

Pattern of Skin Diseases at Upazilla Level.

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Abstract

Skin the largest organ in the human body plays a vital role in one's health care. This anatomical barrier regulates the body temperature and interface with the environment for protecting the body against pathogens. The type of skin problems varies in different geographical areas, climate, economic and other factors including personal characteristics such as age and sex. The pattern of skin diseases varies from one area to another and across different parts within the same country. A retrospective study was done among patient attending Upazilla health complex, South Matlab OPD during the period January 2014 to 31 Dec 2014. To determine the pattern of skin diseases seen in a rural upazilla community. All patients attending the Skin & VD outpatient department were included in this study. All those with dermatological complaints were examined in detail, brief relevant history was elicited and clinical diagnosis was made by a consultant dermatologist.

Patient of Skin diseases comprised 8984 (12 % of total 74870 patients at OPD). The most common age group was 11-20 years (36.06%). Infective disorders were found in 62% and non-infective disorders in 32%, of all the dermatological cases. Fungal infections (48.20%) were the most common among infective dermatoses, whereas bacterial infections were 2nd in position. Among the non-infective dermatoses, eczemas were the most common (33.54%) followed by urticaria (23.78%).

In our study, higher prevalence of infective dermatoses especially fungal infections was more common at rural upazilla level. Since the placement of dermatologists at Upazilla Health Complexes, non-infective dermatoses were also identified in great numbers e.g. Urticaria, Psoriasis, Lichen planus, Pityriasis alba Polymorphic Light Eruption, and vitiligo. These patients were diagnosed, treated and followed up regularly at primary health care settings.

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Introduction

The pattern of skin diseases varies from one country to another and across different parts within the same country.¹ Though community-based studies are the best to determine such patterns, they are difficult to carry out. As such, most studies are based on hospital attendance. The importance of studying these patterns in developing countries is to build healthcare strategies that cope with community requirements and actual citizens' needs². The prevalence of skin disease in general population varies from 6.3% to 11.16% in various studies³. But due to several factors, patients may not report for treatment unless compelled by the severity of the symptoms. In Indian survey, up to 80% of population suffering from skin problem may not seek medical help³. European survey suggests that approximately 1 in 7-10 consultations in primary care are for a skin problem⁴. Knowledge of this hidden section of

population is important as it can affect the delivery of primary health care.

In a developing country like Bangladesh, the pattern of skin disease is influenced by environmental factors, socioeconomic condition, education and health care delivery

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system. Eighty percent people in Bangladesh live in rural areas. They depend mainly upon agriculture for livelihood. There are scarcity of essential goods, education, medical facilities & entertainment. Government has appointed consultant dermatologists at upazilla level. So it is justifiable to identify the major skin diseases in rural areas.

A number of workers have reported different patterns of skin diseases in different geographical areas. As there is very little number of such studies done in our country, we performed a retrospective study of skin diseases at Upazilla Health Complex, Matlab(south), Chandpur during the period from 1st January to December 2014.

Methods

All dermatological cases attending the Skin & VD outpatient department were included in the study. All cases were diagnosed by consultant dermatologists on the basis of history, clinical findings and relevant available laboratory investigations e.g. KOH examination, hematological and biochemical investigations. The diseases were tabulated according to their frequency of presentation.

