Pattern of dermatological disorders among patients attending OPD at a Government hospital in North India

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Abstract
Background: Skin diseases are most common health problems worldwide and it continues so because of difference in the availability of health care access, type of health care and most important awareness of the common man to the importance of early diagnosis and treatment of skin diseases.

Methodology: A hospital based cross sectional study was conducted in Government Medical College Anantnag. All the patients attending the OPD for 1 month were included in the study. A total of 1515 patients were seen and thus included in the study.

Results: In our study, the majority of patients were in the age group of 21-30 years (37%), females (54.3%), belonged to joint families (70.1%) and majority were married (75.1%). The majority of the patients had non-infectious form of skin disease (60.9%) and less had infectious form of skin diseases. Among the non-infectious form of skin disorders, the common one was eczema. The most common form of infectious skin disorder was scabies.

Conclusion: Overall the burden of skin diseases is high in the population. There is a need for imparting awareness regarding the prevent ability and early detection of skin diseases.

Keywords: Dermatology, Scabies, eczema, tinea infection.

Introduction
Dermatology is the branch of medicine that deals with diagnosis and treatment of skin, hair and nail related disorders. It is a vast growing branch as large number of skin related pathological conditions are emerging these days. Skin is also the largest and most visible organ of the body which acts as the first barrier against injury and bacterial infestation therefore reflecting the health status of the body. Skin changes are affected with aging due to passage of time and photo-aging due to exposure to the sun, with signs of xerosis, fine wrinkling, thinning of skin, loss of elasticity, seborrhoic keratosis, coarse deep wrinkling, skin tag, etc. The pattern of skin diseases varies from region to region due to difference in ecological, social and genetic factors and hygienic standards. In developing countries, poor hygiene, lack of basic amenities, and overcrowding also play significant role in occurrence of few skin diseases. In addition, profile of skin disorder among patient is
influenced by the distance needed to travel to seek health care.\(^\text{(4)}\).

Regarding skin disorders, males are more commonly afflicted with infectious diseases whereas women are more vulnerable to psychosomatic disorders, autoimmune, pigmentary as well as allergic diseases.\(^\text{(5)}\). There is a high prevalence of dermatological disorders with significant morbidity in patients admitted in hospitals as well\(^\text{(6)}\). Dermatological problems constitute at least 30% of all outpatient visits to a pediatrician and 30% of all visits to a dermatologist involve children. The prevalence of these disorders among children in various parts of India ranges from 8.7% to 35%.\(^\text{(7)}\)

There are various diseases and syndromes well documented with a cutaneous marker. Certain dermatological diseases such as psoriasis are associated with metabolic syndrome and cardiovascular disease. There is an increased prevalence of various cutaneous infections with diabetes mellitus and other immune-compromised states.\(^\text{(8)}\)

Aim and Objectives
The study was done to assess the pattern of dermatological disorders among patients attending OPD at a Government Medical College Anantnag.

Methodology
The study was cross sectional study conducted at Government Medical College Anantnag, J & K. All the patients presenting with dermatological complaints in OPD were enrolled in the study. The study was conducted during a time period of 1 month during which a total of 1515 were included in the study. Participants were interviewed using a structured questionnaire. Information was obtained regarding demographical and socio-economic characteristics. The collected data was entered in Microsoft Excel. Data was described in terms of percentages.

Results
The study was conducted during a period of 1 month with a total of 1515 participants. The majority of the patients who were included belonged to the age group of 21-30 years (37.0%), were females (54.3%), belonged to a joint family (70.4%), and were married (75.1%). [Table 1].

| Characteristic | Number (n=1515) | Percentage (%) |
|----------------|-----------------|----------------|
| **Age (years)** |                 |                |
| 11-20          | 289             | 19.0           |
| 21-30          | 562             | 37.0           |
| 31-40          | 228             | 15.0           |
| 41-50          | 198             | 13.0           |
| 51-60          | 162             | 11.0           |
| >60            | 76              | 5.0            |
| **Gender**     |                 |                |
| Male           | 692             | 45.7           |
| Female         | 823             | 54.3           |
| **Family type**|                 |                |
| Nuclear        | 448             | 29.6           |
| Joint          | 1067            | 70.4           |
| **Marriage status** |     |                |
| Unmarried      | 377             | 24.9           |
| Married        | 1138            | 75.1           |

