Original Article

Prevalence of skin diseases in a dermatology outpatient department of a Tertiary Hospital

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ABSTRACT:
Background: In planning of the therapeutic and preventive healthcare services, the definition of skin disease prevalence is significant. Use of population based studies is the ideal method for assessing the incidence and prevalence of these dermal disorders .Hence; we planned the present study to assess the incidence of various skin disorders in a known population. **Materials & methods:** The present study included evaluation of prevalence of various skin disorders among patients of known population. A total of 100 subjects were included in the present study. Complete clinical examination of all the patients was carried out. Based on the findings of anamnesis and clinical manifestations, diagnosis of all the patients was done. Biopsy was done where ever indicated and hisotpathologic sections were examined. All the results were recorded on Microsoft excel sheet and were analysed by SPSS software. **Results:** Contact dermatitis, Acne, Dermatophytosis ,Urticaria, Atopic dermatitis, Seborrhoeic dermatitis, Lichen simplex chronicus, Callus, Psoriasis and Viral warts were the common skin lesions encountered in the present study. Among these, acne and dermatophytosis was the most commonly encountered skin lesion found to be present in 23 percent and 20 percent of the total patients respectively. **Conclusion:** Adequate knowledge of the epidemiology of the different skin lesions will help in forming treatment protocols at the community level.
Key words: Epidemiological, Prevalence, Skin lesions

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INTRODUCTION
For the understanding of the etio-pathogenesis of human pathologies, Epidemiologic data are necessary. For allocation of different research resources for health care purposes, it necessary to have keen knowledge and understanding of the incidence of specific human pathologies.[1-3] Outermost part of the human body is formed by the skin. It acts as a vital barrier to external and internal damage. Homeostasis of the skin is affected by various external and internal stimuli, which can be either short- or long-term, leading to a variety of disorders. Most of the skin disorder comprise of multiple etiologic factors and usually result from genetic, environmental, mechanical, meteorological and even cultural effects. In planning of the therapeutic and preventive healthcare services, the definition of skin disease prevalence is significant.[4, 5] Use of population based studies is the ideal method for assessing the

incidence and prevalence of these dermal disorders.[6,7] Hence; we planned the present study to assess the incidence of various skin disorders in a known population.

MATERIALS & METHODS
The present study was conducted in the department of dermatology of the medical institute and it included evaluation of prevalence of various skin disorders among patients of known population. Written consent was obtained from all the patients after explaining in detail the entire research protocol. A total of 100 subjects were included in the present study. Diabetic patients and hypertensive patients were excluded from the present study. We also excluded patients with any known drug allergy from the present study. Patients reporting to the outpatient clinic of the dermatology department were included in the present study. Complete clinical

examination of all the patients was carried out. Based on the findings of anamnesis and clinical manifestations, diagnosis of all the patients was done. Biopsy was done where ever indicated and hisotpathologic sections were examined. International Classification of Diseases (ICD-10) was used for classifying the diagnosis of the diseases. All the results were recorded on Microsoft excel sheet and were analysed by SPSS software. Univariate regression curve was used for assessment of level of significance. P- value of less than 0.05 was taken as significant.

Majority of the patients in the present belonged to the age group of 10 to 30 years (55 patients). Among the total 100 patients included in the present study, 57 percent of the patients were males while the remaining 43 percent were females. Contact dermatitis, Acne, Dermatophytosis , Urticaria, Atopic dermatitis, Seborrhoeic dermatitis, Lichen simplex chronicus, Callus, Psoriasis and Viral warts were the common skin lesions encountered in the present study. Among these, acne and dermatophytosis was the most commonly encountered skin lesion found to be present in 23 percent and 20 percent of the total patients respectively.

RESULTS

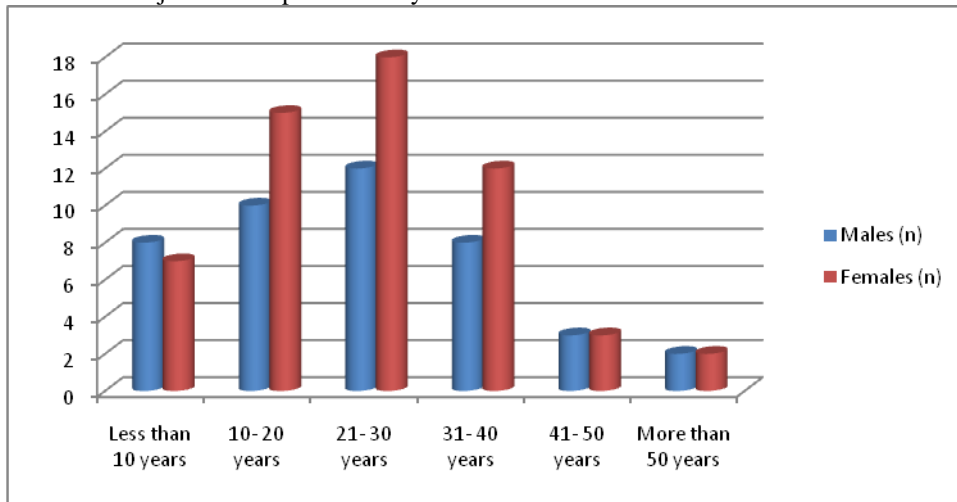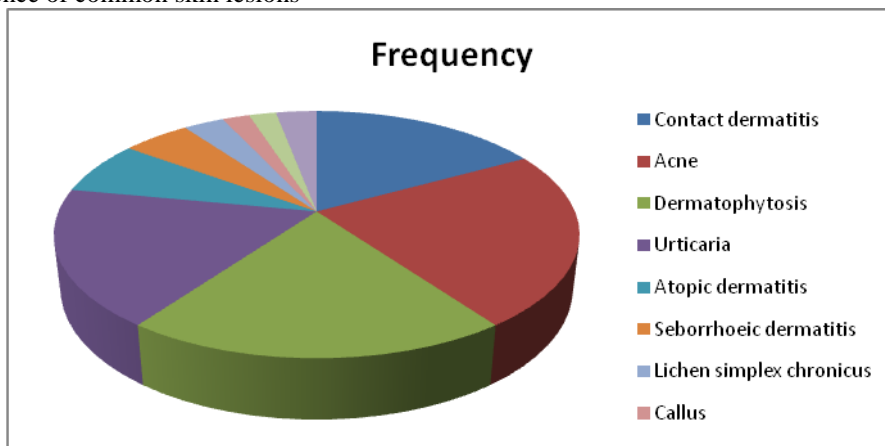**Graph 1:** Distribution of subjects of the present study

