

A PROSPECTIVE STUDY ON THE PRESCRIBING PATTERN OF DRUGS IN COMMON SKIN DISEASES AND THE EFFECT OF PATIENT COUNSELLING ON THE QUALITY OF LIFE IN THE DERMATOLOGY OPD OF A TERTIARY CARE CENTRE

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ABSTRACT

Skin disease refers to disorders exclusively of the superficial layers of the skin. Skin diseases have a serious impact on people's quality of life. Occasionally skin diseases can be a manifestation of systemic diseases. The aim of our study is to assess the prescribing pattern of drugs in common skin diseases and to identify the impact of patient counseling on quality of life. The data were collected and recorded in specially designed pro forma. The impact of patient counseling on quality of life was assessed using a Dermatology Life Quality Index (DLQI) questionnaire. Information was provided through patient information leaflet. A total of 150 patients with skin diseases were selected during the six months study period. Out of this, 87 patients were male and 63 patients were female. The most common skin disease was found to be psoriasis 61(40.7%) followed by tinea 39(26.0%), dermatitis 27(18.0%), acne 16(10.7%) and eczema 7(4.7%). The majority of patients were in the age group of 20-60 years. The commonly prescribed drugs were antihistamines(40.7%) followed by antifungals (26.0%), antibiotics (18.0%) and others(10.7%). It was concluded that psoriasis was the highest presentation and antihistamines was the most commonly prescribed drugs. The quality of life in dermatology patients were improved after effective counseling.

KEYWORD: Skin disease refers patient counseling effective counseling.**INTRODUCTION**

The skin is the largest organ of your body. Its function is to protect your body from infection. Sometimes the skin itself becomes infected. Skin infections are caused by a wide variety of germs, and symptoms can vary from mild to serious. Mild infections may be treatable with over-the-counter medications and home remedies, whereas other infections may require medical attention.^[1]

Skin diseases in developing countries have a serious impact on people's quality of life, it is more so in India where climate, socio-economic status, religions and customs are widely varied in different parts of the country. Occasionally skin diseases can be a manifestation of systemic diseases.^[2]

In India, primary and secondary cutaneous complaints are common. Allergy and itching problems are most widely observed in patients.^[5] Various combinational drugs generally use in the treatment of skin diseases like proactive antibiotic, antifungal, benzoyl peroxide, steroids, salicylic acid, anti-histaminic, vitamins and minerals, analgesics usually depends upon prescriber's choice.^[6] Around 3,000 varieties of skin disease have been identified in the clinical literature, most of which are rarely found. Treatment is the most important part in

both curing the disease as well as in preventing the spread of communicable diseases.^[3]

MATERIALS AND METHODS

The study was conducted for a period of 6 months in 150 outpatients with skin diseases after getting clearance of institutional ethics committee in Cosmopolitan hospital, Trivandrum (kerala). The study included both male and female patients suffering from various skin diseases and are willing to participate in the study. The study excluded inpatients below 5 years of age and patients who are not willing to participate in the study. The objective of our study is to assess the prescribing pattern of drugs in skin diseases and to identify the impact of patient counseling on quality of life.

A written informed consent was taken in prescribed format from the patients with skin diseases. All information relevant to the study was collected from the outpatient case records. The demographic characters, clinical features and other details were documented in the proforma.

The collected data were recorded in Microsoft excel sheet and workload is entered as numeric code. For the

analysis we had used SPSS (Statistical Package for Social Science) software.

OBSERVATIONS AND RESULTS

Our study was conducted in dermatology department for 6 months in a tertiary care multispecialty hospital. During our study period 150 cases of out-patients in dermatology department were analysed.

1. Gender distribution of patients

Out of the total 150 patients enrolled in the study 87 (58.0%) were male patients and 63 (42.0%) were female patients.

Table 1: Percentage distribution of the sample according to gender.

Gender	Count	Percent
Male	87	58.0
Female	63	42.0

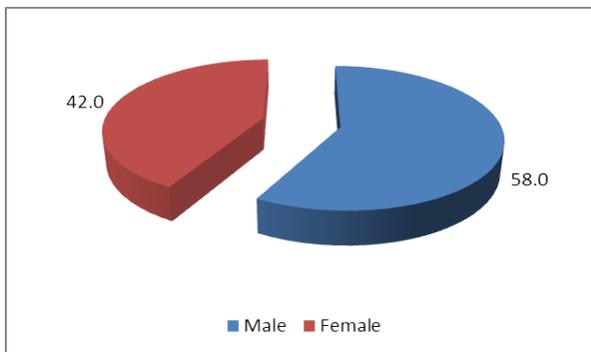


Fig 1. Graph showing percentage distribution of the sample according to gender.

