

Pattern of Skin Diseases: Study in Mymensingh Medical College, Mymensingh, Bangladesh

Dr. Rafiqul Islam^{1*}, Dr. Md. Nazrul Islam², Dr. Mohammed Mosharraf Hossain³¹Assistant Professor, Department of Dermatology, Mymensingh Medical College, Mymensingh, Bangladesh²Assistant Professor, Department of Dermatology, Rajshahi Medical College Hospital, Rajshahi, Bangladesh³Assistant Professor, Department of Dermatology, Shahid Syed Nazrul Islam Medical College, Kishoreganj, BangladeshDOI: [10.36347/sjams.2020.v08i11.047](https://doi.org/10.36347/sjams.2020.v08i11.047)

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*Corresponding author: Dr. Rafiqul Islam

Abstract

Original Research Article

Introduction: Skin diseases are one of the most common health problems seen in the developing countries. It is generally agreed that the pattern of skin diseases differs in different countries, and various factors like environment, economy, literacy, racial and social customs. **Objective:** To assess the pattern of skin diseases in Mymensingh Medical College, Mymensingh, Bangladesh. **Material & Methods:** This cross-sectional retrospective study was conducted at outpatient department of Dermatology and Venereology in Mymensingh Medical College, Mymensingh, Bangladesh during the period from January, 2020 to October 2020. A total of 24,280 patients visited OPD for skin and Venereal diseases during the tenure of the study. Among them 18,567 were newly diagnosed patients selected as study participants. 14,012 patients were male and 14,955 patients were female. **Results:** A total number of 3722(36.96%) cases were parasitic diseases of which 3,642(97.85%) cases were scabies and 80(2.15%) cases were pediculosis. Out of 2,801(27.81%) fungal diseases tinea capitis, tinea corporis, tinea cruris, candidiasis, onychomycosis and pityriasis versicolor were found in 186(6.64%) cases, 1365(48.73%) cases, 465(16.60%) cases, 326(11.64%) cases, 195(6.96%) cases and 264(9.43%) cases respectively. Distribution of the patients according to type of non-infective disease was showed. Among 4,869(57.31%) eczema cases, Seborrheic dermatitis was found in 1,072(22.02%) cases, Pompholyx was in 618(12.69%) cases, Lichen simplex chronicus was in 516(10.60%) cases and undetermined type was in 256(5.26%) cases. Among 473(5.57%) cases of Papulo Squamous Disease, Psoriasis was found in 211(44.61%) cases, lichen planus was in 211(44.61%) cases, pityriasis rosea was in 76(16.07%) cases and Others was in 29(6.13%) cases. Acne was found in 2063(24.28%) cases. Urticaria was found in 1749(84.78%) cases. Vitiligo was found in 314(15.22%) cases. **Conclusion:** A massive burden of skin diseases is existing mostly bacterial and parasitic. Among the infectious disease's scabies, tinea corporis impetigo, pyoderma and verruca are the most common infection. Among sexually transmitted infection (STI), nonspecific urethritis and gonococcal urethritis are frequently found in this study.

Keywords: Skin Diseases, Parasitic Diseases, Scabies, Eczema.

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INTRODUCTION

Skin diseases are also influenced by various factors like environment, economy, literacy, racial and social customs. The pattern of skin diseases differs from one country to another country and in several regions within the same country. Each individual suffers from skin disease at some point in his life [1]. Skin diseases affect all ages from neonate to the elderly [2]. Its sources harm in a number of ways and can have a deep effect on both the individual and the community. Disease is significant through disfigurement, disability or symptoms such as inflexible itch impairs quality of life, even social separation and economic burden [3]. Types of skin diseases were influenced by several influences like genetic, race, religion, occupation,

nutrition and habits [4]. In developing countries 70% of the people suffer from skin diseases in some chunk of their life [5]. Many do not have access to basic skin services and even in established countries 15% of the patients apply home remedies before proper medical services [6]. Keeping in interpretation the reputation of health issues associated to skin it is significant to devise means and measures to evaluation the burden of disease which affects not only the patient's life but also their families and society. Many of the skin infections are endemic in developing countries. However, the epidemiology of these diseases is incompetently unstated in many areas, particularly in Bangladesh [7]. This article is also an attempt to discover some approaches for the upcoming of appropriate

administration of skin diseases in Bangladesh. Bangladesh is recognized to have a high prevalence of skin diseases. As reported by the Directorate General Health Services (DGHS) [8], figures range from 5.3% (1990) to as high as 12.9% (1995) among patients at the region level or below hospitals. The similar report mentions skin diseases as one of top ten leading cause of morbidity amongst the Bangladeshis. In an earlier publication from the same basis, it was described that skin disease produced morbidity to the tune of 10.1% and 9.3% in 1988 and 1989 respectively [9]. In addition, there is a need to produce consciousness between public and primary health care providers to teach people about preventive characteristics related to skin diseases so that the burden of disease can be minimized [10]. 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.

