

Pattern of skin diseases presenting in outpatient department of dermatology, Gujranwala Medical College, Gujranwala

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Abstract

Objective To determine the pattern of skin diseases in patients presenting in DHQ Teaching Hospital, Gujranwala, Pakistan.

Methods This observational study was conducted in Outpatient Department of Dermatology, Gujranwala Medical College, Gujranwala, over a period of 2 years i.e. 1st January 2018 to 31st December 2019. All the patients seeking skin consultation during this period were enrolled in the study. Diagnoses were established clinically or with the help of investigations where needed.

Results Total 157,056 patients were evaluated during this study period. Dermatological diseases constituted 5.5% of the total hospital outdoor patients. Mean age was 26.4±17 years. Male to female ratio was 1:1.6. Infections were the most common (32.7%) disorder observed. Scabies was seen in 26.7% of patient followed by eczema in 18.7%. Acne Vulgaris was found in 6.7% of cases. Autoimmune disorders were seen in 6.4% of patients. 3.1% patients had melasma. Diffuse hair loss, androgenetic alopecia, telogen effluvium were observed in 1.08%, 0.79%, 0.74% of the cases respectively. While 1,512 patients (0.9%) presented with various drug reactions.

Conclusion Our data shows that skin diseases impart a significant health problem for the public. Provision of specialized dermatologic help needs to be extended over a larger scale for prevention and better management of skin disorders.

Key words

Skin disease, infections, scabies, eczema.

Introduction

Disability secondary to skin diseases is substantial worldwide. Skin diseases are the 4th largest cause of disability worldwide. Pattern of disease burden can be used to correlate disease pathogenesis. Worldwide collaboration of experts can draw attention to diverse causes, risk factors, ages and world regions. This may have implications for the field of public health and clinical medicine including dermatology. As it

will aid research priority setting decision and public policy efforts at local and national levels.¹

There is no published data on prevalence of skin diseases in Gujranwala that is the 5th populous city of Punjab and 7th amongst the big populous cities of Pakistan and has over 2 million population.²

We looked for burden and pattern of skin diseases in patient population presenting to Dermatology Outpatient Department of DHQ Teaching Hospital that is affiliated with Gujranwala Medical College. This hospital provides services to the city of Gujranwala as

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well as Aroop Town, Wazirabad, Kamoke, Nowshera virkan, Khiali, Shah Pur town, Nandi Pur town, Qila daidar singh town etc.

Materials and Methods

Clinical data, of all the patients presenting to Dermatology Outpatient Department of DHQ Teaching Hospital during the period of 1st January 2018 to 31st December 2019, was collected and analyzed for assessment of burden and pattern of skin diseases. Demographic information like age and gender were recorded. The data was then analyzed through SPSS 17 version.

The diagnoses of various skin conditions were established either clinically or histologically where needed. Diseases were categorized into various groups like infections, infestations, eczema, disorders of sebaceous glands, hair and melanin, autoimmune disorders, vasculitis, drug reactions, malignancy and miscellaneous.

Results

A total of 157,056 patients presented, in DHQ Teaching Hospital, Gujranwala, during 2 years duration. Out of these, 80.7% were adults and pediatric population was estimated to be 19.3%. In adult population, female gender constituted 50% and male gender was found to be 30.6%. Age range was 2 days to 96 years with the mean age 26.4±17 years. The frequency of various skin disorders seen in our study is shown in

Table 1.

Infections contributed to a percentage of 32.7. The fungal infections were found to be 19.9% (31,296), bacterial infections 8.4% (13,308), viral infections 4.3% (6,792). Fungal infections included tinea corporis, tinea capitis, tinea cruris, tinea manum, tinea pedis, onychomycosis and pityriasis versicolor. Folliculitis,

furunculosis, impetigo, cellulitis constituted bacterial infections. While warts, molluscum contagiosum, herpes simplex, herpes zoster, varicella, measles and nonspecific viral exanthems, were the viral infections seen. Scabies was found to be 26.7% (42,084).

Different types of eczemas seen in our study were allergic contact dermatitis 1.6% (2,529), irritant contact dermatitis 1.2% (1,980), atopic eczema (13%) and seborrheic dermatitis 2.6% (4,128).

