)	
School (5-12 yrs.)	142	72 (50.70 %)	70 (49.30 %)	
Table 2: Sex distribution of Study Subjects				

Table-2 depicts distribution of skin diseases among males and females, among 1 year age group, 69(53.91%) males had skin diseases followed by 59(46.09%) females had skin diseases. Among preschool (1-5 years), 129(56.09%) males had skin diseases followed by 101(43.91%) females had skin diseases. Among school going children (5-12 years), 72(50.70%) males had skin diseases followed by 70(49.30%) females had skin diseases.

DISORDER	NUMBER OF CASES	PERCENTAGE
Pyoderma	56	11.2%
Scabies	53	10.6%
Papular urticaria	44	8.8 %
Impetigo	34	6.8 %
Seborrhoeic dermatitis	31	6.2 %
Candidial intertrigo	30	6 5
Pityriasis Alba	28	5.6 %
Nummular czema	23	4.6 %

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Urticaria	22	4.4 %		
Tinea Capitis	20	4 %		
Diaper Dermatitis	18	3.6 %		
Atopy	15	3 %		
Warts	14	2.8 %		
Chicken pox	14	2.8 %		
Hand foot and Mouth disease	12	2.4 %		
Vitiligo	11	2.2 %		
Postinflammatory	11	2.2 %		
Hyperpigmentation	11			
Molluscum contagiosum	10	2.1%		
Phnynoderma	8	1.6 %		
Miliaria	7	1.4 %		
Polymorphic light eruption	5	1 %		
Lichen planus	5	1 %		
Allergic contact dermatitis	4	0.8 %		
Alopecia Areata	4	0.8 %		
Erythema Toxic	4	0.8 %		
Neonatorum				
Measles	4	0.8 %		
Naevus	3	0.6%		
Drug Reactions	3	0.4 %		
Acanthosis Nigricans	2	0.4 %		
Psoriasis	2	0.2 %		
Erysipelas	1	0.2 %		
Haemangioma	1	0.2 %		
Table 3: Prevalence of skin disorders among study Subjects				

In the present stud, pyoderma was the most common frequent skin disorder accounting to 56(11.2%) followed by Scabies 53(10.6%), Papular urticaria 44(8.8%), Impetigo 34(6.8%) and the least prevalence were Measles 4(0.8%), Acanthosis Nigricans 2(0.4%) and Psoriasis 2(0.2%).

**DISCUSSION:** In the present study there are 500 subjects included of which infants were 128(25.60%) subjects, preschool children (1-5 years) were 230(46%), school children (5-12 years) 142(28.40%) subjects and all the subjects in the age and sex group were distributed almost 1:1 ratio.

The present study included 500 subjects and 33 disorders were prevalent among the subjects presenting to Paediatric OPD RIMS, Kadapa. The present study revealed that pyoderma was the most common skin disorder accounting to 11.2%, however the study conducted in kalkante Agrahara.<sup>7</sup> revealed the Pityriasis Alba to be the most common disorder 46.76% this could be because they took school based study and it is urban area of Bangalore whereas our's is a government hospital based study and majority were children less than 5 years age group.

But the study conducted by Kaethem.K.Al-Rubian.<sup>8</sup> concluded that Eezema and dermatitis 42%, Bacterial infection 13.6%, Parasitic 13.2%. It may be due to racial, diet, costum-habit and other

habits. But the present study correlates with the study conducted by Neupane S at Nepal.<sup>9</sup> concluded that top ten paediatric skin disorders were impetigo, Scabies and Utricaria. Our study correlates with the study conducted by Fawzia Farag Mostafa et al.<sup>10</sup> concluded that bacterial infection were major problem among school age group.

**CONCLUSION:** In the present study pyoderma, utricaria and scabies were highly prevalent among children. Personal hygiene, health education and periodic deworming measures will prevent majority of skin disorders.

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