HEALTH SCIENCES QUARTERLY

Volume: 3
Issue: 3
2023
E-ISSN: 2791-6022
https://journals.gen.tr/jsp

Received: 2023-03-30
Accepted: 2023-05-16

ORIGINAL ARTICLE

Evaluation of skin disease patterns in a tertiary dermatology outpatient clinic in Türkiye

Sema Koç Yıldırım[1] **Neslihan Demirel Öğüt**[1]

[1]Department of Dermatology and Venereology, Faculty of Medicine, Uşak University Training and Research Hospital. Uşak / Türkiye

Abstract

Skin diseases are among the reasons for frequent hospital admissions and bring a significant burden. The aim of this study is to determine the pattern of skin diseases in our dermatology outpatient clinic in a tertiary care hospital in T**ürkiye**. Pediatric and adult patients evaluated in our dermatology outpatient clinics for the first time were included in this cross-sectional observational designed study between January and March 2023. The characteristics of the patients, including age, gender, duration of disease, anatomic localization of the disease, and complaint counts, were recorded in the data collection form. Diagnoses were grouped according to gender, age, and complaint counts. A total of 1381 patients with 1772 skin problems were included in the study. 62.3% of the patients were female (n=860), and 37.7% (n=521) were male. The age range was between 0 and 98 years. The most common diseases were acne (18%), dermatophytosis (8.1%), viral warts (6.5%), seborrheic dermatitis (4.8%), other dermatitis (4.8%), follicular disorders (4.6%), pruritus (3.7%), scabies (3%), benign neoplasms (3%), and urticaria (3%), respectively. 23.4% of the patients (n=324) had at least two complaints. The maximum number of complaints at one visit was 5. The probability of reporting more than one complaint was higher in women and those whose first complaint was on the scalp. In this analysis to determine the patterns of skin diseases, acne, dermatophytosis, and viral warts were found to be important problems. The number of complaints at one visit may vary according to gender and localization.

Keywords: Skin diseases, epidemiology, prevalence, Türkiye

Citation: Koç Yıldırım S, Demirel Öğüt N. Evaluation of skin disease patterns in a tertiary dermatology outpatient clinic in Türkiye. Health Sci Q. 2023;3(3):153-62. https://doi.org/10.26900/hsq.2052

Corresponding Author:
Sema Koç Yıldırım
Email: semakocyildirim@gmail.com

Introduction

The skin is the largest organ of the human body and has some important fundamental functions such as protection against mechanical effects and chemical threats, taking part in adaptive and natural immune response, ensuring thermoregulation, and vitamin D production. Due to these properties of the skin, skin diseases are frequently encountered during hospital visits. According to the Global Burden of Disease 2013 report, skin diseases were the fourth leading cause of nonfatal disability worldwide [1]. Also, numerous studies contain data on the negative effects of skin diseases on quality of life [2].

The frequency of skin diseases can be affected by geographic conditions, ethnicity, socio-economic and socio-cultural status, and various environmental factors. Determining the distribution pattern of skin diseases in a population allows for determining treatment methods and taking preventive measures for some diseases. Until now, various studies have investigated the frequency of skin diseases in the literature. There are also studies in which special populations such as different age groups, gender, occupations, prisoners, and military personnel are examined regarding skin diseases, generally using hospital records [3-7]. However, to the best of our knowledge, there is no study in the literature that evaluates the priority order of the complaints of patients admitted to dermatology outpatient clinics and the average number of complaints in a visit. The aim of this study is to determine the frequency of dermatological diseases in patients who admit to our outpatient dermatology clinics, as well as to evaluate whether the priority order of complaints in individuals who apply for more than one complaint is related to conditions such as age, gender, and disease localization.

This study was carried out in the only tertiary central hospital in the province of Uşak, located in the Aegean region of Türkiye. This province, which has a population of approximately 375.000 people, has an altitude of 906 meters and a temperature range between -24°C and +39.8°C throughout the year.

Materials and Methods

The approval of the Institutional Review Board was received. In this cross-sectional observational study, pediatric and adult patients who were admitted to our dermatology outpatient clinics for the first time were included between January and March 2023. The clinical and demographic characteristics of the patients, including age, gender, duration of the disease, anatomic localization of the disease, and complaint counts, were recorded in the data collection form. The patients were diagnosed based on anamnesis, clinical findings, and dermatologic examination. The clinical diagnoses were confirmed using laboratory and histopathological examination if necessary. Patients who were followed up in our outpatient clinics due to chronic dermatological diseases and repetitive referrals were excluded from the study. The diagnoses were classified according to the International Classification of Diseases (ICD-10). The ages of the patients were grouped as 0-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, and ≥ 80 years. The anatomic localizations of the lesions were determined as the scalp, face, neck, chest-abdomen, back, forearm-arm, hand, thigh-tibia, foot, palmoplantar, fingernail, toenail, genital, and oral mucosa.