OBJECTIVE

To assess the pattern of skin diseases in Mymensingh Medical College, Mymensingh, Bangladesh.

METHODOLOGY AND MATERIALS

This cross-sectional retrospective study was conducted at outpatient department of Dermatology and Venereology in Mymensingh Medical College, Mymensingh, Bangladesh during the period from January, 2020 to October 2020. A total of 24,280 patients visited OPD for skin and venerol diseases during this period were included as study participants. Eighteen thousand five hundred sixty-seven (18,567) newly diagnosed patients at any age and sex who were attended in the OPD of the hospital were selected as study population. Among them, 8,981 patients were male and 9,586 patients were female. The skin diseases were grouped into Infectious skin diseases 10,071 and non- Infectious skin diseases found 8,496. Cases with doubtful diagnosis were excluded from the study. Diagnosis was made on clinical basis. Lab investigations were done whenever required. Restricted to the cases where it carried diagnostic importance. Data were analyzed using SPSS software version-22.

RESULTS

A total number of 18,567 patients had selected for the study. From Figure-1 we found that 9,586(52%) patients were female and 8,981(48%) patients were male. Table-1 showed the educational status of our patients, maximum patients 7,469(40.23%) were educated or studied up to SSC, followed by 4,145(22.32%) patients were educated or studied up to class V, 3,300(17.77%) were illiterate, 2,519(13.57%) were educated or studied up to HSC, 1,134(6.11%) were graduate or above. (Table-2) A total number of 3722(36.96%) cases were parasitic diseases of which 3,642(97.85%) cases were scabies and 80(2.15%) cases were pediculosis. Out of 2,801(27.81%) fungal diseases

tinea capitis, tinea corporis, tinea cruris, candidiasis, onychomycosis and pityriasis versicolor were found in 186(6.64%) cases, 1365(48.73%) cases, 465(16.60%) cases, 326(11.64%) cases, 195(6.96%) cases and 264(9.43%) cases respectively. Out of 1853(18.40%) bacterial cases, Impetigo was found in cases, pyoderma in 535(28.87%) cases, and folliculitis in 739 (39.88%) cases and leprosy in 6 (0.32%) cases. Among the viral 742(7.37%) cases, verruca was found in 351(47.30%) cases, Herpes simplex was in 167(22.51%) cases, Herpes zoster was in 42(5.66%) cases, Molluscum contagiosum was in 133(17.92%) cases, Varicella was in 35(4.72%) cases and Measles was in 14(1.89%) cases. Among 379(3.76%) sexually transmitted infection (STI) cases, nonspecific urethritis was found in 188(49.60%) cases, Gonococcal urethritis was in 33(8.71%) cases and Others was found in 158(41.69%) cases. Other non-specific skin infection 574(5.70%) were found in this study. In Table-3 distribution of the patients according to type of non-infective disease was showed. Among 4,869(57.31%) eczema cases, Seborrheic dermatitis was found in 1,072(22.02%) cases, Pompholyx was in 618(12.69%) cases, Lichen simplex chronicus was in 516(10.60%) cases and undetermined type was in 256(5.26%) cases. Among 473(5.57%) cases of Papulo Squamous Disease, Psoriasis was found in 211(44.61%) cases, lichen planus was in 211(44.61%) cases, pityriasis rosea was in 76(16.07%) cases and Others was in 29(6.13%) cases. Acne was found in 2063(24.28%) cases. Urticaria was found in 1749(84.78%) cases. Vitiligo was found in 314(15.22%) cases. Among Neoplastic skin disorder 155(1.82%) cases, Premalignant was found in 137(88.39%) cases and Malignant was found in 18(11.61%) cases. Among Genodermatoses 167(1.97%) cases, Ichthyosis was found in 105(62.87%) cases. Neurofibromatosis was found in 23(13.77%) cases and others were in 39(23.35%) cases respectively. Other non-infective disease was found in 769(9.05%) cases.

