

Frequency of Skin Disorders, Presenting in a Charity Hospital of Lahore

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ABSTRACT

Aim: To determine the pattern of skin disorders, with age-wise distribution in patients, in a private hospital of Lahore.

Method: This study was carried out in the dermatology department of Akhtar Saeed Trust Hospital, Lahore from 1st January 2015 to 31st December 2016, on consecutive patients, over a period of 2 years. Patients were enrolled irrespective of their age or sex. Skin diseases were diagnosed on the basis of clinical morphology and laboratory investigations, as required. All the findings were recorded and analysed.

Results: 13501 patients were enrolled, out of which 8425(62%) were females and 5076(38%) were males. Infections and infestations were the most common skin conditions, constituting 30% of the enrolled patients. This was followed by eczema, comprising 25% of patients. Acne was seen in 22% patients, vascular disorders in 6%, and pigmentary dermatosis in 4% of patients. Hair disorders, chronic pruritis and papulosquamous disorders were observed in less than 2% of patients. Regarding age distribution of diseases in age group 1-10years, the highest prevalence was found of infection and infestations at 8.6%..

Conclusion: Our study showed a higher prevalence of infective dermatosis as compared to non-infective dermatosis. Bacterial infections and eczemas were most common in their respective groups.

Keywords: Skin disorders, infections, infestations, eczema.

INTRODUCTION

There are many patterns of some are external like climate, nutritional and socioeconomic status, occupation and some are internal like age, gender, personal habits and genetics^{2,3,4}.

Skin is the most exposed organ of body and is most vulnerable to assault by external agents and can exhibit the presenting signs and symptoms of many systemic ailments.⁵ Most dermatological diseases are chronic in nature and decrease the daily quality of life⁶.

There are more than a thousand skin diseases that dermatologists are confronted with. Given the complications that skin disorders may cause and significant burden they put on individuals health; it is of utmost importance for dermatologists to be aware of all skin disorders, especially those with a higher incidence in population⁷.

These range from acne, infections (bacterial, viral and fungal), pigmentary changes which are disfiguring and some fatal diseases like Steven Johnson Syndrome and toxic epidermal necrolysis^{3,8}.

The evaluation of prevalence of skin diseases among a population and the costs of treatment are essential for development of strategies that aim to eradicate or at least reduce the problem⁹.

Numerous studies of prevalence and frequency of skin diseases presenting in outpatient department of various hospitals have been done in different age groups³.

In this study we report the frequency and pattern of skin diseases along with their prevalence according to gender presenting in outpatient department of charity hospital in outskirts of Lahore.

METHODS

This study was carried out in the Department of Dermatology, Akhtar Saeed Trust Hospital, Lahore from 1st January, 2015 till 31st December, 2016. Permission from ethical committee of hospital was taken. All the patients presenting in outpatient department of Dermatology, as well as those referred from other departments for dermatological opinion were enrolled by convenient sampling. Patients belonging to either sex were included in the study irrespective of their age. All the selected patients were subjected to an informed consent. The data collected was analysed through Microsoft SPSS.

RESULTS

A total of 13501 patients were included in the study. There were 8425(62%) females and 5076(38%). The age range was from neonate to greater than 90 years. Table I shows common skin diseases in accordance with their frequency of presentation.

Infections and infestations were the most common skin conditions constituting 4029(30%) of patients. Eczema was next in frequency 3323(25%) patients. Acne was present in 2930(22%) patients. Among vascular disorders patients recorded were 779(6%). Pigmentary dermatosis were present in 447(4%) of patients. Hair disorders and chronic pruritus was observed in less than 2% of patients.

Pattern of different diseases can be seen in Table 2. In the group of infections and infestations, bacterial infections were seen in 1018 (8%), scabies in 975(7.3%) patients, followed by fungal infection in 992(7.4%) patients and then viral infections present in 554(4.2%) patients.

In the group of eczema, seborrhoeic dermatitis was the most frequently seen 722(5.4%) followed by atopic dermatitis 600(4.5%) and contact dermatitis 474(3.6%). In papulosquamous disorders, lichen planus was found in 249(1.8%) while psoriasis and pityriasis rosea in 1% and less than 1% patients. Among pigmentary disorders

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melasma was found in 1058(8%) followed by vitiligo in less than 1% of patients. In category of vascular disorders urticaria was found in 5% of patients.

Table 1: Distribution of disease in study patients

Disease Group	Male	Female	Total
Infections & infestations	1811	2218	4029
Eczema	1924	1444	3368
Acne	983	1947	2930
Pigmentary Disorders	142	1105	1247
Vascular Disorders	264	515	779
Papulosquamous	198	249	447
Hair Disorders	48	152	200
Chronic Pruritis	59	120	179
Miscellaneous	125	142	267

Table III shows the age wise prevalence of diseases ranging from 1 year to > 80 years. In age group of 1 – 10 years highest prevalence was found of infections and infestations 8.6% patients among which bacterial infections like impetigo, ecthyma, folliculitis etc were seen in 31% of patients, followed by eczema in 8% of patients in which atopic eczema was commonest 42% of patients. In age group 11-20 years, acne was commonest 11% of patients. In age group 21-30 years, pigmentary disorders were topmost constituting 4.3% of patients out of which melasma was most commonly seen in 518 patients, in same age group among vascular disorders urticaria was commonest

