



## PATTERN OF SKIN DISEASES AMONG PATIENTS ATTENDING SKIN OUTDOOR IN A TERTIARY CARE HOSPITAL OF JHARKHAND

### Community Medicine

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### ABSTRACT

**BACKGROUND:** Healthy skin plays an important role in most people's self esteem. Every individual suffers from skin diseases at some point of time during his lifetime. This study was conducted to know the socio-demographic profile and pattern of skin diseases in patients attending skin outdoor in tertiary care hospital in Jharkhand.

**METHODOLOGY:** A hospital based cross sectional study was conducted for a period of three months using semi-structured questionnaire for data collection. The patient was interviewed after taking consent.

**RESULTS:** A total of 1302 patients were included in our study. Female (53%) predominance was found with most common age group being 21-60 years. Majority were Hindus (57.6%), residing in rural area (79.7%) and married (60.2%). Most common skin disease found was allergic disorder in 20% of people attending skin opd followed by fungal infections (18.4%). In fungal infection superficial dermatoses was most common and the affected areas are trunk and groin called Tinea corporis (30.5%) and tinea cruris (22.5%) respectively.

**CONCLUSION:** The study reveals that the people in this region are more prone to skin disease and the incidence of skin disease among females was more. The majority of the patients fall under the adult category. We found that allergic skin disease and skin infections were more common in this location

### KEYWORDS

Skin disease, Pattern, Hospital, Dermatoses.

### INTRODUCTION

Healthy skin plays an important role in most people's self esteem. Every individual suffers from skin diseases at some point of time during his lifetime.<sup>1</sup> The pattern of skin diseases varies from one region to another region of the same country. Skin diseases depend on not only the prevalence and ecology of infectious agents but also on climate and geography of that area. It is largely influenced by education, economy, occupation, and also genetic backup of the patients.

The prevalence of skin diseases varies from 11% to 63% in the population.<sup>2</sup> Although it affects the all age group but skin problem most commonly involved in second and third decade.<sup>3</sup> A timely diagnosis and appropriate treatment is needed to control of skin disease. Most of the skin problems occur due to improper hygiene so public awareness, sanitation and personal hygiene is necessary to reduce burden of skin diseases and to improve the quality of life in people of developing countries. Very few Indian studies are available to find out what exactly is the pattern of skin diseases amongst patients reporting regularly to the skin OPD.

### METHODOLOGY

This was a hospital based cross sectional study. Over a three month period from may to july 2018 all those patients attending skin opd of Rajendra Institute of Medical Sciences (RIMS) and fulfill inclusion criteria were included in the study. A semi-structured questionnaire was used for data collection. The variables to describe their socio-demographic profile were age, sex, religion, occupation, residence, marital status, income and education. Socioeconomic status was classified according to Modified B G Prasad Classification 2018. Assessment of their skin diseases are done clinically through physical examination. Those patients in whom diagnosis was not possible at first chance or in which further investigations required were excluded from the study. Either the patient or the accompanying person in case of minor was interviewed after taking consent. The data were entered in MS excel sheet and was analyzed in SPSS version 20.0.

### RESULTS

A total of 1302 patients were included in our study. Female (53%) predominance was found with most common age group being 21-60 years. Majority were Hindus (57.6%), residing in rural area (79.7%)

and married (60.2%). The study population residing in rural was 1038 (79.7%) and the working population was 414 (31.8%) with 888 (68.2%) unemployed. About 62.6% (n=815) belonged to lower class and only 1% (n=13) to upper class. Nearly 8% (104) had attained primary education while 22% (286) were illiterate (Table 1).

Most common skin disease found was allergic disorder in 20% of patients attending skin opd followed by fungal infections (18.4%), bacterial infections (10.1%), Acne vulgaris (9.3%), drug induced lesion (6%), Melasma (5.5%), Vitiligo and Viral infections both 3.7% and others. Scabies and Pediculosis are common among parasitic infection and constitutes 4.6% (Table 2). Among bacterial infections Impetigo, Ecthyma, Cellulitis, Furunculosis, Carbuncle, Pyoderma etc most commonly encountered.

In fungal infection superficial dermatoses was most common and the affected areas are trunk and groin called Tinea corporis (30.5%) and tinea cruris (22.5%) respectively (Table 3).

