

A STUDY ON VARIOUS SKIN DISEASES AND PRESCRIBING PATTERN IN DERMATOLOGY OPD OF A TERTIARY CARE TEACHING HOSPITAL

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ABSTRACT

Skin conditions are a prevalent morbidity for people of all ages, regardless of gender. While some could only be minors, others might perhaps pose a threat to life. A large numbers of skin diseases were caused by carelessness and inadequate personal hygiene. For The majority of patients, skin-related issues might be minimized with instruction on cleanliness and self-care. A useful technique for encouraging sensible drug prescription is the drug utilization study. In the dermatology ward's OPD, a prospective study was carried out for six months. For the study's evaluation, a sample of 106 people was taken into consideration. In the Chalmeda Anand Rao Institute of Medical Sciences in Karimnagar, the study was carried out. There were 106 participants in our study, with a higher proportion of men (52.8%) than women (47.2%) having dermatological disorders. The age range of 21–30 was determined to be the maximum. It was discovered that patients with poor socioeconomic status had the highest infection risk. 35.8% of fungal diseases were detected, and infectious diseases were more prevalent than non-infective diseases. When the population's prescribing patterns were examined, antihistamines were the most often prescribed medication. The Dermatology Life Quality Index was used to measure quality of life. Additionally, A number of skin conditions have a major impact on patients' quality of life. Greater health education, greater hygiene, and higher living standards are all necessary for the prevention of skin diseases. The public should have access to information that educates them about skin conditions and how to prevent them. so that the prevalence of skin conditions in our community might decrease. A clinical pharmacist's engagement in patient care can be beneficial in all aspects, even when The Majority of the medications are given sensibly.

Key words: - Irrational, Dermatology, socioeconomic, Unrestricted, Outcome, Prevention, Infective disease, Cleanliness, Carelessness, Morbidity, Accuracy, Efficacy.

1. INTRODUCTION:

Introduction Depending on social, economic, racial, and environmental factors, skin diseases vary throughout nations and within regions of a nation. Numerous individuals have reported diverse trends in skin conditions in various nations. From infants to the elderly, skin problems impact everyone

1.1 Skin Structure:

Human skin is classified into three major types. The palms and soles of the hands have glabrous skin (areas devoid of hair), which is characterized by dermatoglyphics, or surface grooves.

1.2 Patterns of Skin Diseases at The Community Level:

The following were the most common skin conditions at the community level, according to a recent (unpublished) survey conducted by the International Foundation of Dermatology.

2. SKIN DISEASE

2.1 Scabies:

Although scabies was often the most common skin disease, it was completely absent in some regions. Superficial mycoses. This group of infections is usually reported as one of the most common diseases. Pyoderma. This disease was often, but not invariably, associated with scabies

2.1 Bacterial Skin Infection:

The organisms can also achieve large densities in individuals with HIV infection or other conditions that severely suppress immune responses. Lesions may appear as unusual crusted lesions that itch very little in this crusted or Norwegian variant of scabies.

2.3 Fungal Infection:

Infections with fungi that impact the skin and surrounding tissues are prevalent in every setting. These comprise infections like dermatophytosis or ringworm; lipophilic yeast infections and superficial candidiasis; infections caused by *Malassezia* species; and a few more prevalent foot infections like *Scytalidium*.

2.3 Tinea Capitis:

Tinea capitis is a common childhood illness that is very contagious and can spread throughout schools. Dermatophyte fungi belonging to the genera *Microsporum* and *Trichophyton* are the cause of it. Children can contract diseases from animals (zoophilic infections) or from other children (anthropophilic infections). Whereas zoophilic diseases happen rarely, anthropophilic infections are typically prevalent or epidemic.