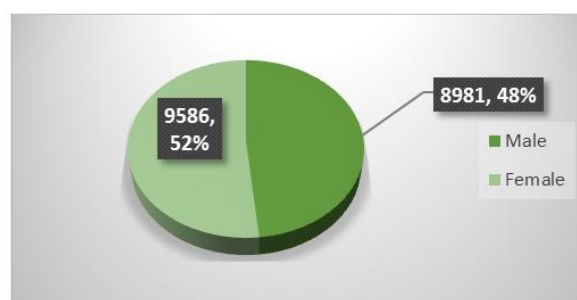


Fig-1: Sex Distribution of the studied participants (n=18,567)

Table-1: Distribution of patient according to educational Status (n=18,567)

Education	n	%
Illiterate	3300	17.77
Up to class (v)	4145	22.32
SSC	7469	40.23
HSC	2519	13.57
Graduate and above	1134	6.11

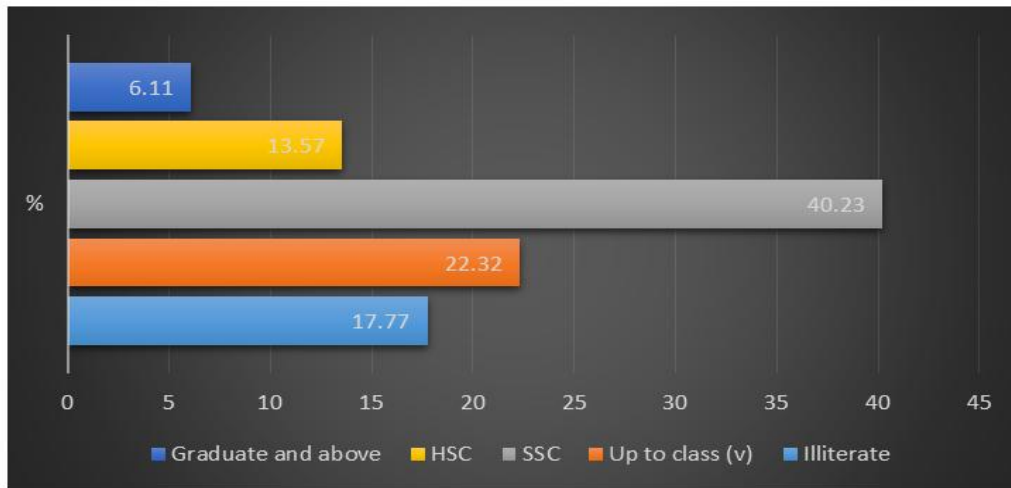


Fig-2: Shows the distribution of patient according to educational Status (n=18,567)

Table-2: Distribution of patient’s according to type of infective disease (n=10,071)

Infective Disease	n	%
Parasite	3722	36.96
Scabies	3642	97.85
Pediculosis	80	2.15
Fungal	2801	27.81
TINEA capitis	186	6.64
TINEA corporis	1365	48.73
TINEA cruris	465	16.60
Candidiasis	326	11.64
Onychomycosis	195	6.96
Pityriasis versicolor	264	9.43
Bacterial	1853	18.40
Impetigo	535	28.87
Pyoderma	573	30.92
Folliculitis	739	39.88
Leprosy	6	0.32
Viral	742	7.37
Verruca	351	47.30
Herpes Simplex	167	22.51
Herpes Zoster	42	5.66
Molluscum contagiosum	133	17.92
Varicella	35	4.72
Measles	14	1.89
STI	379	3.76
Non-specific urethritis	188	49.60
Gonococcal urethritis	33	8.71
Others	158	41.69
Other non-specific skin infection	574	5.70

Table-3: Distribution of the patients according to type of non-infective disease (n=8,496)

Non-Infective Disease	n	%
Eczema	4869	57.31
Seborrheic dermatitis	1072	22.02
Contact dermatitis	1559	32.02
Atopic dermatitis	848	17.42
Pompholyx	618	12.69
Lichen simplex chronicus	516	10.60
Undetermined type	256	5.26
Papulo Squamous Disease	473	5.57
Psoriasis	211	44.61
Lichen planus	157	33.19
Pityriasis rosea	76	16.07
Others	29	6.13
Acne	2063	24.28
Urticaria	1749	84.78
Vitiligo	314	15.22
Neoplastic skin disorder	155	1.82
Premalignant	137	88.39
Malignant	18	11.61
Genodermatoses	167	1.97
Ichthyosis	105	62.87
Neuro fibromatosis	23	13.77
Others	39	23.35
Other non-infective disease	769	9.05