2. Age wise distribution of patients.

Out of the total patients enrolled in the study, the age group that is most affected by skin diseases was found to be adult category; 20-60 years (55.3%).

Table 2: Percentage distribution of the sample according to age.

Age	Count	Percent
Less than 20	25	16.7
20 - 60	83	55.3
Above 60	42	28.0

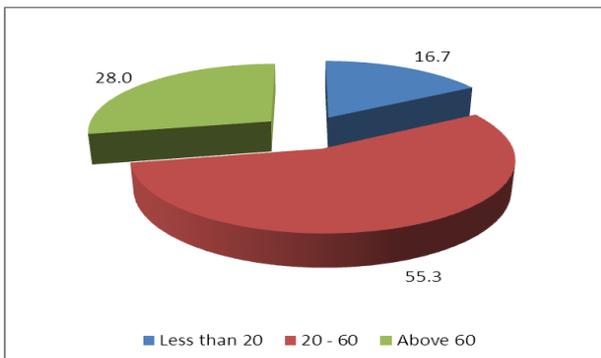


Fig 2. Graph showing percentage distribution of the sample according to age.

3. Disease-wise distribution

The most common skin disease was found to be psoriasis 61(40.7%) followed by tinea 39 (26.0%), dermatitis 27 (18.0%), acne 16 (10.7%) and eczema 7(4.7%).

Table 3: Percentage distribution of the sample according to disease.

Disease	Count	Percent
Psoriasis	61	40.7
Dermatitis	27	18.0
Acne	16	10.7
Eczema	7	4.7
Tinea	39	26.0

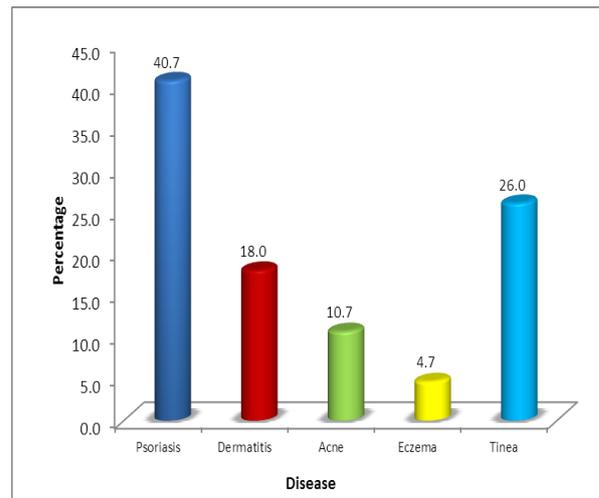


Fig 3: Graph showing percentage distribution of the sample according to disease.

4. Drug-wise distribution

The commonly prescribed drugs were antihistamines (40.7%) followed by antifungals (26.0%), antibiotics (18.0%) and others (10.7%). Most commonly used antihistamines are cetirizine and hydroxyzine; common antifungals include ketoconazole, clotrimazole and terbinafine; commonly prescribed antibiotics were azithromycin, clindamycin, mupirocin and bacitracin. The others include skin preservatives, emollients, vitamin supplements etc.

Table 4: Percentage distribution of the sample according to drugs.

Drugs	Count	Percent
Antibiotics	27	18.0
Antifungal	39	26.0
Antihistamine	61	40.7
Others	16	10.7

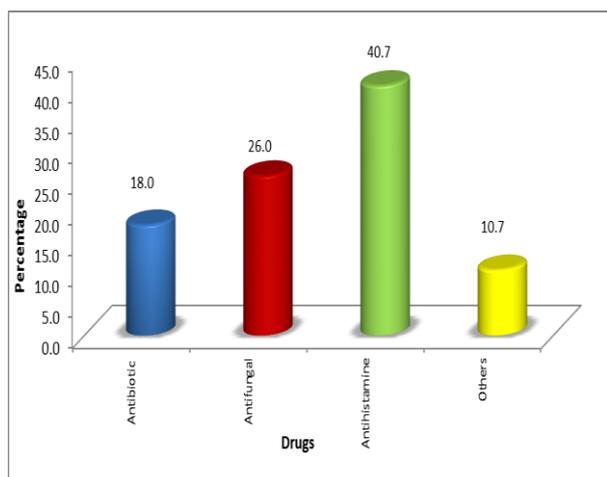


Fig 4. Graph showing percentage distribution of the sample according to drugs.

