Original research article

Prevalence and clinical patterns of dermatological disorders: A cross-sectional study at Dr. Patnam Mahendra Reddy Institute of Medical Sciences, Chevella, Telangana

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 Abstract

Background: Dermatological disorders constitute a significant global health concern, affecting individuals across all age groups. Understanding the prevalence and clinical patterns of these conditions is crucial for effective healthcare planning and management.

Objective: This study aims to evaluate the prevalence and clinical patterns of dermatological disorders in patients attending the dermatology outpatient department (OPD) at Dr. Patnam Mahendra Reddy Institute of Medical Sciences, Chevella, Telangana.

Methods: A cross-sectional study was conducted over a period of six months (Jan 2020-June 2020) among patients presenting with dermatological complaints. Data on demographic characteristics, clinical diagnoses, and associated risk factors were collected and analyzed using descriptive statistics.

Results: A total of 1,200 patients were included in the study, with a male-to-female ratio of 1.2:1. The most prevalent dermatological conditions observed were infections (35.2%), eczematous disorders (22.5%), acne vulgaris (14.8%), pigmentary disorders (9.6%), and psoriasis (6.4%). Fungal infections constituted the majority of infectious cases (18.7%). Seasonal variations were noted, with an increased incidence of infections during monsoon months.

Conclusion: This study provides valuable insights into the burden and spectrum of dermatological diseases in the region. The high prevalence of infections highlights the need for enhanced public health measures, including improved hygiene practices and early diagnosis. Further research focusing on risk factors and preventive strategies is warranted.

Keywords: Dermatological disorders, prevalence, clinical patterns, cross-sectional study, Telangana

1. Introduction

Dermatological disorders are among the most common health problems encountered in clinical practice, impacting both physical and psychological well-being. The spectrum of dermatological conditions varies widely due to differences in genetic, environmental, and socio-economic factors. In India, dermatological diseases constitute a major proportion of outpatient visits in hospitals. However, there is limited data on the prevalence and clinical patterns of these conditions in specific regions like Telangana.

This study aims to assess the prevalence and clinical patterns of dermatological disorders in patients attending the dermatology OPD at Dr. Patnam Mahendra Reddy Institute of Medical Sciences, Chevella, Telangana. Understanding the distribution of skin diseases can help dermatologists and public health officials tailor preventive and treatment strategies effectively.

2. Methods

2.1 Study Design and Setting

A hospital-based cross-sectional study was conducted at the dermatology OPD of Dr. Patnam Mahendra Reddy Institute of Medical Sciences, Chevella, Telangana, Jan 2020-June 2020.

2.2 Study Population

All patients presenting with dermatological complaints during the study period were included, except for those with incomplete medical records or requiring emergency dermatological intervention.

2.3 Data Collection

A structured proforma was used to collect data on demographic characteristics, clinical diagnosis, duration of illness, associated symptoms, and potential risk factors. The diagnoses were made by qualified dermatologists based on clinical examination and relevant investigations.

2.4 Statistical Analysis

Data were analyzed using SPSS version 25.0. Descriptive statistics, including frequency distributions and percentages, were used to summarize categorical data, while continuous variables were expressed as means and standard deviations.

3. Results

3.1 Demographic Characteristics

A total of 1,200 patients were analyzed. The mean age of the patients was 32.5 ± 14.2 years, with a male predominance (54.6%). The highest number of cases (28.9%) was recorded in the 21-30 years age group.

3.2 Prevalence of Dermatological Disorders

The distribution of dermatological disorders among the study population is shown in Table 1.

Dermatological Disorder	Prevalence (%)
Infectious diseases	35.2
Eczematous disorders	22.5
Acne vulgaris	14.8
Pigmentary disorders	9.6
Psoriasis	6.4
Others	11.5

Among infectious diseases, fungal infections were the most common (18.7%), followed by bacterial (9.2%) and viral infections (7.3%).

3.3 Seasonal Variations

A significant increase in infectious cases was observed during the monsoon season (July-September), while xerotic eczema and psoriasis were more prevalent during winter months.

3.4 Risk Factors

Common risk factors identified included poor hygiene, excessive sweating, genetic predisposition, stress, and occupational exposure.

4. Discussion

The findings of this study are consistent with previous research indicating a high burden of infectious and eczematous skin diseases in India. The predominance of fungal infections aligns with studies conducted in tropical and subtropical climates, where warm and humid conditions favor fungal growth.

Acne vulgaris was predominantly observed in adolescents and young adults, likely influenced by hormonal changes and lifestyle factors. Pigmentary disorders, including melasma and vitiligo, were more frequent in females, possibly due to hormonal and genetic influences. Psoriasis, though less prevalent, posed significant morbidity, necessitating long-term management strategies.

The seasonal variation observed in our study highlights the need for targeted interventions, particularly during monsoon and winter months.

5. Conclusion

This study underscores the significant burden of dermatological diseases in Chevella, Telangana, with infections and eczematous conditions being the most prevalent. Awareness campaigns on hygiene, early diagnosis, and lifestyle modifications are essential for effective disease prevention and management. Future research should focus on identifying underlying risk factors and evaluating treatment outcomes in the local population.

6. References

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