DISCUSSION

Educational status of the most of the patients was SSC which was 7,469(40.23%) cases followed by up to class five, HSC, illiterate and graduate with above. This is similar to in a study by Kar et al., [11] except in that study most of the patients were under V class (22.35%). In this study we found, maximum patients 7,469(40.23%) were educated or studied up to SSC, followed by 4,145(22.32%) patients were educated or studied up to class V, 3,300(17.77%) were illiterate, 2,519(13.57%) were educated or studied up to class XI to XII, 1,134(6.11%) were graduate or above. In infectious disease parasitic diseases were more common. This is alike to Indian study [11-14] but vary from Singapore and Egyptian study [15, 16]. Regarding parasitic diseases scabies were most common. Like few Indian studies, they only mentioned about scabies was more prevalent [11-14]. Out of 2,801(27.81%) fungal diseases tinea capitis, tinea corporis, tinea cruris, candidiasis, onychomycosis and pityriasis versicolor were found in 186(6.64%) cases, 1365(48.73%) cases, 465(16.60%) cases, 326(11.64%) cases, 195(6.96%) cases and 264(9.43%) cases respectively. This is similar to one Indian study [11]. In one Egyptian study among fungal subgroup pityriasis versicolor is most common [16]. Out of 1853(18.40%) bacterial cases, Impetigo was found in cases, pyoderma in 535(28.87%) cases, and folliculitis in 739 (39.88%) cases and leprosy in 6 (0.32%) cases. This result quite similar to Indian [11] and Egyptian [16] study except in Indian study the number of leprosy cases are much higher in that study (17.56%). Among the viral 742(7.37%) cases, verruca was found in 351(47.30%) cases, Herpes simplex was

in 167(22.51%) cases, Herpes zoster was in 42(5.66%) cases, Molluscum contagiosum was in 133(17.92%) cases, Varicella was in 35(4.72%) cases and Measles was in 14(1.89%) cases. This is similar to other Indian [11] and Egyptian [16] studies but differ from Singaporean [15] studies. Among 379(3.76%) sexually transmitted infection (STI) cases, nonspecific urethritis was found in 188(49.60%) cases, Gonococcal urethritis was in 33(8.71%) cases and others was found in 158(41.69%) cases. In one Indian [11] study gonococcal urethritis (52.24%) is more common than syphilis (34%). Other non-specific skin infection 574(5.70%) were found in this study. Whereas in a study in Denmark [17] non-Infective dermatitis is more common, like atopic dermatitis followed by seborrheic dermatitis. In India Das and Chatterjee [18] have found eczema (23.1%), pyoderma (14.29%), fungal infections (14.24%) and psoriasis (7.7%) are the major skin diseases in that part of country. In another study it has been found that eczema (17.48%), fungal (17.19%), pyoderma (9.1%) and scabies (8.97%) are the major pattern of skin morbidities. Fungal diseases (20.6%) were the commonly found infection among children reported by Yasmeen and Khan in their study in Pakistan [19]. Among 4,869(57.31%) eczema cases, Seborrheic dermatitis was found in 1,072(22.02%) cases, Pompholyx was in 618(12.69%) cases, Lichen simplex chronicus was in 516(10.60%) cases and undetermined type was in 256(5.26%) cases. Then among 473(5.57%) cases of Papulo Squamous Disease, Psoriasis was found in 211(44.61%) cases, lichen planus was in 211(44.61%) cases, pityriasis rosea was in 76(16.07%) cases and Others was in 29(6.13%)

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Limitations of the study

It was a cross-sectional retrospective type of study with small sample size. So, It will be hard to generalize the finding for the whole community.

CONCLUSION AND RECOMMENDATIONS

A massive burden of skin diseases is existing mostly bacterial and parasitic. Among the infectious disease's scabies, tinea corporis, impetigo, pyoderma and verruca are the most common infection. Among sexually transmitted infection (STI), nonspecific urethritis and gonococcal urethritis are frequently found in this study. This huge burden of dermatological diseases should be properly managed and cure to prevent the contamination to others. This study gives a fair picture of pattern of common skin diseases. 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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