The statistical analysis was carried out using IBM SPSS Statistics 28.0. Continuous data were given as mean ± standard deviation (SD) and median ± Interquartile Range (IR). Categorical data were given as a percentage. *Pearson* Chi-Square analyses were performed in the analysis of the cross tables. For statistical significance, $p<0.05$ was accepted as the criterion. Informed consent was obtained from all patients.

Results

Demographics

A total of 1381 patients with any dermatological complaint were examined at our dermatology outpatient clinic between January 2023 and March 2023. 62.3% of all patients were female (n=860), and 37.7% (n=521) were male. The patients' ages ranged between 0 and 98 years. The median age was 33 years (IR 34). According to the age groups, the greatest number of patients was in the 10-19 years age group (n=301; 22.1%),

and the second most common age group was 20-29 (n=269; 19.7%). There was no statistically significant difference between genders in terms of age group distribution (p=0.166).

Table 1. Demographic characteristics of the patients.

Number of patients, n (%)	1381 (100%)
Gender, n (%)	
Female	860 (62.3%)
Male	521 (37.7%)
F:M	1.65
Age (year), median (IR)	33 (34)
Age groups (years), n (%)	
0-9	46 (3.4%)
10-19	301 (22.1%)
20-29	269 (19.7%)
30-39	204 (15%)
40-49	158 (11.6%)
50-59	145 (10.6%)
60-69	161 (11.8%)
70-79	77 (5.6%)
≥ 80	2 (0.14%)
Total	1363 (100%)
Complaint count, n, (%)*	
1	1381 (100%)
2	324 (23.4%)
3	61 (4.4%)
4	5 (0.36%)
5	1 (0.07%)
Disease duration (month), median (IR)	
First complaint	1.2 (34)
Second complaint	1.2 (46)
Third complaint	3.6 (108)
Fourth complaint	8.5 (27.2)

*By least number of complaints

The total number of complaints was 1772. 23.4% of the patients (n=324) had at least two complaints. The maximum number of complaints evaluated at one visit was 5. There was no statistically significant difference between the age groups and complaint number (p=0.53), but the difference between the number of complaints by gender is statistically significant (p=0.009). 25.8% of female patients had at least two complaints, while this rate was 19.3% for males.

The median disease duration for the first complaints of patients was 1.2 months (IR 34, minimum 1 day and maximum 600 months) and 1.2 months (IR 46, minimum 3 days and maximum 480 months) for the second complaints. There was only one patient with five complaints, and the duration of the fifth complaint was one month. Demographic characteristics according to gender, age, complaint numbers, and disease durations are shown in Table 1. The numbers of complaints by gender are shown in Table 2.

Distribution of skin diseases

The most common disease groups were "skin disorders of appendages" (30.8%); "dermatitis and eczema" (16.8%); "other disorders of skin and subcutaneous tissue" including vitiligo, other disorders of pigmentation, seborrheic keratosis, callus, xerosis cutis, connective tissue disorders, and insect bites (13%); "mycosis" (10%) and "viral infections" (6.8%), respectively. The frequency of the diseases and their distribution by gender are shown in Table 3. The most common diseases were acne (18%), dermatophytosis (8.1%), viral warts (6.5%), seborrheic dermatitis (4.8%), other dermatitis (4.8%), follicular disorders (4.6%), pruritus (3.7%), scabies (3%), benign neoplasms (3%), and urticaria (3%), respectively.

Table 2. The number of complaints according to the gender.

	Number of complaints						
Gender	1	2	3	4	5	Total	p value
Female (n, %)	637 74.1%	173 20.1%	46 5.4%	3 0.3%	1 0.1%	860 100%	0.009
Male (n, %)	420 80.6%	90 17.3%	10 1.9%	1 0.2%	0 0%	521 100%	

Table 3. The frequencies of the diagnoses of patients by gender.

