

Original Research Article

Pattern of Dermatoses in a tertiary care hospital in East Sikkim

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Abstract

The authors had attempted to understand the pattern of Dermatitis coming to the skin OPD of Central referral Hospital, SMIMS, Gangtok. Out of 8630 Patients included in our study, 51.8% were female patients with female male ratio of 1.07:1. Majority of the patients (29.24%) was from the age group 21-30 years followed by age group of 31-40 years (18.96%). Eczema and allergic disorder constituted the maximum number of the cases (21.14%), followed by Fungal Infections (16.5%). The skin infections of viral and bacterial aetiology constituted 11.76% and 4.45% respectively. The pigmentary disorders comprised of 8.7%. Other pattern of skin diseases in a decreasing order as observed were Acne (6.62%), Alopecia (5.9%), Parasitic infestations (5.09%) Photodermatoses (4.6%), papulosquamous disorder (4.27%), vesiculobullous disorders (0.6%), Autoimmune diseases (0.35%) and malignancy (0.04%).

Key words

Sikkim, Skin diseases, Dermatitis.

Introduction

Skin diseases manifest in various ways and often are as a consequence of underlying disease process. While skin diseases are very common among the populations in many developing countries, they have not been regarded as a significant problem that could benefit from public health measures. Indeed, more attention is

frequently given to some less common health problems in the same countries. This attitude is due to the assumption that skin diseases are a benign, not life-threatening minor nuisance, and that they do not merit measures that may appear out of proportion to their low priority [1]. The pattern of skin disease is a consequence of poverty, malnutrition, overcrowding, poor

hygiene, illiteracy, and social backwardness in many parts of India [2].

The evaluation for skin disorders forms an important component of primary health care practice and the prevalence of certain skin diseases in children can reflect status of health, hygiene, and personal cleanliness of a community [3]. The evaluation for skin disorders is an important component of primary health care practice for all, including children [4].

Sikkim is a small hilly state with population of 6.42 Lacs with Sex Ratio 889 per 1000 males with literacy rate 82.20 [5]. The state enjoys a temperate climate and heavy rain fall and is declared as Organic state. SMIMS is the only tertiary care hospital and medical college in the North Eastern Hilly terrain of Sikkim. Very few Indian studies are available to find out what exactly is the pattern of skin diseases amongst patients reporting regularly to the skin OPD in this region. It is a novice attempt by the authors to understand the pattern of Dermatoses coming to the skin OPD of this hospital in the North Eastern Himalayan State.

Materials and methods

This cross sectional study was undertaken with an aim to evaluate the magnitude of skin diseases and pattern of various Dermatoses. All newly registered patients reporting to Skin OPD of Sikkim Manipal Institute of Medical Sciences, Gangtok during the period from 1st April '2016 to 31st March '2017 were enlisted in the study. The controversial and the cases where diagnosis was doubtful were excluded from the study. Other variables such as sex, age and month were taken into consideration. A total of 8630 patients were included as study material. A detailed general, systemic and cutaneous examination was done. Relevant investigations were carried out whenever deemed necessary. The findings were recorded in a performa for analysis and interpretation of data done by using Microsoft Excel spread sheet and SPSS Version 20.0.

Results

The patients coming to Skin OPD showed a decreasing trend in winter season and increasing trend in rainy season (**Table - 1**).

Out of 8630 patients included in our study, 51.8% were female patients with female male ratio of 1.07:1. Majority of the patients (29.24%) was from the age group 21-30 years followed by age group of 31-40 years (18.96%) (**Table - 2**).

21.14% of the total OPD patients were with Eczema and allergic disorders. Under this group, Urticaria comprised the highest percentage (37.06%) followed by Seborrheic dermatitis (17.4%) and Contact dermatitis (16.4%) respectively (**Figure - 1**).

Fungal Infections were 16.5% of total cases, out of which Tinea Corporis (39%) was the most common infection followed Tinea Cruris (29.6%) and Pityriasis Versicolor (6.1%) (**Figure - 1**).

Viral infections comprised of 11.76% of total cases. The following pattern among viral infections was observed. Maximum cases were Herpes zoster (23.3%) followed by Verruca vulgaris and Varicella which comprised of 19.61% and 13.7% respectively of total viral infections. A total of 29 cases of Measles (2.8%) of total viral infections were observed.

