

Original article

Pattern of skin diseases in patients attending OPD of selected upazilla health complex, Bangladesh

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Abstract

Skin diseases differ in different countries, and within various regions of a country depending on social, economic, racial and environmental factors. Many patients have reported various patterns of skin diseases in different countries. It was a descriptive type of cross sectional study conducted at outpatient department (OPD) of Dhamrai upazilla health complex to know the pattern of skin diseases during the period of June 2018 to December 2018. Total 2000 patients at any age and sex who attended in the OPD of the hospital with different types of skin disorders/diseases were selected as study population. Among the patients 27.05% were less than 10 years of age and 56.04% were female, 45.05% patients were illiterate, 57.03% had monthly family oncome more than Tk 15000 and 40.89% were housewife, 20.01% were students. The diagnosis was made on clinical basis as an expert dermatologist. Lab. investigations were restricted to the cases where they carried diagnostic importance. Majority (57%) were suffering from some infectious among them 33.02% had parasitic infection, 28.3% suffering from fungal infection, 20.1% bacterial infection and 43% from some non-infectious skin diseases among them 37.79% had eczema, 17.87% had papulosquamous disease, 14.25% had acne, 14.01% had urticaria, 8.7% had vitiligo. Infectious skin diseases were the most common skin disease seen in our study, followed by dermatological infections. The emerging challenges for dermatologists are to prevent and reduce these skin diseases.

Keywords: Pattern, Skin diseases, OPD

Introduction

The largest external organ, which is also the largest organ in general, is the skin. Skin diseases affect all ages from neonates to the elderly¹. It causes harm in a number of ways and can have a profound effect on both the individual and the community. Morbidity is significant through disfigurement, disability or symptoms such as intractable itch impair quality of life, even social isolation and economic burden². Death, though rare but still seen from metastatic skin cancer. Many times, some dermatological manifestations may give some clues to the presence of benign or malignant systemic diseases in individual. Despite the high frequency of certain skin diseases in developing countries, they have so far not been regarded as a significant health problem in the development of public health strategy³. The pattern of skin diseases varies from country to country. Even in the same country it differs from region to region. Types of skin diseases are influenced by various factors like genetics, race, religion, occupation, nutrition, and habits⁴. Geographical factors such as season and climate also contribute to the increased prevalence of certain types of skin disorders in a particular area. Bangladesh is such a country where wide variation in climate, socioeconomic status, religion, and customs is quite prevalent in different parts of the

country⁵. In developing countries, other than hot and humid climatic conditions, low hygiene, poor access to water, overcrowding, high interpersonal contact also play significant etiological role for certain skin diseases like pyoderma, scabies, fungal infection⁶. In developing countries 70% of the people suffer from skin diseases in some parts of their life⁷. Many do not have access to basic skin services and even in developed countries 15% of the patients apply home remedies before proper medical services⁸. Many of the skin infections are endemic in developing countries. However, the epidemiology of these diseases is inadequately understood in many areas, particularly in Bangladesh⁹. Different studies have shown different results. Moreover, there is scarcity of knowledge about common skin diseases which can be very easily treated by general practitioners reducing the burden on specialized centers for management of more complicated skin diseases. In addition, there is a need to create awareness among public and primary health care providers to educate people about preventive aspects related to skin diseases so that the burden of disease can be minimized.¹⁰ Therefore, this present study was undertaken to know the pattern of skin diseases among the patients attending the OPD of Dhamrai Upazilla Health complex, Dhaka, Bangladesh.

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Materials and Methods

A cross-sectional study was conducted in the outpatient department of Dhamrai Upazilla Health Complex, Dhaka, Bangladesh during the period from June 2018 to December 2018. Total 2000 patients at any age and both sex who attended in the OPD of the hospital were considered as study participants. There was a pre-designed questionnaire for data collection from the respondents. In this study, the sociodemographic profiles and diseases pattern was also taken into consideration. The diagnosis was made on clinical basis by me as an expert dermatologist. Lab. investigations were restricted to the cases where they carried diagnostic importance. Data were collected through direct interview of the patients at the respective department by physician. Collected data was checked and edited first. Then they were processed with the help of software SPSS (Statistical Package for Social Sciences) version 22.