Diagnosis	Female (n, %)	Male (n, %)	Total (n, %
Infectious and parasitic diseases	192 (16.8)	171 (26.9)	363 (20.5)
Mycosis	90 (7.9)	91 (14.3)	181 (10.2)
Dermatophytosis	71 (6.2)	76 (12)	147 (8.3)
Pityriasis versicolor	15 (1.3)	14 (2.2)	29 (1.6)
Candidiasis	4 (0.35)	1 (0.15)	5 (0.28)
Viral infections	70 (6.2)	59 (9.3)	129 (6.3)
Viral warts	56 (4.9)	47 (7.4)	103 (5.8)
Herpes zoster	10 (0.87)	4 (0.62)	14 (0.79)
Herpes simplex infections	2 (0.17)	4 (0.62)	6 (0.33)
Molluscum contagiosum	1 (0.1)	2 (0.31)	3 (0.17)
Others	1 (0.08)	2 (0.31)	3 (0.17)
Scabies	32 (2.8)	21 (3.3)	53 (3.2)
Neoplasms	62 (5.5)	35 (5.5)	97 (5.5)
Malign neoplasms (non-melanoma)	8 (0.7)	9 (1.4)	17 (0.95)
Benign neoplasms*	54 (4.7)	26 (4.1)	80 (4.5)
Diseases of the oral cavity, salivary glands and jaws	8 (0.7)	3 (0.47)	11 (0.62)
Diseases of the skin and subcutaneous tissue	875 (77)	426 (67)	1301 (73.4)
Infections of the skin and subcutaneous tissue	16 (1.4)	18 (2.7)	34 (1.9)
Cutaneous abscess, furuncle and carbuncle	2 (0.17)	2 (0.31)	3 (0.17)
Cellulitis	1 (0.06)	6 (0.94)	19 (1.1)
Other local infections	13 (1.1)	0 (0)	1 (0.05)
Bullous disorders	1 (0.08)	121 (19)	299 (16.9)
Dermatitis and eczema	178 (15.7)	7 (1.1)	12 (0.67)
Atopic dermatitis	5 (0.43)	31 (4.9)	85 (4.8)
Seborrheic dermatitis	54 (4.7)	13 (2)	41 (2.3)
Contact dermatitis	28 (2.5)	3 (0.47)	11 (0.62)
Lichen simplex chronicus	8 (0.7)	30 (4.7)	65 (3.7)
Pruritus	35 (3)	37 (5.8)	85 (4.8)
Other dermatitis	48 (4.2)	28 (4.4)	65 (3.7)
Papulosquamous disorders	37 (3.3)	22 (3.5)	50 (2.8)
Psoriasis	28 (2.5)	3 (0.47)	7 (0.39)
Pityriasis rosea	4 (0.35)	2 (0.31)	6 (0.33)
Lichen planus	4 (0.35)	1 (0.15)	2(0.11)
Pityriasis rubra pilaris	1 (0.08)	17 (2.7)	60 (3.4)
Urticaria and erythema	43 (3.8)	13 (2)	53 (3)
Urticaria	40 (3.5)	4 (0.62)	7 (0.39)
Other erythematous conditions	3 (0.26)	22 (3.5)	53 (3)
Radiation related disorders of the skin and subcutaneous tissue	31 (2.7)	10 (1.6)	22 (1.2)
Polymorphous light eruption	12 (1)	12 (1.9)	31 (1.7)
Actinic keratosis	19 (1.7)	153 (24.1)	545 (30.7)
Skin disorders of appendages	392 (34.5)	2 (0.31)	16 (0.9)
Nail disorders	14 (1.2)	4 (0.62)	11 (0.6)
Eccrine sweet disorders	7 (0.61)	15 (2.4)	24 (1.4)
Alopecia areata	9 (0.79)	10 (1.6)	22 (1.2)
Androgenetic alopecia	12 (1)	3 (0.47)	35 (2)
Telogen effluvium	32 (2.8)	79 (12.4)	311 (17.5)
Acne	232 (20.4)	7 (1.1)	45 (2.5)
Rosacea	38 (3.3)	33 (5.2)	81 (4.6)
Follicular disorders	17 (1.5)	67 (10.5)	244 (13.8)
Other disorders of the skin and subcutaneous tissue	48 (4.2)	10 (1.6)	22 (1.2)
Vitiligo	177 (15.6)	5 (0.78)	58 (3.3)
Other disorders of pigmentation	12 (1)	12 (1.9)	43 (2.4)
Seborrheic keratosis	53 (4.7)	14 (2.2)	37 (2)
Callus	31 (2.7)	6 (0.94)	28 (1.6)
Xerosis	23 (2)	5 (0.78)	15 (0.84)
Connective tissue disorders**	22 (1.9)	7 (1.1)	16 (0.9)
Insect bites	10 (0.9)	8 (1.3)	25 (1.4)
Other disorders of the skin and subcutaneous disorders (not elsewhere classified)	9 (0.79)	5 (0.78)	58 (3.3)
Total	1137 (64.1)	635 (35.9)	1772 (100)

*Including melanocytic naevi, Becker's nevus, skin tag, benign lipomatous neoplasm, cherry angioma, spider angioma, dermatofibroma.

