

Dermatological Health Status in Southern Rajasthan: Gender, Socioeconomic Status, and Disease DurationSonakshi Pargi¹, Bhagyashree Garasia², Amrit Kumar Gausai³, Harendra Meena⁴, Ronak Jain⁵¹Associate Professor, Department of Skin and Venereal Disease, Government Medical College, Dungarpur²Associate Professor, Department of Psychiatry, Government Medical College, Dungarpur³Junior Specialist, Department of Psychiatry, Government Medical College, Dungarpur⁴Junior Specialist, Department of Skin and Venereal Disease, Government Medical College, Dungarpur⁵Junior Resident, Department of Skin and Venereal Disease, Government Medical College, Dungarpur

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Conflict of interest: Nil

Abstract:

In a tribal region in Southern Rajasthan, 105 dermatological patients participated in this descriptive cross-sectional study to examine their illness and quality of life. There were 56 men and 49 women in the sample. With 42 cases of dermatitis and 15 cases of psoriasis, respectively, these two disorders were the most common. Most skin problems (63 individuals) persisted for six months to a year. Only a tiny percentage (18 instances) had genital involvement. According to the Dermatology Life Quality Index (DLQI), intermediate severity was the most prevalent and showed substantial consequences on quality of life. The study emphasises how significantly skin illnesses impair patients' quality of life.

Keywords: Dermatological Health, Socioeconomic Status.

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Introduction

Skin conditions are common and have a big influence on people's lives as well as healthcare systems throughout the world. Depending on demographic, socioeconomic, and regional factors, their patterns and frequency differ. Studies conducted in India have revealed a variety of dermatological problems in various areas. For example, study conducted in the mountainous regions of North India revealed the distinct dermatological profile impacted by geographic isolation [2], whereas a post-secondary institution in Kolkata showed a wide spectrum of skin illnesses [1]. Paediatric skin illnesses were common in South Gujarat, highlighting the need for specialised treatment [3].

Studies conducted regionally in Uttarakhand and Imphal have demonstrated the impact of regional environmental and cultural variables on patterns of skin disease [4,5]. Studies conducted in remote villages in India and Allahabad revealed the unique obstacles that rural residents encounter while trying to get dermatological care [6,7]. Data on the incidence of skin illnesses in children and rural populations were gathered from studies conducted in Northern India and rural Central India,

highlighting the need for healthcare tailored to specific demographics [8,9]. Significant morbidity and death were shown in analyses of the global burden of skin disorders conducted in 2010 and 2013 [10,11]. There is also a significant psychological cost; a research conducted in 13 European nations found that dermatological patients had a significant mental health burden [12].

The purpose of this study is to analyse skin disorders in a tribal area in Southern Rajasthan based on gender, looking at socioeconomic characteristics, the length of the disease, and its impact on quality of life. Comprehending these variables within this distinct demographic and cultural milieu would facilitate the creation of efficacious, situation-specific dermatological treatment approaches for the tribal communities residing in Southern Rajasthan.

Aim

To investigate the gender based differences in dermatology patients in a tribal region of southern Rajasthan according to socio-economic factors,

clinical diagnoses, duration of disease, genital involvement, severity and impact on quality of life.

Objectives

1. To assess the socioeconomic status of dermatology patients based on the modified Kuppuswamy scale in Southern Rajasthan.
2. To analyze the distribution of clinical diagnoses among dermatology patients by gender in southern Rajasthan.
3. To analyse the severity levels of skin illnesses among dermatology patients based on gender in southern Rajasthan.
4. To assess the affect of dermatological quality of life using the DLQI among dermatology patients by gender in southern Rajasthan.

Materials and Methods

Study Design and Area:

Design: Descriptive cross-sectional design.

Area: Dermatological OPD in a tertiary care facility in tribal districts of Rajasthan.

Duration: March 1, 2023, to May 31, 2023 (3 months).

Sample Size: 105 patients.

Inclusion criteria:

1. Informed consent.
2. Age 18-50 years.
3. Married or in a stable heterosexual relationship with active sexual life.
4. Confirmed diagnosis of chronic skin conditions like eczema, psoriasis, or acne.

Exclusion criteria:

1. Intellectual disabilities or diagnosed psychiatric co-morbidities.
2. Diagnosed with STDs (self or partner).
3. Refusal to give consent.

Sampling Method:

Recruitment: Convenience sampling of eligible patients attending dermatological OPD.

Data Collection: Standardized questionnaires (sociodemographic data, dermatology characteristics, DLQI).

Procedure of Data Collection:

Consent: Explained study aims in local language and obtained written/verbal consent.

Questionnaire: Structured anonymous questionnaire for information gathering while maintaining confidentiality.