Result

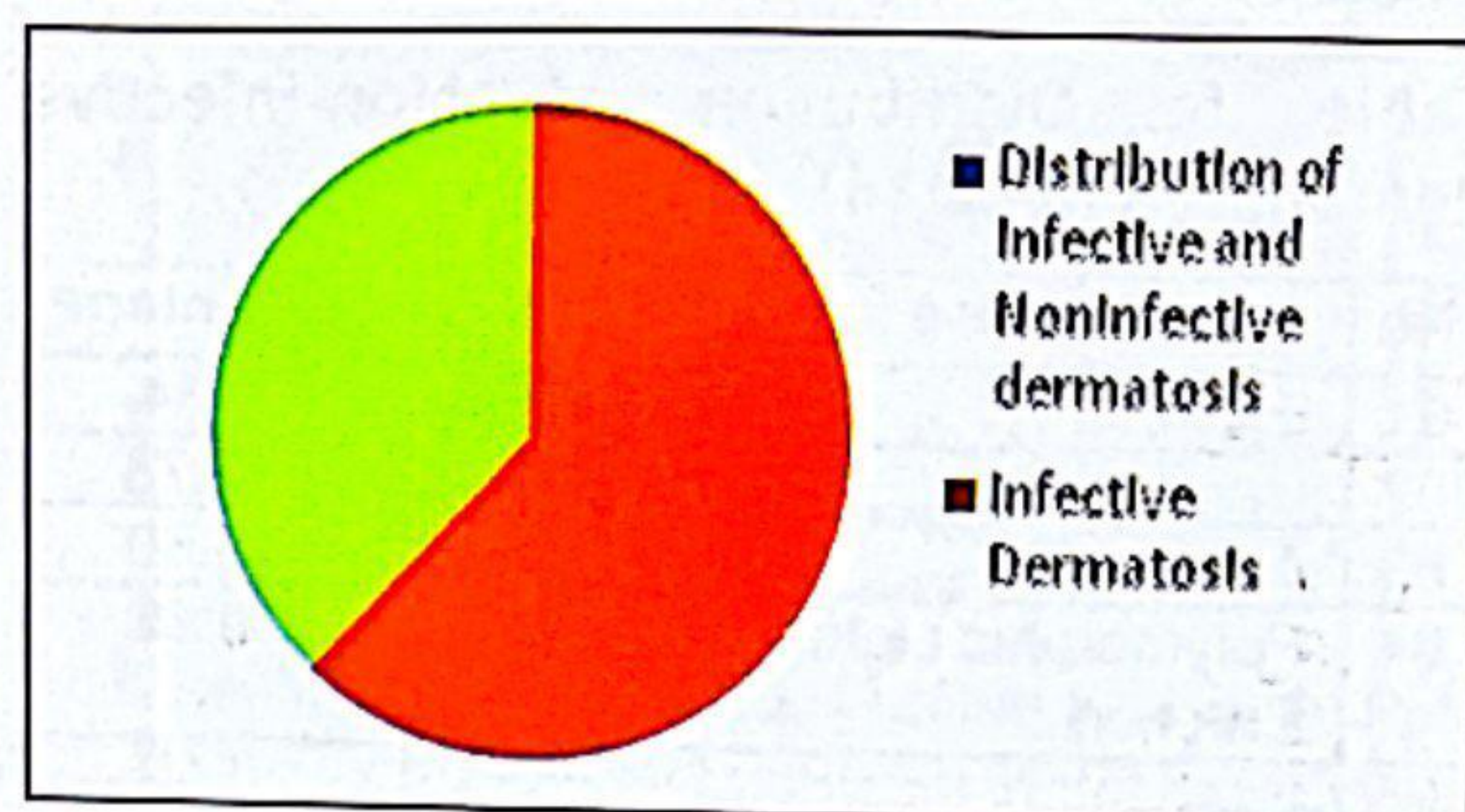
A total of 8984 (12%) patients attended for treatment for skin diseases during one year Upazilla Health Complex, Matlab (South) Chandpur. Total OPD patients were 74,870. The majority of population was in the age group 11-20 years.

Table 1: Distribution of age in study population (N=24,240)

No	Age (years)	Total patients	Percentage (%)
01	0-10	1,164	12.95
02	11-20	3,240	36.06
03	21-30	1,260	14.02
04	31-40	1,450	16.13
05	41-50	1,180	13.58
06	50+	700	7.79

Table 1 shows most common age group is 11-20 years (36.06%).

Pie-chart: Distribution of Infective and Non-infective dermatoses.



Infective dermatoses: 5570 (62%)
Non-infective dermatoses: 3414(38.00%)

Table 2: Distribution of infective dermatoses (N=5570)

No	Disease	Total No	Percentage
01	fungal diseases	2685	48.20
02	bacterial diseases	1896	34.00
03	parasitic diseases	670	12.01
04	viral diseases	319	5.72

Table 2 shows the predominance of fungal infections (48.20%) over other infective dermatoses.

Table 3: Distribution of Fungal diseases (N=2685)

No	Disease	Total No	Percentage
01	Tineacuris	245	9.12
02	Tineacorporis	385	14.33
03	Tineaversicolor	454	16.91
04	Tineapedis	1143	42.47
05	Tineacapitis	156	5.81
06	Tineaunguim	167	6.22
07	Candidiasis	75	2.79
08	Tineamanuum	35	1.30
09	Tineafaciei	25	0.93

TineaPedis was the most common (42.47%) among fungal infections.

