# Spectrum of Geriatric Dermatoses in Jharkhand

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## Abstract

**Introduction:** India's geriatric population will increase dramatically over the next four decades. Skin diseases are a major health problem in the geriatric age group.

Aim: To describe the cutaneous lesions in geriatric population in a tertiary care centre in Jharkhand

Materials and Methods: 500 geriatric patients aged 60 and above, with clinical evidence of cutaneous disorders were studied at Rajendra Institute of Medical Sciences, Ranchi.

Results: Geriatric patients accounted for 4.2% of Dermatology, Venereology and Leprosy OPD attendance with a male preponderance (M:F::2.2:1). Majority (52%) of the patients were literate, 67% belonged to low socioeconomic group. 36% were farmers and 22% labourer. 47% had multiple addictions with Chewing tobacco the most common addiction (31%). Pruritus was the commonest symptom (64%) among which 56.4% was associated with different dermatoses and rest 7.6% with senile xerosis. The most common dermatosis was superficial fungal infections (29.8%) followed by scabies (10.2%), xerosis (7.6%) and eczema (6.2%). Both viral infections and acrochordons were seen in 5.8% of patients.

**Conclusions:** Skin problems are quite common among geriatric population. Most of the dermatoses were infectious in nature followed by degenerative conditions.

**Keywords:** Geriatric dermatoses, superficial fungal infections, xerosis, acrochordons

#### I. Introduction

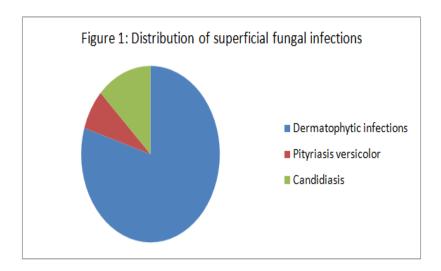
According to Population Census 2011 there are nearly 104 million elderly persons (aged 60 years or above) in India; 53 million females and 51 million males. India's older population will increase dramatically over the next four decades. The share of India's population aged 60 and older is projected to climb from 8 percent in 2010 to 19 percent in 2050, according to the United Nations Population Division (UN 2011). This surge in geriatric population can be attributed to increase in life span of individuals and increase in life expectancy during last century which in turn is a result of improvement in health care delivery system, standards of housing, hygiene, nutrition, family planning, maternity and child care. In India, problems of the aged are often neglected. A detailed study on the problems is important to improve the quality of life in old age. Keeping this in mind, this study was undertaken to find out incidence of geriatric dermatoses in Jharkhand.

## II. Materials And Methods

The study was conducted in the Department of Dermatology, Venereology & Leprosy, in a tertiary care centre in Jharkhand, in 500 consecutive geriatric patients attending the OPD, over a period of one year from July 2016 to June 2017. Patients aged 60 years and above with clinical evidence of cutaneous disorders were included in this hospital-based descriptive study to determine the prevalence of various skin disorders. All the patients were subjected to detailed history taking and meticulous examination in relation to age, sex, literacy and socio-economic status as per the proforma after obtaining informed consent. Relevant investigations, routine and special, were done to arrive at a diagnosis and the data thus obtained were recorded and statistically analyzed using Chi square test.

# III. Results

Among the 500 geriatric patients studied, 346 were males and 154 were females with a male: female ratio 2.2:1. 52% of the patients were literate and 48% were illiterate. According to socio-economic status 67% belonged to low, 31% to middle and 2% to high income groups. Occupational history revealed that 36% were farmer, 22% labourer, 10% retired employee, 9% businessman and 23% housewife. Addictions were observed among 80% of cases. Among them, 47% had multiple addictions. Chewing tobacco was the most common addiction found among the studied geriatric patients (31%). Various dermatoses observed in the geriatric population are shown in Table 1. Superficial fungal infection constituted highest proportion 29.8% (149) followed by scabies which constitute 10.2% (51). Dermatophytic infections constituted the maximum of the superficial fungal infections (79.9%) [Figure 1]. Among dermatophytic infections tinea corporis constituted the highest proportion, ie 38.6% (46), followed by tinea cruris 26.1% (31) and tinea pedis 14.3% (17) [Figure 2].



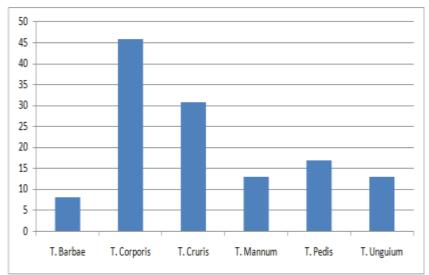
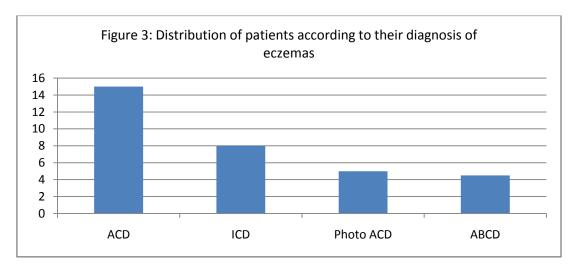


Figure 2: Different clinical types of Dermatophytic infections.