Pigmentary disorders comprised of 8.7% of total number of cases. Skin Diseases like vitiligo (35.7%) was seen in maximum cases followed by melasma (29%) of total pigmentary disorders. Laser tattoo removal was done in 133 cases in a year.

Acne cases were 6.62% of total number of cases where acne vulgaris was the majority (87.93%). Alopecia was seen in 5.9% of cases with Alopecia areata being the major variant (68.73%). Parasitic infestations were observed in 5.09% of cases where scabies accounted for majority of cases followed by pediculosis.

Photodermatoses consisted of 4.65% of total cases, out of which polymorphic light eruptions constituted 71.28%.

A total of 384 cases (4.45%) were bacterial infections. Furunculosis (34.64%) was the most common bacterial infections followed by folliculitis (19.53%) of total bacterial infections. A total number of six patients reported as new case of Leprosy.

Papulosquamous disorders comprised of 4.27% of total number of cases, out of which psoriasis

lead the group with 43.9%, followed by Lichen planus (25.2%).

The vesiculobullous disorders (0.6%), Autoimmune diseases (0.35%) and malignancy (0.04%) were found in a significant less number of patients.

The other diseases like Acanthosis Nigricans, Insect bite, Xerosis, drug rash, keloid, mole, Ichthyosis, skin tag, vasculitis were grouped under miscellaneous category which comprised of 10.4% of total cases.

Table - 1: Month and Sex distribution of patients.

Month	Male	Female	Total
April 2016	431	462	893
May 2016	349	375	724
June 2016	418	450	868
July 2016	452	485	937
Aug 2016	417	449	866
Sep 2016	383	411	794
Oct 2016	331	357	688
Nov 2016	299	321	620
Dec 2016	290	312	602
Jan 2017	253	272	525
Feb 2017	231	250	481
Mar 2017	305	327	632
Total	4159	4471	8630

Table - 2: Age range.

Age range (years)	Male	Female	Total	Percentage (%)
0-10	640	588	1228	14.24
11-20	850	785	1635	18.95
21-30	1146	1378	2524	29.24
31-40	690	947	1637	18.96
41-50	409	386	795	9.23
>51	424	387	811	9.39
Total	4159	4471	8630	100

Discussion

51.8% were female patients with female male ratio of 1.07:1. It was similar to study in Nepal in terms of sex distribution where male comprised

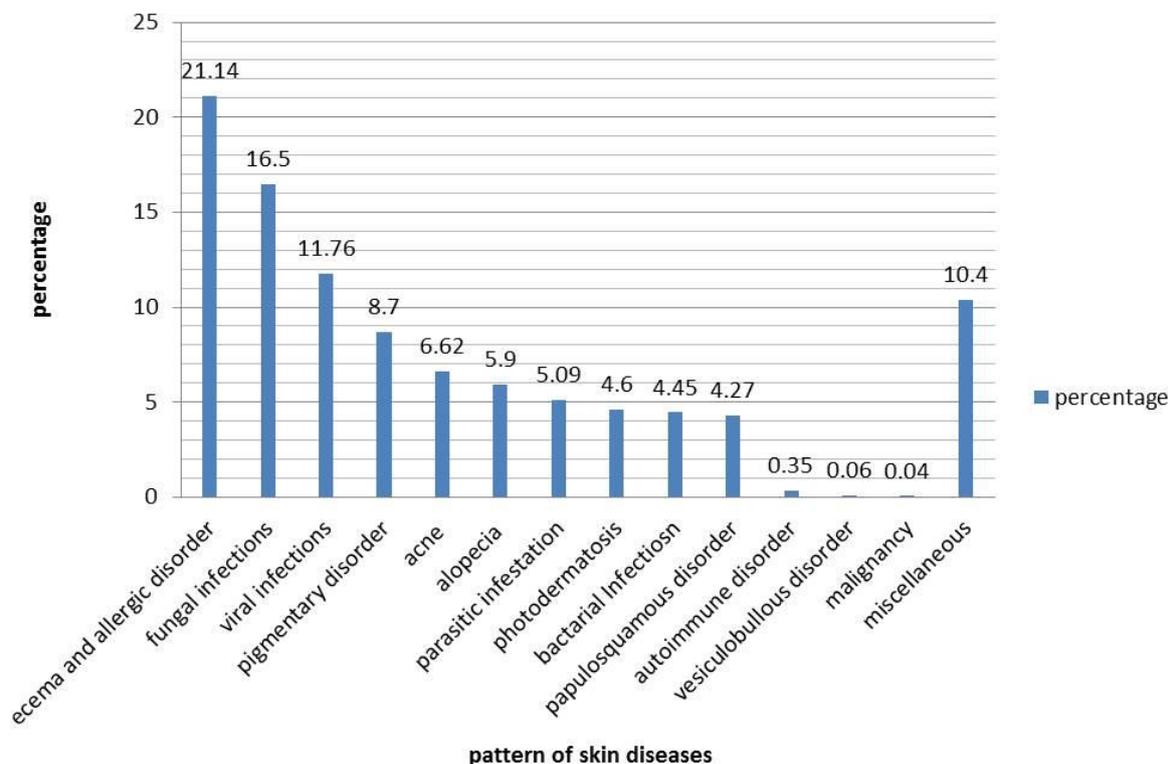
of 47.9% and females 52.1%. But our finding of 29.24% of patients in age group 21-30 years differed from the study in Nepal where the

