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Original Article

The Pattern of Skin Diseases in Patients Attending OPD of Dermatology and Venereology at TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh

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Abstract

Background: The pattern of skin diseases is a vital part of the education of medical science. In developing countries like Bangladesh, skin diseases are very prevalent. On the other hand, difference in environment and climate, skin disease pattern differs from one country to another and even crosswise diverse parts within the same country. The prevalence of skin disease varies from 11.16 % to 63 % in overall population and this prevalence differs in different ages of the residents of the same country.

Aim of the study: This study aimed to assess the pattern of skin diseases in patients attending the outpatient department (OPD) dermatology and venereology at the TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh.

Materials and Methods: This was a cross-sectional study that was conducted in the outpatient department of dermatology and venereology at the TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh from January 2022 to December 2022. In total 3302 patients of skin diseases were enrolled in this study as the study subjects. A purposive sampling technique was used in sample selection. All the demographic and clinical information were recorded. All data were processed, analyzed and disseminated by using the MS Office program.

Results: In this study among the total of 3302 participants, 42% (n=1357) were male whereas the rest 58% (n=1845) were female. So, the male-female ratio of the respondents was 1:1.4. The mean $\pm$ SD age of the patients was 38.38 ± 11.46 years. As per the major distribution of skin disease among our participants, we found more than one-third of our participants (37%) were with fungal disease which was the highest proportion of a single skin disease. Besides, eczema, urticaria, disturbances of pigmentation and scabies was found in 22%, 9%, 7% and 6% cases respectively which were also noticeable. Among some other skin disease patients, acne vulgaris cases were 212 in number which contributed 6.42% of the total study population.

Conclusion: Fungal disease of the skin is very frequent among patients who attended the outpatient department (OPD) of dermatology and venereology at the TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh during January, 22 to December, 22. The frequency of eczema, urticaria, disturbances of pigmentation and scabies are also noticeable among those patients.

Keywords: Skin diseases, Dermatology, Venereology, Fungal infection, Acne. Scabies.

Introduction

The pattern of skin diseases in any community is affected by the genetic constitution, socioeconomic status, climate, occupations, education, customs, hygiene standards and quality of medical care. These factors give every community its unique pattern and account for a wide variation reported from different regions of the globe and even in the same country.¹

Though community-based researches are the best option to determine such patterns, they are difficult to carry out. Usually, most of the studies are based on hospital attendance. The importance of studying such patterns in developing countries is to build healthcare strategies that cope with the respective community requirements as well as the actual needs of citizens. It

is remarkable that most of the patterns in developing countries reveal a predominance of transmissible diseases like skin diseases that are potentially controllable.² Bangladesh has a huge variation in religion, climate, socioeconomic conditions and customs in different parts of this country.³ In developing countries, apart from hot-humid climatic conditions, inadequate hygiene, poor access to water, overcrowding, and high interpersonal contact also play prominent etiological roles in specific skin diseases like pyoderma, scabies and fungal infection.⁴ In a study, it was found that, in developing countries, 70% of people suffer from any skin disease in some tenures of their lives.⁵ In such countries, a lot of patients do not have the scope to use essential skin services, and even in developed countries, about 15% of the patients use only traditional home remedies before taking proper medical services.⁶ In Bangladesh, the epidemiology of this disease is poorly understood in low socio-economic people.⁷ In Indian subcontinent, infectious skin diseases are more common than non-infectious diseases.^{8,9} On the other hand, dermatitis is more common in Denmark, Egypt and Singapore and pre-malignant as well as malignant skin diseases are very common in the United Kingdom.^{10, 11} To reduce this disease burden, awareness development on the etiology, pattern as well as prevention of skin diseases is very necessary.¹² The objective of this current study was to assess the pattern of skin diseases in patients attending OPD of the dermatology and venereology department at the TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh.

