# A Study Of Pattern Of Various Skin Diseases In Patients Attending To SKIN OPD, RIMS General Hospital, Srikakulam, Andhrapradesh.

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### Abstract:

Background: There has been a rise in the magnitude of dermatological diseases in India. It is generally agreed that the pattern of skin diseases differs in different countries, and within the various regions of same country depending on social, economic, racial and environmental factors. Many workers have reported various patterns of skin diseases from different parts of India. So far, no such report is available from this backward district of Andhra Pradesh state. To fill the lacunae, we decided to undertake a study on the skin disease pattern in this premier hospital of Srikakulam, Andhra Pradesh state. \*Objective & Aim: We conducted this study to find out the various patterns of skin diseases in relation to age, sex, occupation, and socio-economic status which the patients attending to SKIN OPD, RIMS GENERAL HOSPITAL, in SRIKAKULAM which is a tertiary care hospital and to identify the risk factors of skin diseases among the population of our area and to determine the burden of these diseases in our set up.\* Materials and Methods: The study included all the newly diagnosed cases attended to the OPD of Dermatology, Venereology and Leprosy, RIMS General Hospital, Srikakulam, for a period of one year (from 1st April 2017 to 31st March 2018). Diagnosis was done on clinical grounds and laboratory investigations were done whenever required like KOH preparation, slit skin smear for AFB, Tzank smear, wood's lamp examination, VDRL test, skin biopsy, culture etc. We recorded 24,550 new cases of both male and female of all age groups within this specified period.\*Results: An analytic study of the medical records of patients attended to the dermatology outpatient department of RIMS Hospital showed that Fungal Infections (Mycoses) 7023 (28.60%) constituted most of the dermatoses and was the most common disease. Allergic Disorders & Drug Eruption 4,828 (19.66%) is in the second position. In our study, it is clear that the fungal and parasitic infestations are the commonest infective skin disorders instead of bacterial infections and Contact dermatitis was the most common entity seen in Allergic Disorders. \*Summary & Conclusion: The present study infers that on contrary to many such studies performed, females (45%) formed the majority of the study population and Fungal infections formed the majority and ranked first among the present disease conditions and effecting the patients' Quality of life. Hence as a whole the present study necessitates the need for further such studies so as to provide further insight on the pattern of skin diseases and their extent of effect on patient's quality of life.

\*Keywords: Tertiary care, Pattern of skin diseases, Infective skin diseases, Non-infective skin diseases, occupational dermatoses.

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# I. Introduction

Dermatology is the science that is concerned with the diagnosis and treatment of diseases of the skin, hair and nails. The skin is the largest and most visible organ of the body. It reflects the health of the body and acts as a barrier against injury and bacteria. Unfortunately, at one time or another, nearly everyone will have some type of skin disease i.e., infants, children, teenagers, adults and the elderly.

Dermatological disorders are commonly seen by general practitioners and physicians of all specialities, as often these are manifestations of some systemic disorders. Prompt and correct diagnosis is therefore important for proper management of such disorders both in acute as well as chronic cases.

Diseases of skin are increasing. The pattern of skin diseases in India is influenced by the developing economy, level of literacy, social backwardness, varied climate, industrialization, access to primary health care, and different religious, ritual and cultural factors. 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, seborrhoeic keratosis, coarse deep wrinkling, skin tag, etc[1,2]. To those in the field of dermatology, it

will come as no surprise that conditions affecting our skin comprise one of the largest burdens of disease worldwide. Skin conditions are the most prevalent and disabling diseases and widespread among the worldwide population and a source of considerable loss of healthy life. It also affirms an urgent need for the inclusion of skin <u>diseases in the prevention</u> and treatment programmes in national and <u>global health</u> policies.

There are many parameters that determine the distribution of skin diseases, from genetic susceptibility to environmental factors. Social factors such as poverty, affluence, inequality, education, and access to health care also have an important role in the epidemiology of skin disease. Movements of individuals through travel, migration or war increase the chance of spread of infectious skin diseases. Noninfectious skin diseases are also affected by global social and economic changes including climatic changes and natural disasters.

Skin disease is one of the most common human illnesses. It pervades all cultures, occurs at all ages, and affects most of the individuals. Its detrimental effects on health range from physical incapacity to death. The International Classification of Disease 10 classification of human disease lists more than 1,000 skin or skin-related illnesses accounting for most of the skin disease burden. Yet, despite of this profound impact, skin disease continues to receive relatively little attention in the national or global health debate.

