

Original Article

## Prevalence Of Various Skin Diseases In A Tertiary Care Hospital In Rural Setting

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### Abstract:

**Aim of the study:** This study was carried out to find out the prevalence of various skin diseases in a tertiary care centre in rural setting.

**Material and Methods:-** An observational community-based study was carried out at Uttar Pradesh University of Medical Sciences, Saifai Etawah. Total 2562 patients including 1459 male and 1103 female participated in this study during 2022-23 including male and female of different age groups.

**Inclusion criteria:** person having sign of skin disease were included in the study

**Exclusion criteria:** person who did not shown any sign of skin disease were excluded in the study

**Results:** Our study showed that majority, 825 out of 2562, (about 32%) patients during the study were 50–70 years of age. Diabetes Miletus was found to be major underlying co-morbidities about 34.77% among the patients. Majority of infection was belonging to fungal infection i.e., 48.04% (number 1231) followed by viral infection i.e., 25.8%. Among non-infectious disease Contact Dermatitis (CD) was found to be 33.64% affecting 862 patients, followed by Eczema @20.25% affecting 519 patients and Bullous disorder was found in about 3.62% patients.

**Conclusion:** Skin disease become one of the important public health concerns. Care and early treatment should be taken to avoid deep tissue involvement during skin infection.

**Keywords:** Skin disease, Eczema, Fungal infection, and Contact Dermatitis (CD)

### Introduction:

Skin disease affect hundreds of millions population leading to disturbed immune system, suffering, stigmatization including mental distress and ultimately quality of life. Now a days as everyone is very conscious about health and beauty, hence skin infection become very important for general population as well as doctors dealing with infections related to skin infection. Different groups of

microorganisms including bacteria and fungi as well as climatic conditions, poor hygiene leads to several skin infections [1]. Superficial mycosis is also known as cutaneous mycosis. These common diseases are caused by a group of related fungi called dermatophytes fall into three genera and each with many species, i.e., Epidermophyton, Microsporium and Trichophyton[2]. Occurrence of cutaneous infection is observed based on skin xerosis, thinning of skin, fine wrinkling on skin, loss of skin elasticity, seborrheic keratosis, skin tag and coarse deep wrinkling of the skin causing discomfort [2]. In a study carried out in 2022, involving about 44689 persons from about 27 countries through questionnaire it was found that about 43.35% had minimum one dermatological condition in last 12 months, out of these 48.98% were male while 51.02% were female [3] while in India general population skin disease prevalence varied from 7.86% to 11.16% in different studies carried out [4,5]. In 2022 world health organization (WHO) started an integrated approaches for controlling and management of skin -related neglected tropical disease (Skin NTDs), it also includes capacity-building for detection of cases, common learning platform and delivery of treatment [6].

**Materials and Methods:**

This demographic study was carried out in department of Dermatology in a tertiary care hospital situated in rural area of Uttar Pradesh University of Medical Sciences, Saifai, Etawah.

**Inclusion criteria:** person having sign of skin disease were included in the study

**Exclusion criteria:** person who did not shown any sign of skin disease were excluded in the study

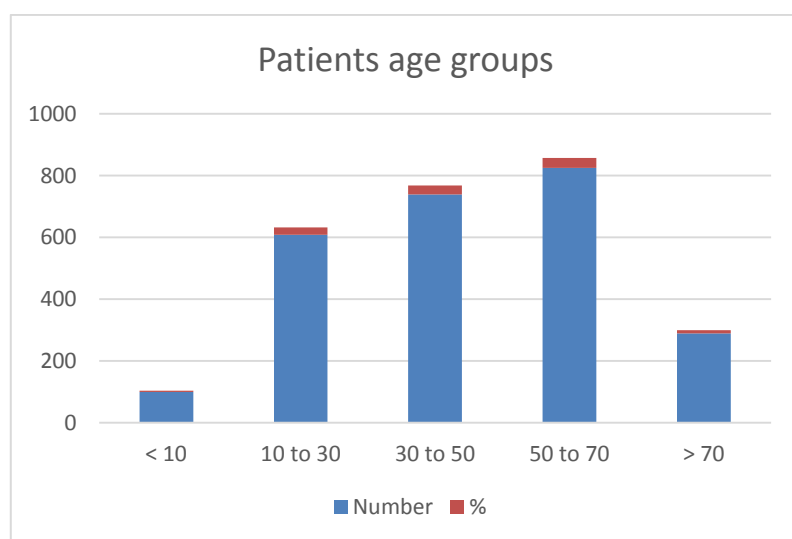
After collection of data from patients it was entered in excel sheet. After analysis different outcomes observed were presented in the form of tabulated data and histogram.