2.4 Ringworm of Tokelau, Tinea Imbricata:

Tinea imbricata is a rare and uncommon infection that is uncommon in many developing nations. Isolated foci of the infection can be found in isolated regions of Brazil, India, Indonesia, Malaysia, Mexico, and the western Pacific. It is nevertheless widespread and endemic in a few particular areas with incidence rates exceeding 30% in some populations in the western Pacific. For instance, Hay and colleagues (1984) extrapolated from a school survey in Goodenough Island, Papua New Guinea, to estimate that about 7,000 out of over 20,000 people were sick.

2.5 Tropical Ulcer:

In clearly defined tropical climates, tropical ulcers are a frequent illness, primarily affecting adolescents and teenagers. Usually affecting the lower limbs, it causes the abrupt emergence of deep and frequent ulceration (Bulto Maskel and Fisseha 1993). It is mostly found in portions of Indonesia and the Philippines, as well as in Africa, India, and the western Pacific.

2.6 Skin conditions associated with HIV:

HIV infection can lead to a wide range of skin disorders, most of which are outside the purview of this chapter. These are circumstances that significantly deplete limited resources. These include toxic epidermal necrolysis a potentially fatal form of drug-induced skin failure that requires the same level of care and attention as patients with severe burns. Kaposi's sarcoma is another of these.

2.7 Disorders of Pigmentation:

In many societies, the emergence of pigmentary alteration is a major cause for concern. Pigmentary disorders are prevalent and encompass a wide spectrum of conditions, from genetic abnormalities like albinism (Lookingbill and Leppard 1995) to hyperpigmentation, or enhanced pigmentation, linked to inflammatory skin lesions like acne. In the poor world, albinism is a major contributing factor to skin cancer that can be fatal.

3. METERIALS AND METHODOLOGY:

Study Site: This study was carried out in Chalmeda Anand Rao Institute of Medical Sciences, Bommakal, Karimnagar. **Study Design:** Prospective, questionnaire based observational study. **Study Period:** The study was conducted over a period of 6 months. **Sample Size:** 106 individuals. **Study Population:** Patients attending dermatology OPD. **(Study Criteria) Inclusion criteria:** Patients of all ages including both the gender and with different types of dermatological diseases. **Exclusion criteria:** Patients already recruited in the study coming for review to the OPD, CAIMS Pregnant women, Lactating mothers. **Source of Data:** Patient record and a specially designed (Patient data collection form) issued to obtain the data required for the study. **Direct communication with patients and their care takers.** **Parameters to be Considered:** Demographics of patients, Diagnosis, Treatment, Assessment of quality of life (QOL) by Questionnaire. **Study procedure:** Patients in both male and female outpatient settings at CAIMS were analyzed, and those who satisfied the inclusion requirements were enrolled. A form that was appropriate for gathering, recording, and analyzing data was created. Additionally, the patients are categorized based on their socioeconomic position and demographic information. The patients were then divided into groups based on the nature of their illnesses. Next, the prescription medications were categorized using the pharmacological classification. Skin disease prevalence and prescription medicine usage patterns were determined. **Dermatology Life Quality Index:**

The Dermatology Life Quality Index (DLQI) is a simple, self-administered and user- friendly validated questionnaire. The DLQI is designed to measure the health-related quality of life of adult patients suffering from a skin disease. DLQI is a validated questionnaire which grades QoL by assessing the following domains: (a) physical symptoms and feelings (questions 1 and 2), (b) daily activities (questions 3 and 4), (c) leisure (questions 5 and 6), (d) work/school (questions 7), (e) personal relationships (questions 8 and 9), and (f) treatment (question 10). Each question is scored as "very much" (score 3), "a lot" (score 2), "a little" (score 1), and "not at all" (score 0), keeping in mind the problems faced the previous week due to the disease. Final DLQI score is the sum poor QoL. of all scores (range 0-30). High scores indicate

DLQI score interpretation is done as follows: 0-1 no effect on patient's life, 2-5 small effect on patient's life, 6-10 moderate effect on patient's life, 11-20 very large effect on patient's life, 21-30 extremely large effect on patient's life.