As mentioned earlier, skin diseases are very common health problem worldwide. At the same time it should be remembered that almost 73% of people affected with skin disorder do not seek medical advice [3]. This may be influenced by the availability of different health systems in different countries. There are no geographical limitations and boundaries for skin diseases. However, there are some variations in the distribution, types and frequencies of their occurrence.

Skin diseases have innumerable causes which might be either an infectious one (bacterial, fungal or viral) or non-infectious such as allergy, hypersensitivity, physical or chemical damage. Skin diseases are very much prevalent in the developing countries (1). These diseases range from simple acne and scabies to various serious disorders such as Stevens-Johnson syndrome, toxic epidermal

necrolysis and purpura fulminans(2, 3). The pattern of skin diseases varies, from country to country and even

necrolysis and purpura fulminans( $\underline{2}$ ,  $\underline{3}$ ). The pattern of skin diseases varies from country to country and even from region to region within the country due to different ecological factors, genetics, hygienic standards and social customs ( $\underline{1}$ ,  $\underline{2}$ ,  $\underline{3}$ ). Skin diseases can cause high morbidity but apparently less mortality ( $\underline{3}$ ,  $\underline{4}$ ,  $\underline{5}$ ). It is very important to remember that skin manifestations may be a clue to the patient's internal disease, but literature on the pattern of skin diseases is deficient. Early identification of skin disease is important not only for treating patients but also for preventing the spread of communicable diseases ( $\underline{1}$ ). Improvement in environmental sanitation, education of the general public and good nutrition can help to reduce the incidence of skin disorders in any community( $\underline{1}$ ,  $\underline{2}$ ,  $\underline{4}$ ,  $\underline{6}$ ). Although there have been some studies on the pattern of skin diseases in the general global population, there is a paucity of such work in developing countries( $\underline{4}$ ,  $\underline{7}$ ,  $\underline{8}$ ). The present study was planned to have an insight into the frequency and types of skin disorders that appear in a <u>tertiary care</u> hospital like ours to determine the burden of these diseases in our set up.

# II. Materials and Methods

This was an observational study carried out from 1<sup>st</sup> April 2017 to 31<sup>st</sup> March, 2018 in the Department of Dermatology, RIMS General Hospital, Srikakulam, AndhraPradesh .All new patients who attended to the outpatient department (OPD) for skin problems during this period were included in this study. A thorough and detailed medical and cutaneous examination was performed on each patient and diagnoses were made on clinical examination. Difficult cases were diagnosed by some basic skin investigations like KOH preparation for fungus, slit skin smear for AFB, Tzank smear, smear for LD bodies, wood's lamp examination, VDRL test, skin biopsy, culture etc. for confirmation of the initial diagnoses. Patients suffering from HIV infection and patients in whom the diagnosis was not yet confirmed and required complex diagnostic techniques were taken to be exclusion criteria. Individuals less than 12 years of age were considered as children while those above 12 years were considered as adults. The study was divided into four parts: Selection of the study population, history taking and data collection, clinical examination and relevant investigations and data analysis. A standard questionnaire for collecting patients' demographic details was designed which included all the data of the patient (name, age, gender, educational and employment status etc.) and diagnosis of the present disease condition. The data obtained from the questionnaires was processed and analysed. We recorded 24,550 new cases of both male and female of all age groups within this specified period. We tried our best to enroll all new patients. Different patterns of skin disorders were noted and compared with the data from different countries and different regions within the

### III. Result

\*\*For better visualization and understanding, the study results on the pattern of skin diseases have been shown in Tables:

TABLE -1(Total 24,550 patients)

MALE	9,820 (40%)
FEMALE	11,048 (45%)
CHILDREN	3,682 (15%)

TABLE-- 2: %age of cases according to AGE-GROUP

	0
2months10years	1,841 cases (7.5%)
11yrs20yrs	2,332 (9.5%)
21yrs30yrs	4,419 (18%)
31yrs40yrs	2,946 (12%)
41yrs50yrs	3,192 (13%)
51yrs60yrs	3,928 (16%)
61yrs70yr	4,910 (20%)
71yrs80yrs	614 (2.5%)
81yrs86yrs	368 (1.5%)

