



A RETROSPECTIVE STUDY ON CLINICAL PATTERNS OF PAPULOSQUAMOUS DERMATOSES IN PATIENTS ATTENDING A TERTIARY CARE CENTRE OF JHARKHAND

Dermatology

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ABSTRACT

Background: Papulosquamous dermatoses constitute a clinically heterogeneous group of skin disorders characterised by scaly papules and plaques. They are associated with significant morbidity and represent a major proportion of dermatology outpatient attendance across India. **Objective:** To analyse the demographic and clinical patterns of papulosquamous dermatoses at a tertiary care hospital in Jharkhand. **Methods:** A retrospective observational study was conducted over one year (November 2024 to November 2025) enrolling 1825 patients with papulosquamous lesions at the Dermatology OPD. **Results:** Males predominated (1106; 60.7%), with a male-to-female ratio of 1.54:1. The 31–50-year age group was most affected (43.23%). Psoriasis was the commonest diagnosis (35.84%), followed by Lichen planus (29.86%) and Seborrheic dermatitis (24.82%). Chronic plaque psoriasis (69.4%) and classical lichen planus (67.9%) were the predominant subtypes. **Conclusion:** Psoriasis, Lichen planus, and Seborrheic dermatitis are the most prevalent papulosquamous dermatoses in this region. Morphological characterisation remains essential for accurate clinical diagnosis and effective patient management.

KEYWORDS

Papulosquamous Dermatoses, Psoriasis, Lichen Planus, Seborrheic Dermatitis, Jharkhand, Retrospective Study

INTRODUCTION

Skin disorders represent a significant burden of disease across all age groups and are frequently associated with considerable morbidity and psychosocial impact [1]. Among the diverse categories of dermatological conditions, papulosquamous dermatoses occupy a particularly prominent position due to their frequency, chronicity, and clinical heterogeneity. The term “papulosquamous” refers to a group of disorders characterised by the presence of scaly papules and plaques, typically erythematous in nature, arising from abnormalities of the epidermis and superficial dermis [2].

The primary conditions classified under papulosquamous dermatoses include psoriasis, pityriasis rosea, seborrheic dermatitis, lichen planus, lichen nitidus, lichen striatus, pityriasis rubra pilaris, parapsoriasis, and pityriasis lichenoides chronica [3]. These conditions exhibit a wide clinical spectrum ranging from acute self-limiting disorders such as pityriasis rosea, to chronic relapsing diseases such as psoriasis, and treatment-resistant conditions such as parapsoriasis [4]. Their classification is primarily based on descriptive morphology, and accurate clinical recognition is essential for appropriate management and prognostication.

Epidemiological data from tertiary care hospitals across India have demonstrated regional variations in the prevalence and pattern of papulosquamous dermatoses, with psoriasis and lichen planus being the most frequently encountered conditions [5]. However, data specific to Jharkhand—a predominantly tribal, mineral-rich state in eastern India—remain limited. Understanding the regional disease burden and clinical patterns is important for devising appropriate diagnostic and therapeutic strategies. The present retrospective study was undertaken to analyse the demographic and clinical patterns of papulosquamous dermatoses presenting to a tertiary care dermatology OPD in Jharkhand over one year.

AIMS AND OBJECTIVES

Aim: To analyse the demographic and clinical patterns of papulosquamous dermatoses in patients attending the outpatient department of Dermatology at a tertiary care hospital in Jharkhand.

Objectives:

1. To identify the most prevalent types and variants of papulosquamous dermatoses.
2. To describe the age distribution of affected patients.
3. To determine the gender distribution and male-to-female ratio among study participants.
4. To analyse the morphological subtypes of psoriasis and lichen planus.

MATERIAL AND METHODS

Study Design: A retrospective observational study was conducted in the outpatient clinic of the Department of Dermatology at a tertiary care hospital in Jharkhand.

Study Duration: November 2024 to November 2025.

Study Population: A total of 1825 patients diagnosed with papulosquamous dermatoses during the study period were included. OPD records were reviewed and relevant clinical data organised into a master chart for analysis [6].

Inclusion Criteria: All patients of either sex and any age presenting with papular and scaly lesions to the skin OPD were included.

Exclusion Criteria: (i) Patients with skin diseases other than papulosquamous dermatoses; (ii) Pre-diagnosed cases referred from other facilities; (iii) Patients who did not provide consent.