**Including scar conditions and fibrosis, atrophic and hypertrophic disorders of skin, lupus erythematosus, localized scleroderma, other localized connective tissue disorders, vasculitis limited to skin.

When we evaluated the frequency of diseases according to gender, acne was the most common disease in both genders. While dermatophytosis was seen approximately two times, and viral warts and pruritus were approximately 1.5 times more in men than in women, urticaria was seen approximately 1.5 times more in women than in men. This difference in the distribution of disease frequencies by gender was statistically significant (p=.000). The distribution of the 10 most common diseases by gender is shown in Table 4.

When the frequencies of the most common 10 diseases according to age categories were evaluated, acne, viral warts, seborrheic dermatitis, and other dermatitis were most common in the 10-19 age group. Follicular disorders and scabies were most common in the 20-29 age group. Benign neoplasms and urticaria were the most common in the 40-49 age group and, dermatophytosis and pruritus were most common in the 60-69 age group. The distribution of the 10 most common diseases by age categories is shown in Table 5. Also, the distribution of disease frequencies by age categories was statistically significant (p=.000).

When we look at the frequency of the diseases according to the order of complaints, the three most common diagnoses according to the first complaint were acne (19.4%), dermatophytosis (6.9%), and viral warts (5.9%). According to the second-order complaints, the three most common diagnoses were dermatophytosis (13.3%), acne (11.4%), and follicular disorders (7.4%), while dermatophytosis (14.8%) benign neoplasms (11.4%) and acne (9.8%) were the

Table 4. The distribution of the 10 most common diseases by gender.

Disease	Female (n, %)	Male (n, %)
Acne	232 (20.4)	79 (12.4)
Dermatophytosis	71 (6.2)	76 (12)
Viral warts	56 (4.9)	47 (7.4)
Seborrheic dermatitis	54 (4.7)	31 (4.9)
Other dermatitis	48 (4.2)	37 (5.8)
Follicular disorders	48 (4.2)	33 (5.2)
Pruritus	35 (3)	30 (4.7)
Scabies	32 (2.8)	21 (3.3)
Benign neoplasms	54 (4.7)	26 (4.1)
Urticaria	40 (3.5)	13 (2)

Table 5. The distribution of the 10 most common diseases by age categories.

Disease	0-9 (n)	10-19 (n)	20-29 (n)	30-39 (n)	40-49 (n)	50-59 (n)	60-69 (n)	70-79 (n)	≥80 (n)
Acne	1	168	107	30	5	0	0	0	0
Dermatophytosis	3	7	13	25	22	24	37	11	0
Viral warts	4	26	26	25	11	6	3	4	0
Seborrheic dermatitis	2	28	21	12	4	6	6	2	0
Other dermatitis	4	15	11	12	12	10	12	1	0
Follicular disorders	0	15	26	14	8	10	7	6	0
Pruritus	3	6	6	5	8	8	16	9	1
Scabies	3	5	15	9	9	6	4	1	0
Benign neoplasms	3	11	8	7	22	11	6	4	0
Urticaria	0	8	8	6	11	6	10	6	0

three most common diagnoses among the third complaints, respectively. The diagnoses related to the complaints mentioned in the fourth order were viral wart (n=1), benign neoplasm (n=1),

Table 6. The frequencies of diagnosis according to the complaint order.

