International Journal of Medicine
pISSN 1468-3814 | eISSN 2667-7008
https://theinternationalmedicine.com/

Original Researcher Article *DOI: 10.61336/im/25-12-68*

Prospective Clinico-epidemiological Study of Venereal and Non-Venereal Genital Dermatoses in Men and Women in a Tertiary Care Hospital, Suryapet, Telangana, India.

[1*]**Dr. Bandi Shalini Priya.**
[1]*Assistant Professor, Department of Dermatology, Venerology and Leprosy, Government Medical College, Suryapet, Telangana, India.*

Correspondence:
Dr. Bandi Shalini Priya.
Assistant Professor, Department of Dermatology, Venerology and Leprosy, Government Medical College, Suryapet, Telangana, Indi.

Received: **November 10, 2025**
Revised: **November 29, 2025**
Accepted: **December 12, 2025**
Published: **December16, 2025**

Abstract

Background: Genital dermatoses comprise a significant portion of skin diseases, yet comprehensive studies detailing their prevalence, especially in the context of gender and age differences, are limited. ***Objectives:*** To determine the prevalence of common genital dermatoses in different age groups and genders, and to analyze seasonal variations and monthly fluctuations in a tertiary care setting in Suryapet, Telangana, India.***Methods:*** A prospective observational study was conducted, collating data on the prevalence of various genital dermatoses in relation to age, gender, and seasonality.***Results:*** Age and Gender Distribution: Prevalence in males and females aged <20 years were 6% and 5% respectively.In the 21-24 age group, 8% of males and 7% of females exhibited dermatoses.The 25-44 age group recorded 12% prevalence in males and 10% in females.For individuals aged >45, the prevalence was 7% for males and 9% for females. Disease-specific Findings: Genital Warts (G.Warts) were more common in males (10%) compared to females (5%). Peaks were observed in December and May. Genital Ulcer Disease - Herpes (GUD H) displayed a higher prevalence in females (8%) than males (7%), peaking in November. Lichen Planus (LAP) occurred consistently throughout the year with a notable 9% prevalence in the >45 age group. Molluscum Contagiosum (MC) showed moderate fluctuations with an overall prevalence of 6%.Scabies (SCABIES) had an overall prevalence of 7%, peaking in December and November .Vitiligo (VCD) had a 4% prevalence in the 25-44 age group, with consistent occurrences all year.Monthly Fluctuations:The highest prevalence for G.Warts and GUD H was in December (10% and 9% respectively).LAP, MC, and VCD showed consistent patterns, while SCABIES peaked in November and December.Implications: Public Health Planning: Seasonal patterns and gender-specific differences must be integrated into outreach and education programs.Clinical Management: Interventions and counseling should be tailored based on patient demographics.Longitudinal Analysis: Continuous tracking can reveal emerging trends, guiding targeted interventions.***Conclusion:*** The study highlights the varying prevalence of genital dermatoses across age groups, gender, and seasons. A tailored approach in public health planning and clinical management can potentially enhance disease control efforts.

Keywords: Genital Dermatoses, Prevalence, Seasonality, Gender Differences, Age Distribution, Clinicoepidemiological Study..

INTRODUCTION

Genital dermatoses, encompassing both venereal and non-venereal conditions, are a significant subset of dermatological ailments encountered in clinical settings1. These conditions, often overlooked or misdiagnosed due to their sensitive nature, can considerably impact an individual's quality of life2. Both physiological and psychological implications arise from the presence of skin abnormalities in the genital area, which is why understanding their epidemiology is paramount to efficient medical practice and public health planning3,4.

The district of Suryapet in Telangana, India, like many regions across the globe, hosts a diverse population with various cultural, socioeconomic, and health backgrounds. In such an intricate mosaic of people, the epidemiology of genital dermatoses can offer unique insights that can shape healthcare policies and intervention programs. In a country where discussions related to sexual health and genital conditions are often limited by cultural and societal barriers, accurate and comprehensive data on the prevalence and patterns of these diseases becomes even more vital5.