Materials and Methods

This was a cross-sectional study that was conducted in the outpatient department of dermatology and venereology department at the TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh from January 2022 to December 2022. In total 3302 skin disease patients who attended the mentioned OPD were enrolled in this study as the study subjects. The study was approved by the ethical committee of the mentioned hospital. Properly written consent was taken from all the participants before data

collection. The whole intervention was conducted following the principles of human research specified in the Helsinki Declaration¹³ and executed in compliance with currently applicable regulations and the provisions of the General Data Protection Regulation (GDPR)¹⁴. As per the inclusion criteria of this study, patients of several ages either male or female suffering from any kind of skin disease for at least one month were included. On the other hand, according to the exclusion criteria of this study, patients with skin disease for more than one year and patients with other major complications and severely ill were excluded. All the demographic and clinical information of the participants was recorded. All data were processed, analyzed and disseminated by using the MS Office program.

Results

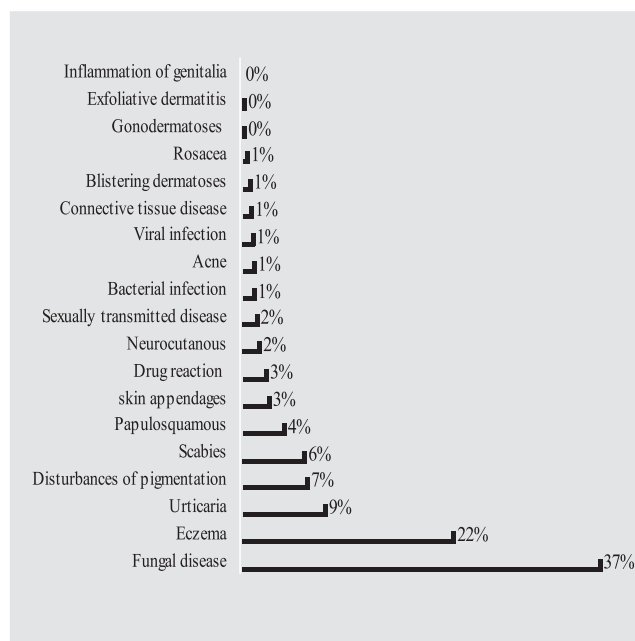


Figure-1 Major distribution of skin disease among the participants (N=3302)

In this study among the total of 3302 participants, we found that more than one-third of our participants (37%) were with fungal disease. Besides, eczema 22%, urticaria 9%, disturbances of pigmentation 7%, scabies 6% and papulosquamous 4% was found respectively which were also noticeable.

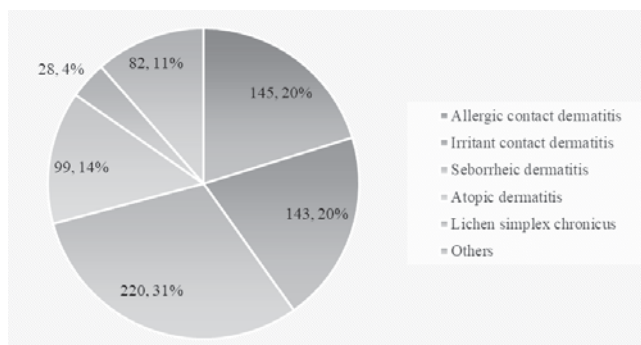


Figure-2 Distribution of participants as per the Eczema (N=1214)

Among eczema patients, seborrheic dermatitis 31%, allergic contact dermatitis 20%, irritant contact dermatitis 20%, atopic dermatitis 14% and lichen simplex chronicus 4%.