**Results:**

Total 2562 patients including 1459 male and 1103 female participated in this study. Marital status indicated that 1731 patients were married while 831 was unmarried. Majority, 825 out of 2562, (about 32%) patients during the study were 50 – 70 years of age (table-1 and fig-1).

**Table-1:** Showing age groups of patients

Sl No	Group	Number	%
1.	< 10	100	3.90
2.	10-30	609	23.77
3.	30-50	739	28.84
4.	50-70	825	32.20
5	> 70	289	11.28

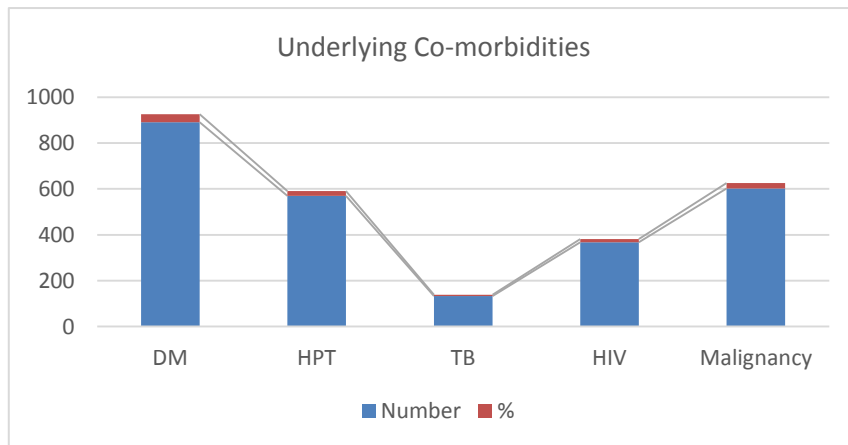


**Figure: 1** Showing age groups of patients

Diabetes Miletus was the major underlying co-morbidities about 34.77% (number 891) after that malignancy about 23.49% (number 602) while hypertension was found to be 22.20% (number 569) followed by HIV 14.32% (number 367) and TB was found in 5.19% (number) patients (table-2 and fig-2).

**Table-2:** Showing Co-morbidities of patients

Sl No	Co-morbidities	Number	%
1.	DM	891	34.77
2.	HPT	569	22.20
3.	TB	133	5.19
4.	HIV	367	14.32
5.	Malignancy	602	23.49

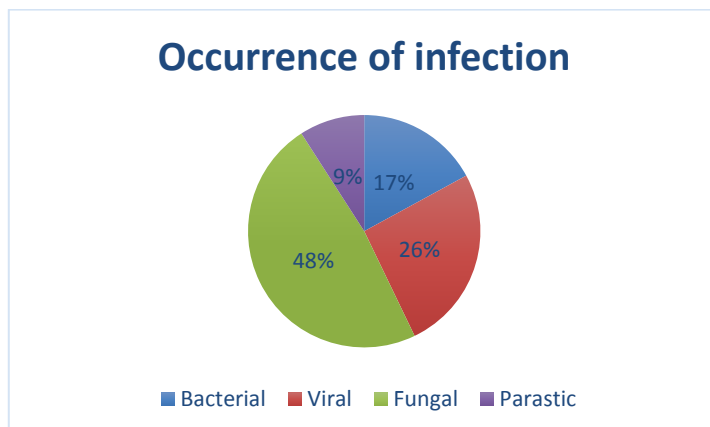


**Figure-2:** Showing Co-morbidities of patients

Type of infection as shown in table-3 and also in fig. -3 indicated that majority of infection was belonging to fungal infection i.e. 48.04% (number 1231) followed by Viral i.e. 25.80% (number 661), bacterial infection was found about 17.05% (number 437) and rest 9.01 % (number 233) was belonging to parasitic infection (fig. 4 -6).

