

Pattern of Diseases and Demographic Characteristics of Admitted Patients in the Dermatology Unit, Hayatabad Medical Complex, Peshawar

Diseases and Demographic Characteristics in Dermatology Department

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ABSTRACT

Objective: To determine the pattern of various dermatological diseases and demographic characteristics of admitted patients.

Study Design: Retrospective study

Place and Duration of Study: This study was Department of Dermatology MTI HMC Peshawar of 1st January 2022 to 31st December 2022.

Methods: Diagnosis, demographic features and duration of stay for different skin diseases was recorded on prescribed Performa. A total of 323 patients were admitted for various dermatological diseases.

Results: Out of 323 patients 182 (56%) were male and 141 (44%) were female. Among 323 patients, 48 (15%) were in age range of 0 day to 14 years, 149 (46%) in age group of 15 years to 45 years and 125 (39%) were > 45 years of age. 88 (27.2%) patients with various types of eczemas presented for hospitalization, followed by Psoriasis with 40 (12.3%) patients, immunobullous diseases in 40 (12.3%), and 36 (11%) having different skin infections. The high number of patients i.e. 167 (52%) belonged to Peshawar while the lowest patients 3 (0.9%) were admitted from Hazara Division. Majority of patients were farmers followed by labourers, government servants, shopkeepers, teachers, drivers and tailors. Mean duration of hospital stay was 7.42 days. Hospitalization is necessary for patients with multiple dermatological diseases and comorbidities. Numerous skin diseases are chronic in nature and requires prolonged hospital stay. Therefore, expanding specialized dermatological inpatient facilities is necessary.

Conclusion: Hospitalization is necessary for patients with multiple dermatological diseases and comorbidities. Numerous skin diseases are chronic in nature and requires prolonged hospital stay. Also as many dermatological emergencies are admitted in skin wards so there is need for high dependency suit with specialized monitoring facilities and nursing care in every skin unit.

Key Words: Dermatological Diseases, Inpatients, Skin Unit, Hospitalization.

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INTRODUCTION

Dermatological diseases are very common, especially in developing countries like Pakistan and majority of them are infectious ^[1]. About 20 % to 80 % of the population in these countries is affected by dermatological diseases ^[1].

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Worldwide, around 8% to 20% of patients visiting emergency departments are suffering from dermatological emergencies ^[2].

In the United Kingdom and the USA, skin diseases affect 20 % - 33 % of their people. Dermatological diseases are different in developed and developing countries and can vary in a single country among different socioeconomic classes, hygienic habits, educational, and immune status ^[3]. Most skin diseases are managed on outpatient basis but certain skin diseases can lead to chronic morbidity as well as dermatological emergencies which need inpatient care^[4].

Hospital admissions are required in these conditions for continuous clinical monitoring, regular investigations, preventing complications like sepsis and systemic effects, I/V drug administration and multi-disciplinary care of such patients^[4]. Admitting the patients with serious skin conditions not only improve their illness

but also give chance to educate the patient about the disease. By admitting patients with dermatological diseases we can calculate disease burden and pattern of skin diseases in a community^[5]. Various studies showed that common skin diseases that need inpatient care in West are inflammatory skin conditions like Psoriasis, Eczema, immunobullous diseases and non-healing ulcers^[4]. In developing countries, various infectious ,chronic granulomatous diseases like Leishmaniasis and adverse drug reactions are common^[4]. There are certain patients admitted as dermatological emergency where skin fails to perform its normal anatomical and physiological functions and require high dependency units or ICUs ^[2]. Professor Rene Touraine introduced the idea of intensive care unit in dermatological patients presenting with skin failure ^[2].

In skin unit of Hayatabad Medical Complex, we admit patients presenting with dermatological emergencies as well as infectious, inflammatory and autoimmune diseases for diagnostic and therapeutic purpose. This present study was conducted to determine the pattern of various dermatological diseases and demographic characteristics of admitted patients in skin unit of Hyderabad medical complex, Peshawar.

METHODS

This retrospective study was carried out on records of inpatients in skin unit of Hayatabad medical complex during period of 1st January 2022 to 31st December 2022. It is 20 bedded ward with 10 beds on male side and 10 on female side. From charts of in patients during above mentioned period diagnoses, demographic features and duration of stay for different skin diseases was determined. A performa was prepared and prior consent was taken from hospital ethical committee.

RESULTS

In skin unit of Hayatabad medical complex, Peshawar 323 patient with various dermatological diseases got admitted from 1st January 2022 to 31st December 2022. Out of 323 patients 182 (56%) were male and 141 (44%) were female.

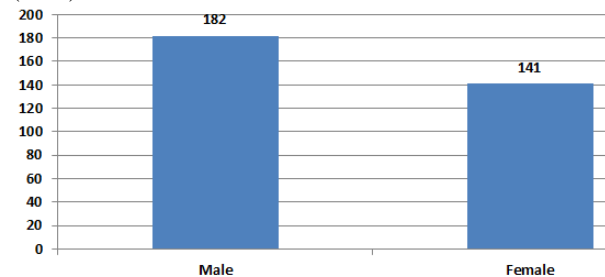


Figure No. 1: Gender wise distribution of admitted patients.