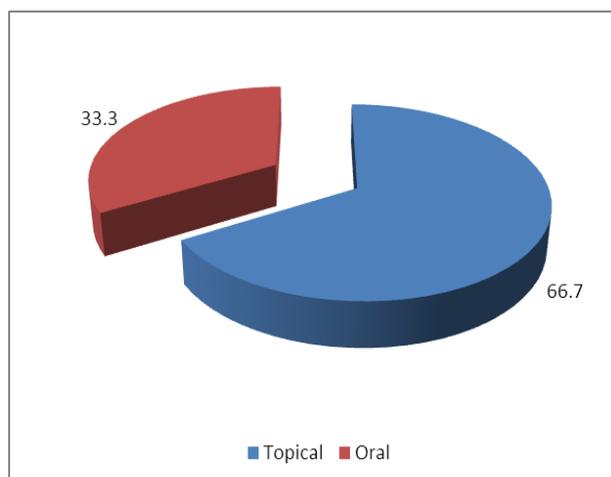


Fig 5: Graph showing percentage distribution of the sample according to route of administration.

5. Route of administration

The preferred route of administration was found to be topical (66.7%) followed by oral (33.3%). Commonly used topical agents are diphenhydramine, clindamycin and ketoconazole.

Route	Count	Percent
Topical	100	66.7
Oral	50	33.3

6. Effect on Pre-counseling

The assessment of patient before counseling showed that skin disease posed an extremely large effect (50.7) on patient’s quality of life. The patient counselling was given on how to care for skin especially prevention and maintaining dry skin problems which lead to diseases like psoriasis and dermatitis, maintaining adequate skin hydration through fluid intake avoid and of use of hygiene products that dry out skin and other important information that was otherwise unknown by the patient was provided. Thus improved the adherence to therapy and improved quality of life.

Table 6: Distribution of the sample according to pre counselling.

Pre counseling	Count	Percent
No effect at all on patient's life	6	4.0
Small effect on patient's life	10	6.7
Moderate effect on patient's life	10	6.7
Very large effect on patient's life	48	32.0
Extremely large effect on patient's life	76	50.7

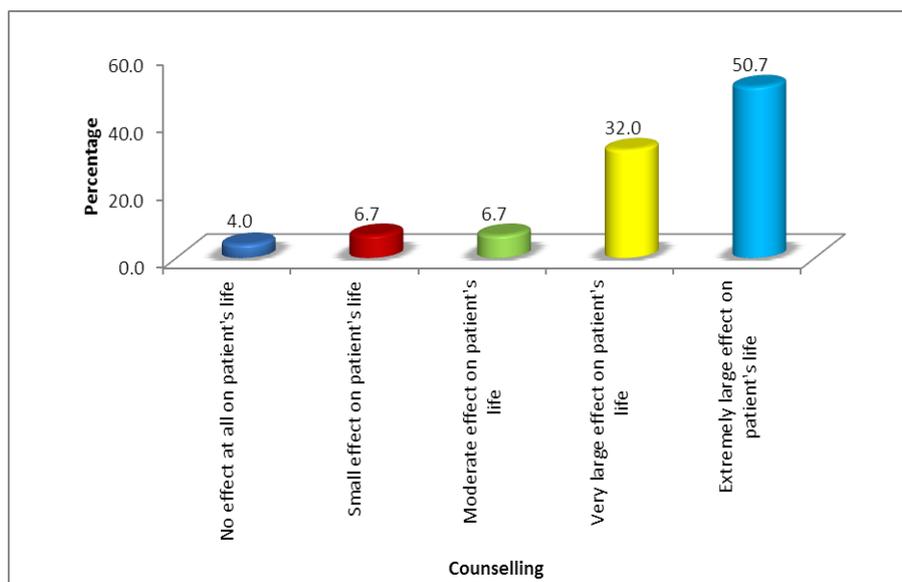


Fig 6: Graph showing percentage distribution of the sample according to pre-counseling.

7. Effect on Post-counseling

After counseling and treatment period, it was found that skin disease had only moderate effect (61.3) on patient’s quality of life.

Table 7: Percentage distribution of the sample according to post counseling.

Post counseling	Count	Percent
No effect at all on patient's life	9	6.0
Small effect on patient's life	30	20.0
Moderate effect on patient's life	92	61.3
Very large effect on patient's life	13	8.7
Extremely large effect on patient's life	6	4.0

