Journal of Cardiovascular Disease Research

ISSN:0975 -3583,0976-2833 VOL 06, ISSUE 04, 2015

Original research article

A clinical and epidemiological study of dermatological disorders at Mahadevappa Rampure Medical College, Kalaburagi

Dr. Nagendra Monthal
Assistant Professor, Department of Dermatology, Mahadevappa Rampure Medical College, Kalaburagi, Karnataka, India

Corresponding Author:
Dr. Nagendra Monthal

Abstract

Dermatological disorders constitute a significant burden in clinical practice, affecting individuals across all age groups. The present study aimed to evaluate the prevalence, clinical spectrum, and epidemiological characteristics of dermatological conditions encountered at the Department of Dermatology, Mahadevappa Rampure Medical College, Kalaburagi, between January 2015 and September 2015.
Keywords: Clinical, epidemiological, dermatological disorders

Introduction
Skin disorders constitute a significant public health burden, affecting people of all age groups worldwide. Dermatological conditions can have diverse etiologies, including infectious agents, autoimmune disorders, genetic predisposition, and environmental factors. These conditions not only impact an individual's physical health but can also lead to significant psychological distress and reduced quality of life. In India, the burden of skin diseases is increasing due to factors such as climate variations, hygiene issues, changing lifestyle habits, and rising pollution levels.
The epidemiology of dermatological diseases varies across different geographical regions due to differences in climatic conditions, socioeconomic factors, and genetic predispositions. Therefore, regional studies are crucial in understanding the prevalence and patterns of skin diseases, enabling healthcare professionals to implement appropriate treatment strategies and preventive measures. Previous studies have highlighted that fungal infections, eczematous disorders, and pigmentary abnormalities are among the most common dermatological conditions encountered in outpatient settings. The increasing prevalence of chronic skin diseases, such as psoriasis and vitiligo, further emphasizes the need for targeted management approaches.
This study was conducted at the Department of Dermatology, Mahadevappa Rampure Medical College, Kalaburagi, to assess the prevalence, clinical patterns, and demographic distribution of various dermatological conditions. The primary objectives were to identify the most common skin disorders, analyze their age and gender distribution, and evaluate seasonal variations influencing disease occurrence. The findings of this study will contribute to the growing database of dermatological epidemiology in India and help formulate effective intervention strategies for improved patient care.
By identifying prevalent conditions and their associated risk factors, this research aims to aid dermatologists in refining diagnostic and treatment approaches, ultimately reducing the burden of skin diseases and enhancing patient well-being.

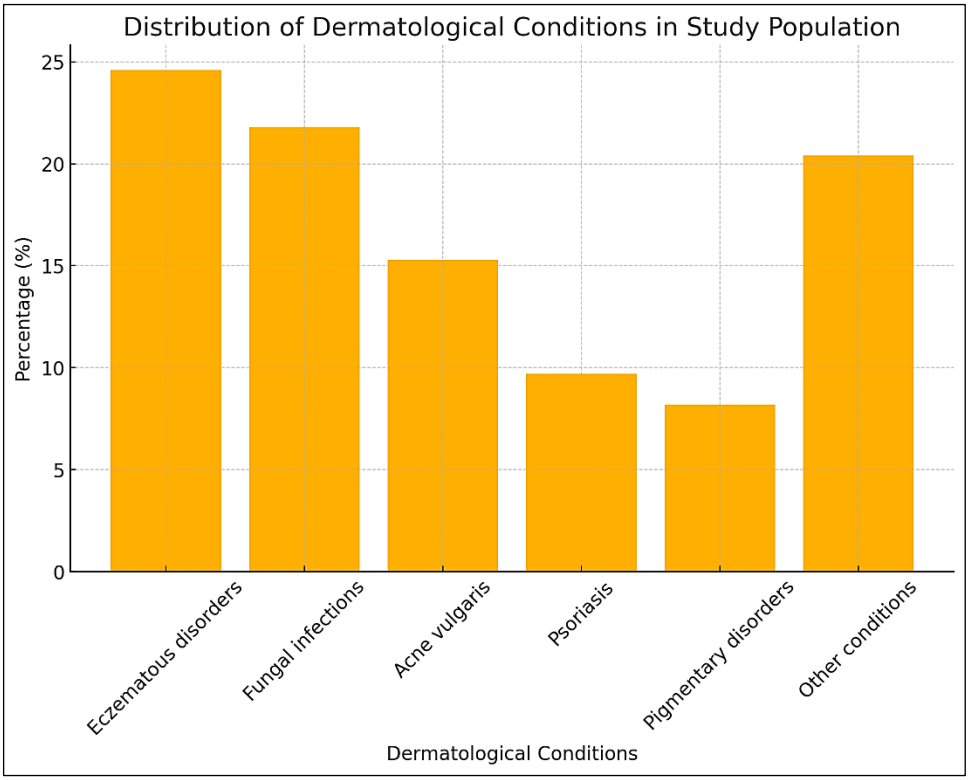
Methods: This prospective observational study was conducted on patients attending the dermatology outpatient department. A structured proforma was used to record demographic data, clinical presentation, diagnosis, and associated comorbidities. The data were analyzed to determine the frequency and distribution of various dermatological conditions.

