



ISSN 0975-413X
CODEN (USA): PCHHAX

Der Pharma Chemica, 2017, 9(7):34-37
(<http://www.derpharmachemica.com/archive.html>)

The Prevalence of Skin Diseases in Al-Najaf Governorate

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ABSTRACT

To the best knowledge, this is the first population-based study which had determined the prevalence of skin diseases in Iraq, so it is a pressing necessity to conduct such a study in the Najaf province. To determine the prevalence of various skin diseases in Najaf and Kufa cities across sectional study carried out on 430 patients of all ages and both sex choose randomly from dermatological departments in three hospitals (Sader medical city, Hakeem hospital and Al-Furat Al-Awsat hospital) in Najaf and Kufa cities, the data were collected from November 2015 to March 2016. The results were recorded, that the group with eczema/dermatitis had the highest prevalence rate (33.7%) of which eczematous dermatitis was the commonest (31.4%) parasitic infestations were the next with (16.3%) with cutaneous leishmaniasis forming the majority (8.4%). viral infections group had a rate of (13.7%), followed by bacterial skin infections (9.1%) then urticarial (8.8%), superficial fungal infections (5.6%), acne vulgaris (5.3%), pigmentary disorders (2.3%) psoriasis (1.9%) alopecia areata (0.5%), other skin disorders were recorded (2.8%). The conclusion from the current study, a house to house dermatologic examination and interviews needs to be conducted for longer period, a year or more. Targeted training should enable health-care workers to prevent, accurately and manage the skin diseases on site.

Keywords: Prevalence, Skin diseases, Leishmaniasis

INTRODUCTION

The importance of skin diseases is often overlooked. They are usually not life-threatening and tend to be shrugged away. Skin diseases are a significant problem all over the world [1].

Most of the available statistics on the pattern of skin diseases have been based on hospital or private practice and can provide a very crude indication of true prevalence and incidence in a community, as many social and economic factors affect the decision to seek medical advice [2,3].

There are a number of surveys around the world with different statistical analysis considerations, according to the annual reports of ministry of health and population in Nepal [4]. Skin diseases (SDs) are one of the leading causes of morbidity, with approximately 2,700,000 and 2,680,000 visits to outpatient clinics in 2009 and 2010 i.e., the 4th and 5th most common reasons for consultations. Worldwide, SDs is one of the most ubiquitous health problems, affecting 1 in 5 persons in the UK [5] and 1 in 3 in the US [6], but there are large differences between countries, climates and cultures. The highest prevalence has been reported from developing countries and poor area. In the mountainous region of northern India, the overall prevalence is 45.3%, while in rural Sumatra; it is 28.2% [7].

The retrospective study, reported that the most common skin disorders were allergic disorders (17.9%), followed by viral skin disorders (15.8%) among children under the age of 17 who presented to outpatient clinics of dermatology [8]. In another study reported that skin complains accounted for 3.9% of the all hospital admissions and 3.7% of all admissions to community health centers [9].

Aim of the study

Determined the type of skin diseases and there prevalence in Najaf and Kufa cities according to the etiological agent, and study relation between these diseases and many factors such ad age, gender, occupation, and the residence of the patients that were exposed to the skin diseases.

METHODOLOGY

The study was conducted on the patients with skin diseases in three major hospitals in Najaf and Kufa cities at period extended from December 2015 to April 2016; I have studies randomly 430 patients in these hospitals.

Bio-statistical analysis

Data were coded, checked, entered and analyses by using SPSS version 20, all statistical analysis were performed using Excel program (2013), from Microsoft Company USA.

RESULTS

It has been found that out of 430 patients there were 208 (48.4%) males and 222 (51.6%) females. The incidence of skin diseases as regard age groups was as follows; 106 cases (24.7%) in first age group, 87 cases (20.2%) in second age group, 48 cases (11.2%) in third age group, 57 cases in fourth age group (13.3%), 65 cases in fifth age group (15.1%), 33 cases in sixth age group (7.7%), 22 cases in seventh age group (5.1%), 12 cases in eighth age group (2.8%) (Table 1).