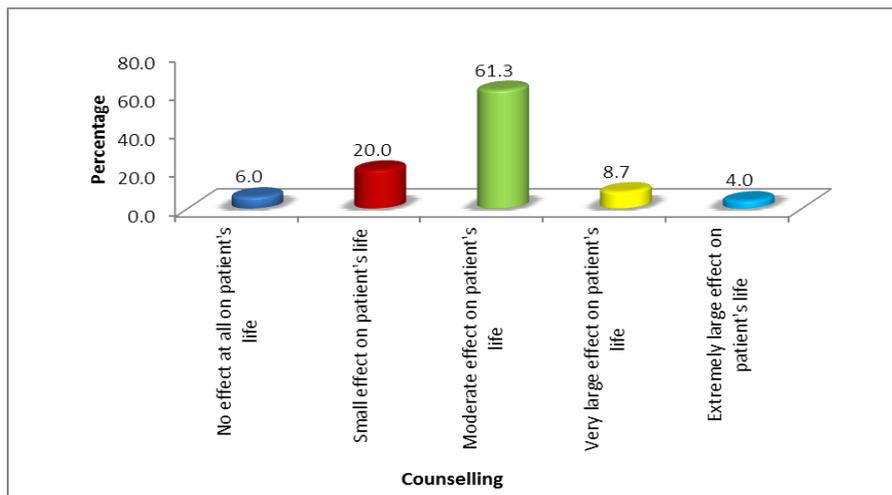


Fig 7: Graph showing percentage distribution of the sample according to post-counseling.

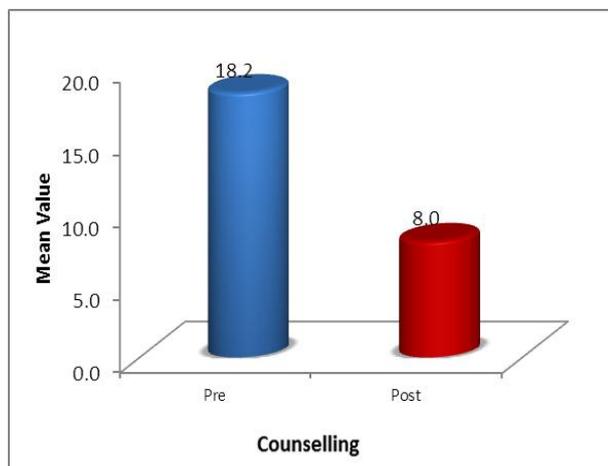
8. Effectiveness of patient counseling

Table 8: Effectiveness of patient counselling.

Counselling	Mean	SD	N	Mean Difference	Paired t	P
Pre	18.2	7.3	150	10.3	13.48**	0.000
Post	8.0	4.7	150			

**:- Significant at 0.01 level

As depicted in the figure below, the mean value has decreased from an 18.2 in pre- counseling to 8.0 in post counseling cases with a mean difference of 10.3 and the change is significant (P<0.000).



Graph showing effectiveness of patient counseling.

DISCUSSION

From the study of 150 patients during a period of 6 months in a tertiary care hospital, it was found that the most commonly affected population with skin diseases is male patients (58.0%). This is because males are more exposed to the causative factors of skin diseases when compared to female patients. The results were in concordance with the study done by Berhane et al^[3] (Table 1).

Skin diseases was found to occur mostly in the age group between 20-60 years (55.3%) as this age group is mostly exposed to the aggravating factors that serves as the reason for skin diseases when compared to people of other age groups (Table 2).

In addition to this, the most prescribed drug classification was found to be antihistamines (40.7%). Antihistamines were prescribed the most due to the common inflammatory and allergic characteristics of skin diseases. These results were similar to the study done by M. H. Sumana et al. While considering the treatment

options, antihistamine therapy is the primary and most important treatment option for these patients. Antifungals, Antibiotics and other medication like vitamin supplements is given if necessary. (Table 3).

In our study we had assessed that the skin disease of highest incidence is psoriasis(40.7%) similar to the finding of C. M. Divyashanthi et al. The study was conducted during the winter months which is the reason for psoriasis to be the most common disease. In terms of socio-economic status of the patients with skin diseases, majority of them were from poor sanitary conditions and low hygiene surroundings, furthermore, the disease occurrence was also related to occupational status like construction laborers, IT professionals, and those living in overcrowded environment (Table 4).

The commonly prescribed route of administration is the topical route (66.7%) as this is the most preferred route of administration for the treatment of various skin diseases. This was similar to the study of Nasir et al. The least occurred disease is eczema (4.7%). Topical agents can be directly applied to the affected area (Table 5).

The assessment of patient during pre-counseling showed that disease had extremely large effect (50.7%) on patient's quality of life (Table 6). Whereas, during the post counseling session, the skin condition had only a moderate effect (61.3%) on patient's quality of life which was a good sign (Table 7).

Effectiveness in patient counseling is increased significantly. The mean score was raised from 18.2 to 8.0.

CONCLUSION

From the study of 150 patients during a period of 6 months in a tertiary care hospital, it was found that the most commonly affected population with skin diseases is male patients (58.0%). This is because males are more exposed to the causative factors of skin diseases when compared to female patients. The results were in concordance with the study done by Berhane et al^[3] (Table 1).

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