

Original Research Article

Epidemiological study of skin diseases in Himatnagar

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ABSTRACT

Background: The aim of the study was to identify the prevalence of skin diseases in the peripheral area of North Gujarat, India.

Methods: It was retrograde OPD based study in which patients visiting skin department of GMERS, Himatnagar, were studied from 30 October 2017 to 30 October 2018.

Results: Total 15042 patients, male were 53% and female were 47%. Fungal infection was the most common infectious diseases (16.6%) and eczema was the most common non infectious diseases (12.77%). Contact dermatitis accounted (10.49%). Xerosis (8.19%) was the most common in the patients who were in their 5th and 6th decade of life.

Conclusions: Fungal infection was seen almost equally in male and female. Contact dermatitis was very common in females. Acne was seen predominantly in teenagers and adolescents due to hormonal changes.

Keywords: Prevalence, Fungal, Contact dermatitis, Acne epidemiology

INTRODUCTION

Skin diseases are becoming very important.¹ The prevalence of skin disease in general population has varied from 7.86% to 11.16% in various studies.²

Epidemiological data from Himatnagar has been summarized in a retrograde manner. This has facilitated the further analysis of prevalence of various skin conditions from this area. Himatnagar is the town in Sabarkantha district of Gujarat with the population of approximately 81,137 (census 2011).

This study was conducted in GMERS medical college, Himatnagar for the duration of 1 year.

Aim of the study

This is the retrospective study, undertaken mainly to know the prevalence of various skin diseases in this area.

METHODS

It was a retrograde study. The data of patients visiting OPD skin department, GMERS, Himatnagar from 30/10/17 to 30/10/18 were taken into the study.

All patients who visited skin OPD during this period were thoroughly examined, their disease plotted and divided into specific group as per their disease classification.

Inclusion criteria

All patients who were willing to get examined in detail were included. Males and females of both sexes and all age groups were enrolled. Verbal consent was taken.

Exclusion criteria

No exclusion criteria were set as it was only an epidemiological study.

RESULTS

Total 15,042 patients had visited the hospital during this period, out of which males were 8020 and females were 7022 (Table 1).

Table 1: Gender wise classification.

Gender	N (%)
Male	8020 (53)
Female	7022 (47)

Table 2: Major groups into which diseases were broadly classified.

	N (%)
Total	15,042
Dermatophytic infection	2498 (16.6)
Eczema	1922 (12.77)
Bacterial infection	746 (4.96)
Acne	979 (6.50)
Atopic dermatitis	600 (3.98)
P.alba	170 (1.13)
Infestation	1238 (8.23)
Psoriasis	156 (1)
Keratosis pilaris	45 (0.29)
Viral infection	231 (1.53)
Vaginal discharge	11 (0.07)
Post inflammatory changes	518 (3.44)
Oral lesion	65 (0.43)
Pemphigus vulgaris	42 (0.27)
Contact dermatitis	1578 (10.49)
Vitiligo	248 (1.64)
Nutritional disorder	68 (0.45)
Urticaria	1440 (9.57)
Hair disorder	838 (5.57)
Xerosis	1232 (8.19)
Keloid	8 (0.05)
Hypertrophic scar	3 (0.019)
Melasma	240 (1.9)
Onychomycosis	160 (0.1)
DLE	2 (0.01)
Skin tag	4 (0.02)

Broadly the diseases were classified into 26 groups. Accordingly, in few cases it was further sub classified.

Table 3: Sub classification of various infections.

Infection	N
Fungal	2498
Tinea cruris	660
Tinea corporis	417
Tinea faciei	315
Tinea pedis and mannum	190
Onychomycosis	160
Pityriasis versicolor	128
Seborrheic dermatitis	628
Bacterial	746
Impetigo	343
Furuncle	229
Folliculitis	174
Viral	231
Herpes zoster	27
Herpes simplex	11
Molluscum contagiosum	43
Wart	150
Infestation	1238
Scabies	1072
Pthirus capitis	138
Pthirus pubis	28

In cutaneous dermatophytic infection, patients with tinea cruris were the highest. Onychomycosis was mainly in association with tinea pedis.

