



Prevalence of Vitiligo Among Patients in Baquba City

Mohammad Husain Al-Qayssi (FIBMS)¹

Abstract

Background: Vitiligo is an acquired, idiopathic, and worldwide common depigmentation disorder with an estimated prevalence from 0.1 to 2.5%. These numbers are based on clinical population studies and field research examining inhabitants of geographically enclosed areas.

Objective: To evaluate the prevalence of vitiligo in Baquba city-Diyala Province.

Patients and Methods: A retrospective study was done in outpatient clinic of Baquba Teaching Hospital, which include (10964) patients with different skin diseases attending the clinic during the whole year from first of January to thirty one of December 2012, they were diagnosed clinically by dermatologists . They were assisted regarding the age and gender and the data were analyzed by using the computer according the P-value .

Results: The study shows that prevalence of vitiligo was(0.71%)out of all patients with different skin diseases attending the outpatient clinic of Baquba Teaching Hospital over period of one year. Number of patients in general was tenthousands , nine hundred and sixty four, from which (78) patients diagnosed as vitiligo , the females were (29) (37.1%)and males were (49)(62.8%) , their ages ranges from (2-60) years and more prevalent in patients under (20) years (52.56%) .

Conclusion: It was concluded that vitiligo was more prevalent in males under (20) years and with similar prevalence to most of studies in European countries .

Key words: Vitiligo, skin diseases, prevalence, depigmentation .

Corresponding Author: drmoh_alqaisy@yahoo.com

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¹Baquba Teaching Hospital- Baquba- Diyala-Iraq

Introduction

Vitiligo is a disorder of the skin which is presented as hypopigmented or depigmented macules or patches most commonly seen in children and young adult , 50% of cases seen before 20 years of age and most often seen on sun exposed parts which include (face, hand and feet) and already hyperpigmented areas (axilla , areola, genetelia) as well as areas exposed frequently to friction and trauma like (knee, elbow, ankle and hand). Occasionally, the loss of melanin (i.e. hypopigmentation) is partial, which is called trichrome vitiligo [1].

It is an acquired progressive disorder in which some or all of the melanocytes in the epidermis, and occasionally those in the hair follicles, are selectively destroyed [2]. Based on few dermatological outpatient records, the incidence of vitiligo is found to be (0.1-2.5%) [3]. There is a stigma attached to vitiligo and affected persons and family. This disorder does not result in restriction of capacity to work or expectancy of life, but it causes cosmetic disfigurement leading to psychological trauma to the patients [4]. Most evidence support autoimmune etiology, focusing on the presence of circulating antibodies



against melanocytes and the association of vitiligo with other autoimmune disorders such as pernicious anemia, Addison's disease, diabetes mellitus and autoimmune thyroiditis. Also there is neurogenic theory and self-destruction theory [1,2,4]. 30-40% of patients has family history and inherited as polygenetic or autosomal dominant [5]. Patients with vitiligo presents with one to several amelanotichypo pigmented macules that appear chalk or milk white in color. The macules are round and /or oval in shape often with scalloped margins [5]. Vitiligo is classified as focal, segmental, acrofacial, generalized, mucosal and universal vitiligo. Differential diagnosis of vitiligo include, pityriasis alba, postinflammatory hypopigmentation, morphea, tuberous sclerosis, lichen sclerosis [6].

Topical therapy is employed as first-line treatment in localized vitiligo. Currently, several topical agents are available in many forms viz. methoxsalen (solution and cream), trioxsalen (solution), corticosteroids (gel, cream, ointment and solution) and calcineurin inhibitors (ointment and cream). Although topical therapy has an important position in vitiligo treatment, side-effects or poor efficacy affect their utility and patient compliance [7].

Vitiligo occurs worldwide with an overall prevalence of (0.1-2.5%) [3]. The highest incidence of the condition has been recorded

in Indian from the Indian subcontinent, followed by Mexicans and Japanese [5]. Epidemiological studies on vitiligo have been rarely reported from South Korea [3].

The aim of the present study was to evaluate the prevalence of vitiligo in patients and relation to age and gender in Baquba city.

Patients and Methods

A retrospective study was done in Department of Dermatology of Baquba Teaching Hospital for the period from first of January to thirty one of December 2012. The sample consists of ten thousands, nine hundred and sixty four patients attended Dermatological Department during this period. So patients with vitiligo were selected and evaluated according to the age and gender, using computer for statistical analysis of data in relation to P-value .

Results

The study showed that out of ten thousands, nine hundred and sixty four patients with different skin diseases, who were attended Dermatological Department of Baquba Teaching Hospital over period of one year, (78) patients had vitiligo (0.71%). They were (49) males (62.8%) and (29) females (37.17%), with male to female ratio 1.6:1, their age ranged from (2-60) years, with a significant difference between males and females (P 0.005), i.e. more prevalent in males (table-1).

Table (1): Distribution of patients with vitiligo according to the gender.

Gender	Number	Percentage
Males	49	62.8%
Females	29	37.2%
Total	78	100%

Among patients with vitiligo (41) patients (52.56%) were below (20) years, (28) patients (35.8%) between (20-40) years and (9) patients (11.5%) above (40) years, so the

majority of patients (52.56%) were below (20) years, i.e. with a significant difference in relation to the age group (P 0.005) (table-2).

**Table (2):** Distribution of patients with vitiligo according to the age .

Age group (years)	Number	Percentage
2-19	41	52.56%
20-40	28	35.8%
>40	9	11.5%

Discussion

In general, the worldwide prevalence of vitiligo was (0.1-2.5%), which was agreement with the prevalence of the disease in this study (0.71%) and also the age prevalence was concordant with other worldwide prevalence (50%) , i.e. most of patients with vitiligo (52.56%) in this study were below the age of (20) years [1,3,6,8,9] . In this study, the males: females ratio was (1.6:1), which means the disease was more prevalent in male gender, which was disagreement with worldwide studies, in which the vitiligo was more prevalent in females or equal in both six, males: females (1:0.9) [10]. (1:1.6) [11,12] , (1:1.22) [13] .

In comparison with other studies, the prevalence of vitiligo in India is high (0.46-8.8%) [4,5,14] and also high in those with racially pigmented skin, Japans, Mexicans, Africans, Arabia Sudia and Kuwait [15,16]. Which was disagreement with our study, because in most of these countries, the population was of dark skin . In Denmark, north-west European countries and USA the prevalence and the age of preponderance of vitiligo was nearly similar to our study, due to white skin population [13,17] .

Regarding the gender prevalence of vitiligo, both sexes are equally afflicted and the female preponderance in most series and studies is attributed to the outpatient attendances for cosmetic concerns by females patients , so made them to lock for advice , but the frequency in the population is probably the same in both sexes , which was disagreement with our study [13,18,19] .

In conclusion, it was concluded that the prevalence of vitiligo in this study was similar to that seen in countries with white skin population and lower than those with dark skin population. It is the disease of males less than (20) years .

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