

Pattern of Skin Diseases among Patients Attending Military Hospital, Ramu

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Abstract

Introduction: The pattern and distribution of skin diseases varies from one country to another and even in different areas within the same country. Skin diseases can be influenced by so many factors like genetics, environment, race, religion, occupation, nutrition and habit. Skin diseases affect all ages from neonate to elderly.

Objectives: To evaluate the pattern of skin diseases in patients attending outpatient department (OPD) at military hospital, Ramu.

Materials and Methods: This cross-sectional observational study was conducted in CMH, Ramu from July to December 2019 among 1700 patients. All newly diagnosed patients of skin diseases irrespective of age and sex attended the OPD of the hospital were selected by purposive sampling. Patients' diagnosis was made clinically by a dermatologist and lab investigations were performed only in case of diagnostic importance.

Results: Mean age of patients was 27.1 ± 12.7 years and 58.8% were male. Majority (96.5%) received formal education and 59.4% were married. The mean of the numbers of family members of the respondents was 4.0 ± 1.0 . Maximum 36.5% respondents suffered from eczema followed by superficial fungal infection 19.5%, scabies 14.1%, acne vulgaris 11.2%, psoriasis 3.5% and viral warts 2.9%. Scabies was higher among younger age group and acne vulgaris was higher among females and these association was statistically significant ($p < .05$).

Conclusion: By appropriate prevention and awareness program morbidity associated with few contagious skin diseases can be reduced and a good amount of money and manpower can be saved.

Key-words: Skin diseases, Military Hospital, Bangladesh

Introduction

The pattern of skin diseases varies from one country to another country and in various regions within the same country. Even within different regions of a country depending on social, economic, racial and environmental factors there have been reports of various patterns of skin diseases. Skin diseases have high morbidity but apparently little mortality. Skin diseases are also influenced by various factors like occupation, environment, economy, literacy, racial and social customs. Occasionally skin

diseases can be a manifestation of systemic diseases. The skin diseases were grouped into infective and non-infective varieties¹. Armed forces personnel and their families, retired service personnel and their families, civilian paid from defense estimates and their families usually attend this Combined Military Hospital, Ramu for treatment. This study was conducted to evaluate the pattern of skin diseases, in patients attending outpatient department of dermatology in Combined Military Hospital, Ramu.

Materials and Methods

This cross-sectional observational study was carried out among 1700 respondents by purposive sampling to assess the pattern of skin diseases among the patients attending at skin OPD of military hospital, Ramu from July to December 2019. All the skin disease cases irrespective of age and sex attending at dermatology department for seeking treatment were considered. Data collection was carried out through face to face interview by asking question. The data were analyzed by using software SPSS v 20 and presented in tables.

Results

Out of 1700 patients, 1000(58.8%) were male and 700(41.2%) were female. All disorders were broadly classified into Non-infective 1064(62.6%) and infective 636(37.4%). Most common skin diseases were found to be eczema 620(36.5%), followed by superficial fungal infection 330(19.5%), scabies 240 (14.1%), acne vulgaris 190(11.2%), psoriasis 60(3.5%), viral warts 50(2.9%) and other skin disease 210(12.4%) which includes alopecia 57, vitilligo 34, urticaria 29, callosity 24, miliaria 20, herpes zoster 15, skin tag 8, lichen plannus 8, chronic arsenicosis 4, melasmas 4, purigo simplex 3, keloid 3 and viral exanthem 1 (Table-I). Among non-infective dermatoses eczema (36.5%), acne (11.2%) and psoriasis (3.5%) constituted top 3 most common dermatoses, whereas fungal infections (19.5%), scabies (14.1%) and viral warts (2.9%) constituted top 3 infectious dermatoses. Maximum reported patients were in the age group of 21-30 years (35.9%) followed by 31-40 years (27.6%).

The mean age was 27.1 years with standard deviation 12.7 years. Majority (96.5%) received formal education followed by pre-school (2.9%) and illiterate (1.6%) group. Among the respondents, 101(59.4%) were married. The mean number of living room per house was 2.0 ± 0.7 with the range 1-4 per rooms. The mean family

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member of the respondents was 4.0±1.0 members with the range 1-7 persons. The maximum respondents belonged to 4-5 members group 1040(61.2%) followed by upto 3 members group 510 (30.0%) per house. As many as 95.3% had habit of daily bathing. Half (50%) of the total respondents used soap for bathing daily. Most of the respondents 1610(94.7%) cleaned their clothing regularly. Majority of the respondents lived in family accommodation 1280(75.3%) and the rest 420(24.7%) lived in barracks.

Maximum 6.5% scabies cases were seen in the age group up to 10 years and with increase age less number of cases was seen and in the age group above 40 years it was only 1.8%. Chi-square test reveals significant association ($p < .05$) between age of the respondents and scabies (Table-II). The frequency of occurrence of scabies was more in the educational class (I-V) and gradually diminishes with increase educational qualification. In the higher educational class it was only 0.6%. Chi-square test shows significant association ($p < .05$) between education of the respondents and scabies. Among Eczema cases; 36.5%, 10.6%, 9.4% and 3.5% were seen in the educational status class VI-X, SSC or equivalent group, HSC or equivalent and Graduate or above group respectively, indicates that educational status of the respondents had influence the occurrence of eczema.