Diagnosis	Complaint 1 (n, %)	Complaint 2 (n, %)	Complaint 3 (n, %)
Infectious and parasitic diseases	273 (19.8)	76 (23.5)	13 (21.3)
Mycosis	123 (8.9)	47 (14.5)	11 (18.0)
Dermatophytosis	95 (6.9)	43 (13.3)	9 (14.8)
Pityriasis versicolor	24 (1.7)	3 (0.92)	2 (3.3)
Candidiasis	4 (0.29)	1 (0.30)	0 (0.0)
Viral infections	102 (7.4)	24 (7.4)	2 (3.3)
Viral warts	81 (5.9)	19 (5.9)	2 (3.3)
Herpes zoster	13 (0.94)	1 (0.30)	0 (0.0)
Herpes simplex infections	2 (0.14)	4 (1.2)	0 (0.0)
Molluscum contagiosum	3 (0.21)	0 (0.0)	0 (0.0)
Other	3 (0.21)	0 (0.0)	0 (0.0)
Scabies	48 (3.4)	5 (1.5)	0 (0.0)
Neoplasms	64 (3.5)	24 (7.4)	8 (13.1)
Malign neoplasms (non-melanoma)	14 (1.0)	2 (0.61)	1 (0.16)
Benign neoplasms*	50 (3.6)	22 (6.8)	7 (11.4)
Diseases of the oral cavity, salivary glands and jaws	10 (0.72)	1 (0.30)	0 (0)
Diseases of the skin and subcutaneous tissue	1034 (74.9)	223 (68.8)	40 (65.6)
Infections of the skin and subcutaneous tissue	30 (0.22)	2 (0.61)	2 (3.3)
Cutaneous abscess, furuncle and carbuncle	10 (0.72)	1 (0.3)	1 (1.6)
Cellulitis	3 (0.21)	0 (0)	0 (0)
Other local infections	17 (1.2)	1 (0.3)	1 (1.6)
Bullous disorders	1 (0.07)	0 (0)	0 (0)
Dermatitis and eczema	239 (17.3)	50 (15.4)	9 (14.8)
Atopic dermatitis	11 (0.8)	1 (0.3)	0 (0)
Seborrheic dermatitis	64 (4.6)	17 (5.3)	3 (4.9)
Contact dermatitis	38 (2.8)	2 (0.61)	1 (1.6)
Lichen simplex chronicus	10 (0.72)	1 (0.3)	0 (0)
Pruritus	53 (3.8)	11 (3.4)	1 (1.6)
Other dermatitis	63 (4.5)	18 (5.5)	4 (6.6)
Papulosquamous disorders	60 (4.3)	5 (1.5)	0 (0)
Psoriasis	46 (3.3)	4 (1.2)	0 (0)
Pityriasis rosea	7 (0.51)	0 (0)	0 (0)
Lichen planus	6 (0.43)	0 (0)	0 (0)
Pityriasis rubra pilaris	1 (0.07)	1 (0.3)	0 (0)
Urticaria and erythema	57 (4.1)	2 (0.61)	1 (1.6)
Urticaria	50 (3.6)	2 (0.61)	1 (1.6)
Other erythematous conditions	7 (0.51)	0 (0)	0 (0)
Radiation related disorders of the skin and subcutaneous tissue	48 (3.5)	4 (1.2)	1 (1.6)
Polymorphous light eruption	20 (1.5)	1 (0.3)	1 (1.6)
Actinic keratosis	28 (2)	3 (0.92)	0 (0)
Skin disorders of appendages	430 (31.1)	98 (30.2)	16 (26.2)
Nail disorders	11 (0.8)	5 (1.5)	0 (0)
Eccrine sweet disorders	7 (0.51)	3 (0.92)	1 (1.6)
Alopecia areata	21 (1.5)	2 (0.61)	1 (1.6)
Androgenetic alopecia	15 (1.1)	6 (1.9)	0 (0)
Telogen effluvium	17 (1.2)	15 (4.6)	3 (4.9)
Acne	268 (19.4)	37 (11.4)	6 (9.8)
Rosacea	38 (2.8)	6 (1.9)	1 (1.6)
Follicular disorders	53 (3.8)	24 (7.4)	4 (6.6)
Other disorders of the skin and subcutaneous tissue	169 (12.2)	62 (19.1)	11 (18)
Vitiligo	19 (1.4)	3 (0.92)	0 (0)
Other disorders of pigmentation	41 (3)	15 (4.6)	2 (3.3)
Seborrheic keratosis	24 (1.7)	15 (4.6)	3 (4.9)
Callus	24 (1.7)	13 (4)	0 (0)
Xerosis	14 (1)	9 (2.8)	4(6.6)
Connective tissue disorders**	13 (0.9)	1 (0.3)	1 (1.6)
Insect bites	14 (1)	2 (0.61)	0 (0)
Other disorders of the skin and subcutaneous disorders (not elsewhere classified)	20 (1.4)	4 (1.2)	1 (1.6)
Total	1381 (100)	324 (100)	61 (100)

*Including melanocytic naevi, Becker's nevus, skin tag, benign lipomatous neoplasm, cherry angioma, spider angioma, dermatofibroma.