Table 1: Prevalence of common skin lesions

Skin lesion	Frequency
Contact dermatitis	17
Acne	23
Dermatophytosis	20
Urticaria	18
Atopic dermatitis	7
Seborrhoeic dermatitis	5
Lichen simplex chronicus	3
Callus	2
Psoriasis	2
Viral warts	3

Graph 2: Prevalence of common skin lesions

DISCUSSION

In the present study, Contact dermatitis, Acne, Dermatophytosis, Urticaria, Atopic dermatitis, Seborrhoeic dermatitis, Lichen simplex chronicus, Callus, Psoriasis and Viral warts were the common skin lesions encountered in the present study. Among these, acne and dermatophytosis was the most commonly encountered skin lesion found to be present in 23 percent and 20 percent of the total patients respectively. Bilgili MEet al determine the main causes for outpatient visits in a dermatology outpatient clinic in Turkey. The outpatient clinic records of the Dermatology Department of Eskisehir YunusEmre Government Hospital, dated between 1 January 2011 and 1 January 2012, were retrospectively assessed. Patients were grouped according to age, gender and clinical diagnosis .A total of 11,040 new patients with 12,174 skin problems were included in the study. The study group was 55.7% female and 44.3% male. The age range was between 1 and 99 years. The most commonly encountered diseases were: acne (13.1% of patients), fungal infections (8.5%), contact dermatitis (8.5%), urticaria (8.3%), psoriasis (5.5%), viral warts (4.1%), lichen simplex chronicus (3.0%), callus, atopic dermatitis, and seborrheic dermatitis (2.2% each). It appeared that certain skin diseases acne, fungal infections, contact dermatitis and urticarial cause serious health problems. Public health policies should be implemented in order to manage these problems rationally.[8] Davis SA et al determined the leading dermatologic disorders for each major racial and ethnic group in the United States. They queried the National Ambulatory Medical Care Survey (NAMCS) for the leading diagnoses in patient visits to U.S. dermatologists from 1993 to 2009. The leading diagnoses were tabulated for each racial and ethnic group, and the top conditions were compared between groups. In a separate analysis, visits for skin conditions regardless of physician specialty were analyzed for leading diagnoses in each racial and ethnic group.The top five diagnoses for African-American patients in dermatology clinics were acne, unspecified dermatitis or eczema, seborrheic dermatitis, atopic dermatitis, and dyschromia. For Asian or Pacific Islander patients, the top five were acne, unspecified dermatitis or eczema, benign neoplasm of skin, psoriasis, and seborrheic keratosis. Several dermatologic disorders are much more commonly seen in patients of color. Acne and unspecified dermatitis or eczema are in the top five for all major U.S. racial and ethnic groups. There may be an opportunity to improve the care of patients of color by ensuring they have equal access to dermatologists.[9]Furue Met al clarified the prevalence of skin disorders among dermatology patients in Japan, a nationwide, cross-sectional, seasonal, multicenter study was conducted in 69 university hospitals, 45 district-based pivotal hospitals, and 56 private clinics (170 clinics in total). In each clinic, information was collected on the diagnosis, age, and gender of all outpatients and inpatients who visited the clinic on any one day of the second week in each of May, August, and November 2007 and February 2008. Among 67,448 cases, the top twenty skin disorders were, in descending order of incidence, miscellaneous eczema, atopic dermatitis, tinea pedis, urticaria/angioedema, tineaunguium, viral warts, psoriasis, contact dermatitis, acne, seborrheic dermatitis, hand eczema, miscellaneous benign skin tumors, alopecia areata, herpes zoster/postherpetic neuralgia, skin ulcers (non diabetic), prurigo, epidermal cysts, vitiligo vulgaris, seborrheic keratosis, and drug eruption/toxicoderma. Atopic dermatitis, impetigo, molluscum, warts, acne, and miscellaneous eczema shared their top-ranking position in the pediatric population, whereas the most common disorders among the geriatric population were tinea pedis, tineaunguium, psoriasis, seborrheic dermatitis, and miscellaneous eczema. For some disorders, such as atopic dermatitis, contact dermatitis, urticaria/angioedema, prurigo, insect bites, and tinea pedis, the number of patients correlated with the average high and low monthly temperatures. Males showed a greater susceptibility to some diseases (psoriasis, erythroderma, diabetic dermatoses, inter alia), whereas females were more susceptible to others (erythema nodosum, collagen diseases, livedoreticularis/racemosa, hand eczema, inter alia). In conclusion, this hospital-based study highlighted the present situation regarding dermatological patients in the early 21st century in Japan.[10]

CONCLUSION

One of the leading spectrum of pathologies routinely encountered are the skin diseases. Hence; adequate knowledge of the epidemiology of the different skin lesions will help in forming treatment protocols at the community level. Therefore; further epidemiological studies are recommended.

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