

Original Research Article

Prevalence of dermatological conditions in tribal place of Timbi, Bhavnagar (Saurashtra)

Bhuvnesh Girish Shah¹, Keya Jayesh Sheth^{2*}

¹Department of Dermatology, Government Medical College, Valsad, Gujarat, India

²Consultant Dermatologist, Skincare Clinic, Surat, Gujarat, India

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*Correspondence:

Dr. Keya Jayesh Sheth,

E-mail: ksheth1412@gmail.com

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ABSTRACT

Background: Skin is one of the major organs of our body. With time people have started taking due care of their skin. Also with changing civilization, there are new problems up springing every now and then. Even prevalence of skin diseases is different from place to place. No precise data is available to know the exact occurrence of dermatological conditions in Timbi. Hence a study was undertaken to know the burden of the disease in that area.

Methods: A study of 9500 cases, was undertaken in tribal area of Timbi. Males and females were included in the study.

Results: It was observed that occupation and the literacy level has somewhat co-relation with the nature, occurrence, and pattern of disease that was seen. Also it was noted that skin diseases were directly or indirectly related to systemic diseases. It was observed that once the systemic diseases were treated, the skin condition improved drastically. Also it brought into the limelight, the nuisance of irrational and improper usage of steroid. As per our observation, half of the complications seen were due to steroids. Majority cases were of Tinea, along with eczema and psoriasis. Cases like pellagroid dermatitis were also seen along with zinc dermatitis.

Conclusions: This study was helpful in understanding the nature of diseases which prevailed, helped in planning of an effective healthcare system and also brought into the notice how commonly the steroids are being used for irrational case. Also it helped in emphasizing the need of educating people and creating awareness amongst them.

Keywords: Epidemiology, Tribal area, Saurashtra

INTRODUCTION

Skin is one of the major organs of our body. With time people have started taking due care of their skin. Also with changing civilization, there are new problems up springing every now and then. Even prevalence of skin diseases is different from place to place.¹ What may be

seen as a common disease, in one place may not be commonly seen at the other place. A search was made to know the burden of skin diseases prevalent in Timbi, but no precise data was available, which could throw sight onto the topic. Hence a study was undertaken to know the prevalence of various dermatological conditions prevalent in village of Timbi, Bhavnagar (Saurashtra).

Aim

The aim of the study was prevalence of dermatological conditions in tribal place of Timbi, Bhavnagar (Saurashtra).

METHODS

Patients attending the outpatient department of a Local hospital at Timbi were studied. Duration of study was from February 2017 to April 2017. The patients were explained in details, the need and importance of the study. Only then, cases that wished to enroll voluntarily were taken up for the study. Verbal consent was taken.

Males and females of all ages were undertaken. A total of 9500 cases were enrolled. Detailed history was taken. Needed investigations were performed.

RESULTS

Total cases- 9500; Males- 6500 (68.42%); Females- 3000 (31.57%).

Males outnumbered females in the study conducted (Table 1).

50% people were farmers by occupation while only 5% were unemployed (Table 2).

45% were highly educated, while 10% could not read or write (Table 3).

Diabetes and thyroid disorders were commonly seen co-existing with skin diseases (Table 4).

Fungal infection was the commonest skin problem seen in all ages and both sexes (Table 5).

Table 1: Age wise distribution.

<20 years		20-44 years		45-65 years		>65 years	
Male	Female	Male	Female	Male	Female	Male	Female
1125	1120	2000	880	1600	750	1775	250

Table 2: Broadly the cases were divided into 5 subgroups on basis of occupation.

Sr.no	Occupation	%
1	Students	10
2	Housewife	15
3	Farmers	50
4	Businessman, employee, owners, etc.	20
5	Unemployed	5

Table 3: Broad classification of the cases into 4 sub class based on their education.

Sr.no	Level of education	%
1	Never attended school / could not read and write.	10
2	School drop out	15
3	Matrix passed	30
4	Degree/ Diploma holders.	45

Table 4: Skin disorder which co-existed with major systemic diseases.

Male	Systemic disorder	Female
900	Endocrinopathy(Mainly DM &Thyroid)	750
300	Nutritional disorder	450
13	Carcinoma	1
17	Renal disease	2
22	Gastric disease	40
17	Respiratory disease	45
500	Cardiovascular disease	155
600	Other dermatosis	907
4131	No systemic co-relation	650

Table 5: Pattern of diseases seen during the study.