Data Collection and Clinical Assessment: Patient data were retrieved from OPD records. Information on age, sex, occupation, residence, duration and onset of illness, symptoms, recurrence, drug history, past and family history, comorbidities, and morphological characteristics of lesions were systematically recorded. Patients were categorised into age groups: <10, 11–30, 31–50, 51–70, and >70 years. Diagnosis was established on clinical grounds, supported by investigations (KOH mount, Tzanck smear, skin biopsy, routine haematology) where indicated [7].

Statistical Analysis: Data were analysed using descriptive statistics; frequencies and percentages were calculated for categorical variables.

RESULTS

Gender Distribution

The study included 1825 patients. Males accounted for 1106 cases (60.7%) and females for 719 cases (39.3%), giving a male-to-female ratio of 1.54:1 [5]. Male predominance was observed across most diagnostic categories (Table 1).

Age Distribution

The age of patients ranged from infancy to over 70 years. The 31–50-year group was the most commonly affected, comprising 789 patients (43.23%), followed by the 51–70-year group (445; 24.38%) and the 11–30-year group (387; 21.20%) (Table 2) [4,9]. The age-wise distribution is depicted in Figure 3.

Overall Diagnosis Distribution

Psoriasis was the most frequently observed diagnosis, accounting for 654 patients (35.84%), followed by Lichen planus (545; 29.86%) and Seborrheic dermatitis (453; 24.82%) (Table 3) [3,5]. Pityriasis rosea was present in 98 patients (5.37%). Less common conditions included Lichen nitidus (1.92%), Lichen striatus (1.32%), Pityriasis lichenoides chronica (0.55%), Classical juvenile PRP (0.22%), and Parapsoriasis (0.11%). No cases of Lymphomatoid papulosis were recorded [10].

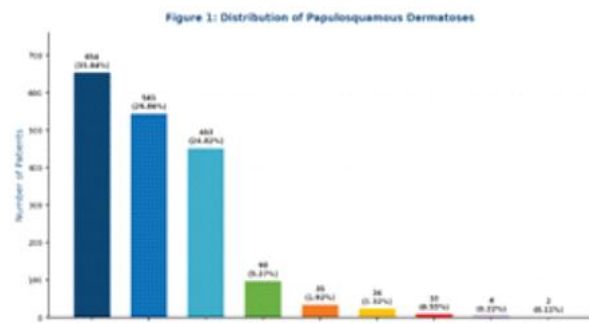


Figure 1: Bar Chart – Distribution of Papulosquamous Dermatoses

Figure 2: Pie Chart – Distribution of Papulosquamous Dermatoses

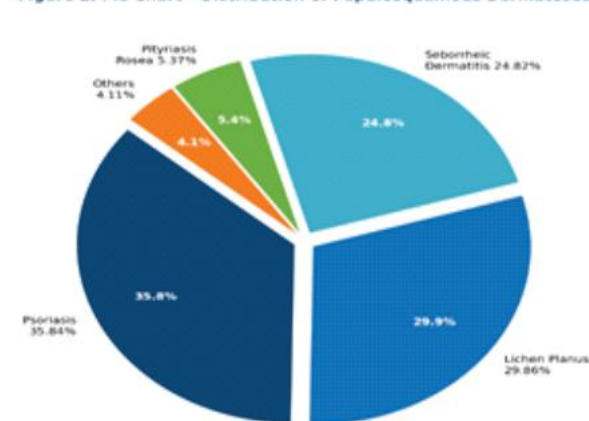


Figure 2: Pie Chart – Proportional Distribution of Papulosquamous Dermatoses

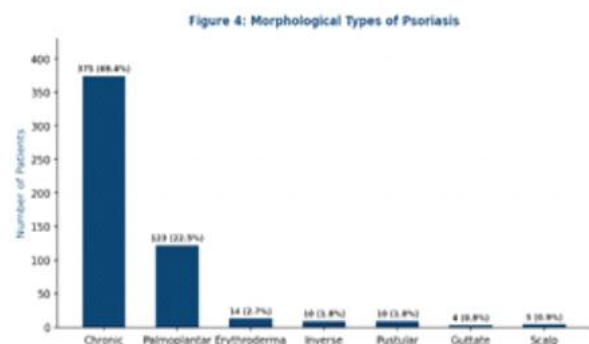


Figure 4: Morphological Types of Psoriasis

Morphological Types of Psoriasis

Among 654 psoriasis cases, chronic plaque psoriasis was the predominant morphological variant (375; 69.4%), followed by palmoplantar psoriasis (123; 22.5%) (Table 4, Figure 4) [7]. Psoriatic erythroderma accounted for 14 cases (2.7%), while inverse psoriasis and pustular psoriasis were each seen in 10 patients (1.8%). Guttate and scalp psoriasis were the least common subtypes (0.9% each).