4 RESULT:

Table 4.1 Distribution of Skin Diseases among the study population

Type of infection	No of patients	Percentage(%)
Fungal skin diseases	38	35.5
Autoimmune skin diseases	19	17.9
Parasitic skin diseases	15	14.1
Inflammatory skin disease	12	11.3
Pigmentary skin diseases	7	6.6
Allergic skin diseases	6	5.67
Bacterial skin diseases	5	4.7
Photosensitive skin diseases	1	0.9
Viral skin diseases	1	.9
Others	2	1.88
Total	106	100

Out of 106 patients, fungal diseases have been found to be 38 (35.8%), 19 (17.9%) have been found for Autoimmune diseases, 15 (14.1%) have been found for parasitic diseases, 12 (11.3%) have been found for inflammatory skin diseases, 7 (6.6%) have been found for pigmentary diseases, 6 (5.6%), 1(0.94%). The least observed were viral 1 (0.94%) and photosensitive disease, followed by 1 (0.94%) have been found for other category of skin diseases. The results were summarized in Table 4.1 and Figure 4.1

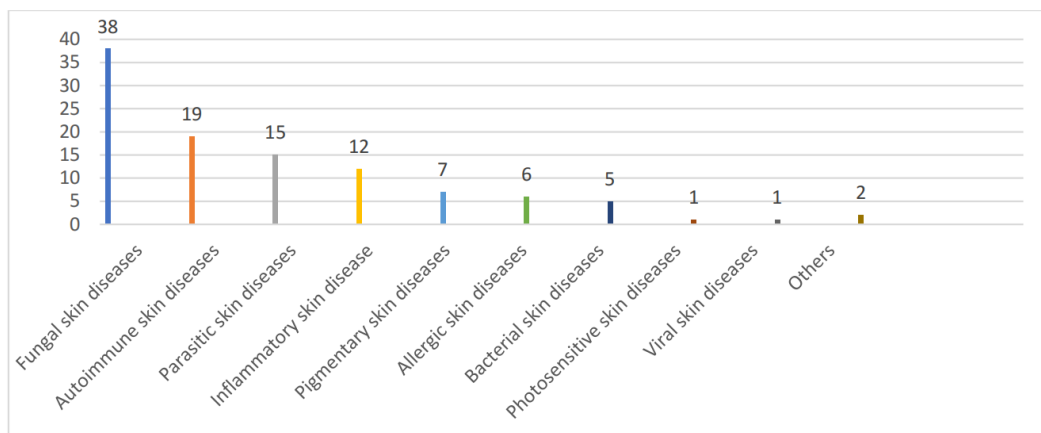


Figure 4.1 DISTRIBUTION OF SKIN DISEASES

Table 4.2 Medication categories prescribed for patients

Class of drug	No. of drugs	Percentage (%)
Anti-Histamines	95	17.27
Antibiotics	50	9.09
Anti-Viral	20	3.63
Corticosteroids	86	15.63
Immunosuppressants	45	8.18
Anti-Leptotics	25	4.54
Anti-inflammatory agents	38	6.90
Anti-fungals	75	13.63
Anti-Parasitics	67	12.18
Vitamin supplements	40	7.27
Others	9	1.63
Total	550	100

A total of 550 medicines were prescribed for 106 patients. Anti-histamines were the most prescribed drug (17.27%) among the population, followed by other category of drugs as shown in the Table 4.2 and Figure 4.2