**Including scar conditions and fibrosis, atrophic and hypertrophic disorders of skin, lupus erythematosus, localized scleroderma, other localized connective tissue disorders, vasculitis limited to skin.

androgenetic alopecia (n=1), seborrheic keratosis (n=1), and xerosis cutis (n=1). There was only one patient with 5 complaints, and the diagnosis was seborrheic dermatitis for the fifth complaint. Disease frequencies according to the order of complaints were shown in Table 6.

When we evaluated the anatomic localizations according to the order of complaint, the most common localizations reported for the first complaint were face (34.2%), chest-abdomen (21.3%), arm-forearm (11.6%), back (11.1%), and thigh-tibia (10.8%) regions. The anatomic localization according to the order of complaints is shown in Table 7.

When the number of complaints was compared according to the localization of the first complaints, 32.8% (n=42) of those with scalp involvement stated at least two complaints, while this rate was 22.2% (n=278) in those without scalp involvement. This difference was statistically significant (p=0.026). No relationship was found between other anatomical localizations for the first complaints and the number of complaints.

Discussion

The literature shows different results about the most common skin disease groups and skin diseases in various studies reported from different countries. However, the three most common disease groups are seen as dermatitis and eczema, skin disorders of appendages, and mycosis, similar to our study, although their order varies [8-10]. In a study from Türkiye, the most common disease group was identified as dermatitis and eczema (21.8%) [8]. Dermatitis and eczema were also the most frequently reported group of skin diseases in previous studies conducted in Greece, Iraq, Japan, Saudi Arabia, and South Africa [11-15]. In this study, the most common disease group among the 1772 skin diseases diagnosed was the disorders of skin appendages (30.7%). The most likely reason for this difference may be the age distribution of the patients in the study group. In our study, most of the patients were in the 10-19 age group (22.1%) and the most common disease was acne (17.5%). Acne accounted for more than half of skin disorders of appendages. On the other hand, although acne is the most common disease in both gender, it was proportionally more common in women than men (20.4% versus 12.4%), and the female-to-male ratio in our study was 1.65. For these reasons, the disorders of the skin appendages group are at the top of the list in our study. In addition, although the most frequently reported disease group in some of these studies was dermatitis and eczema, the most frequently reported disease was acne, which was in the skin disorders of appendages group, similar to our study [8,10]. Also, "dermatitis and eczema" is the most second disease group in our study (16.9%).

Evaluating the distribution of the most common diseases by gender, acne, dermatophytosis, and viral warts were the first three most common skin diseases in both groups in our study. When

Table 7. The anatomic localizations according to the order of the complaints.

Anatomic localizations	Complaint 1 (n, %)	Complaint 2 (n, %)	Complaint 3 (n, %)
Scalp	128 (9.3)	51 (15.7)	6 (9.8)
Face	473 (34.2)	100 (30.9)	18 (29.5)
Neck	41 (3)	10 (3.1)	1 (1.6)
Chest-abdomen	295 (21.3)	28 (8.6)	14 (22.9)
Back	154 (11.1)	29 (8.9)	12 (19.6)
Forearm-arm	160 (11.6)	26 (8)	7 (11.5)
Hand	133 (9.6)	24 (7.4)	4 (6.5)
Thigh-tibia	149 (10.8)	30 (9.3)	8 (13.1)
Foot	126 (9.1)	58 (17.9)	7 (11.5)
Palmoplantar	17 (1.2)	0 (0)	1 (1.6)
Finger nail	6 (0.43)	0 (0)	0 (0)
Toe nail	36 (12.6)	3 (0.92)	1 (1.6)
Genital	42 (3)	8 (2.5)	1 (1.6)
Oral mucosa	11 (0.79)	2 (0.61)	0 (0)

we look at the frequency rates of these three diagnoses, acne was more common in women (20.4% versus 12.4%). However, dermatophytosis was seen about 2 times more frequently in men (12% versus 6.2%), and viral warts were about 1.5 times more frequently (7.4% versus 4.9%). In a study from Türkiye, acne was the most common diagnosis, slightly more common in women than men, similar to our study (14.6% versus 14.1%). Also, dermatophytosis was the second most common disease in males and was slightly more common in men than women, similar to our study (10.2% versus 8.7%). Nevertheless, the most common second disease was contact dermatitis in females, which differs from our study. Also, the most common third disease was urticaria in both genders, and the frequency of viral warts was in lower order in their list [8].