Table 3: Age groups

Diseases	1-10 yrs	11-20 yrs	21-30 yrs	31-40 yrs	41-50 yrs	51-60 yrs	61-70 yrs	71-80 yrs	> 80 yrs
Infections & Infestations									
Bacterial Infections	357	190	179	113	98	56	18	5	2
Scabies	324	192	169	121	80	57	20	8	4
Fungal Infections	170	161	224	187	48	48	15	11	2
Viral Infections	121	136	99	76	35	35	22	3	5
Eczema	1162	585	658	409	295	188	92	27	7
Acne	29	1494	1140	200	46	15	5	1	0
Papulosquamous Orders									
Lichen Planus	24	36	59	35	47	36	9	2	1
Psoriasis	2	20	29	46	32	9	1	3	1
Pigmentary Disorders									
Melasma	0	121	518	320	78	19	2	0	0
Vitiligo	21	27	22	11	2	3	3	0	0
Urticaria	90	160	180	108	78	43	11	7	0
Hair Disorders	15	54	95	21	13	1	0	1	0
Chronic Pruritis	13	18	43	33	30	17	17	8	0
Miscellaneous	49	63	99	50	29	21	3	1	0

DISCUSSION

Lahore is the capital city of most populous province of Pakistan Punjab. Estimated population of Lahore is little over 7 million. The pattern of skin diseases is influenced by the type of weather prevailing in area like short winters, long & moist summers. Other factors also make an impact like level of literacy, industrialization, cultural practices & of course access to primary health care.

In current study 8425(62%) of patients were females and males were 5076(38%) as shown by some other studies like Baur B et al¹² and Shresta R et al¹³ female attendance was more 51.5% & 52.1% respectively. Unlike some other studies which reported male preponderance^{6,16}.

87% of patients, followed by papulosquamous disorders lichen planus was seen in 57% of patients. Other disorders like chronic pruritus, hair disorders and miscellaneous group of diseases was common in same age group.

Table 2: Pattern of different disease groups

Disease Group	Total Patients
Infestations	
Scabies	975
Pediculosis	76
Infections	
Bacterial	1018
Viral	554
Fungal	955
Others	451
Eczema	
Seborrheic Dermatitis	1285
Atopic Dermatitis	1067
Contact Dermatitis	843
Others	228
Papulosquamous Disorders	
Lichen Planus	249
Psoriasis	153
Others	45
Pigmentary Disorders	
Melasma	1058
Vitiligo	89
Others	100

This change maybe due to more females getting conscious of their appearance and becoming aware of primary health care.

In our study infections and infestations were the commonest 4029(30%) like in Nigerian and Kerala studies.^{11, 19} In which bacterial infections were the most common infection 1018(8%). It was followed by scabies 975 (7.3%). This incidence is greater in our study as compared to other studies like Humaira et al³ in which it was 17%, this may be due to increased sample size in our study and secondly due to poor socioeconomic status of patients presenting in our hospital which is almost similar to incidence seen in studies by Devi and Zamzachin⁵ from India.

Eczemas accounted to be 25% of the total patients. Out of which seborrheic dermatitis was the commonest 722(5.4%) followed by atopic dermatitis in 600(4.5%) of patients and contact dermatitis in 474(3.6%) of patients. This percentage of eczema is almost comparable to the result seen in study in Dhaka by Alam et al¹⁶.

In current study Acne was observed in 2930(22%) of patients which is higher than observed in other studies Maryam H et al³, Zamanian et al², Tamizzuddin et al¹⁷, and Mishra N et al⁴.

Pigmentary disorders were found in 1242(10%) of patients out of which melasma was present in 1058(8%) patients and vitiligo in 89(0.7%) of patients. In our study frequency of melasma was found to be higher than other studies like Ahmad et al¹⁴, and Vinita G¹⁰ Whereas frequency of vitiligo was almost consistent with other studies^{10,18}.

Frequency of urticaria 6% in current study is comparable to other studies like Zamanian et al², Tamizzuddin et al¹⁷ Among papulosquamous disorders, lichen planus was found in 249(2%) patients & psoriasis in 153(1.2%) patients in our study. The frequency of these disorders are reported to be around 1% in other studies^{3,10,18} Ahmad et al¹⁴, has reported higher frequency as compared to our study.

Hair disorders were found in less than 2% of patients in comparison to study done by Ahmad et al¹⁴, which depicts frequency to be 8%. We also tried to show the age wise prevalence of skin diseases in patients coming to Akhtar Saeed Trust Hospital. Among age group 1-10 years, infections and infestations were commonest 1151(8.6%), out of which bacterial infections impetigo etc. were the highest^{19,20} It was followed by eczema 1132(8.4%) out of which atopic eczema was commonest. In age group 11-20 years , acne was commonest 1494(11%) almost similar to the study done by Antony et al¹⁹ Among 21-30 years age group pigmentary disorders were commonest out of which melasma was highest in prevalence 574(4.3%).

CONCLUSION

Our study found a high incidence of infective dermatosis as compared to non-infective dermatosis. Bacterial infections & eczema formed the highest prevalence in the respective groups. Nature of occupation, living conditions, climate & lack of awareness all contribute to increased burden of disease in any society. In this regard role of public awareness about personal & community hygiene & timely reporting of skin disorders is very important for decreasing burden of skin diseases & improving quality of life in any society in a country. So studies like this one are needed to increase public awareness & decrease load on our health system.

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