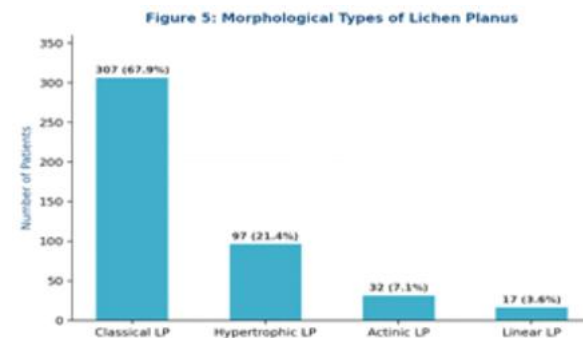


Figure 5: Morphological Types of Lichen Planus

DISCUSSION

Papulosquamous dermatoses encompass a diverse group of conditions that constitute a significant proportion of dermatology OPD cases across India [5]. The present study, conducted over one year at a tertiary care centre in Jharkhand, enrolled 1825 patients, providing data on the epidemiology and clinical patterns of these conditions in a region where such data have hitherto been limited.

The predominance of male patients (60.7%), with a male-to-female ratio of 1.54:1, is comparable to findings by Sivaprakasam et al. [9] who reported 56.7% males and a ratio of 1.2:1. Occupational exposure, physical stress, and differential health-seeking behaviour may contribute to this gender skew [4]. The 31–50-year age group emerged as the most commonly affected (43.23%), aligning with observations from Varma et al. [4] and consistent with the burden of chronic skin disease in the productive working-age population.

Psoriasis vulgaris was the most commonly diagnosed condition (35.84%), consistent with its status as the leading papulosquamous disorder in hospital-based studies across India [5]. Among psoriasis subtypes, chronic plaque psoriasis accounted for 69.4% of psoriasis cases, closely paralleled by Nanda et al. (69.6%) [7], confirming that this morphological type predominates globally. Palmoplantar psoriasis constituted 22.5%, relatively higher compared to some north Indian series, possibly reflecting the predominance of manual labour in the Jharkhand population. The male-to-female ratio for psoriasis (approximately 2.2:1) was comparable to the ratio of 2.46:1 reported by Okhandiar and Banerjee [1]; stress-related and occupational factors were considered contributory.

Lichen planus was the second most frequent diagnosis (29.86%), with classical lichen planus predominating (67.9%), followed by hypertrophic lichen planus (21.4%). The proportion of actinic lichen planus (7.1%) was notable and may reflect higher ultraviolet radiation exposure in the predominantly semi-rural outdoor-working population [8]. Seborrheic dermatitis was the third most common condition (24.82%), showing a predilection for the scalp, face, and upper trunk, and contributing significantly to the dermatological workload due to its chronic and relapsing nature [2].

Pityriasis rosea accounted for 5.37% of cases, predominantly in adolescents and young adults, consistent with its known epidemiology as a self-limiting exanthem [3]. Rarer conditions—lichen nitidus (1.92%), lichen striatus (1.32%), pityriasis lichenoides chronica (0.55%), and parapsoriasis (0.11%)—were infrequent but diagnostically significant owing to their clinical overlap with more serious dermatoses, particularly cutaneous T-cell lymphoma [10].

CONCLUSION

This retrospective study provides a comprehensive overview of the clinical and demographic patterns of papulosquamous dermatoses at a tertiary care centre in Jharkhand. Psoriasis (35.84%), Lichen planus (29.86%), and Seborrheic dermatitis (24.82%) emerged as the three predominant conditions. The 31–50-year age group was the most

affected, and males outnumbered females across most diagnostic categories. Chronic plaque psoriasis and classical lichen planus were the dominant morphological subtypes. Accurate morphological characterisation of papulosquamous lesions remains the cornerstone of clinical diagnosis in resource-limited settings, enabling evidence-based management and informed patient counselling. Future prospective, multicentre studies from Jharkhand with histopathological correlation would further strengthen the epidemiological database for this region.

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