**Table-3:** Showing Type of infection in patients

Sl No	Type of infection	Number	%
1.	Bacterial	437	17.05
2.	Viral	661	25.80
3.	Fungal	1231	48.04
4.	Parasitic	233	9.01



**Figure-3:** Showing type of infection in patients



**Fig.-4** Showing Herpes Labialis



**Fig-5.** Showing Lupus vulgaris

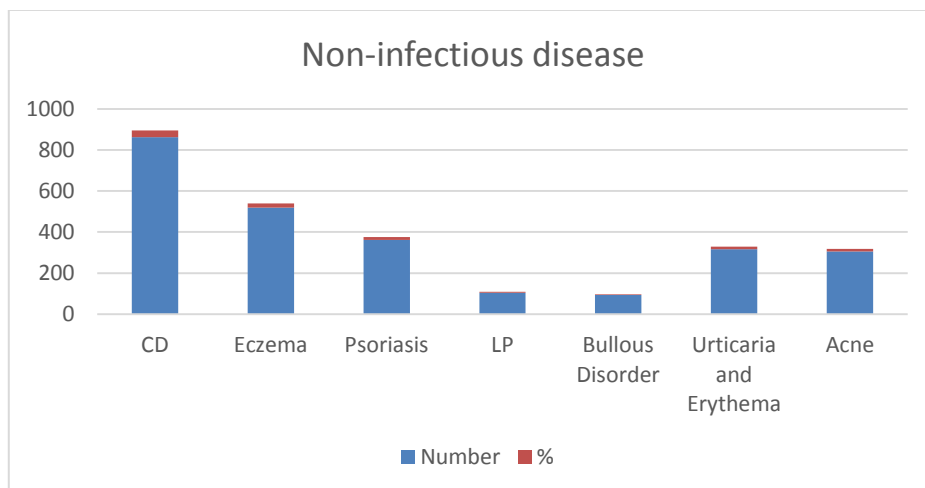


**Fig.-6** Showing Impetigo contagious

Among non-infectious disease Contact Dermatitis (CD) was found to be 33.64 % affecting 862 patients, Eczema @20.25% (number 519), Psoriasis 14.09% (number 361), Urticaria and Erythema 12.37% (number 317), Acne 11.94 % (number 306), while Lichen Planus (LP) and Bullous disorder was found 4.05% and 3.62% respectively (table-4 and fig-6-8).

**Table-4:** Showing non-infectious disease in patients

Sl No	Non-infectious disease	Number	%
1.	Contact Dermatitis (CD)	862	33.64
2.	Eczema	519	20.25
3.	Psoriasis	361	14.09
4.	Lichen Planus (LP)	104	4.05
5.	Bullous Disorder	93	3.62
6.	Urticaria and Erythema	317	12.37
7.	Acne	306	11.94



**Figure-4:** Showing non-infectious disease in patients



**Fig.-8** Showing Plantar psoriasis

### Discussion

In a federal sponsored study carried out in America revealed that the skin diseases prevalence was found about 40% in people between 65 and 74 years of age [8] However, our study found that,

individuals between 50-70 years of age group accounted for 32% of the patients. In another study infective dermatosis was most common (36.41%) conducted by Das *et al.*, [9] while, our study showed Contact Dermatitis (CD) as most common dermatosis (33.64%) and eczema was found at second position with (20.25%). The pattern of skin diseases usually depends on environmental factors but other factors like socioeconomic status, occupation, age and literacy of the patients [10]. Angiotensin-converting enzyme 2 (ACE2) that plays an important role in the invasion into host cells by viruses including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the pathogen for COVID-19. Density of ACE2 is affected by medical conditions, such as hypertension, or by drugs, including angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs), which can change the fate of SARS-CoV-2 infectivity such factors are also responsible for infectivity [11]. Among non-infectious disease Contact Dermatitis (CD) was found to be 33.64% affecting 862 patients, Eczema @20.25% (number 519), Psoriasis 14.09% (number 361), Urticaria and Erythema 12.37% (number 317), Acne 11.94% (number 306), while Lichen Planus (LP) and Bullous disorder was found 4.05% and 3.62% respectively.

### Conclusion:

Skin disease become one of the important public health concerns. As stated by WHO 10 out of 20 NTDs are responsible for change on skin prior to change in internal organs. Our study showed that majority, 825 out of 2562, (about 32%) patients during the study were 50–70 years of age. Diabetes Mellitus was found to be major underlying co-morbidities about 34.77% among the patients. Majority of infection was belonging to fungal infection i.e., 48.04% (number 1231) followed by viral infection i.e., 25.8%. Among non-infectious disease Contact Dermatitis (CD) was found to be 33.64% affecting 862 patients, followed by Eczema @20.25% affecting 519 patients and Bullous disorder was found in about 3.62% patients. Social media and advancement of technology has increased the demand of cosmeceuticals to be used for care and maintenance of skin. The focus of the study was to find out the Prevalence of Various Skin Diseases in A Tertiary Care Hospital in Rural Setting.

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