

# PATTERN OF SKIN DISEASES IN PATIENTS ATTENDED OPD OF DERMATOLOGY AND VENEREOLOGY IN A TERTIARY CARE TEACHING HOSPITAL IN BANGLADESH

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## ABSTRACT

**Background:** Skin problems are one of the most common health problems seen in the developing countries.

**Objective:** To assess the pattern of skin diseases most commonly encountered in Dermatology & Venereology Outdoor Patient Department (OPD) of Northern International Medical college Hospital (NIMCH).

**Materials and Methods:** This cross sectional study was carried out in the Dermatology & Venereology OPD of NIMCH, Dhanmondi, Dhaka, Bangladesh, during the period of January 2012 to December 2012. A total of 1169 patients (511 male and 658 female) aged 10-44 years, attended in the OPD in which 969 patients (450 male and 519 female) were found to have dermatological problems. Data were analyzed by using SPSS soft-ware version 18.

**Results:** The pattern of skin diseases was higher in females (53.6%) than in males (46.4%). The most common disorders seen in outpatient department is eczema (23.7%) followed by fungal infection (15.5%), scabies (13.4%) and acne vulgaris (11.9%). A remarkable part (41.4%) of the patients was illiterate. Majority of the patients (67.6%) belonged to poor socio-economic class. 61.4 % patients were residing in overcrowded homes and 53% patients were not maintained personal hygienic standards

**Conclusion:** This study gives a fair picture of pattern of common skin diseases in urban Dhanmondi and its surrounding locality, Dhaka. From this study, it can be concluded that better health education, maintaining personal hygiene, improvement in the standard of living, proper case diagnosis and proper treatment may remain of importance in managing common skin diseases.

**Keywords:** Skin diseases, Pattern, Outdoor Patient Department (OPD)

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## INTRODUCTION

Skin problems are one of the most common health problems seen in the developing countries. The pattern of skin diseases varies from one country to another country and in various regions within the same country. Every individual suffers from skin disease at some point in time during his lifetime.<sup>1</sup> The prevalence of skin disease in any region or country depends on various factors, such as economy, literacy, racial and social

customs, nutritional status and climatic conditions.<sup>1-3</sup> Also overcrowding and poor standards of hygiene are important factors of determining the distribution of skin diseases in developing countries.<sup>4</sup>

As the pattern of skin diseases varies in different parts of a country, the aim of this study was to assess the pattern of skin diseases in patients visiting the Dermatology and Venereology OPD of a tertiary care teaching hospital in relation to basic demographic characteristics and seasonal conditions.

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**MATERIALS AND METHODS**

This cross sectional study was conducted in the OPD of Dermatology and venereology of Northern International Medical College Hospital, a tertiary care teaching hospital, Dhaka, Bangladesh, during the period of one year starting from 1st January 2012 to 31st December 2012. A total of 1169 patients (511 male and 658 female) aged 10-44 years, attended in the OPD in which 969 patients (450 male and 519 female) were found to have dermatological problems. Each patient was given ID No. to avoid double entry.

Diagnosis was made on face to face interview and clinical examinations and laboratory investigations were done whenever required. Detailed history about personal, medical, family, socio-economic and occupation was taken which were documented in a data collection sheet.

**STATISTICAL ANALYSIS:**

Data were analyzed by using SPSS soft-ware version 18. The values for quantitative data were expressed as mean, mean ± SD, while that of qualitative data were presented as percent.

**RESULTS**

Total 1169 patients attended in Dermatology & Venereology OPD of NIMCH from 1st January 2012 to 31st December 2012 (1 year). Among them, 511 (43.7%) were male and 658 (56.3%) were female. Out of 1169 patients, 969 (82.9%) patients were found to have dermatological problems in which 450 (46.4%) were male and 519 (53.6%) were female (Table I).

**Table I**  
*Distribution of patients according to gender*

Group	Total Patients			Skin disease Patients		
	Total	Male	Female	Total	Male	Female
No. of patients	1169	511	658	969	450	519
Percentage (%)	100	43.7	56.3	82.9	46.4	53.6

The mean ± SD of age in male and female total patients were 32.88 ± 28.57 years and 32.25 ± 26.61 years, respectively. However, in skin disease patients mean ± SD of age in male was 25.68 ± 7.80 years and in female was 25.89 ± 9.42 years (Table II).

**Table II**  
*Distribution of patients according to age*

Group	Age in years (mean ± SD)	
	Total Patients	Skin disease Patients
Male	32.88 ± 28.57	25.68 ± 7.80
Female	32.25 ± 26.61	25.89 ± 9.42

A remarkable part (41.4%) of the patients was illiterate. Majority of the patients (67.6%) belonged to poor socio-economic class. 61.4 % patients were residing in overcrowded homes and 53% patients were not maintained personal hygienic standards (Table III).