Tools and materials:

1. **Consent Form:** Informed Consent was obtained from all patients/caregivers before entering into study by administering the consent form in Hindi language.
2. **Questionnaire:** A pre-designed and pre-tested structured questionnaires provided to subjects for obtain information about using standardized questionnaires, including sociodemographic data, psychosexual disorders screening questionnaires (FSFI, IIEF), sexual quality of life questionnaires for males and females, Dermatology characteristics of Participants, Dermatology Life Quality Index (DLQI).
3. **Dermatology Life Quality Index (DLQI):** To assess the impact of skin conditions on the quality of life of patients.
4. **Severity of skin condition - Psoriasis area and severity index (PASI), Urticaria: UAS-7 Band: (Urticaria activity score), vitiligo area and severity index (VASI), Eczema area and severity index (EASI), Severity of scalp hair loss (alopecia areata) melisma area and severity index (MASI), Scale for severity of Lichen planus, dermatophytosis severity score for Tinea.**

Statistical Analysis:Data entered in Microsoft excel and data analysis will be done on statistical software and appropriate statistical test will be used.

Observation: In our study, there is a slightly higher number of male patients (56) compared to female patients (49). This indicates a relatively balanced gender distribution among the patients, with males comprising a slightly larger proportion.

Table 1: Distribution of Patients, according to Socio-economic status (Modified Kupuswamy Scale)

SES	Male	Female	Total
Upper Middle	13	1	14
Lower Middle	25	10	35
Upper Lower	17	29	46
Lower	1	9	10
Total	56	49	105

Table 2: Gender-Based Distribution of Clinical Diagnoses in Dermatology Patients

Clinical Diagnosis (Dermatology)	Male	Female	Total
Dermatitis	27	15	42
Psoriasis	11	4	15
Urticaria	2	10	12
Melasma	0	4	4
Tinea	12	9	21
Lichen Planus (LP)	1	4	5
Vitiligo	2	1	3
Alopecia Areata	1	2	3
Total	56	49	105

Our study reveals that 34 males and 29 females have experienced skin diseases for a duration ranging from 6 months to 1 year, with a total of 63 patients in this category. Additionally, 9 males and 6 females have had skin diseases for 1 to 2 years, totalling 15 patients.

Furthermore, 9 males and 9 females were diagnosed with skin diseases lasting from 2 to 3 years, comprising a total of 18 patients. Lastly, 4 males and 5 females have been dealing with skin diseases for more than 3 years, with a total of 9 patients falling into this category. These findings shed light on the gender-specific distribution of skin disease duration in dermatology patients,

offering insights into the varying lengths of illness experienced by males and females. In our study, out of the total 56 males analyzed, 13 were affected by skin diseases involving the genital area, while among the 49 females analyzed, 5 were affected. In total, 18 cases of genital involvement in skin diseases were observed across both genders. The majority of individuals, comprising 43 males and 44 females, were unaffected by genital involvement.

Overall, the data suggests that a small proportion of both males and females experienced genital involvement in skin diseases in the analyzed population.

Table 3: Gender-Based Analysis of Severity Levels in Skin Diseases

Level Severity (Skin Disease)	Male	Female	Total
Mild	13	13	26
Moderate	30	25	55
Severe	12	10	22
Very Much Worse	1	1	2
Total	56	49	105

Table 4: Gender-Based Analysis of the Impact of Dermatological Quality Life Index (DLQI) on Patients with Skin Diseases: Evaluating the Magnitude of Effects

DLQI Effects On Patients	Male	Female	Total
Small effect	4	3	7
Moderate effect	11	9	20
Very large effect	20	16	36
Extremely large effect	21	21	42
Total	56	49	105

Table 5: Correlation between Level of Severity of skin disease of male with Dermatological Life Quality Index male

Level of Severity (Skin Disease Male) and DLQI (Male)	
Pearson correlation coefficient (r)	0.2405
P-value	0.07416
Covariance	0.163

Table 6: Correlation between levels of severity of skin disease of female with dermatological life quality index female

Level of Severity (Skin Disease Female) and DLQI (female)	
Pearson correlation coefficient (r)	0.3933
P-value	0.005181
Covariance	0.2734

Discussion

According to our research, there is a gender difference in the frequency of skin conditions, with men slightly outnumbering women. The distribution is influenced by socioeconomic circumstances, as seen by the notable male preponderance in the upper middle socioeconomic category. The most frequent disorders are psoriasis and dermatitis, with dermatitis being more common among men.

The substantial influence that skin illnesses, especially those with moderate to severe symptoms, have on patients' quality of life is highlighted by the Dermatology Life Quality Index (DLQI). These emphasises the necessity of focused measures to control and lessen the prevalence of skin conditions among these indigenous people.

Conclusion

The study concludes by highlighting the negative effects of dermatological disorders on patients' quality of life and the correlation between socioeconomic status and dermatological health.

Recommendation: Research the sociocultural influences of dermatological disorders and use thorough patient evaluations. Create treatments tailored to a certain gender, improve patient education, and encourage a multidisciplinary approach. Advocate for policies that prioritise sexual and dermatological health, work with tribal health authorities, undertake longitudinal research, and offer psychosocial support.

Limitation: Limitations of the study include limited generalizability due to a sample size particular to a single tribal region in Rajasthan and the absence of a control group for comparison. It employed few evaluation instruments without a multidisciplinary approach, relied solely on self-reported data, lacked longitudinal research, and did not fully examine socioeconomic or cultural issues.

Ethical Approval: The study was approved by the Institutional Ethics Committee, Rabindra Nath Medical College and attached hospital, Udaipur (Rajasthan).

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