The non-infectious form of skin diseases was more common as compared to infectious disorders. (Table 2)

| Diagnosis     | Male | Female | Total |
|---------------|------|--------|-------|
| Non-infectious| 367  | 557    | 924   |
| Infectious    | 325  | 266    | 591   |

The distribution of non – infectious form of skin disorders is given as under : (Table 3)

| Diagnosis            | Male | Female | Total | Percentage (%) |
|----------------------|------|--------|-------|----------------|
| Eczema               | 74   | 92     | 166   | 17.9           |
| Vitiligo             | 55   | 43     | 98    | 10.6           |
| Melasma              | 25   | 64     | 89    | 9.8            |
| Psoriasis            | 72   | 80     | 152   | 16.4           |
| Acne Vulgaris        | 64   | 95     | 159   | 17.2           |
| Urticaria            | 22   | 64     | 86    | 9.3            |
| Drug Eruptions       | 40   | 45     | 85    | 9.2            |
| Miscellaneous        | 43   | 46     | 89    | 9.6            |
The distribution of infectious form of skin disorders is under (Table 4)

**Table 4:** Distribution of infectious form of skin disorders is as under:

| Diagnosis           | Number (n=591) | Percentage (%) |
|---------------------|----------------|----------------|
|                     | Male | Female | Total |                |
| Scabies             | 63   | 93     | 156   | 26.5           |
| Tinea Infection     | 62   | 59     | 121   | 20.5           |
| Pityriasis Versicolor | 54   | 63     | 117   | 19.8           |
| Candidiasis         | 42   | 51     | 93    | 15.6           |
| Herpes Zoster       | 16   | 22     | 38    | 6.4            |
| Chicken pox         | 10   | 11     | 21    | 3.6            |
| Warts               | 30   | 15     | 45    | 7.6            |

**Discussion**

The rise of skin related problems are high specially in our country. This can be attributed to hot- humid climatic condition, low socio-economic status, religions, lack of access to primary health care, poor educational status. The pattern of skin disorders varies from country to country but also within the same country in different parts. So, frequency of different skin disorders in different parts of the same country should be studied.\(^{(1)}\)

In our study, the majority of the patients belonged to the age group of 21- 30 years with a percentage of 37.0%, followed by the age group of 11-20 years , followed by age group of 31-40 years and then the least participants belonged to the age group of >60 years.

The majority of the patients were females (54.3%) as compared to the males (45.7%). The majority of the patients belonged to joint families (70.4%) as compared to nuclear families (29.6%). The majority of the patients were married (75.1%) followed by unmarried (24.9%).

The most common form of skin disorder was non-infectious as compared to the infectious form of disorders.

In the non-infectious form of skin disorders, the most common was eczema (17.9%), followed by acne vulgaris (17.2%), followed by psoriasis (16.4%), followed by vitiligo (10.6%), followed by melasma (9.8%), followed by miscellaneous group (9.6%) , followed by urticarial (9.3%) and the last being drug eruptions (9.2%). The non -infectious form of skin disorders were more common among females as compared to males.

In the infectious form of diseases, the most common was scabies (26.5%), followed by tinea infections (20.5%), followed by pityriasis versicolor (19.85%), followed by candidiasis (15.6%), followed by warts (7.6%), followed by herpes zoster (6.4%)and the least found were cases of chicken pox(3.6%).

**Conclusion**

The frequency of skin disorders is increasing day by day. The pattern of skin diseases varies from one country to another country and in various regions within the same country. The emerging challenges for dermatologists are to prevent and reduce these skin diseases that pose a major healthcare burden, as well as affecting the quality of patients' lives. There should be training programmes for diagnosing and managing common skin disorders for general practitioners and primary health care physicians to reduce referrals to tertiary care hospitals.\(^{(2)}\) The most predominant patients attended the skin OPD belongs to low socioeconomic status which comprise of basically farmers, construction workers and others from rural areas.\(^{(1)}\) Improvement education, personnel hygiene, the standard of living, environmental sanitation, and good nutritious food may help us to bring down the skin diseases in this area. Hence the aim of this study was to enforce the necessity of education, good health care system, environmental sanitation, good nutrition and maintenance of personnel hygiene as a whole can bring down the percentage of skin related diseases and improvement in the quality of life, hence more studies in this field is required which can give deeper insight on the pattern and their extent of effect on the quality of life.\(^{(1)}\)

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