majority of patients belonged to age group of 10-19 years [6].

21.14% of the total OPD patients were with Eczema and allergic disorders similar to study done in Nepal [6]. Our findings were slightly

lower than the study done in West Bengal where allergic diseases were observed in 29.88% of total patients [7]. This could be accounted due to the fact that Sikkim enjoys a temperate climate and is an organic state having non polluted environment and dense forest areas.

Figure - 1: Pattern of skin diseases.



32.71% of total infective dermatoses was seen with Fungal Infections (16.5%), Viral infections (11.76%) and bacterial infections (4.45%) similar to findings of the study done in West Bengal, where infective dermatoses was seen in 36.41% and different from the study done in Nepal where infective dermatoses comprised of 22.5% of total cases out of which Pyoderma was the most common infective dermatoses [6, 7]. Due to prevailing cold and damp climate, irregular bath habits, wearing of woollen dresses and shoes for majority of time and lack of exposure to sunlight could be the predisposing factors for the infective pattern of Dermatitis seen in this area.

In our study, Parasitic infestations were observed in 5.09% of cases where scabies accounted for majority of cases. Our findings were quite

different from a study done in Udaipur on Pediatric Dermatitis where the infection and infestation group, bacterial infection (13.72%) was the most common entity followed by scabies (10.42%), fungal (6.52%), and viral infection (3.40%) [8]. This may be attributed due to different climatic conditions and infestations being more common in paediatric age group. Only 0.07% of total patients were new case of Leprosy which is strikingly lower than the study done in West Bengal where New cases of leprosy accounted for 5.64% [7]. Being a tertiary referral hospital with a corporate set up and a District hospital nearby, the number of reported leprosy cases was less. The prevalence rate of Leprosy in State of Sikkim is 0.2% per 10000 population [9].

Pigmentary disorders comprised of 8.7% of total number of cases. Skin diseases like vitiligo were 3.14% similar to finding done in Gujarat [10]. Laser tattoo removal was done in 133 cases in a year. Acne cases were 6.62% of total number of cases which was less than the study done in Andaman and Nicobar islands where it was seen 11.5% of cases [11]. Alopecia was observed in 5.9% of cases with Alopecia areata being the major variant (68.73%) was lower than the study done in Gujarat (9%) [10]. Our findings showed that polymorphic light eruptions constituted 3.28% of total cases which differed from the study in Andaman and Nicobar Islands where polymorphic light eruption was seen in 1.77% of cases [11]. Papulosquamous disorders comprised of 4.27% of total number of cases, out of which psoriasis comprised of 1.87% which was quite lower than the study in Gujarat where Psoriasis consisted of 6% cases [10].

Conclusion

Our study showed an interesting trend that eczema and allergic disorder and fungal Infections were the maximum number of patients in an organic state of Sikkim which enjoy a temperate climate. Thus an extensive study may be needed to have a holistic approach to the problem and establish a correlation between the variables. The limitation of the study was the cross sectional design of the study.

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