TABLE-- 3: %age of cases according to AREA -WISE

RURAL	18,167cases ( 74% )
URBAN	6,383cases ( 26% )

TABLE -4: Marital Status:

Married	57%
Unmarried	43%

TABLE—5: Types of Patients and their %age

Housewives	24%
Students	22%
Pre-school infants and children	12%
Service holder	11%
Business-man	9%
Skilled worker	4%
Unskilled laborer	6%
Cultivator	4%
Drivers	1.5%
Building construction workers	5.5%
House maids	1%

<sup>\*</sup>A total of 24,550 new cases presented in the OPD of Dermatology were enrolled for the present study. This group comprised 40% males, 45% females and 15% children (Table-1). The age range noted was 2 months to 86 years with a mean age of  $30.4 \pm 9.2$  years. The majority of patients belonged to the 20–40 years of age range (Table-2).

\*\* We grouped skin diseases as follows (Table-6):

TABLE---6 (PATTERN OF SKIN DISEASES AND THEIR NUMBER AND %AGE)

SKIN DISEASES	NUMBER(n=24,550)&%age
1.Bacterial Infections (Pyodermas)	1,820 cases (7.41%)
2.Fungal Infections (Mycoses)	7,023 (28.60%)
3.Viral Infections	866 (3.53%)
4.Parasitic Infestations	4,009 (16.33%)
5.Tuberculosis of the Skin	55 (0.22%)
6.Leprosy	76 (0.31%)
7.Sexually Transmitted Diseases	61 (0.25%)
8.Acne & Acneiform Eruptions	1,203 (4.9%)
9.Pigmentary Disorders	761 (3.1%)

<sup>\*</sup>Seventy-four patients (74%) were from the rural background while twenty-six patients (26%) belong to urban area (Table-3). Fifty-seven (57%) patients were married and the remaining forty-three (43%) patients were unmarried (Table-4). \*In our study, one fourth (24%) of all patients were housewives, followed by students (22%), pre-school infants and children (12%), service holder (11%), business-man (9%), skilled worker (4%), unskilled laborer (6%), cultivator (4%), drivers (1.5%), building construction workers (5.5%), and house maids (1%) (Table-5)

10.Allergic Disorders & Drug Eruptions	4,828 cases (19.66%)	
11.Erythematous,Papular&SquamousDisorders	1,546	(6.3 %)
12.Vesiculobullous Disorders	52	(0.21%)
13.Connective Tissue Disorders	114	(0.464 %)
14.Hair & Nail Disorders	280	(1.14%)
15. Naevi & Tumours	503	(2.05%)
16.Metabolic & Nutritional Disorders	73	(0.3%)
17.Genodermatoses	246	(1.002%)
	1034	(4.21%)
18.Miscellaneous		

\*(1) Among 1,820 cases (7.41%) of Bacterial infections ,chronic <u>folliculitis</u>, <u>furunculosis</u>, sycosis, cellulitis, <u>ulcers</u>, <u>impetigo</u>, ecthyma, pitted keratolysis ,erythrasma, trichomycosis axillaris , acute paronychia ,carbuncle ,acute lymphangitis ,SSSS and lastly, actinomycosis are included. \*(2) <u>Fungal infections</u> were the most commonly seen variety, accounting for 7,023 cases (28.60%), including <u>tinea cruris</u>, <u>tinea corporis</u>, <u>tinea pedis</u>, <u>tinea capitis</u>, tinea faciei, tinea unguium, <u>tinea versicolor</u> and <u>candida infections</u>. \*(3)In 866 cases (3.53%) of viral infections , viral wart was highest in 368 cases (1.5%) followed by herpes zoster in 221 cases (0.9 %), molluscum contagiosum in 123 cases (0.5%), herpes simplex in 74 cases (0.3%), chicken pox in 61 cases (0.25%), measles in 12 cases(0.05%), and other viral exanthems in 7 cases (0.03%). There were 21 human immunodeficiency virus (HIV) positive patients present in these 866 patients. \*(4)Among 4,009 patients (16.33%) of the parasitic infestations , scabies constituted the major number (3805 patients, 15.5 %), of which 572 patients had associated secondary bacterial infection. 184 patients (0.75%) had pediculosis, 20 patients (0.08%) had cutaneous larva migrans in this group. \*(5)Cutaneous <u>tuberculosis</u> was seen in 55 cases (0.22%), with <u>scrofuloderma</u>, <u>lupus vulgaris</u> and <u>tuberculosis verrucosa cutis</u>.