Table 1: Age and gender distribution of all studied cases

Age group	No.	Gender			
		Male		Female	
		No.	%	No.	%
0.4-6	106	57	27.4	49	22.1
6-13	87	52	25.0	35	15.8
13-18	48	21	10.1	27	12.2
18-25	57	22	10.6	35	15.8
25-40	65	27	13.0	38	17.1
40-50	33	11	5.3	22	9.9
50-60	22	10	4.8	12	5.4
60	12	8	3.8	4	1.8
Total	430	208	48.4	222	51.6

The results of distribution of skin diseases according to the occupation (Table 2).

Table 2: Rates of occupations among patients with skin diseases

Occupation	No.	%
Free jobs	45	10.5
House wife	97	22.6
Officer	21	4.9
Student	128	29.8
Child	139	32.3
Total	430	100.0

Regarding the etiologic factors for the different skin diseases (Table 3).

Table 3: Skin diseases prevalence according to the causative agent

Skin diseases	No.	%
Eczema/dermatitis	145	33.7
Bacterial skin infections	39	9.1
Viral infections	59	13.7
Parasitic infestations	70	16.3
Fungal infections	24	5.6
Urticarial	38	8.8
Pigmentary disorder	10	2.3
Hair disorders	2	5
Acne vulgaris	23	5.3
Others	8	1.9
Total	430	100

Eczema/dermatitis were the most common diseases 145 cases (33.7%), dermatitis present in 135 cases (93.10%) of all cases with dermatitis diseases (Table 4).

Table 4: Eczematous diseases prevalence

Eczematous diseases	Male		Female	
	No.	%	No.	%
Eczema/dermatitis	67	32.2	68	30.6
Pityriasis rosea	5	2.4	0	0.0
Lichen planus	5	2.4	0	0.0
Total	77	35.10	68	46.90

Table 5: Prevalence of parasitic skin infestation

Parasitic infestations	Male		Female	
	No.	%	No.	%
Scabies	17	8.2	16	7.2
Cutaneous leishmaniasis	19	9.1	17	7.7
Pediculus capitis	0	0.0	1	5
Total	36	51.4	34	49.6

Parasitic infestations was next, 70 cases (16.28%), cutaneous leishmaniasis was the most frequently observed parasitic diseases 36 cases (8.4%), Scabies was 33 cases (7.7%) (Table 5).

Viral infections placed in the third place with 59 cases (13.72%), Warts was the most prevalence, 47 cases (10.9%) (Table 6).

Table 6: Prevalence of viral skin diseases

Viral infections	Male		Female	
	No.	%	No.	%
Warts	25	12.0	22	9.9
Varicella zoster	1	0.5	2	0.9
Viral dermatitis	2	1.0	5	2.3
Total	28	49.1	29	51.9

Bacterial skin diseases were the fourth accounted for 39 cases (9.07%), the commonest was boils that was present in 22 cases (5.1%) out of all cases with bacterial diseases (Table 7).

Table 7: Bacterial skin infection prevalence rates

Bacterial infection	Male		Female	
	No.	%	No.	%
Boils	12	5.8	10	4.5
Impetigo	9	4.3	3	1.4
Others	3	1.5	2	1.0
Total	24	61.5	15	38.5

Fungal infection, found in 24 cases (5.58%), the commonest of which was tinea responsible for 17 cases (4%) of all cases with fungal infections (Table 8).

Table 8: Fungal skin infections and their prevalence

Eczematous diseases	Male		Female	
	No.	%	No.	%
Tinea	5	2.4	12	5.4
Tinea versicolor	0	0.0	2	0.9
Tinea unguium	1	.5	4	1.8
Total	6	25	18	75

Urticarial comprised 38 cases (8.84%), pigmentary disorder 10 cases (2.33%) of which vitiligo comprised 7 cases (1.6%) and melisma 3 cases (0.7%). Acne vulgaris found in 23 cases (5.35%). Psoriasis have a prevalence rate of 8 cases (1.86%), diffuse hair loss (alopecia areata) comprised 2 cases (0.5%). Other diseases comprised 12 cases (2.79%), these include acrochordons 5 cases (1.2%), head dermatitis 4 cases (0.9%), cellulitis and swollen lymph gland (for each one, 1 cases, 0.2%).