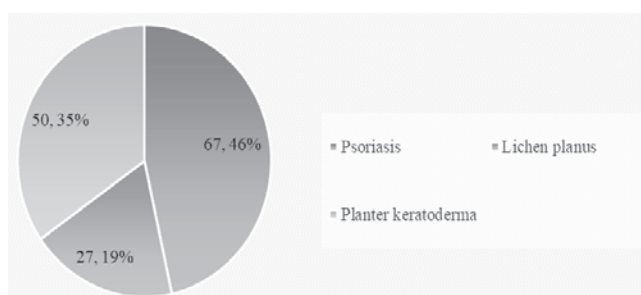


Figure-3 Distribution of participants as per the papulosquamous disease (N=144)

The total papulosquamous cases, nearly about half (46%) were with psoriasis, more than one-third (19%) were with planter keratoderma and the rest of 35% were with lichen planus

Table-I Distribution of participants as per the neurocutaneous dermatoses (N=62)

Disease type	N	Percentage (%)
Prurigo nodularis	11	18
Prurigo simplex	51	82
Total	62	100

According to the distribution of participants as per the neurocutaneous dermatoses where 18% of the cases diagnosed as prurigo nodularis and about 82% were prurigo simplex.

Table II: Distribution of participants as per the urticaria (N=283)

Disease type	N	Percentage (%)
Acute urticaria	227	80
Chronic urticaria	45	16
Allergic rhinitis	8	3
Cold urticaria	3	1
Total	283	100

According to the distribution of participants as per urticaria we found that 80% were with acute urticaria which was noticeable and chronic urticaria were with 16%, allergic rhinitis were 3% and cold urticaria were with 1%.

Table III: Distribution of participants as per the viral infection (N=39)

Disease type	N	Percentage (%)
Herpes zoster	33	85
Genital herpes	6	15
Total	39	100

According to the distribution of participants as per viral infection we found that 85% were with Herpes zoster which was noticeable and Genital herpes 15%.

Table IV: Distribution of participants as per the disturbances of pigmentation (N=223)

Disease type	N	Percentage (%)
Melasma	70	31
Vitiligo	148	66
Acanthosis nigricans	5	2
Total	223	100

According to the distribution of participants as per disturbances of pigmentation we found that 66% were with vitiligo which is large in number and Melasma were with 31% and acanthosis nigricans were only 2%.

Table V: Distribution of participants as per the bacterial infection (N=43)

Disease type	N	Percentage (%)
Impetigo	4	9
Folliculitis	37	86
UTI	2	5
Total	43	100

According to the distribution of participants as per bacterial infection we found that 86% were with folliculitis which is large in number and impetigo were with 9% and UTI were 5%.

Table VI: Distribution of participants as per the skin appendages (N=93)

Disease type	N	Percentage (%)
Androgenic alopecia	54	58
Diffused alopecia	18	19
Alopecia areata	17	18
Hidradenitis suppurativa	4	4
Total	93	100

According to the distribution of participants as per the disease of skin appendages we found that 58% were with androgenic alopecia 18% and diffuse alopecia with 19% and hidradenitis suppurativa were only 4%

Table VII: Distribution of participants as per the sexually transmitted infection (N=50)

Disease type	N	Percentage (%)
Acute urethritis	10	20
Acute gonococcal urethritis	21	42
Nongonococcal urethritis	17	34
Syphilis	2	4
Total	50	100

According to the distribution of participants as per the sexually transmitted infection we found that 42% were with Acute Gonococcal urethritis and Non gonococcal urethritis with 34% and syphilis were only 4%

Table VIII: Distribution of participants as per the inflammation of genitalia (N=3)

Disease type	N	Percentage (%)
Orchitis	1	33
Balanitis	2	67
Total	3	100

According to the distribution of participants as per the sexually inflammation of genitalia we found that 67% were with Balanitis and orchitis were 33%

Table IX: Distribution of participants as per the connective tissue disease (N=32)

Disease type	N	Percentage (%)
Systemic lupus erythematosus	7	22
Discoid lupus erythematosus	9	28
morphea	5	16
striae	11	34
Total	32	100

According to the distribution of participants as per the diseases of connective tissue we found that 34% were with striae and discoid lupus erythematosus were with 28% and morphea were only 16%

Table X: Distribution of participants as per the chronic blistering dermatoses (N=26)