Broadly, genital dermatoses can be divided into venereal (sexually transmitted) and non-venereal6. The former includes conditions like genital warts and genital ulcer disease due to herpes, while the latter comprises ailments like lichen planus, molluscum contagiosum, scabies, and vitiligo7,8. While the former often garners more attention due to its mode of

transmission and public health implications, non-venereal diseases are equally important, as they can have significant psychosocial implications and may sometimes be mistaken for venereal conditions, leading to undue stress and stigma9. Age and gender play significant roles in the prevalence and presentation of these conditions. The hormonal shifts that accompany different life stages, combined with lifestyle factors, can predispose certain age groups to specific dermatoses. For instance, sexually active young adults might have a higher predisposition to sexually transmitted conditions, while hormonal changes post-menopause can influence the skin's integrity and susceptibility to certain conditions. Similarly, gender-specific anatomical differences, societal roles, and personal care practices can influence the prevalence and types of genital dermatoses.

Furthermore, seasonality appears to have a pronounced effect on the prevalence of various dermatological conditions, including those of the genital region. Factors like humidity, temperature, and even sociocultural practices associated with particular seasons (like festivals, which might increase intimate contacts) can contribute to this fluctuating pattern.

The prospective clinico-epidemiological study set in a tertiary care hospital in Suryapet aims to fill the existing knowledge gap in the domain of genital dermatoses. By focusing on a specific geographic region and setting, it hopes to provide granular data which, when extrapolated, can be of significant use for broader public health strategies.

understanding the intricacies of genital dermatoses, especially in relation to variables like age, gender, and season, is not only important for clinicians but also for public health policymakers. It helps in tailoring interventions, raising awareness, and most importantly, addressing the stigma associated with genital skin conditions. This introduction sets the stage for a detailed exploration of the prevalence and patterns of genital dermatoses in Suryapet, Telangana, providing insights that are hoped to be of value both locally and globally.

MATERIALS AND METHODS

Study Design and Setting

A prospective clinico-epidemiological observational study was undertaken to explore the prevalence and patterns of both venereal and non-venereal genital dermatoses. The study was conducted in a tertiary care hospital in Suryapet, Telangana, India, over a predetermined period to ensure comprehensive data collection.

Study Population

All patients visiting the dermatology outpatient department (OPD) during the study period, who exhibited symptoms or signs of genital dermatoses, were considered for inclusion.

Inclusion Criteria

- Patients of both genders.
- All age groups.
- Patients willing to participate and provide informed consent.
- Patients with clinical signs of genital dermatoses.

Exclusion Criteria

- Patients unwilling to participate or provide informed consent.
- Patients with systemic diseases impacting skin conditions but not primarily dermatological in nature.
- Patients previously diagnosed and under treatment for the same dermatoses to avoid duplication.

Sample Size

The sample size was determined based on the average patient footfall in the dermatology OPD and the expected prevalence of genital dermatoses. An appropriate margin of error was factored in to ensure the sample was representative.

Data Collection

- A structured proforma was utilized to collect data. It included:
- Demographics: Age, gender, socioeconomic status, etc.
- Clinical history: Onset, duration, progression, associated symptoms, prior treatments, etc.
- Clinical examination: Morphology, distribution, and nature of the lesions.
- Diagnostic Procedures: Apart from a thorough clinical examination:
- Skin biopsies were performed when necessary.
- Tissue samples were sent for histopathological examination for definitive diagnoses.
- For suspected sexually transmitted conditions, serological tests were recommended to ascertain the diagnosis.

- Seasonal and Monthly Analysis: Data was collated month-wise to evaluate the prevalence and patterns over different months and seasons.

Ethical Considerations

The study was initiated after receiving approval from the Institutional Ethics Committee, Government Medical College, Suryapet, Telangana, India. Informed consent was obtained from all participants.All personal and medical information was kept confidential, and anonymity was maintained.All procedures performed were in accordance with the ethical standards of the institution and with the 1964 Helsinki Declaration.

Data Analysis

Collected data was entered into a secure database and analyzed using statistical software. Descriptive statistics like mean, median, and standard deviation were used for continuous variables, while categorical variables were expressed as percentages and frequencies. The Chi-squared test was employed to identify significant relationships between categorical variables. A p-value of <0.05 was considered statistically significant.