Regarding the distribution of the most common diseases according to age groups, acne was most common in the 10-19 age group in our study. This result was consistent with some studies in the literature [8,10]. In a study among pediatric patients aged between 0 and 16 years from Türkiye, the most prevalent disease was acne [16]. In a study from the similar geographic region to our study, the most common diagnosis were encountered as acne as well [17]. However, in another study from Türkiye, the most common skin was reported as eczema in the 6-17 age group [18]. In another study in which patients aged 0-15 were evaluated, viral infections took the first place [19]. The differences might be due to the geographic localizations of the studies conducted and not including only 10-19 age group patients. Also, in our study, viral warts, seborrheic dermatitis, and other dermatitis were the most common other diseases in the 10-19 age group, consistent with the mentioned studies. In our study, the most common age group of dermatophytosis, the second most common diagnosis, was 60-69 years. Similar to our study, in a study in which the second most common diagnosis was dermatophytosis, it was stated that the most common age group for this diagnosis was 20-29 years [8]. However, in this study, while the 60-69 age group comprised 7.2% of the population, this proportion was 11.8% in our study. The difference in this result might be due to the difference in the number of patients according to age distributions. In two different studies on geriatric patients, fungal infections were among the three most common diagnoses, similar to our study in the 65-74 age group [20,21]. According to our study, the most common age groups of viral warts, which are the third most common diagnosis, were 10-19 and 20-29 years. This result was consistent with the results of other studies evaluating the age groups [8,10].

No study focusing on the number of complaints of patients at one visit has been found in the literature. In our study, those with at least 2 complaints were 23.4% of the patients, and those with at least 3 were 4.4%. Almost one out of every four patients reported more than one complaint in a single visit. Considering the time that can be allocated for a patient in our outpatient clinics, it can be predicted that this situation may impose a significant burden on physicians, and the time required for diagnosis as well as treatment planning will be shortened. The three most frequent diagnoses based on the first complaint were acne (19.4%), dermatophytosis (6.9%), and viral warts (5.9%). The three most frequent diagnoses based on second-order complaints were dermatophytosis (13.3%), acne (11.4%), and follicular disorders (7.4%). Dermatophytosis (14.8%), benign neoplasms (11.4%), and acne (9.8%) were the most common diagnoses for the third complaint. Acne may be the first complaint, as it occurs in more visible anatomic localizations and may cause negative cosmetic results.

When we analyzed the factors affecting the number of complaints, it was determined that the rate of stating more than one complaint was higher in women than in men. 25.8% of female patients had at least two complaints, while this rate was 19.3% for males, and the difference was statistically different. However, there was no statistical difference between complaint number and age categories. When we look at the anatomical localizations of the complaints, the most common anatomical localization for all the complaints mentioned in the first three orders was the face. Chest-abdomen was the second most common localization for first and third complaints. The foot was the most

common second localization for the second complaint. When we look at the relationship between anatomic localizations and the number of complaints, the rate of having more than one complaint was significantly higher in patients with the first complaint site on the scalp than those without as an interesting result. In line with this information, it may be helpful to consider the possibility of a patient who has any complaints about the scalp making an additional complaint.

There are some limitations of our study. Our results cannot be generalized as it is not a population-based study. The timing of the study is short. The educational status and occupation of the patients included in the study might also be questioned, and it might be evaluated whether it affects factors such as the pattern of diseases, the number, and anatomic localizations of the complaint.

Conclusion

In conclusion, skin diseases are common in society of all ages and genders, and determining disease patterns can play an essential role in treatment planning and preventive measures. In addition to determining the distribution of skin diseases by age and gender, determining the number of complaints expected to be diagnosed at one visit will also enable dermatologists to be prepared in treatment planning and time management.

Funding

The authors declare that no funds, grants, or other support were received during the preparation of this study.

Conflict of interest

The authors have no relevant financial or non-financial interests to disclose.