DISCUSSION

The differing survey methods, particularly the definitions of skin diseases, are a serious problem, preventing the valid comparison of studies also, the classification of skin diseases differs; some disorders included herein had not been included in other comparable studies [10]. Many factors determine the results of epidemiologic studies on skin diseases, genetic background, geographic area, climate, season, socioeconomic status, living conditions and medical resources are the most important factors [11,12].

According to our finding in relation to sex, female predominance was observed; the male to female ratio was (1:1.06). This was in agreement with a study from turkey [13] in which male to female ratio was (1:1.1) and one from Egypt [14]. The high prevalence of skin diseases was found in the preschool children (24.7%) and children under 13 y old (20.2%). Prevalence rates of 5.1% and 2.8% were recorded for the age groups 50-60 and above 60 years old respectively.

Prevalence of non-infective skin diseases

According to the etiology, non-infectious diseases were the most frequent (55.35%), in order parts of the world, same results was recorded in pediatrics of Switzerland [15], Turkey (78.6%) [13] and Kuwait (68.8%) [16]. The most prevalent skin infections group in our study was eczema/dermatitis group (33.72%) of which dermatitis with its type is the most prevent among all diseases (31.4%) while pityriasis rosea and lichen planus have similar prevalence, that were 1.2% for each [16].

Urticarial constituted 8.8% this is relatively a high rate compared to that in rural Assiut (1.82%) [10]. Lower rates were reported in rural area seen in rural Assiut study (1.22%) [10], high rates were reported among rural (4%) and urban (3%) population from Mexico [17]. Diffuse hair loss was very rare (only two females 0.5%). It had a prevalence rate of 8.37% in Assiut [10]; it was prevalence among females than woman. Acne vulgaris was 5.35% among the studied population [18]. Absence of malignant skin tumors in the present study is the result of the protection offered by melanin pigment in Iraqi skin against the effect of sun rays.

Prevalence of infective skin diseases

Skin diseases and parasitic infestations a sizeable portion, with prevalence rates of 28.37% and 16.28% among the studied populations, parasitic infestations was the most frequent and prevalent infectious skin diseases in this study (16.28%). Different results obtained by other studies [19]. Cutaneous leishmaniasis was the most prominent parasitic skin infections have a prevalence rate 8.4%, the high prevalence rates scabies were recorded (23.5%) in El-Akhras [20]. Also the prevalence rates were 15% in rural areas in Mexico [17], Barret and Morse [21].

Pediculosis capitis had a very low prevalence rate of 0.2% (only one case) and this have no clear explanation, in some urban localities in Pakistan [22].

Viral infections were second in frequency among infectious skin diseases in our study (13.7%) a significant low results were obtained in other studies, rates of 2.31%, 1.32% and 1.07-2.9% recorded in Assiut [10]. Bacterial infections had a prevalence rate of 9.1% from other developing countries; nearly similar results were reported such as 12% in Tanna, Vanuatu [23].

In this study, boils were not uncommon (5.1%), and impetigo had a prevalence rate of 2.8%, the prevalence 10.2% in El-Akhras et al. study [20]. Tinea (ringworm) was the commonest fungal infection with a prevalence rate of 4% in this study, tinea unguium had a prevalence rate of 1.2%, tinea versicolor recorded relatively low rate (0.5%), similar results (0.84%) was observed in the USA [24].

Recommendation

We recommended improvement of socioeconomic status improvement of the level of education and family income. Taking measures to overcome, overcrowding especially in school. Parental education especially of mothers is important regular visits by medical staff to rural area will provide care, treatment and health education about the most frequent skin infections and could control such conditions.

ACKNOWLEDGMENTS

We should like to thanks Prof. Dr. Abdul AL-Hadi Sallal Ruqaya Muneer, Safa Zuhair, Sarah Adel Abd Al-Hussein, Sabreen Hakim and Noor Hussein.

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