Results

It was a cross-sectional study and was conducted in the outpatient department of Dhamrai Upazilla Health Complex, Dhaka, Bangladesh during the period from June 2018 to December 2018. In total 2,000 patients were recruited for this study who were presented with skin diseases in the OPD of that hospital. Out of 2,000 patients 541(27.05%) were less than 10 years of age followed by 461(23.04%) within 11 to 20 years, 372(18.63%) within 41 to 60 years of age, 337(16.83%) within 21-40 years of age, and 289 (14.44%) more than 60 years of age. Among the patients 901(45.05%) were illiterate and only 98(4.9%) were graduate. Majority 1141(57.03%) patients had monthly family income more than Tk 15000. Regarding occupational status 818(40.89%) were housewife, 400(20.01%) were students, 301(15.03%) service holder. (Table 1) Of these 1121(56.04%) were female and 879 (43.96%) were male. (Figure 1) We found infectious and non-infectious, both types of diseases in our study. Among the patients 1140 (57%) were suffering from some infectious and 860 (43%) from some non-infectious skin diseases. (Figure 2) Out of 2000 patients, 1140 (57%) suffering from infectious diseases among 379 (33.02%) had parasitic infection, 324 (28.3%) suffering from fungal infection, 230(20.1%) bacterial infection, 104(9.56%) viral infection, 55(4.72%) sexually transmitted infections (STIs), and 48(4.16%) suffering from other infectious diseases. (Table 2) Regarding non-infectious diseases, 326 (37.79%) had eczema, 154(17.87%) had papulosquamous disease, 123 (14.25%) had acne, 120 (14.01%) had urticaria, 75 (8.7%) had vitiligo, 27 (3.15%) had drug reaction, 8(0.94%) had chronic arsinocosis,

6(0.7%) had neoplastic skin disorder, 10(1.28%) had Genodermatoses, and rest 11(1.3%) patients had some other non-infectious skin diseases. (Table 3)

Table 1: Sociodemographic characteristics of patients (n = 2000)

Sociodemographic characteristics	Frequency (n)	Percentages (%)
Age in years		
Less than 10 years	541	27.05
11-20 years	461	23.04
21-40 years	337	16.83
41-60 years	372	18.63
>60 years	289	14.44
Educational status		
Illiterate	901	45.05
Primary	681	34.03
Secondary	320	16.02
Graduate	98	4.9
Monthly family income in Taka		
Less than 15,000 taka	1141	57.03
More than 15,000 taka	859	42.97
Occupational status		
Housewife	818	40.89
Students	400	20.01
Service	301	15.03
Others	481	24.07
Total	2000	100

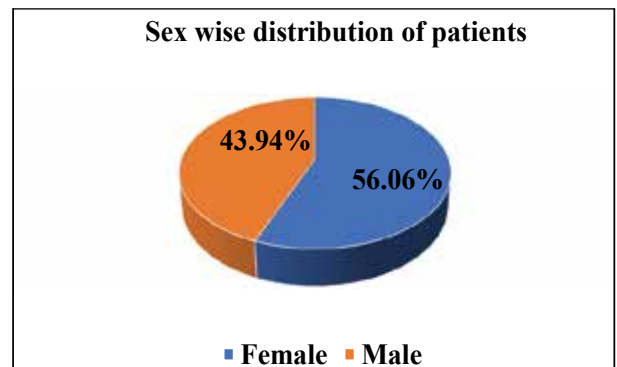


Figure 1: Sex wise distribution of patients (n=2000)

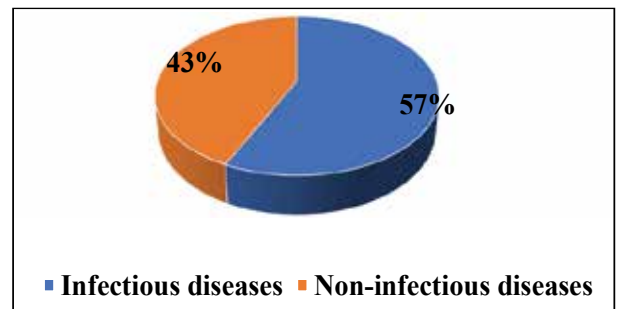


Figure 2: Infectious and non-infectious diseases of patients (n=2000)