\*(6)Among all 76 cases (0.31%) of Hansen's patients, who were needed leprosy treatment, multi-bacillary adult patients were 39 cases (0.16%), paucibacillary adult in 26 cases (0.105%), multi-bacillary child in 2 cases (0.008%), and 9 cases (0.036%) had paucibacillary child leprosy and approximately 10% of cases had visible deformity. \*(7) In 61 cases (0.25%) of Sexually transmitted infections (STIs), most commonly seen were herpes progenitalis followed by venereal warts and molluscum contagiosum. Other STIs such as syphilis, chancroid, gonorrhoea and lymphogranuloma venereum were not seen during the study period \*(8)Study revealed among 1203(4.9%) cases of Acne & Acneiform Eruptions, 1072 patients (4.37%) were suffering from acne vulgaris, 54 patients (0.22%) from other forms of acne like steroid-induced acne and nodulocystic acne, 47 patients (0.19%) had perioral dermatitis, and 30 patients (0.12%) had rosecea. \*(9) Amongst 761 patients (3.1%) of Pigmentary Disorders , 491 patients (2%) had melasma and 270 patients (1.1%) had vitiligo\*(10) Out of 24,550 new cases, Allergic Disorders & Drug Eruptions were seen in 4,828 (19.66%) of patients. Among these patients, 2,540 (10.35%) cases of contact dermatitis (mainly hand eczema) accounted for the majority of cases followed by seborrhoeic eczema 628 (2.56%), atopic eczema 471( 1.92%), lichen simplex chronicus 275 (1.12%) discoid eczema 236 (0.96%), stasis eczema 197 (0.8%), Drug Eruptions 165 cases (0.67 %), xerotic eczema 157 (0.63%), pityriasis alba 80 (0.325%) and pompholyx 79 ( 0.32%) .Among 165 cases(0.67 %) of Drug Eruptions .76 (0.31%) fixed drug eruption (FDE) cases became the commonest, followed by maculosquamous drug rash 38 cases (0.155%), erythema multiforme 17 cases (0.07%), lichenoid drug eruption 11 cases (0.044%), Stevens-Johnson Syndrome (SJS) 10 cases (0.040 %), bullous drug eruption 5 cases(0.020%), erythema nodosum 4 cases (0.015%), toxic epidermal necrolysis (TEN), and urticarial drug rash 2 cases each (0.008%). \*(11)Among 1,546 cases (6.3 %) of Erythematous, Papular & Squamous Disorders, psoriasis in 589 cases was the commonest (2.4%), followed by lichen planus in 466 cases (1.9 %), sebopsoriasis in 307 cases (1.25%), pityriasis rosea in 184 cases (0.75%). Different types of psoriasis were seen, such as psoriasis vulgaris, pustular psoriasis, psoriatic arthritis and psoriatic erythroderma. \*(12)In 52 cases(0.21%) of Vesiculobullous Disorders, the most common variety seen was pemphigus yulgaris followed by bullous pemphigoid, chronic bullous disease of childhood and Hailey- Hailey disease. \*(13)Among 114(0.464 %) Connective Tissue Disorder cases, 51 cases(0.208%) of discoid lupus erythematosus ranked first, followed by lichen sclerosus et atrophicus 31 cases (0.126%), morphea 17 cases (0.07%), systemic lupus erythematosus 11cases (0.044%) and systemic sclerosis in 4 cases (0.016%).\*(14)In 280 cases (1.14%) of Hair and Nail disorders, physiological alopecia is the commonest alopecia seen followed by androgenic alopecia, alopecia areata ,trichotillomania and cicatrical alopecia. Premature canities is an another complaint commonly encountered. In nail disorders, ingrown toe nails and pincer nails are commonly seen.\*(15)In 503 cases (2.05%) of Naevi & Tumours, naevi are seen in 58 cases and the remaining 445 cases are tumours of various types. Among malignant disorders of skin, squamous cell carcinoma (SCC) ranked first, followed by basal cell carcinoma, malignant melanoma. \*(16)In 73 cases(0.3%) of Metabolic & Nutritional Disorders most commonly seen was pellagra followed by phrynoderma, xanthelasma, lichen amyloidosis and vitamin B12