RESULTS

During the study period from January 2021 to December 2021, genital dermatoses were evaluated across age and gender groups in a tertiary care hospital setting. The distribution showed a clear concentration of cases in the adult reproductive age group. The highest average prevalence was observed among males aged 25-44 years (12%), followed by females aged 25-44 years (10%) and females aged more than 45 years (9%). The lowest average prevalence was recorded in the less than 20 years age group, with 5% among females and 6% among males. Overall, the 25-44 years age group represented the most affected demographic category, as shown in Table 1.

Table 1. Age and gender distribution of genital dermatoses

Age group	Gender	Average prevalence (%)
<20 years	Female	5
<20 years	Male	6
21-24 years	Female	7
21-24 years	Male	8
25-44 years	Female	10
25-44 years	Male	12
>45 years	Female	9
>45 years	Male	7

The most frequently documented genital dermatoses included genital warts, genital ulcer disease-herpes (GUD-H), lichen planus, molluscum contagiosum, scabies, and vitiligo. Genital warts showed a male predominance, with an average prevalence of 10% in males compared with 5% in females. In contrast, GUD-H showed a slightly higher average prevalence among females (8%) than males (7%). Lichen planus was more frequent in the older age group, with an average prevalence of 9% among individuals aged more than 45 years. Molluscum contagiosum and scabies showed relatively consistent overall prevalence values of 6% and 7%, respectively. Vitiligo was documented with an average prevalence of 4% in the 25-44 years age group. The distribution of common dermatoses and their seasonal patterns is presented in Table 2.

Table 2. Prevalence of common genital dermatoses

Dermatosis	Subgroup	Average prevalence (%)	Seasonal pattern
Genital warts (G.Warts)	Males	10	Higher in December and May
Genital warts (G.Warts)	Females	5	Higher in December and May
Genital ulcer disease-herpes (GUD-H)	Males	7	Higher in November-December
Genital ulcer disease-herpes (GUD-H)	Females	8	Higher in November-December
Lichen planus (LAP)	>45 years age group	9	Occurred throughout the year
Molluscum contagiosum (MC)	Overall	6	Moderate monthly fluctuations
Scabies	Overall	7	Higher in November-December
Vitiligo (VCD)	25-44 years age group	4	Occurred throughout the year

Monthly analysis demonstrated visible fluctuations in the prevalence of the selected dermatoses. Genital warts ranged from 6% to 10%, with the highest value in December (10%) and another rise in May and November (9% each). GUD-H ranged from 5% to 9%, increasing toward the end of the year and reaching its highest value in December (9%). Lichen planus remained comparatively low during most months but increased to 5% in December. Molluscum contagiosum varied between 3% and 6%, while scabies showed higher values in May, September, November, and December. Vitiligo showed a relatively stable pattern, ranging from 7% to 9%, with the highest value in December. These monthly trends are summarized in Table 3.

Table 3. Monthly fluctuations in genital dermatoses prevalence

Month	G.Warts (%)	GUD-H (%)	LAP (%)	MC (%)	Scabies (%)	VCD (%)
January	8	6	3	4	5	7
February	7	6	4	3	6	7
March	7	5	4	4	6	8
April	6	5	3	4	5	7
May	9	7	3	5	7	8
June	8	6	4	4	6	7
July	7	5	4	3	5	8
August	7	6	3	4	6	7
September	6	5	4	3	7	8
October	8	7	3	4	6	7
November	9	8	4	5	7	8
December	10	9	5	6	8	9

Abbreviations: G.Warts, genital warts; GUD-H, genital ulcer disease-herpes; LAP, lichen planus; MC, molluscum contagiosum; VCD, vitiligo.

The findings indicate that genital dermatoses in this tertiary care setting were not uniformly distributed across demographic groups or calendar months. Adult patients, particularly those aged 25-44 years, formed the major affected group. Male predominance was more evident for genital warts, whereas GUD-H showed a slightly higher prevalence among females. The increase in several dermatoses during November and December suggests the need for continued surveillance and season-sensitive clinical preparedness. The implications of these observations for public health planning, clinical management, and longitudinal monitoring are outlined in Table 4.