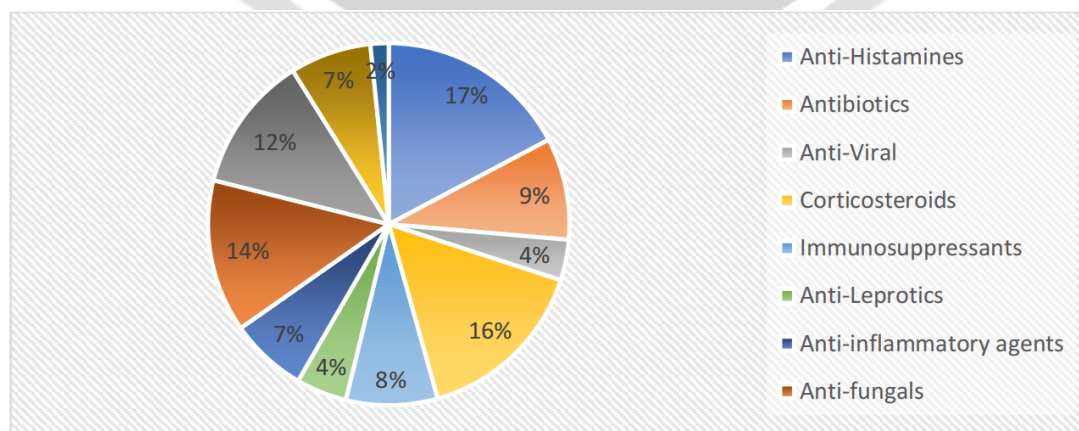


Figure 4.2 MEDICATION CATEGORIES PRESCRIBED

Table 4.3: Impact of Skin Diseases using DLQI or Assessment of Dermatological Life Quality Index (DLQI)

Severity	Number of patients	Percentage of patients
No effect	0	0
Small effect	2	1.9
Moderate	27	25.47
Very large	70	66.03
Extremely large	07	6.60

The study shows that severity of skin diseases has no effect of 0%, small effect of 1.9%, moderate effect of 25.47, very large effect of 66.03%, extremely large of 6.60%. Among these, as the very large effect was showing more percentage we can conclude that impaired quality of life on patients. Mean DLQI scores in this study increased with increasing age. The results were shown in Table 4.3 and Figure 4.3.

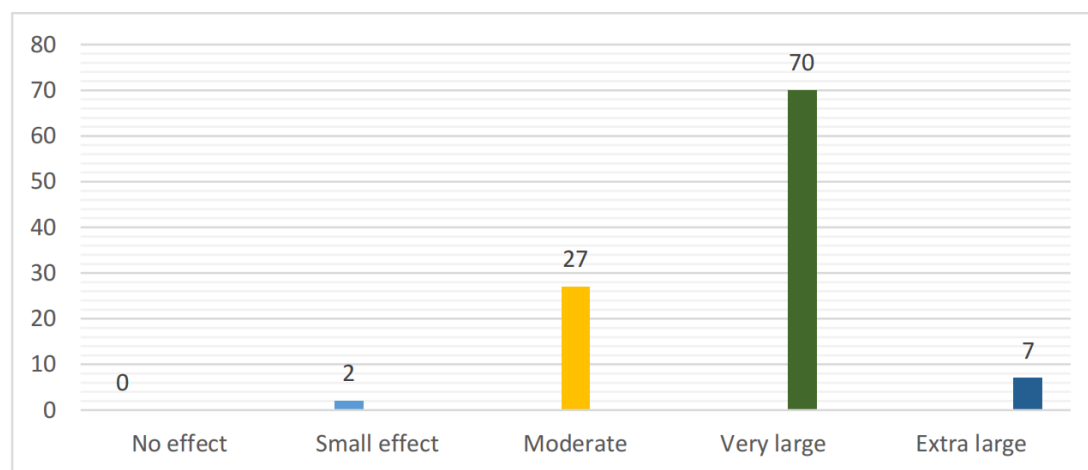


Figure 4.3 DERMATOLOGICAL LIFE QUALITY INDEX (DLQI)