deficiency disorder.\*(17)If we go through the 246 (1.002%)keratinization disorders (Genodermatoses), we found 162 cases(0.66%) of icthyosis, congenital keratoderma 51 cases(0.209%), Pityriasis rubra pilaris in 17cases (0.07%), porokeratosis in 10 cases (0.039%), and Darier's disease in 6 cases(0.024%).\*(18) Among 1034 (4.21%) cases in Miscellaneous group, patients with scars and keloids of various types were seen followed by generalized pruritus, fissured foot, acanthosis nigricans, pigmented purpuric dermatoses, vasculitis, non-healing venous ulcer, cheilitis, corn, granuloma pyogenicum and so on. The list was so long that it was not possible to cover all.

# IV. Discussion.

\*The present study was carried out on 24,550 cases of clinically diagnosed skin diseases with a view of studying the clinical pattern, aetiological factors, age/sex distribution of the particular disease. The age ranged from 2 months to 86 years in the present study .Majority of the patients belonged to age group of 21-70 years. Maximum incidence (30%) of skin diseases was observed in 21-40 years age group, 29% in 41-60 years, 20% in 61-70 years, i.e. total 79% in 21-70 years which constitutes about 3/4th bulk of total patients out of which 845 were alcoholic, 369 were diabetic. This group comprised 40% males, 45% females and 15% children. The present study indicated that female patients outnumbered their male counterparts. This trend is similar to those observed in other studies (16, 17). It may be attributed to the high sensitivity of females to health-related issues or consciousness about their body image at a younger age, as most of our patients presented between ages 20 and 40 years.

\*In our study, one fourth (24%) of all patients were housewives, followed by students (22%), preschool infants and children (12%), service holder (11 %), business-man (9 %), skilled worker (4 %), unskilled laborer (6 %), cultivator (4 %), drivers (1.5%), building construction workers(5.5%), and house maids (1%).\*Seventy-four patients (74%) were from the rural background while twenty-six patients (26%) belong to urban area. Fifty-seven (57%) patients were married and the remaining forty-three (43%) patients were unmarried.

\*For better visualization and understanding, the ranking of the pattern of skin diseases have been shown in Table(7):

**TABLE---7(Ranking of the skin diseases)** 

SKIN DISEASES	NUMBER(n=24,550)&%age
1.Fungal Infections (Mycoses)	7,023 (28.60%)
2.Allergic Disorders & Drug Eruptions	4,828 (19.66%)
3.Parasitic Infestations	4,009 (16.33%)
4.Bacterial Infections (Pyodermas)	1,820 (7.41%)
5.Erythematous,Papular&SquamousDisorders	1,546 (6.3 %)
6.Acne & Acneiform Eruptions	1,203 (4.9%)
7.Miscellaneous	1,034 (4.21%)
8. Viral Infections	866 (3.53%)
9.Pigmentary Disorders	761 (3.1%)
10. Naevi & Tumours	503 (2.05%)
11.Hair & Nail Disorders	280 (1.14%)
12.Genodermatoses	246 (1.002%)
13.Connective Tissue Disorders	114 (0.464%)
14.Leprosy	76 (0.31%)
15.Metabolic & Nutritional Disorders	73 (0.3%)
16.Sexually Transmitted Diseases	61 (0.25%)
17.Tuberculosis of the Skin	55 (0.22%)
	52 (0.21%)
18.Vesiculobullous Disorders	

\*An analytic study of the medical records of patients attended to the dermatology outpatient department of RIMS Hospital showed that Fungal Infections (Mycoses) 7023 (28.60%) constituted most of the dermatoses and was the most common disease. Allergic Disorders & Drug Eruption 4,828 (19.66%) is in the second position.

\*In our study, infection was the most common dermatological problem (57.77%), of which fungal infections (28.6%) were commonest followed by parasitic infestations(16.33%), bacterial infections (7.41%), viral infections (3.53%), and mixed infections (1.90%, 468 patients). \*Fungal infection is the major bulk (28.60%) of our study and it came on the top of infective group. In this study, fungal infections emerged as the single largest group of disorders. Similar findings are also reported by other workers. Fungal infections constituted 28.60% of the total diseases. In the present study, the higher prevalence rate may be due to the warm and highly humid climate of the state, overcrowding, poor environmental hygiene, relative ignorance and poverty and at the same time the fungal resistance developed to available antifungal drugs may account for the

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high incidence of fungal infections. In fungal infection, superficial fungal infection is compatible with few Indian studies [12, 13]. But, the deep fungal infections of our study is far low than above described studies [12] because it is not common in Andhra Pradesh.