About 240(14.1%) respondents had a positive family history of skin disease in their family while 1460(85.9%) patients did not have such family history. Presence of scabies in the other member of the family had positive influence over development of the disease. Chi-square test shows significant association ($p < .05$) between the family history of skin disease and scabies amongst the respondents. Presence of eczema in the other member of the family had no positive influence over development of the disease of the patient. Chi-square test shows no association between the family history of skin disease and eczema amongst the respondents. Maximum number of acne vulgaris 160(9.4%) cases was seen in younger age group (11-30 years). Chi-square test reveals significant association between age of the respondents and acne vulgaris ($p < .05$). Table-III shows that acne frequently occurring in female 130(7.6%) in comparison to male 60(3.5%). Chi-square test reveals significant association between sex of the respondents and acne vulgaris ($p < .05$).

Table-I: Incidence of infective skin diseases

Disease	Frequency	Percentage
Fungal infections	330	19.5
Scabies	240	14.1
Viral wart	50	2.9
Herper zoster	15	0.8
Viral exanthema	1	0.05

Table-II: Distribution of respondents by age group and presence of scabies (n= 1700)

Characteristics		Presence of scabies		Total	Statistics
		Yes n(%)	No n(%)		
Age of the respondents	Upto 10 yrs	110(6.5)	90(5.5)	200(11.8)	$\chi^2=32.4$ df= 4 $p < .05$
	11-20 yrs	20(1.2)	220(12.9)	240(14.1)	
	21-30 yrs	40(2.4)	570(33.5)	610(35.9)	
	31-40 yrs	40(2.4)	430(25.3)	470(27.6)	
	>40 yrs	30(1.8)	150(8.8)	180(10.6)	
	Total	240 (14.1)	1460 (85.9)	1700 (100)	

Table-III: Distribution of respondents by sex and presence of Acne vulgaris

Characteristics		Presence of acne vulgaris		Total	Statistics
		Yes	No		
Sex of the respondents	Male	60 (3.5%)	940 (55.3%)	1000 (58.8%)	$\chi^2=6.55$ df= 1 $p < .05$
	Female	130 (7.6%)	570 (33.5%)	700 (41.2%)	
	Total	190 (11.2%)	1510 (88.8%)	1700 (100%)	

Discussion

In the present study, several types of skin diseases were found among the respondents. The diseases belonging to different type of eczema 36.5%, superficial fungal infection 19.45%, scabies 14.1% and acne vulgaris 11.2%. Similar results were found by Nasiruddin M¹ March 2004 at CMH, Dhaka and found eczema 35.3% superficial fungal infection 26.7, scabies 8.6%, acne vulgaris 5%. Similar findings were also reported in other studies²⁻⁵. In this study the age distribution shown that highest 35.9% of skin diseases were found in 21-30 years age group, then 27.6% cases in 31-40 years age group and 14.1% cases in 11-20 years group. The mean age of the responded was 27.1±12.7 years. There was significant association in between the different age group and the presence of scabies. There were some age specific distributions of skin disease almost 63.5% cases were seen in 21-40 years age group. They are most productive section of the community and are more exposed to adverse environmental condition. Although skin disease is not uncommon at any age, it was particularly frequent in the elderly. But other study revealed certain skin disease like scabies was distributed in all age group⁶.

In this present study, among the respondents of 240 scabies patients majority 45.8% were upto 10 years of age group and maximum were school going and primary school level children. Scabies is highly contagious disease which is transmitted from person to person by close contact with an infected person and is more common among school children during free mixing in the class room and in the playground. Similar findings were reported in other studies by Okbi LM⁷ et al in Cairo, Masawe AE⁸ in Tanzania on characteristics of scabies. This study depicted that 14.1% of the respondents had a positive history in their family. Similar family history for skin disease was 16% of patients in a study by Yasmeen N and Khan MR⁹. Positive influence of family history was present in the occurrence of scabies in the patients ($p < .05$). The prevalence of skin disease was attributed to poor hygiene, overcrowding with intimate personal contacts in the family group.

It was evident from the study that more than one third (36.5%) of the respondents suffered from eczema, but there was no significant difference in between the different educational qualification and the presence of eczema. It indicates educational status does not interfere with the development of eczema. There is evidence of an immunological basis for the disease (eczema)¹⁰. The present study depicted that maximum no. of acne vulgaris 9.4% cases were seen in younger age group 11-30 years and in female 7.6% in comparison to male. Similar findings were also presented by other studies^{11,12}. Screening adolescents for acne may be of great importance especially in view of the wide armamentarium of therapy available.

Conclusion

This study found a higher prevalence of non-infective skin diseases. Eczema and fungal infections formed the largest group in their respective categories. Males and young adults were found to be mostly affected. Eczema and fungal infections found to be the most common diseases according to nature of occupation, living conditions and lack of awareness. All contribute to an increasing burden of skin diseases in the society. Role of public awareness regarding personal and community hygiene and timely

reporting of skin diseases are of great importance for reducing disease burden and improved quality of life.

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