Table 2: Distribution of infectious diseases of patients (n=1140)

Infectious diseases of patients	Frequency (n)	Percentages (%)
Parasitic	379	33.2
Fungal	324	28.3
Bacterial	230	20.1
Viral	104	9.56
STI	55	4.72
Other infectious diseases	48	4.16
Total	1140	100

Table 3: Distribution of Non-infectious diseases of patients (n=860)

Non infectious diseases of patients	Frequency (n)	Percentages (%)
Eczema/Dermatitis	326	37.79
Papulo Squamous disease	154	17.87
Acne	123	14.25
Urticaria	120	14.01
Vitiligo	75	8.7
Drug reaction	27	3.15
Chronic arsenicosis	8	0.94
Neoplastic skin disorder	6	0.7
Genodermatoses	10	1.28
Other non-infectious diseases	11	1.3
Total	860	100

Discussion

It was a cross-sectional study and was conducted in the outpatient department of Skin and Venereal Diseases of Dhamrai Upazilla Health Complex, Dhaka, Bangladesh during the period from June 2018 to December 2018. In total 2,000 patients were recruited for this study who were presented with skin diseases in the OPD of that hospital. Out of 2,000 patients 541(27.05%) less than 10 years of age followed by 461(23.04%) within 11 to 20 years, 372(18.63%) within 41 to 60 years of age, 337(16.83%) within 21-40 years of age, and 289 (14.44%) more than 60 years' of age. The largest group of population (50.7%) was in their second and third decades.⁸ In another study, although there was female preponderance with skin disorders of 55.7%,

the largest group was in the third and fourth decades of life (49.1%), respectively.⁹ In Singapore more patients were in age group 20 to 39 years; however, in Egypt it is more on 2nd decade. Among the patients 901(45.05%) were illiterate and only 98(4.9%) were graduate. About 1141(57.03%) patients had monthly family income more than Tk 15000 and 40.89% were housewife, 20.01% were students, 15.03% service holder. Majority 56.04% were female and 43.96% were male. Which is similar to other study where female patients were more in studies done in Denmark and Egypt.¹¹ In a study by Grover et al.⁸ the prevalence of skin disorders presented with female preponderance. In the present study 1140 (57%) were suffering from some infectious and 860 (43%) from some non-infectious skin diseases which was similar to other study done in Bangladesh where (65409, 54.9%) had infectious diseases and (53819, 45.1%) had non-infectious diseases.¹² In current study, 1140 (57%) suffering from infectious diseases among 379 (33.02%) had parasitic infection, 324 (28.3%) suffering from fungal infection, 230(20.1%) bacterial infection, 104(9.56%) viral infection, 55(4.72%) sexually transmitted infections (STIs), and 48(4.16%) suffering from other infectious diseases. Which was not similar to study done in Pakistan where Out of 71,681, eczema was diagnosed in 22,275 (31.07%), infections including bacterial, viral, fungal, sexually transmitted infections (STIs) in 20,178 (28.16%).¹³ Regarding non-infectious skin diseases, 326 (37.79%) had eczema, 154(17.87%) had papulosquamous disease, 123 (14.25%) had acne, 120 (14.01%) had urticaria, 75 (8.7%) had vitiligo, 27 (3.15%) had drug reaction, 8(0.94%) had chronic arsenicosis, 6(0.7%) had neoplastic skin disorder, 10(1.28%) had Geno dermatoses, and rest 11(1.3%) patients had some other non-infectious skin diseases. In other study where acne 7910 (11.03%), drug reactions 4830 (6.74%), urticaria 2910(4.06%), and pigmentary disorders such as lichen planus, melasma and vitiligo were reported in 2739 (3.82%) cases. In addition, psoriasis was reported in 2724 (3.80%), bullous disorders in 1187 (1.66%) and connective tissue disorders in 645 (0.90%).¹³

Limitations of the Study

This was a single-centered study. So, the results may not reflect the scenario of the whole country.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Conclusion

Infectious skin diseases were the most common skin disease seen in our study, followed by dermatological infections. The emerging challenges for dermatologists are to prevent and reduce these skin diseases. Government

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and policymaker should give more attention to this group for being a healthy society with free of skin diseases.

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