Among the bacterial infection, prevalence of Impetigo was the highest, prominently seen in pediatric patient followed by furuncle and folliculitis which was mainly seen in adult population. Among the viral infection molluscum contagiosum was the highest. Among the infestation, scabies was the most common one, while pthirus pubis was seen in sexually active people only.

Table 4: Sub classification of various eczematous condition.

Sub classification	N
Eczema	1922
Discoid eczema	1141
Hypertrophic eczema	490
Acral eczema	241
Disseminated eczema	50

Total 1922 patients presented with eczema. Atopic dermatitis was seen mainly in children. Minor signs of atopic dermatitis were sole presenting features in few cases (Table 4).

Acne was one of the most distressing complain in teenagers (Table 7).

Urticaria was seen commonly in this area. Males presented with urticarial more commonly than females (Table 8).

Table 5: Sub classification of atopic dermatitis and related condition.

Sub classification	N
Atopic dermatitis	600
P. alba	170
Keratosis pilaris	45

Table 6: Sub classification of various dermatitis.

Sub classification	N
Contact dermatitis	1578
Airborne contact dermatitis	678
Allergic contact dermatitis	690
Irritant contact dermatitis	210

Table 7: Sub classification of acne vulgaris.

Sub classification	N
Acne vulgaris	979
Comedonal	179
Papular-pustular	417
Nodulo cystic	383

Table 8: Sub classification of urticaria.

Sub classification	N
Urticaria	1440
Acute urticaria	890
Chronic urticaria	550

Table 9: Sub classification of autoimmune condition.

Autoimmune	N
Psoriasis	156
Guttate	6
Palmoplantar	110
Scalp	11
Psoriasis vulgaris	29
Pemphigus vulgaris	42
Vitiligo	248
DLE	2

Table 10: Sub classification of pigmentary conditions.

Pigmentary	N
Melasma	240

Melasma was seen equally in both sexes. History of constant sun exposure noted in most cases (Table 10).

Table 11: Sub classification other conditions.

Others	N
Keloid	8
Hypertrophic scar	3
Achrochordon	4

DISCUSSION

In a study by Grover et al prevalence of skin disorders showed female preponderance and the largest group of population (50.7%) was in their second and third decades.² Also in our study female preponderance was seen along with 62.7% people in their third and fourth decade.

In a study by Jain et al showed fungal diseases to be the most common infection (13%), and most common non infectious condition was eczema (22%), while study conducted by Rao et al, fungal infection (22.92%) was the highest in infectious group and eczema (32.19%) was the commonest in non infectious group.^{3,4}

In our study fungal infection and eczema had upper hand by (16.6%), (16.72%) respectively. Often worsening of the condition was seen in few cases because of self medication and for prolonged duration with, oral or topical steroid. In few of the patients, recurrence was seen due to non-adherence of treatment. The occupation of the locals along with the climate of the area, were equally responsible for the high prevalence of fungal infection.⁵

Discoid eczema was the highest and mainly seen in middle age males. Acral eczema was more common in female because of household work and repeated exposure to soap and detergent.

As seen in our study, out of 15042 patients with allergic contact dermatitis were the highest-690, followed by air borne contact dermatitis. In patients who were involved with farming⁶, irrigation, frequent exposure to pesticide and insecticide, mostly had irritant contact dermatitis.

Also as in our study, in females, hormonal imbalance was commonly seen.⁷ In most of the popular-pustular type and nodulocystic type of acne, healing was followed by post acne scar. In few cases, self application of topical steroid had worsened the condition.

Kar et al in his study concluded skin disease depends on occupation, socioeconomic status, literacy and age of the patients.⁸ Even in our study we concluded that the occupation, climate, socio-economic status, sex, and age does have a role to play in occurrence of skin diseases. It was seen that, people with basic education could understand the instructions in a better responsible way.

CONCLUSION

This study has shown that even to this date, the patients with skin diseases are present irrespective of the advances made by medicine. It's an amalgam of the intrinsic and extrinsic turmoil which leads to the occurrence of diseases.

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Ethical approval: The study was approved by the institutional ethics committee

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