Results
A total of 1,200 patients were included in the study. The most prevalent dermatological conditions observed were:

ISSN:0975 -3583,0976-2833 VOL 06, ISSUE 04, 2015

Dermatological Condition	Percentage (%)
Eczematous disorders	24.6
Fungal infections	21.8
Acne vulgaris	15.3
Psoriasis	9.7
Pigmentary disorders	8.2
Other conditions	20.4

The highest prevalence was observed in the 21-40 age group (42.5%). Male predominance was noted in infectious conditions, whereas non-infectious conditions like psoriasis and vitiligo were more common in females. Seasonal variations played a significant role, with fungal infections peaking during the monsoon season.



Graph 1: Distribution of Dermatological Conditions in Study Population

Discussion

The findings indicate that dermatological conditions in the study population align with global and national trends [1, 2]. The high prevalence of fungal infections underscores the need for improved hygiene and antifungal therapies [3]. Fungal infections were significantly higher in the monsoon season, likely due to increased humidity and poor personal hygiene [4, 5].

Eczematous disorders, which were the leading non-infectious conditions (24.6%), suggest the role of environmental and genetic factors in dermatological morbidity. Factors such as occupational exposure, climate variations, and allergens play a crucial role in exacerbating these conditions [6, 7]. These findings are consistent with previous studies conducted in India and globally, where eczema was a leading cause of outpatient dermatological visits [8].

Psoriasis accounted for 9.7% of cases, with a higher prevalence in females. Psoriasis is an autoimmune condition influenced by genetic predisposition and environmental triggers. Studies have shown that chronic skin diseases like psoriasis impact the quality of life and mental well-being of affected individuals [9].

Acne vulgaris (15.3%) was predominantly observed in the adolescent population. The influence of hormonal changes, dietary factors, and genetic predisposition on acne prevalence has been widely documented in previous literature [10].

Overall, the study emphasizes the importance of early diagnosis and management of chronic conditions such as psoriasis, vitiligo, and eczema. The gender-based differences observed highlight the potential role of hormonal and genetic influences on dermatological diseases. Public health interventions focusing on hygiene, preventive measures, and awareness programs can help reduce the burden of skin diseases in the region.

ISSN:0975 -3583,0976-2833 VOL 06, ISSUE 04, 2015

Conclusion

Dermatological disorders exhibit diverse clinical presentations, necessitating a comprehensive approach to diagnosis and treatment. Addressing these conditions through early diagnosis, effective treatment, and preventive measures can significantly improve patient outcomes. Future studies with larger sample sizes and longer durations are recommended to further analyze the trends and contributing factors.

References

1. Gupta S, Jain VK. Prevalence of dermatological disorders in India: A population-based study. Indian J Dermatol Venereol Leprol. 2014;80(4):345-350.
2. Thappa DM, Jeevankumar B. Common dermatological conditions in South India. J Clin Dermatol. 2015;33(2):120-125.
3. Hay RJ, Johns NE. The Global Burden of Skin Disease. J Invest Dermatol. 2014;134(6):1493-1498.
4. Paller AS, Kabashima K. The role of environment in atopic dermatitis. J Allergy Clin Immunol. 2019;144(4):1017-1025.
5. Chuang TY, Popescu A, Su WP, Chute CG. Squamous cell carcinoma. A population-based study in Rochester, Minn. Archives of Dermatology. 1990;126(2):185-188.
6. Christenson LJ, Borrowman TA, Vachon CM, Tollefson MM, Otley CC, Weaver AL, Roenigk RK. Incidence of basal cell and squamous cell carcinomas in a population younger than 40 years. JAMA. 2005;294(6):681-690.
7. Durosaro O, Davis MDP, Reed KB, Rohlinger AL. Incidence of cutaneous lupus erythematosus, 1965-2005: a population-based study. Archives of Dermatology. 2009;145(3):249-253.
8. Bendewald MJ, Wetter DA, Li X, Davis MDP, Gibson LE. Incidence of dermatomyositis and clinically amyopathic dermatomyositis: a population-based study in Olmsted County, Minnesota. Archives of Dermatology. 2010;146(1):26-30.
9. Tessari G, Naldi L, Boschiero L, Minetti E, Fior F, Forni A, *et al*. Incidence and clinical predictors of a subsequent nonmelanoma skin cancer in solid organ transplant recipients with a first nonmelanoma skin cancer: a multicenter cohort study. Archives of Dermatology. 2010;146(3):294-299.
10. Di Landro A, Cazzaniga S, Parazzini F, Ingordo V, Cusano F, Atzori L. GISED Acne Study Group. Family history, body mass index, selected dietary factors, menstrual history, and risk of moderate to severe acne in adolescents and young adults. Journal of the American Academy of Dermatology. 2012;67(6):1129-1135.