Table 1: Common dermatoses observed in the geriatric population

Disease	Males	Females	Total	Percentage(%)
Superficial fungal infections	116	33	149	29.8
Scabies	19	32	51	10.2
Xerosis	22	16	38	7.6
Eczema	19	12	31	6.2
Viral infections	21	8	29	5.8
Acrochordons	19	10	29	5.8
IGH	15	8	23	4.6
Ulcers	16	3	19	3.8
Cherry Angioma	16	3	19	3.8
Vitiligo	12	7	19	3.8
Bacterial infections Urticaria	15 9	2 6	17 15	3.4
Psoriasis	11	3	14	2.8
Lichen planus	10	3	13	2.6
Malignant & pre-malignant conditions	8	4	12	2.4
PHN	9	2	11	2.2
Adverse drug reaction	9	2	11	2.2
Total	346	154	500	

Among the eczemas, allergic contact dermatitis (ACD) was the most common which constituted 15 cases (48.4%). Irritant contact dermatitis was seen in 8 cases (25.8%), photo ACD in 5 cases (16.1%), and airborne contact dermatitis (ABCD) in 3 cases (9.7%) [Figure 3].



Warts were the most common skin lesion caused by viral infection in the study and constituted 58.6% (17) followed by Herpes zoster (31%) and Herpes labialis (10.3%). Among dermatoses caused by bacterial infection, Folliculitis was most common which constituted 6 cases (35.3%), closely followed by Furuncle 5 cases (29.4%) [Figure 4].

Figure 4: Different clinical types of bacterial infections

Disease	Total Patients	Percentage %
Folliculitis	6	35.3
Furuncle	5	29.4
Cellulitis	4	23.5
Carbuncle	2	11.8

## IV. Discussion

Old age should be regarded as a normal, inevitable biological phenomenon. Discoveries in medical science and improved social conditions during past few decades have increased the life span of man. In India, although the percentage of aged persons to the total population is low in comparison to the developed countries, nevertheless the absolute size of aged population is considerable.<sup>[2]</sup> The ageing population is both a medical and sociological problem. It makes a greater demand on the health services of a community. In rapidly greying world, healthy ageing is vital for the countries. Skin disorders are very common amongst the elderly.<sup>[3-5]</sup> But physical and mental debility, self neglect and failure to evaluate the condition and a general disinclination to bother the doctor account for poor attendance of such cases which, in long run make matters worse.<sup>[6]</sup> The pattern of skin lesions in elderly is greatly influenced by climatic factors, dietary patterns, and socioeconomic status.

The present study was carried out on 500 patients aged 60 years and above. It reveals that skin problems are quite common among the elderly. Geriatric patients accounted for 4.2% of Dermatology, Venereology and Leprosy OPD attendance with a male preponderance [M:F::2.2:1]. Sahoo *et al.* also reported male predominance. Pruritus was the commonest symptom (64%) among which 56.4% was associated with different dermatoses and rest 7.6% with senile xerosis. This was much higher than the pruritus reported by Beauregard and Gilchrests (29%). Old age is usually associated with dry and atrophic skin which is responsible for essential pruritus.

Infections were the most common dermatoses encountered, which were seen in 39% of the total cases. Among infections, Superficial fungal infection constituted highest proportion 29.8%. Our findings were similar to study by Sahoo *et al.* which showed 30% but significantly higher than that reported by Patange *et al.* (18%) and significantly lower as compared to the study by Tindall et al (79%). Dermatophytic infections constituted the maximum of the superficial fungal infections (79.9%). Viral and bacterial infections were observed in 5.8% and 3.4% respectively. Warts were the most common skin lesion caused by viral infection in the study and constituted 58.6%. Among dermatoses caused by bacterial infection, Folliculitis was most common which

constituted 6 cases (35.3%), closely followed by Furuncle 5 cases (29.4%) Patange *et al.* and Sahoo *et al.* have not reported any incidence of viral and bacterial infection.

Scabies constituted 10.2% of the total dermatoses. Patange *et al.* and Sahoo *et al.* have not reported any incidence of scabies. The incidence of acrochordon observed was 5.8%. Tindall *et al.* reported a much higher incidence (56%). <sup>[9]</sup>

Idiopathic guttate hypomelanosis was seen in 4.6% of cases especially over the sunprotected sites. Incidence of IGH observed by Beauregard *et al.*, Sahoo *et al.* and Patange *et al.* was 25.4%,<sup>[7]</sup> 6.5% <sup>[6]</sup> and 24.5% <sup>[5]</sup> respectively. In one series of 452 patients, it was seen in only 20% of patients between the ages of 20 and 30 but in 80% of patients over the age of 70.<sup>[8]</sup>

The incidence of vitiligo was found to be higher (3.8%) as against reported by Weisman (1.4%). <sup>[4]</sup> The overall incidence of vitiligo in India is about 3-4%. <sup>[10]</sup> Malignant and pre-malignant conditions were seen in 2.8% of cases which were lower than that reported by Sahoo *et al.*(5%). <sup>[6]</sup>

Our study had few limitations. It was conducted in a single centre and sample size was small. No laboratory tests were done for confirmation. A Large, prospective multicentric study needs to be conducted to know more about geriatric dermatoses.

## V. Conclusions

The present study was undertaken to determine the characteristic clinical pattern and prevalence of geriatric dermatoses. Geriatric patients accounted for 4.2% of Dermatology, Venereology and Leprosy OPD attendance with a male preponderance. Pruritus was the commonest symptom observed. The most common dermatoses was superficial fungal infections followed by scabies, xerosis and eczema. Among the eczemas, allergic contact dermatitis (ACD) was most commonly observed. Both viral infections and acrochordons were seen in 5.8% of patients. Warts were the most common skin lesion caused by viral infection in the study.

A detailed knowledge about the pattern of geriatric dermatoses will help us in implementing essential changes in disease control and preventive strategies in the area concerned.

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Nil.

#### **Conflicts of Interest**

There are no conflicts of interest.

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