**Table III**  
*Distribution of patients (n=969) according to some selected characteristics*

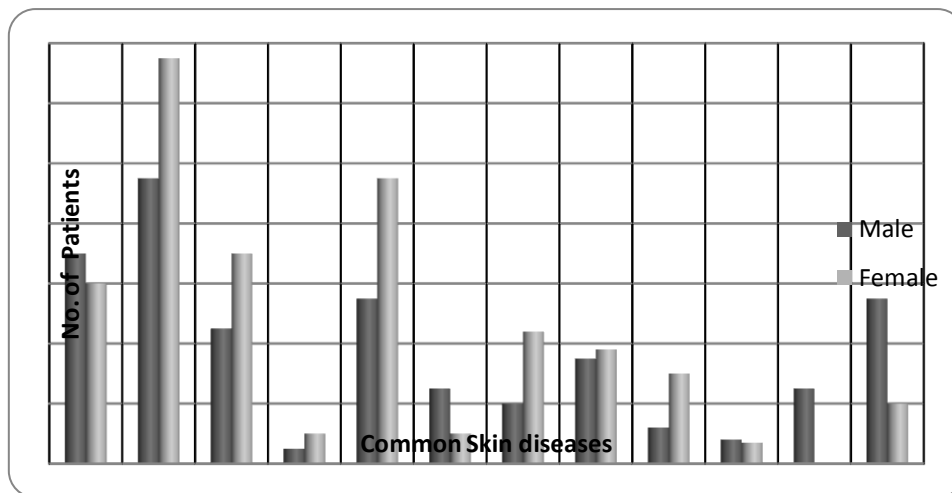
Characteristics	Number (in percent)	
Educational Status	Primary education	63 (6.5)
	Higher school	315 (32.5)
	Graduate and above	190 (19.6)
	Illiterate	401 (41.4)
Socio-economic Status	Poor	655 (67.6)
	Good	314 (32.4)
Over-crowding households	Yes	595 (61.4)
	No	374 (38.6)
Personal hygiene	Maintained	259 (26.7)
	Not maintained	710 (73.3)

Eczema (23.7%) was found to be the most common skin disease followed by fungal infection (15.5%), scabies (13.4%), acne vulgaris (11.9%), urticaria (7.5%), melasma (6.6%), vitiligo (4.3%), psoriasis (3.6%), STD (2.6%), viral infection (1.5%) and alopecia (1.5%). Another 7.7% patients had miscellaneous skin diseases (Table IV).

**Table IV**  
Pattern of skin diseases

Skin diseases	Total	Percentage (%)
Scabies	130	13.4
Eczema	230	23.7
Acne vulgaris	115	11.9
Viral infection	15	1.5
Fungal infection	150	15.5
Psoriasis	35	3.6
Melasma	64	6.6
Urticaria	73	7.5
Vitiligo	42	4.3
Alopecia	15	1.5
STD	25	2.6
Miscellaneous	75	7.7

Most of the skin diseases were found to be more common in female (53.6%) than male (46.4%). STD was only found in male patients (Figure 1).



**Figure 1:** Distribution of the patients according to skin diseases

## DISCUSSION

In the present study, we described the pattern of common skin diseases in a tertiary care teaching hospital in Bangladesh. Analysis of 1169 patients showed 969 (82.9%) patients had dermatological problems. The pattern of skin diseases was higher in females (53.6%) than in males (46.4%). This finding was similar with that of other studies.<sup>5,6</sup>

The prevalence of various skin diseases varies according to geographical area and usually related to many factors including race, environment and socioeconomic factors of populations. In the present study, we found that eczema (23.7%) was the commonest skin disorder. This may be attributed to the presence of high number of allergens in industrialized area such as Hazaribagh Tannery area. This result was similar to that of

others.<sup>3,6-11</sup> Fungal infections were the second largest group of disorders seen in 15.5% of patients. The warm and highly humid climate of the country contributed to the higher proportion of fungal infections in this population.<sup>10</sup> Scabies was seen in 13.4% of patients in our study.<sup>10</sup> This may be due to over-crowding, poor socio-economic status and poor personal hygienic standard. Acne vulgaris was seen in 11.9% of patients. It is a major public health problem in westernized world with higher rates in urban areas & increased incidence during hot-humid weather.<sup>12</sup> The percentage of viral infection was relatively low (1.5%) in our study which was comparable to similar studies.<sup>7, 10, 13</sup> STD (2.6%) was only found in male patients which was similar to another study.<sup>10</sup>

Out of 969 patients, 655 (67.6%) belonged to poor socioeconomic class, 595 (61.4%) were those who were residing in overcrowded homes and in 710 (73.3%) patients, hygiene was not maintained which were comparable to similar study.<sup>5</sup>

In the present study, we found that eczema, fungal infection, scabies and acne vulgaris were the most common skin disorders while the prevalence of viral infection, melasma, urticaria, psoriasis, vitiligo, alopecia and STD were comparatively less.

## CONCLUSION

This study gives a fair picture of pattern of common skin diseases in urban Dhanmondi and its surrounding locality, Dhaka. From this study, it can be concluded that better health education, maintaining personal hygiene, improvement in the standard of living, proper case diagnosis and proper treatment may remain of importance in managing common skin diseases.

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