Disease type	N	Percentage (%)
bullous pemphigoid	6	23
Pemphigus vulgaris	12	46
Dermatitis herpetiformis	5	19
Hailey-Hailey disease	3	12
Total	26	100

According to the distribution of participants as per the chronic blistering dermatoses we found that 46% were with pemphigus vulgaris and bullous pemphigoid were with 23% and Hailey Hailey disease were only 12%

Table XI: Distribution of participants as per the drug reaction skin disease (N=85)

Disease type	N	Percentage (%)
bullous drug reaction	13	15
Fixed drug reaction	72	85
Total	85	100

According to the distribution of participants as per the drug reaction skin disease we found that 85% were with fixed drug reaction and bullous drug reaction were 15%.

Table XII: Distribution of participants as per the genodermatoses (N=8)

Disease type	N	Percentage (%)
Ichthyosis	4	50
Neurofibromatosis	4	50
Total	8	100

According to the distribution of participants as per the genodermatoses we found that 50% were with Neurofibromatosis and Ichthyosis were with 50%

Table XIII: Distribution of participants as per the other skin disease (N=280)

Disease type	N	Percentage (%)
Acne	40	14
Scabies	212	76
Exfoliative dermatitis	8	3
Rosacea	20	7
Total	280	100

Among some other skin disease patients, acne vulgaris cases were 212 in number which contributed 76% of the total study population.

Discussion

This study aimed to assess the pattern of skin diseases in patients attending the OPD of the dermatology and venereology department at the TMSS Medical College and Rafatullah Community Hospital, Bogura, Bangladesh. As per the major distribution of skin disease among our participants, we found that more than one-third of our participants (37%) were with fungal disease. Besides, eczema 22%, urticarial 9%, disturbances of pigmentation 7% and scabies 6% was found, which were also noticeable. The majority of our fungal disease patients (47%) were with tinea cruris and were with corporis 14%, tenia capitis 24% and pityriasis versicolor (PV) 10% respectively. Fungal infection was the predominant subgroup parallel to data reported in Tunisia,¹⁵ but it was comparatively higher in some reports from other nearby countries.^{16,17} Among the total eczema patients, were with seborrheic dermatitis 31%, allergic contact dermatitis 20%, Irritant contact dermatitis 20%, atopic dermatitis 14% and lichen simplex chronicus 4%. Among the total papulosquamous disease cases, 47% were with psoriasis, more than one-third of participants (35%) were with planter keratoderma and the rest of 19% were with lichen planus. The papulosquamous diseases came after, and they were slightly lower compared with most reports.^{18,19} The most common disease was psoriasis, which occupied a midpoint among percentages in other studies.^{20,21}

According to the distribution of neurocutaneous dermatoses among the participants, we observed that more than three-fourths of the participants (82%) were with prurigo simplex. Besides, only 18% of participants were with prurigo nodularis. Among the urticaria patients, 80% were with acute urticaria which was noticeable. These findings are comparable with some previous studies.^{22,23} We found that 85% of the viral infection cases were with herpes zoster and the rest 15% were with genital herpes. These findings were consistent with the findings of another study.²⁴ More than three-fourths (86%) of our bacterial infection cases, were with folliculitis. Besides, 9% and 5% were with impetigo and UTI respectively. Among the cases with pigmentation, the majority (66%) were with vitiligo, 31% were with melasma and only 2% were with acanthosis nigricans whose findings were comparable with that in another study.²⁵ In the current study, the number of scabies patients was noticeable. The prevalence of scabies varies remarkably with variables in each community even within the same locality.²⁶ In our study, among some other skin disease patients, acne vulgaris cases were 212 in number which contributed to 6.42% of the total study population. In an Indian community, the prevalence of acne vulgaris was found 38%²⁷ which was very dissimilar from our findings. However, all the findings of this current study may be helpful in further similar studies.

Limitation of the study:

This was a single-centered study. Moreover, the study was conducted over a very short period. So, the findings of this study may not reflect the exact scenario of the whole country.