Diseases of sebaceous glands, hair and melanin disorders were seen in 19,608 patients (12.4%). Acne vulgaris was seen in 10,608 (6.7%) followed by melisma 4,872 (3.1%), diffuse hair loss 1,704 (1.08%), telogen effluvium 1176 (0.74%), androgenetic alopecia 1,248 (0.79%).

Autoimmune disorders were found in 10,164 (6.4%) of patients. Alopecia areata was seen in 984 (0.6%), urticaria in 5,604 (3.5%), vitiligo in 996 (0.63%), lupus erythematosus in 96 (0.06%), systemic sclerosis in 192 (0.12%), pemphigus vulgaris in 96 (0.06%), bullous pemphigoid in 132 (0.08%), lichen planus in 912 (0.58%) and psoriasis in 1,152 (0.73%).

Drug reactions were seen in 1,512 patient 0.9% while 240 cases (0.15%) of vasculitis were found. Cutaneous malignancy was seen in 108 (0.06%).

Table 1 Stratification of dermatoses

<i>Disease group</i>	<i>No. of patients (%)</i>
Infections	51,396 (32.7%)
Scabies	42,084 (26.7%)
Eczema	29,412 (18.7%)
Disorder of sebaceous glands, hair and melanin	19,608 (12.4%)
Autoimmune Disorders	10,164 (6.4%)
Drug Reactions	1,512 (0.9%)
Vasculitis	240 (0.15%)
Malignancy	108 (0.06%)
Miscellaneous	2,532 (1.6%)

Miscellaneous disorders including syphilis, leprosy, cutaneous tuberculosis, leishmaniasis and genodermatoses etc constituted 2,532 (1.6%) patients.

Discussion

In our study total of 157,056 patients were seen in 2 years duration, with a male to female ratio of 1:1.6. Majority of adult patients belonged to female gender as shown by similar findings by Suleri *et al.* Their study at Khawaja Safdar Medical College, Sialkot, showed that male to female ratio was found to be 1:2 in a patient population of 34,799 during 18 months period.³

Infective group was the most prevalent in our patient population with scabies being the next most common. This is exactly in line with the findings sorted out by Shahbaz H *et al* at dermatology department, Sheikh Zayed hospital, Lahore. In their study, skin infections were diagnosed in 29.1% of cases followed by eczema in 20.6%, sebaceous and sweat gland disorders 12.2% and infestations in 7.5%.⁴

Majority of studies conducted in Pakistan regarding pattern of skin diseases have shown scabies as the most frequent skin condition. While only few studies including ours, have shown skin infections as the highest in prevalence amongst the dermatological diseases.⁵

In our study population infections and infestations constituted major bulk of skin diseases 59.4%. Our findings are closer to the study performed by Alahi MN *et al* at Bangladesh. They collected data of 2013 to 2016 with total number of patients 119,228. Infective cases were 65,409 (54.9%) and non-infective 53,819 (45.1%).⁶

One-year study conducted at Pokhara, Nepal,

showed that dermatology patients constituted 6% of the total hospital patients. In our tertiary care setup skin patients formed 5.5% of the hospital outpatient population.⁷

In a study conducted by Al-Shamrani HM *et al* at University Hospital, Jeddah, Saudi Arabia, it was found that male to female ratio was 1:2.4 and most common dermatology disease was eczema (21.4%) followed by acne (15.7%) and fungal infections (10.9%). The burden of skin infections seen in our study might be because of overcrowding and lack of hygiene practices.⁸

Amongst infections in our study, the prevalence of bacterial infections was highest, followed by fungal and viral infections. Whilst prevalence of skin diseases in general European population showed viral infections (41.3%) to be the most common followed by acne (19.2%) and contact dermatitis (15%) in a study conducted by Svensson A *et al.* The difference in pattern of skin diseases might be due to lack of treatment facilities in our region.⁹

Conclusion

Our study showed skin infections as the most common disorder followed by scabies. Awareness campaigns, regarding skin diseases and hygiene practices and provision of specialized dermatological care at a wider scale, can help lessen the burden of communicable skin diseases.

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