Regarding age wise distribution, patients were divided in three categories. 48 (15%) patients got admitted in age range of 0 day to 14 years, 149 (46%) in age group

of 15 to 45 years and 125 (39%) were > 45 years of age.

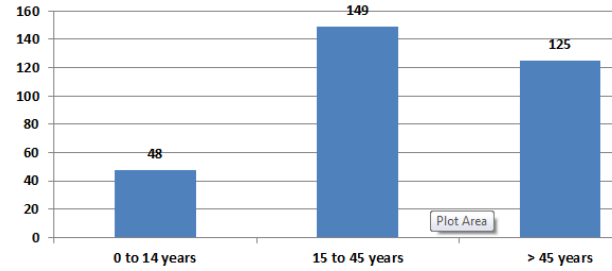


Figure No. 2: Age wise distribution of admitted patients.

When we analyzed frequency wise distribution of different dermatological diseases we found that various types of eczemas were leading cause of admission. Among 323 patients, 88 (27.2%) were suffering from eczema, 40 (12.3%) were having Psoriasis, 40 (12.3%) admitted with immunobullous diseases and 36 (11%) having various infectious.

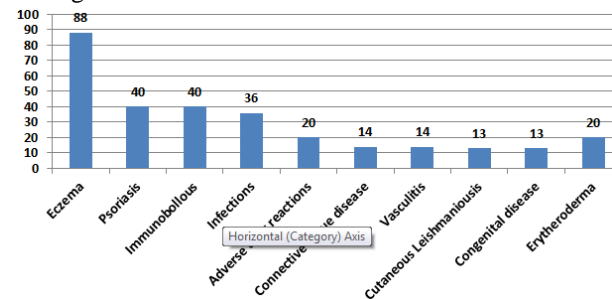


Figure No. 3: Dermatological disease wise distribution of admitted patient.

A total of 20(6.19%) cases of adverse drug reactions, 14(4.33%) of connective tissue diseases and vasculitis each were admitted. 13(4%) patients suffering from congenital skin diseases and 13(4%) of cutaneous Leishmaniasis, while 20(6.19%) cases of Erythroderma secondary to various conditions got admitted.

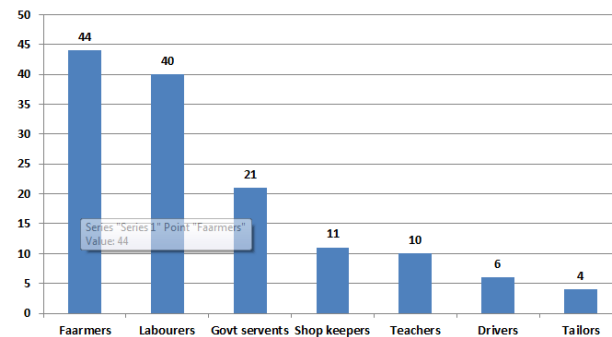


Figure No. 4: Occupation wise distribution of admitted patient.

In district wise distribution of patients 167(52%) belonged to Peshawar, 52(16%) to Malakand, 40(12.3%) to Kohat, 25(8%) to Mardan, 18(5.5%) to

Afghanistan, 12(3.7%) to Bannu, 6(1.8%) to DI Khan, and 3(0.9%) to Hazara Division.

Regarding occupation of admitted patient farmers were in majority 44(14%) followed by laborers 40(12.3%), 21(6.5%) were government servants, 11(3.4%) shop keepers, 10(3%) teachers, 6(1.8%) drivers and 4(1.2%) Tailors. A total of 101(32%) were housewives, 42 13% students, 27(8.3%) were minors.

During year 2022 the hospital stay ranged from 01 day to 51 days with mean duration of stay of 7.42 days.

Table No. 1: Average stay of length in different diseases.

Diseases	Mean length of stay
Immunobullous disease	16.05 days
Drug reactions	9.4 days
Erythroderma	11.17 days
Eczemas	7.75 days
Psoriasis	5.29 days
Connective tissue diseases	6.86 days
Vasculitis	7.66 days
Congenital diseases	5 days
Infections	9.32 days
Leishmaniasis	6.85 days

DISCUSSION

Charts of all 323 patients admitted from first January 2022 to 31st December 2022 were analyzed. Male patient 182(56%) out numbered female patients 141(44%). This gender wise distribution is similar to in Indian study by Sen et al^[4]. This could be explained on the basis of social and cultural norms as females have to take care of children and household work so they prefer outpatient treatment.

Majority of patient in our record belonged to age group of 15 to 45 years i.e. 149(46%). Individuals in this age group are active and are prone to develop various occupational dermatosis and infections. Similar age-related figures were found in other studies^[3,5].