Table 4: Distribution of Bacterial diseases (N=1896)

No	Disease	Total No	Percentage
01	Impetigo	570	30.06
02	Folliculitis	454	23.94
03	Furunculosis	170	8.97
04	Paronychia	520	27.43
05	Cellulitis	140	7.38
06	Leprosy	22	1.16
07	Skin Tuberculosis	10	0.53

Impetigo comprises majority of bacterial diseases (30.06%).

Table 5: Distribution of Non-infective dermatoses (N-3414)

No	Disease	Total No	Percentage
01	Eczema	1145	33.54
02	Urticaria	812	23.78
03	Acne	396	11.60
04	Polymorphic Light Eruption	16	0.35
05	Pigmentary disorders	290	8.49
06	Psoriasis	80	2.34
07	Lichen Planus	35	1.02
08	Prurigo simplex	210	6.15
09	Drug reaction	48	1.40
10	Miliaria	70	2.05
11	Nevus	12	0.35
12	Alopecia areata	20	0.58
13	Genodermatoses	16	0.47
14	Prurigonodularis	75	2.20
15	Aphthous ulcer	45	1.31
16	Keloid	15	0.44
17	Miscellaneous	129	3.78

Among Non-infective dermatoses, Eczema was on top of the list (33.54).

Table 6: Distribution of Eczemas (N=1145)

No	Disease	Total patients	Percentage %
01	Contact dermatitis	396	34.52
02	Atopic dermatitis	243	21.07
03	Seborrheic dermatitis	182	15.73
04	Hand dermatitis	93	8.18
05	Hyperkeratotic planter eczema	92	8.01
06	Nummular eczema	86	7.55
07	Pityriasis alba	53	4.94

Table 6 shows highest number of patients was suffering from contact dermatitis (34.52%).

Discussion

Present study brings into focus the pattern of skin diseases in rural areas of Bangladesh. A total of 8984 (12%) patients had skin diseases among 74870 OPD patients. Reports from other studies showed similar results like 7.8% & 11.16%.^{3,6} From the present study, it was found that skin diseases are more common among age group 11 to 20 years (36.06%) followed by 31 to 40 years age group (16.13%). Sanjiv Grover et al reported peak age group at 2nd and 3rd decade.³

The incidence of infective dermatoses (62%) was higher than that of non-infective dermatoses (32%) of all the dermatological cases. In some studies infective dermatoses has outstripped that of non-infective dermatoses varying from 42.68% -89.72%.^{7, 8, 9}

Fungal infections were most common (48.20%) among infective dermatoses. Geographical factors such as occupation and climate contribute to higher incidence of fungal infections in this Population. Jaiswal AK has reported similar findings i.e. fungal infections contributed the major portion of infective dermatoses (46.8%).¹⁰ Bacterial infections were the 2nd most common infection in our study and comprised 38.7%. In a study conducted at Faridpur Medical College Hospital, bacterial infections were found in 31.8%. Among the bacterial infections Impetigo comprised 53.35%. Momin et al reported similar findings i.e. impetigo (53.35%).¹¹ Incidence of leprosy was 1.5% compared to other studies with similar results 2.26%⁵ & 1.7%.⁶ This may be due to awareness of the people regarding this disease and reporting for treatment. It is evident that infestation with scabies was 12.01% in our study whereas Kuruvilla M et al reported 9.44%. which is very much similar to our study.⁸ Khatri ML in his study found the infestation of parasite contributed 8.2%.¹²

Among the non-infective conditions, eczema has been reported as the -largest group (33.54%). Other studies also found similar results varying from 17% to 33.93%. Most common eczema was Contact dermatitis (34.52%). It was the commonest form of eczema (22.69%-23.59%) in various studies.^{5,7,8} Drug reaction contributed 3.32% of non-infective dermatoses. Das KK observed 3.49% in his study⁵. Other non-infective dermatoses e.g. Psoriasis (2.34%), Polymorphic Light Eruption (.35%), Lichen Planus (1.02%), Pigmentary disorders (8.49%)

&Genodermatoses (.47%) etc. were recorded frequently at rural upazilla health complexes level.

Conclusion

Our study explored higher prevalence of infective dermatoses at rural upazilla level. Since the placement of dermatologists at Upazilla Health Complexes, non-infective dermatoses were also identified in greater numbers e.g. Urticaria, Psoriasis, Lichen planus, Pityriasis alba, Genodermatoses, Polymorphic Light Eruption & Vitiligo. These patients were diagnosed, treated and followed up regularly at primary health care situation. Further large scale studies regarding age and seasonal variation of dermatologic diseases at rural level is suggested to review the actual picture of dermatoses in Bangladesh.

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