Table 4. Implications of genital dermatoses findings

Implication area	Recommendation
Public health planning	Consider seasonal patterns and gender-specific differences while planning outreach, health education, and prevention programs.
Clinical management	Tailor diagnosis, treatment, counselling, and follow-up according to patient age group, gender, and common clinical patterns.
Longitudinal analysis	Continue periodic monitoring of genital dermatoses to identify emerging trends and guide targeted interventions.

Overall, the results show that genital dermatoses were most frequent among adults aged 25-44 years, with condition-specific gender variation and modest month-wise fluctuation. Genital warts, GUD-H, scabies, molluscum contagiosum, lichen planus, and vitiligo constituted the major patterns identified in the study data. The clustering of higher values during the later months of the year supports the importance of regular clinic-based monitoring and targeted patient education.

DISCUSSION

Prevalence and Distribution: Our study identified a prevalence rate of genital dermatoses among the study population, consistent with the findings of Banger HS et al4., who reported a similar prevalence rate in a neighbouring region. However, it is essential to acknowledge the significant regional variability within India, as evidenced by Mishra A et al7.'s nationwide study. The presence of Tinea genitalis as discussed by Luchsinger et al9. highlights the need to explore not only the conventional venereal dermatoses but also less common genital dermatological conditions.

Gender Differences: Noteworthy gender disparities were observed in the occurrence of genital dermatoses in our study, echoing the findings of Sivayadevi P et al2 in their research conducted in a tertiary care center in New Delhi. These results emphasize the potential need for gender-specific healthcare approaches to ensure effective diagnosis and treatment. Kaur et al. also observed gender-specific differences in vulval dermatoses among female patients in North India, further highlighting the importance of tailored interventions.

Venereal vs. Non-Venereal Dermatoses: In alignment with Kaur K et al10.'s study, our research highlighted the coexistence of both venereal and non-venereal genital dermatoses in our study population. This underscores the importance of comprehensive diagnostic and treatment protocols in healthcare settings to address the multifaceted nature of genital dermatological conditions. The study by Choudhry et al11. on sexually transmitted infections and the study by Saraswat et al12. on nonvenereal genital dermatoses among male patients offer valuable insights into the spectrum of genital dermatological conditions that healthcare providers should consider.

Age Groups: Our study revealed a higher prevalence of genital dermatoses among younger individuals, consistent with the findings of Kumar et al14. However, it is vital to recognize that age-related variations may exist in different geographical regions, as highlighted by Joshi S et al5. Future research could delve deeper into age-related trends and their implications for healthcare strategies.

Implications and Future Directions: The comparisons with previous studies underscore the local and regional variations in the epidemiology of genital dermatoses. These findings carry several implications for healthcare providers in Suryapet, Telangana, and suggest potential avenues for future research.

Community Awareness: Given the prevalence of genital dermatoses, public health initiatives should prioritize raising awareness, especially among at-risk populations, as recommended by studies conducted in other regions of India (Awasthi S et al6.). Dissemination of information about both conventional and less common genital dermatoses, as discussed by Luchsinger et al., can be beneficial.

Tailored Interventions: Healthcare providers in Suryapet should consider tailoring their interventions based on gender-specific prevalence rates, as demonstrated in previous studies (Mishra A et al7., Kaur et al10.,). This approach can lead to more effective diagnosis and management of genital dermatoses.

Longitudinal Studies: Future research should explore the trends and risk factors associated with genital dermatoses over time. Limited longitudinal data available in the literature, as suggested by Kumar et al14. indicate the need for comprehensive and ongoing investigations in this field. Additionally, comments and discussions, such as the one provided by Kumar et al., can stimulate further research and collaboration in understanding genital dermatological conditions.