From our records we found various types of exogenous and endogenous eczema (27.2%) as leading cause of admission. Psoriasis (12.3%) and Immunobullous diseases (12.3%) were second cause of admissions. Among bullous disorders, Pemphigus Vulgaris was commonest (72.5%). Infections and Infestations were present in 49(15%) and 20(6.19%) admitted with drug reactions. Our figures regarding disease pattern in admitted patients is different from Indian^[4] and Iranian Studies^[6] where immunobullous diseases were leading cause of admissions. These could be due to genetic as well an occupational difference. In Pakistan because of high illiteracy rates most poor people are exposed to Cement, Parthinium and sun light because of their professions leading to various exogenous eczemas.

Infections and infestations were the second leading cause of admissions in our record. This is because of overcrowding, poverty, poor personal hygiene and

endemic regions of Leishmaniasis close to Hayatabad Medical Complex. In study of Raza et al^[7] Infections were leading cause of admissions, 19.47%, in study of Sen et al^[4] and 28.16% in study of Aman et al^[3].

We found in our record that SJS, TEN and DRESS comprised 20(6.19%) of dermatological emergency admissions. Our severe drug reactions figures are quite similar to that of Aman et al^[3] whose drug reactions percentage was 6.74%.

It can be explained as our people prefer self medication, using multiple drugs together, and are in habit of taking herbal, hakemi and homeopathic medicines. Highest rate of admissions due to drug reactions i.e. 21.6 % was observed in Nepali study^[8].

Regarding different occupations of admitted patients; farmers were 44 (14 %) and labourer 40(12.3 %) were most frequently admitted, presenting with dermatological occupational hazards.

Mean duration of stay in our study was 7.42 days. Longer duration of stay was observed in drug reactions, Erythrodermas and immunobullous diseases. This is because these patients need nursing care, develop secondary infections and metabolic complications and need referral to other units.

Mean duration of stay in study from USA was 13 days^[9]. This difference could be due to limited number of beds and facilities and frequent admissions in our set up so patients are discharged on home treatment.

In addition, due to financial constraints our patients want to resume their work thus insisting on early discharge.

CONCLUSION

Hospitalization is necessary for patients with multiple dermatological diseases and comorbidities. Numerous skin diseases are chronic in nature and requires prolonged hospital stay. Also as many dermatological emergencies are admitted in skin wards so there is need for high dependency suit with specialized monitoring facilities and nursing care in every skin unit.

Author's Contribution:

Concept & Design of Study: Naheed
 Drafting: Haroon, Noor Rehman
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 Revisiting Critically: Naheed, Haroon
 Final Approval of version: Naheed

Conflict of Interest: The study has no conflict of interest to declare by any author.

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REFERENCES

1. Naseem R, Aamir S, Tufail Q. Dermatological disorders being overlooked among patients admitted in medical wards and allied in Sheikh Zayed Hospital, Lahore, Pakistan. *Pak J Med Health Sciences* 2014;8(3):640-643.
2. Mitra D, Chopra A, Saraswat N, Agarwal R, Kumar S. An Observational Study to Describe the Clinical Pattern of Dermatological Emergencies from Emergency Department and Intensive Care Unit: Our Experience from a Tertiary Care Hospital in Northern India. *Ind Dermatol Online J* 2019;10(2):144–148.
3. Aman S, Nadeem M, Mahmood K, Ghafoor MB. Pattern of skin diseases among patients attending a tertiary care hospital in Lahore, Pakistan. *J Taibah Univ Med Sciences* 2017;12(5):392–396.
4. Sen A, Chowdhury S, Poddar I, Bandyopadhyay D. Inpatient Dermatology: Characteristics of Patients and Admissions in a Tertiary Level Hospital in Eastern India. *Ind J Dermatol* 2016;61(5):561–564.
5. Siddiqui S, Sharif MM, Fatima F, Ashraf E. Pattern of Skin Diseases Among Patients Visiting a Private Tertiary Care Hospital in Karachi. *J Dow Univ Health Sciences (JDUHS)* 2022;15(1):29–34.
6. Hasan S, Farshad F, Negin S, Parastoo D, Farzam G. Patterns of admissions to a Referral Skin Hospital in Iran. *Iranian J Dermatol* 2008;11(4): 156-158.
7. Raza N, Saleem J, Rashid Dar N, Akhter Malik N. Why dermatology patients are hospitalized? A study from Pakistan. *Acta Dermatovenerologica Croatica* 2009;17(2):0-0.
8. Parajuli S, Paudel U, Pokhrel DB. In patient dermatology: Characteristics of patients and admissions in Tribhuvan University (TU) Teaching Hospital. *Nepal J Dermatol Venereol Leprol* 2013;11(1):59-63.
9. Ayyalaraju RS, Finlay AY, Dykes PJ, Trent JT, Kirsner RS, Kerdel FA. Hospitalization for severe skin disease improves quality of life in the United Kingdom and the United States: a comparative study. *J Am Acad Dermatol* 2003;49(2):249-254.