Male	Skin disease	Female
540	Eczema	397
960	Psoriasis	160
620	Urticaria	169
90	Scabies	60
420	Atopic dermatitis	200
70	P. versicolor	19
2	Plantar keratoderma	15
300	Tineacorporis	290
250	Tineacurris	120
160	Tineafaciei	60
273	Onychomycosis	130
123	Polymorphous light eruption	200
100	Acne	160
2	Melasma	82
4	Seborrheic Dermatitis	10
24	Post inflammatory hyperpigmentation	20
65	Viral Warts	90
140	Xerosis	60
430	Vitiligo	140
220	Candidiasis	60
60	Lichen simplex Chronicus	56
4	P.alba	12
108	ICD/ACD	100
80	Hansen's disease	62
30	Acrochodone	60
102	Furuncle	60
20	Apthous ulcer	12
59	Telogen effluvium	64
44	Pemphigus vulgaris	4
60	Herpes zoster	3
10	Herpes labialis	20
17	Discoid lupus erythematous	6
115	Keloid	2
12	Hypertrophic scar	0
60	Purpura	0
3	Pellagroid disease	1
6	Mycetoma	2
4	Zinc dermatitis	3
15	Phrynoderma	6
50	Pompholyx	20
4	Nostalgia parasthetica	7
30	Milia	10
117	Neurodermatitis	2
550	Lichen planus	10
0	PUPP	4
70	Callosity	8
70	Prurigonodularis	10
3	Icthyosis	11
4	Cutaneous tuberculosis	3

DISCUSSION

A total of 9500 cases were studied. Both sexes were seen during the study. Males constituted major Population of the study. Even infants and females were seen in large number. People of all age groups were studied.

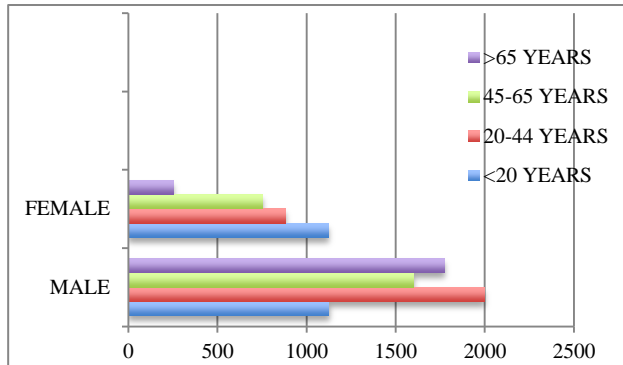


Figure 1: Illustration showing the age wise distribution.

Skin and occupation

Occupation of person has a co-relationship with the skin disease he has. It was seen that most of polymorphous light eruptions and air borne contact dermatitis were commonly seen in farmers. Hand dermatitis and onychomycosis was commonly seen in females working constantly with water.

Scabies was commonly seen in unemployed and rag pickers. Irritant contact dermatitis was commonly seen in artisans and cement workers.

Fungal infection was commonly seen with population of all age groups. It could also be attributed to persistent hot environment, lack of aeration in houses.¹

Skin disease and literacy rate

It is now widely recognized that health outcomes are deeply influenced by a variety of social factors outside of health care system, this includes the education level and economy.²

Higher the literacy level, more is the understanding, about the disease. It was seen that the frequency of the follow up needed, for an educated person, were very less in comparison to an uneducated person.

The level of understanding about the nature and the cause of the disease, the care and precautions to be taken, were comparatively higher for an educated person.

Thus, Literacy has a role to play, directly or indirectly in occurrence and persistence of skin disease.

Skin diseases and systemic disorder

It is not uncommon to see the co-relationship of systemic disorder with skin diseases. The most common association is with endocrinopathy.

Out of every 10 cases of fungal infection, 4 had existing un-controllable diabetes. Out of every 20 cases of telogen effluvium, 5 had thyroid disorder and 2 had severe iron deficiency.

It was also observed that, once diabetes was controlled, the skin condition improved rapidly.³ Similarly when iron substitute was provided, the hairfall decreased drastically.