\*There was a higher prevalence of Scabies, caused by the mite *Sarcoptes scabiei* and transmitted by person-to-person contact. It was mostly seen in children and was present in 16.33%% (4,009) of patients. The preponderance of scabies may be explained by overcrowding of hostels, close contact and poor socioeconomic status of patients. Lack of medical intervention reported by symptomatic students was unexpectedly high. Therefore, it is useful to monitor the epidemiology of skin problems in children so that relevant skin health education programs and preventive measures can be planned and implemented effectively. \*Bacterial skin diseases were the third from all infections with a rate of 7.41% of the total. Impetigo had a high prevalence rate of the total. The high incidence of Pyodermas in our study may be due to the low socio-economic status of such patients, poor personal hygiene more so in children belonging to rural areas, lack of new drugs, and bacterial resistance to the available antibiotics. \*It is clear that the fungal and parasitic infestations are the commonest infective skin disorders noted in our study, instead of bacterial infections. By reviewing various reports, we found that almost all studies mentioned here[12,13,] are comparable with our reports i.e., the commonest skin disease is of infective origin, followed by allergic diseases except two reports[14,15] which show the reverse situation.

\* Contact dermatitis was the most common entity seen in Allergic Disorders & Drug Eruptions .The reason for high incidence of CD in our community may be due to exposer to many occupational allergens and chemicals and lack of protective measures. Hand eczema was found to be more common in building construction workers and house maids. Seborrhoeic eczema, pityriasis alba and atopic eczema were seen mostly in children, while discoid eczema, pompholyx, lichen simplex chronicus, stasis eczema and xerotic eczema were noted in adults and the old age group.\*About causative agents of drug eruptions, 26 patients(16%) of total 165 patients could not recognize any offending drugs. Among the recognized drugs, most common was sulfonamides (14% of total drug reaction), followed by NSAIDs (12%), only anti-amebic drugs (11%), combination of anti-amebic and quinolones (10%), griseofulvin (9%) fluconazole (8%), anti-convulsant (6%), only doxycycline, amoxycilline, quinolones, homoeopathic medicine (each 3.5%).Most common drug causing FDE was combination form of anti-amebic and quinolones (10%). SJS was usually due to sulfonamide group of drugs and ofloxacin. Urticaria is a skin disease with significant morbidity and a wide spectrum of causes. In this study (17,19). Both acute and chronic urticarias were found to be mainly associated with food and drugs (21). It was also seen that the infective and allergic skin diseases were more common in illiterate and less-educated groups because of ignorance

\*Diffuse hair loss was also a prevalent dermatoses .It was also more prevalent among females than males due to life stresses particularly child bearing period in females, besides other physical stress or nutritional factor and increased consciousness about self-imaging among patients, especially females. Androgenic alopecia is more commonly seen in males.

\*Acne is a common skin disease that affects pilosebaceous follicles mainly among adolescents. In this study, acne was found in 4.9% of cases, mostly in females (16, 17). In our opinion, it may be due to pubertal changes, excessive use of cosmetics, steroid preparations, psychological aspects and emotional stress (16, 17). A high prevalence of steroid-induced acne has been reported and attributed to widespread use of corticosteroids.

\*Among all 76 cases (0.31%) of Hansen's patients, who were needed leprosy treatment, multi-bacillary adult patients were 39 cases (0.16%), paucibacillary adult in 26 cases (0.105%), multi-bacillary child in 2 cases (0.008%), and 9 cases (0.036%) had paucibacillary child leprosy and approximately 10% of cases had visible deformity. The decreased rate in the recent study may be explained by the introduction of multi-drug therapy for leprosy, availability of specialized hospitals that dedicated for the management and follow-up of leprosy patient, and the health education programmes. The low incidence of Hansen's disease in this study is due to the fact that such patients mainly attend leprosy centers where the medicines (MDT) are given free of cost .