References

1. Karimkhani C, Dellavalle RP, Coffeng LE, Flohr C, Hay RJ, Langan SM, et al. Global skin disease morbidity and mortality: An update from the Global Burden of Disease Study 2013. JAMA Dermatol. 2017;153:406-12. doi: 10.1001/jamadermatol.2016.5538.
2. Stenberg B, Meding B, Svensson Å. Dermatology in public health - a model for surveillance of common skin diseases. Scand J Public Health. 2010;38:368-74. doi: 10.1177/1403494810364557.
3. Svensson A, Ofenloch RF, Bruze M, Naldi L, Cazzaniga S, Elsner P, et al. Prevalence of skin disease in a population-based sample of adults from five European countries. Br J Dermatol. 2018;178:1111-8. doi: 10.1111/bjd.16248.
4. Tempark T, Whaidee K, Bongsebandhu-Phubhakdi C, Suteerojntrakool O. Prevalence of skin diseases in school-age children. Fam Pract. 2022;39:340-5. doi: 10.1093/fampra/cmab164.
5. Esmail RY, Sakwari GH. Occupational skin diseases among building construction workers in Dar es Salaam, Tanzania. Ann Glob Health. 2021;87:92. doi: 10.5334/aogh.3102.
6. Kocatürk E, Kocatürk A, Kavala M. Prevalence of skin diseases in female prisoners in Turkey: Analysis of impact of prison conditions and psychological stress. Acta Dermatovenerol Croat. 2014;22:26-31.
7. Şenel E, Doğruer Şenel S, Salmanoğlu M. Prevalence of skin diseases in civilian and military population in a Turkish military hospital in the central Black Sea region. J R Army Med Corps. 2015;161:112-5. doi: 10.1136/jramc-2014-000267.
8. Bilgili ME, Yildiz H, Sarici G. Prevalence of skin diseases in a dermatology outpatient clinic in Turkey. A cross-sectional, retrospective study. J Dermatol Case Rep. 2013;7:108-12. doi: 10.3315/jdcr.2013.1156.
9. Richard MA, Paul C, Nijsten T, Gisondi P, Salavastru C, Taieb C, et al. Prevalence of most common skin diseases in Europe: A population-based study. J Eur Acad Dermatol Venereol. 2022;36:1088-96. doi: 10.1111/jdv.18050.
10. Baghestani S, Zare S, Mahboobi AA. Skin disease patterns in Hormozgan, Iran. Int J Dermatol. 2005;44:641-5. doi: 10.1111/j.1365-4632.2004.02140.x.
11. Symvoulakis EK, Krasagakis K, Komninos ID, Kastrinakis I, Lyronis I, Philalithis A, et al. Primary care and pattern of skin diseases in a Mediterranean island. BMC Fam Pract. 2006;7:6. doi: 10.1186/1471-2296-7-6.
12. Al Samarai AGM. Prevalence of skin diseases in Iraq: A community based study. Int J Dermatol. 2009;48:734-9. doi: 10.1111/j.1365-4632.2009.03812.x.
13. Furue M, Yamazaki S, Jimbow K, Tsuchida T, Amagai M, Tanaha T, et al. Prevalence of dermatological disorders in Japan: A nationwide, cross-sectional, seasonal, multicenter, hospital-

based study. J Dermatol. 2011;38:321-34. doi: 10.1111/j.1346-8138.2011.01209.x.

14. Fatani MI, Al-Afif KA, Hussain H. Pattern of skin diseases among pilgrims during Hajj season in Makkah, Saudi Arabia. Int J Dermatol. 2000;39:493-6. doi: 10.1046/j.1365-4362.2000.00009.x.
15. Hartshorne ST. Dermatological disorders in Johannesburg, South Africa. Clin Exp Dermatol. 2003;28:661-5. doi: 10.1046/j.1365-2230.2003.01417.x.
16. Tamer E, Ilhan MN, Polat M, Lenk N, Alli N. Prevalence of skin diseases among pediatric patients in Turkey. J Dermatol. 2008;35:413-8. doi: 10.1111/j.1346-8138.2008.00495.x.
17. Kacar SD, Ozuguz P, Polat S, Manav V, Bukulmez A, Karaca S. Epidemiology of pediatric skin diseases in the mid-western Anatolian region of Turkey. Arch Argent Pediatr. 2014;112:421-7. doi: 10.5546/aap.2014.eng.421.
18. Sula B, Uçmak D, Saka G, Akdeniz S, Yavuz E, Yakut Y, et al. Prevalence of skin disorders among primary school children in Diyarbakir, Turkey. Arch Argent Pediatr. 2014;112:434-8. doi: 10.5546/aap.2014.eng.434.
19. Bilgili SG, Akdeniz N, Karadag AS, Akbayram S, Calka O. The prevalence of pediatric skin diseases in Eastern Turkey. Int J Dermatol. 2014;53:6-9. doi: 10.1111/j.1365-4632.2012.05520.x.
20. Yaldiz M. Dermatological diseases in the geriatric age group: Retrospective analysis of 7092 patients. Geriatr Gerontol Int. 2019;19:582-5. doi: 10.1111/ggi.13665.
21. Bilgili SG, Karadag AS, Ozkol HU, Calka O, Akdeniz N. The prevalence of skin diseases among the geriatric patients in Eastern Turkey. J Pak Med Assoc. 2012;62:535-9.