### DISCUSSION

The pattern of skin diseases in India is influenced by the developing economy, level of literacy, social backwardness, varied climate, industrialization, access to primary health care, and different religious, ritual and cultural factors.<sup>2</sup> In our study skin diseases were higher in females (53%) than in males (47%). This finding was similar with that of other studies.<sup>5,6</sup>

Our study shows most common skin disease found was allergic disorder in 20% of patients attending skin opd followed by fungal infections (18.4%) and bacterial infections (10.1%). In a recent study by Das *et al.*,<sup>7</sup> reported from an urban institute in Kolkata eczematous disease in (31.4%), pyoderma as 14.36%, fungal infections in 9.7%, of cases. Two other similar studies from Indian subcontinent were carried out. Anand *et al.*,<sup>8</sup> in a study from Saurashtra showed skin infection comprised 83.25% of skin diseases, followed by allergic (8.55) and miscellaneous disorders (8.25%).

Fungal infections were the second largest group of disorders seen in 18.4% of patients. The warm and highly humid climate of the country contributed to the higher proportion of fungal infections in this

population. Occurrence of fungal infection in present study was similar to another study conducted in Pune<sup>9</sup>. But it was higher compared to another study from an urban institute in Kolkata where 9.7% of cases were of fungal infections<sup>7</sup>.

Scabies and Pediculosis are common among parasitic infection and constitutes 4.6%. This may be due to over-crowding, poor socio-economic status and poor personal hygienic standard.

The percentage of viral infection was relatively low (3.7%) in our study which was comparable to similar studies<sup>10, 11</sup> STD was only found in 2.3% of patients which was similar to another study<sup>10</sup>.

The study reveals that the people in this region are more prone to skin disease and the incidence of skin disease among females was more. The majority of the patients fall under the adult category. We found that allergic skin disease and skin infections were more common in this location. From this study, it can be concluded that better health education, maintaining personal hygiene, improvement in the standard of living, proper case diagnosis and proper treatment may remain of importance in managing common skin diseases.

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**DECLARATIONS**

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*Conflict of interest:* There are no conflicts of interests.

*Ethical approval:* The study was approved by Institutional Ethics Committee.

**TABLE 1: Socio-demographic profile of skin patients (N=1302)**

S. no	Characteristics	Frequency	Percentage
1	Gender		
	Males	612	47%
	Females	690	53%
2	Age		
	<14 years	104	8%
	15-20 years	195	15%
	21-60 years	912	70%
	>60 years	91	7%
3	Religion		
	Hindu	750	57.6%
	Muslim	352	27%
	Christian	31	2.4%
	Sarna#	169	13%
4	Residence		
	Rural	1038	79.7%
	Urban	264	20.3%
5	Type of Family		
	Joint	233	17.9%
	Nuclear	1069	82.1%
6	Marital status		
	Married	784	60.2%
	Unmarried	518	39.8%
7	Education		
	Illiterate	286	22%
	Primary education	104	8%
	Secondary education	508	39%
	Higher secondary & above	404	31%
8	Employment		
	Employed	414	31.8%
	Unemployed	888	68.2%
9	Socioeconomic status*		
	Class 1	13	1%
	Class 2	31	2.4%
	Class 3	95	7.3%
	Class 4	348	26.8%
	Class 5	815	62.6%

# local religion of Jharkhand

\*according to Modified BG Prasad classification 2018

**TABLE 2: Pattern of skin diseases (N=1302)**

S.no	Characteristic	Frequency	Percentage
1	Allergic disorder	260	20%
2	Fungal infection	240	18.4%
3	Bacterial infection	132	10.1%
4	Acne vulgaris	121	9.3%
5	Drug induced lesion	78	6%
6	Melasma	72	5.5%
7	Scabies and Pediculosis	60	4.6%
8	Urticaria	57	4.4%
9	Vitiligo	48	3.7%
10	Viral infection	48	3.7%
11	Alopecia	44	3.3%
12	Psoriasis	42	3.2%
13	Sexually transmitted disease	30	2.3%
14	Leprosy	10	0.7%
15	Miscellaneous	60	4.6%

**TABLE 3: Pattern of Fungal Infection (N=240)**

S.no	Characteristic	Frequency	Percentage
1	Tinea corporis	72	30.5%
2	Tinea cruris	54	22.5%
3	Tinea unguam	22	9.1%
4	Tinea pedis	20	8.3%
5	Tinea capitis	15	6.2%
6	Tinea faciei	10	4.1%
7	Tinea barbae	03	1.25
8	Candidiasis	14	5.5%
9	Ptyriasis versicolor	18	7.5%
10	Onychomycosis	12	5%

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