\* In 61 cases (0.25%) of Sexually transmitted infections (STIs), most commonly seen were herpes progenitalis followed by venereal warts and molluscum contagiosum. Other STIs such as syphilis, chancroid, gonorrhoea and lymphogranuloma venereum were not seen during the study period. The low incidence of STIs (0.25%) noted in the present study is comparable with previous studies (19, 20). It may be due to better implementation of STI control programme with syndromic case management in the early stage or the patients may prefer to attend the private clinics due to the social stigma associated with these diseases. About STI cases, our study reveals quiet low incidence than other reports [12,14]

\* Pigmentary disorders (3.1%) were the nineth most common skin disorder of all cases, among which melasma was the most frequent presentation. The figure noted in the present study was because of psychosocial stigma and negative impact on patients' quality of life, especially in adult females (22).

\*Skin diseases include a spectrum of diseases with varied etiology. The pattern of skin diseases varies from one country to another and in various regions within the same country (4, 5). It is more so in India where

climate, socio-economic status, religions and customs are widely varied in different parts of the country. Skin diseases are very much prevalent in the developing countries like India (1) and identified as a public health problem. Although there have been some studies on the pattern of skin diseases in the general global population, there are very few comprehensive studies on the pattern of skin diseases from various parts of India [2,3]. Some factors like genetic, environmental, racial, occupational, nutritional and habitual can influence the pattern of skin diseases  $(\underline{6,8})$ . With the time, the pattern of skin diseases may be differed due to change in existing factors or development of new factors.

\*Skin diseases can cause high morbidity but apparently less mortality(3, 4, 5). Early identification of skin disease is important not only for treating patients but also for preventing the spread of communicable diseases(1). Improvements in environmental sanitation, education of the general public and good nutrition can help to reduce the incidence of skin disorders in any community(1, 2, 4, 6). 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.

\*As the pattern of skin diseases varies in different parts of India, we decided to undertake an analysis of the skin disease pattern in our area. Our study is the first of its kind on the pattern of skin diseases from this remote and underdeveloped part of the state. For this study, we selected 24,550 patients who attended to the skin OPD ,RIMS General Hospital, Srikakulam from 1<sup>st</sup> April 2017 to 31<sup>st</sup> March 2018.\*Our working place i.e.,RIMS General Hospital, Srikakulam is the only tertiary care hospital in this area. The catchmanent area of this hospital is large. Number of factory workers, day labour of various classes, drivers of various categories, poor socio-economic status people stay in this area. There are lot of schools, colleges under private and government sector present in this area. There was lack of knowledge, misconceptions in beliefs and attitude, poor personal and sexual hygiene, overcrowding, poor sanitary conditions in living and working environment of our attending patients. Health service facilities in the working area are also poor which need to be modified to ensure early diagnosis and treatment. People also sometimes contact pharmacies or traditional healers, homeopathic doctors instead of health care facilities and sometimes self medications which worsen the diseases.

# V. 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.[1] It is more so in India where climate, socio-economic status, religions and customs are widely varied in different parts of the country. There are some reports regarding the pattern of skin diseases from various parts of India.[2],[3],[4] .As the pattern of skin diseases varies in different parts of India we decided to undertake an analysis of the skin disease pattern in our area and to find out what exactly is the cause of the dermatological disease, and what age group of patients do they commonly report in the skin OPD.

The predominant patients, who reported to this RIMS Medical college hospital are of low socioeconomic status and are chiefly farmers or workers engaged in relation to agriculture and building construction. However there are a large number of engineering and other colleges where there are a good number of students who come to study from other districts and also from other states. There is a trend of increasing non-infectious skin diseases particularly contact dermatitis. On the other hand, infectious skin diseases still occupied major portion particularly fungal infections. Genodermatoses formed the least number of cases. Skin and skin-related diseases are an important public health concern. Skin diseases also pose a huge financial, psychological burden for the patients and also for their families. Improvement in the standard of living, education of the general public, improvement in the environmental sanitation, and good nutritious food may help us to bring down the skin diseases in this area.

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. The present study infers that on contrary to many such studies performed, females (45%) formed the majority of the study population and Fungal infections formed the majority and ranked first among the present disease conditions and effecting the patients' Quality of life. Hence as a whole the present study necessitates the need for further such studies so as to provide further insight on the pattern of skin conditions and their extent of effect on patient's quality of life.

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