5 DISCUSSION:

The developing economy, social regression, diverse climate, industrialization, availability of primary healthcare, and cultural differences all have an impact on the prevalence of skin diseases in India. Our study looked into the fact that less serious medical issues frequently result in greater suffering than minor skin disorders. Poor hygienic standards, overcrowding, and a low socioeconomic level are the variables linked to a high prevalence of skin diseases. A total of 106 patients who satisfied the inclusion criteria are included in the study. Age, gender, social standing, distribution of diseases, and medicine prescription patterns are taken into consideration when evaluating the study. The current investigation was conducted at a teaching hospital that provides tertiary care in Karimnagar. The sample size for our study consisted of 106 individuals, of which 47.2% were female and 52.8 percent were male. Similar to a study by **Md. Razu Ahmed** et al., which had 6203 patients, our investigation also revealed a male preponderance for dermatological illnesses. Of these patients, 3373 (57.38%) were male and 2830 (45.62%) were female. Every case underwent a comprehensive history, which included family history, address, name, age, gender, and economic condition. (**Dr. Razu Ahmed and Colleagues**, 2019).

6 CONCLUSION

The primary emphasis of this study is the influence of skin disorders on patients' quality of life and the medicine prescribing pattern in dermatology and OPD. In the outpatient department of tertiary care hospitals, there is a significant burden of skin diseases, with fungal infections accounting for The Majority of cases. Male patients were more vulnerable to antoine and parasite infections. It has been determined that poor living conditions, overcrowding, and poor cleanliness are the main contributing causes. Improving these conditions will greatly lower the incidence of these dermatoses. Drugs are administered logically, and the assessment of drug usage in relation to diseases was examined. A clinical pharmacist's engagement in patient care can be beneficial in every way. Upon examination of the patient questionnaire, it was noted that men were more likely than women to experience a reduced quality of life. The patient's quality of life improved as a result of knowledge and counselling. Public resources

ought to educate individuals about skin conditions and how to avoid them. In order to lessen the prevalence of skin conditions in our community. Based on the findings and recommendations of the analysis, skin illness is one of the main health problems that impacts people's ability to live their daily lives. According to this report, there is a huge potential for raising living standards and a pressing need for improved health education. Therefore, such research ought to be done continuously.

7 REFERENCES

1. Clark RA, Ghosh K, Tonnesen MG. *Journal of Investigative Dermatology*. 2007; 127:1018 - 29.
2. Sumana MH, Santhosh Kumar. Prescription analysis of drugs used in the outpatient department of dermatology at tertiary care hospital. *Asian J of Biomedical and Pharm sciences*.2015; 5(46):13-15.
3. The global burden of skin disease in 2010: an analysis of the prevalence and impact of skin conditions. Hay RJ, Johns NE, Williams HC, Bolliger IW, Dellavalle RP, Margolis DJ, Marks R, Naldi L, Weinstock MA, Wulf SK, Michaud C, JL Murray C, Naghavi MJ *Invest Dermatol*. 2014 Jun; 134(6):1527-1534.
4. Saravanakumar RT, Prasad GS, Ragul G, Mohanta GP, Manna PK, Moorthi C. Study of prescribing pattern of topical corticosteroids in the department of dermatology in a multi- specialty tertiary care teaching hospital in south India. *Int J Res Pharm Sci*. 2012;3(4):685- 87.
5. Differential diagnosis of annular lesions. Hsu S, Le EH, Khoshevis MR *Am Fam Physician*. 2001 Jul 15; 64(2):289-96. Tinea corporis gladiatorum.
6. Adams BBJ *Am Acad Dermatol*. 2002 Aug; 47(2):286-90.
7. Tinea corporis, tinea cruris, tinea nigra, and piedra. Gupta AK, Chaudhry M, Elewski B *Dermatol Clin*. 2003 Jul; 21(3):395-400, v.
8. New Antifungal Agents and New Formulations Against Dermatophytes. Gupta AK, Foley KA, Versteeg SG *Mycopathologia*. 2017 Feb; 182(1-2):127-141
9. CG Burkhart, CN Burkhart, KM Burkhart. **An epidemiologic and therapeutic reassessment of scabies**. *Cutis*, 65 (2000), pp. 233-240
10. BJ Currie, JR Carapetis, **Skin infections and infestations in Aboriginal communities in northern Australia**, *Aust J Dermatol*, 41 (2001), pp. 139-143.