CONCLUSION

Our study highlights the multifaceted nature of genital dermatoses prevalence, with significant variations influenced by age, gender, and seasonal factors. These findings underscore the importance of tailored approaches in both public health planning and clinical management. Age-related distinctions call for specific strategies to address vulnerabilities within different age groups. Gender disparities emphasize the need for gender-specific interventions, considering unique challenges in healthcare seeking and adherence. Additionally, the impact of seasonal fluctuations on prevalence underscores the necessity for adaptable strategies. Healthcare providers and public health authorities should be equipped to respond to these changes promptly. Overall, tailored strategies have the potential to enhance disease control efforts, improve patient outcomes, and contribute to the well-being of the community.

REFERENCES

1. Sartori GC, Wicher RT, Ferreira FR, Batista VH. Most frequent dermatoses at a vulvar pathology outpatient clinic. An Bras Dermatol. 2018;93:294–6.
2. Sivayadevi P, Anandan H. A study of pattern of non-venereal genital dermatoses in female patients at a tertiary care center. Int J Res Dermatol. 2019;5:134–8
3. Wollina U, Verma S. Vulvar vestibular papillomatosis. Indian J Dermatol Venereol Leprol. 2010;76:270–2.
4. Banger HS, Sethi A, Malhotra S, Malhotra SK, Kaur T. Clinico-epidemiological profile of patients attending Suraksha clinic of tertiary care hospital of North India. Indian J Sex Transm Dis AIDS. 2017;38(1):54–9.
5. Joshi S, Shrestha S, Joshi A. Clinico-epidemiological profile of women with non-venereal vulval diseases: A hospital-based observational study. NJDVL. 2019;17:32–8.
6. Awasthi S, Ornelas J, Armstrong A, Johnson JA, Eisen DB. Anogenital warts and relationship to child sexual abuse: Systematic review and meta-analysis. Pediatr Dermatol. 2021;38:842–50.
7. Mishra A, Verma P, Marathe N, Srivastava D. Study of the profile of patients with STDs attending an STD clinic in J.A.H., Gwalior. Indian J Community Med. 2008;33:263–4.
8. Sood N, Sud SS. Profile of infection in women with vaginal discharge in North India. Int J Reprod Contracept Obstet Gynecol. 2018;7:4184–90.
9. Luchsinger I, Bosshard PP, Kasper RS, Reinhardt D, Lautenschlager S. Tinea genitalis: A new entity of sexually transmitted infection? Case series and review of the literature. Sex Transm Infect. 2015;91:493–6.

10. Kaur K, Mohi MK, Chopra D, Sarangal R, Singh Saini JR, Chopra P. Vulval dermatoses (venereal and nonvenereal) among female patients presenting to a tertiary care hospital in North India. Indian J Sex Transm Dis AIDS. 2022 Jul-Dec;43(2):141-145. doi: 10.4103/ijstd.ijstd_18_22. Epub 2022 Nov 17. PMID: 36743089; PMCID: PMC9891011.
11. Choudhry S, Ramachandran VG, Das S, Bhattacharya SN, Mogha NS. Pattern of sexually transmitted infections and performance of syndromic management against etiological diagnosis in patients attending the sexually transmitted infection clinic of a tertiary care hospital. Indian J Sex Transm Dis AIDS. 2010 Jul;31(2):104-8. doi: 10.4103/0253-7184.74998. PMID: 21716796; PMCID: PMC3122595.
12. Saraswat PK, Garg A, Mishra D, Garg S. A study of pattern of nonvenereal genital dermatoses of male attending skin OPD at a tertiary care center. Indian J Sex Transm Dis AIDS. 2014 Jul-Dec;35(2):129-34. doi: 10.4103/0253-7184.142408. PMID: 26396448; PMCID: PMC4553841.
13. V Sharanbasava, PS Babu, C Sridevi Patil. A clinico-epidemiological study of non-venereal dermatoses involving male and female genitalia. IP Indian J Clin Exp Dermatol. 2021;7(3):237-242.
14. Kumar B, Narayanan VR, Narang T. Comment on: "Vulval dermatoses (venereal and nonvenereal) among female patients presenting to a tertiary care hospital in North India". Indian J Sex Transm Dis AIDS. 2023 Jan-Jun;44(1):105-106. doi: 4103/ijstd.ijstd_31_23. Epub 2023 Jun 6. PMID: 37457533; PMCID: PMC10343116.