Conclusion

The frequency of eczema, urticaria, disturbances of pigmentation and scabies are also noticeable among those patients.

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Conflict of interest: None declared.

References

1. William HC. Epidemiology of skin disease. In: Burns T, Breathnach S, Cox N, Griffiths C, eds. *Rook's Textbook of Dermatology*, 7th edn. Oxford: Blackwell Science, 2004: 6.8–6.
2. Dagneu MB, Erwin G. Epidemiology of common transmissible skin diseases among primary school children in north-west Ethiopia. *Trop Geogr Med* 1991; 43: 152–155.
3. Atraide DD, Akpa MR, George IO. The pattern of skin disorders in a Nigerian tertiary hospital. *J Public Health Epidemiol*. 2011; 3(4):177-81.
4. Devi TB, Zamzachin G. Pattern of skin diseases in Imphal. *Indian Journal of Dermatology*. 2006; 151(2):149.
5. Symvoulakis EK, Krasagakis K, Komninos ID, Kastrinakis I, Lyronis I, Philalithis A, Tosca AD. Primary care and pattern of skin diseases in a Mediterranean island. *BMC Family Practice*. 2006; 7(1): 1-6.
6. Grover S, Ranyal RK, Bedi MK. A cross-section of skin diseases in rural Allahabad. *Indian journal of dermatology*. 2008; 53(4): 179.
7. Jain S, Barambhe MS, Jain J, Jajoo UN, Pandey N. Prevalence of skin diseases in rural Central India: A community-based, cross-sectional, observational study. *Journal of Mahatma Gandhi Institute of Medical Sciences*. 2016; 121(2):111.
8. 10Kar C, Das S, Roy AK. The pattern of skin diseases in a tertiary institution in Kolkata. *Indian journal of dermatology*. 2014; 59(2): 209.
9. Doe PT, Asiedu A, Acheampong JW, Rowland Payne CM. Skin diseases in Ghana and the UK. *International journal of dermatology*. 2001; 40(5): 323-6.
10. Chua, Ty G, Goh CL, Koh SL. The pattern of skin diseases at the National Skin Centre (Singapore) from 1989–1990. *International journal of dermatology*. 1992; 31(8): 555-9.
11. El Khateeb EA, Imam AA, Sallam MA. The pattern of skin diseases in Cairo, Egypt. *International journal of dermatology*. 2011; 50(7): 844-53.
12. Onayemi O, Isezuo SA, Njoku CH. Prevalence of different skin conditions in an outpatients' setting in northwestern Nigeria. *International journal of dermatology*. 2005; 44(1): 7-11.
13. World Medical Association. (2001) World Medical Association Declaration of Helsinki. Ethical principles for medical research involving human subjects. *Bulletin of the World Health Organization*, 79 (4) ¶ 373 - 374. World Health Organization. <https://apps.who.int/iris/handle/10665/268312>.
14. Voigt, Paul, and Axel von dem Bussche. "Enforcement and fines under the GDPR." *The EU General Data Protection Regulation (GDPR)*. Springer, Cham, 2017. 201-217.
15. Souissi A, Zeglaoui F, Zouari B, Kamoun MR. A study of skin diseases in Tunis. An analysis of 28,244 dermatological outpatient cases. *Acta Dermatovenerol Alp Panonica Adriat* 2007; 16: 111–116.
16. Parthasarathy A, Al Gufai AF. The pattern of skin diseases in Hail Region, Saudi Arabia. *Ann Saudi Med* 1998; 18: 558–561.
17. Baghestani S, Zare S, Mahboobi AA. Skin disease patterns in Hormozgan, Iran. *Int J Dermatol* 2005; 44: 641–645.
18. Parthasaradhi A, Al Gufai AF. The pattern of skin diseases in Hail Region, Saudi Arabia. *Ann Saudi Med* 1998; 18: 558–561.