Multiple achrocordones were observed in patients with obesity and diabetes.

Skin diseases and alternate remedies

It was observed that many patients had taken up home remedy as means to treat their problem, few had taken ayurvedic and homeopathic medications before consulting us, and few directly opted to take allopathic medicines. Details as follow-

A) *Home remedy*

It was observed that in 50% cases, home remedy was done for the prevailing skin condition. The most common home remedy used by patient were-

1. Lime for Malaria and acne,
2. Neem paste for Malaria and acne,
3. Turmeric for pyodermas,
4. Heena and curd for dandruff,
5. Bathing with neem water for pruritus.

B) *Quacks*

Around 12.8% cases referred to quacks. The reason for visiting quacks were-Cheap, easy accessible, time effective.

C) *Ayurvedic therapy*

Around 10.5% cases had undertaken ayurvedic medications. The most common reason for taking Ayurvedic medication was the mentality, of not wanting to take allopathic medicines.

D) *Homeopathy therapy*

Around 8.2% cases had taken homeopathy medicines.

E) *Allopathy*

Around 18.42% had directly opted to take allopathy medicines.

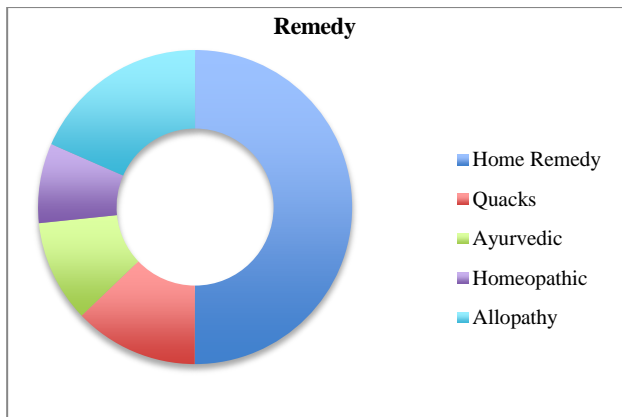


Figure 2: Illustration showing the remedy, primarily taken up for the skin diseases.

Skin and steroids

It was observed that, around 60% of cases were earlier treated with steroid.

The cases were either treated by quacks or patients purchased the steroid from over the counter pharmacy. Many claimed that they came to know about steroids from their neighbors /friends who had once used steroid for some other skin condition and it had improved.

The most common cases where irrational use of steroid was seen were-

1. Fungal Infection- especially Tinea corporis, cruris.
2. Teenagers who are obsessed with fair skin colour, use steroids to become fair.⁴
3. In acne cases, for quick improvement.

It was only after steroid led to further complications like persistence or recurrence of condition like in tinea, or adverse effects like ochronosis- after using triple combination for melasma, or striae formation, that people referred to us.⁵

Pattern of skin diseases

Variety of skin manifestations were observed in case study of 9500 patients. Fungal infection especially Tinea corporis, cruris, faciei were abundantly seen in the population owing to the kind of climate, nature of occupation and lack of awareness.⁶

The dermatophytosis cases seen represented just the tip of the iceberg of the epidemic that is in the community.

Many cases of tinea incognito were observed due to irrational use of steroid. 3 cases of tinea with severe secondary infections were seen. Many cases were seen where entire families were affected with Tinea.

Eczema was also commonly seen. Mostly hand eczema was seen in females while both hand and foot eczema was seen commonly in males.

Psoriasis and urticaria were seen more commonly in males. Many cases of Atopic dermatitis were seen in young children. Around 10 cases had strong family history of atopy.

Even polymorphous light eruption was commonly seen in farmers. Acne was more common in teenagers.

CONCLUSION

Dermatological conditions are prevalent near and far. There is no end to the stigmatic condition of fungal disease. Improper understanding about the disease leads to further worsening of the situation. Misuse of topical corticosteroids appears to be a common problem in India, as seen in our study. Topical steroid abuse as a fairness cream is widely prevalent.

The long-term risk associated with its chronic use certainly outweighs the aesthetic benefit it may offer in some people. Easy availability of quick but temporary relief, from quacks, has been a major reason where the initial findings of skin conditions are tampered with, adding to further problems.

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Conflict of interest: None declared

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

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