

Original article

Impact of Atopic Dermatitis on Quality of Life, Tripoli Central Hospital

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ABSTRACT

Background and aims. Atopic dermatitis (AD) is a common, chronic, inflammatory skin disorder with an increasing prevalence. It has a significant effect on their quality of life, work productivity, activity impairment, and health care costs. This study was aimed to assess the impact of AD on quality of life of patients. **Methods.** Eighty-seven patients with atopic dermatitis attending dermatology eczema clinic in Tripoli Central Hospital were studied by using Dermatology Life Quality Index (DLQI) which is a self-administrated questionnaire to assess the type and degree of psychosocial impairment among atopic dermatitis patients. Data was analyzed using the SPSS software program version 16. **Results.** The age of patients was ranged from 3 to 78 years with mean age 18 ± 17 with males to female ratio 1.3:1. The impact of AD on quality of life of patients was significant among adults more than children. **Conclusion.** This study concludes that AD disease has a negative impact on the quality of life of adult patients, on social relationships, work, study, and on performing daily activities.

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INTRODUCTION

Atopic dermatitis (AD) or atopic eczema, is a common, chronic, pruritic, relapsing, inflammatory skin disorder with an increasing prevalence and a variable clinical feature [1-3]. Besides genetic susceptibility, external environmental factors and lifestyle factors are critical for development of the atopic diseases [4]. About 70% of AD patients have personal or family history of atopy such as asthma and allergic rhinitis. Affects from 2% to 7% of adults worldwide, 10-20% of children in Europe, and 17% of children in the United States. However, the total prevalence of AD in Korean children and adults was 2.2%-2.6% [4-6].

Atopic patients with moderate to severe disease due to severe intractable itching, often suffer from significant morbidity on their quality-of-life, and they may have disturbance in sleep, irritability, daytime tiredness, skin infections, and school or work disruption. Atopic dermatitis, and significant emotional stress for them as well as their families [5-8].

Many studies had demonstrated that atopic dermatitis can be a major skin disorder with very significant costs and morbidity [2,9]. In addition, AD is a physically, mentally, and socially disabling disease that reduces the quality of life. Atopic dermatitis has been studied extensively enough particularly in developed countries especially with the subject of effect of the disease on the quality of life of patients but still there is lack of studies on this aspect of the disease in Libya.

METHODS

Study design and setting

A cross sectional study was carried out at eczema clinic, Tripoli Central Hospital for nine months on patients was clinically diagnosed as having atopic dermatitis.

Data collection procedure

All patients attending eczema clinic who was clinically diagnosed as having atopic dermatitis were enrolled, however, infants with atopic dermatitis were excluded. Children less than 14 years was answered questions with the help of their parents.

Patients were asked about the impact of their disease on their lives by using translated Arabic form of Dermatology Life Quality Index (DLQI) questionnaire which is a 10-question filled by interview to assess the type and degree of psychosocial impairment among atopic dermatitis patients. The questions cover the psychosocial aspects and daily activities of patients after developing the disease and were divided into the following subgroups: Questions 1-2 about the impact of the disease on symptoms and feelings in last week. Questions 3-4, about the impact of the disease on daily activities. Questions 5-6, about the impact of the disease on leisure. Question 7 about the impact of the disease on work. Questions 8-9, about the impact of the disease on personal relationships. Question 10, about the impact of the disease treatment on daily life. Each question has four alternative responses: "not at all", a "little", a "lot", or "very much" with 0, 1, 2 and 3 scores respectively.

Statistical analysis

Data was analyzed using the SPSS software program version 16. Mean, standard deviation and percentages was used to describe the data. Chi-square test was used for analyzing associations between the categorical variables and Student "T" test to compare differences between groups.

RESULTS

This study included 87 patients presented with a clinical diagnosis of atopic dermatitis. Their age was ranged from 3 to 78 years with mean age 18 ± 17.05 (Table 1). The highest frequency (42.5%) was represented school age group, followed by (26.4%) young adults, (21.8%) preschool age group and the lowest frequency (4.6%) for adults. Of the total cases 56% were males and 27% were females with males to female ratio 1.3:1 (Figure 1).

For the purpose of comparison in DLQI score in the next results, we divided the 87 cases under the study into two groups. Children group (< 17 year): 50 cases with mean age = 8 ± 3.7 years. adults' group (>17year): 37 cases with mean age = 33 ± 17.4 years.

Table 1. Distribution of Age of studied cases.

Items	Children group	Adults group	Total
Number of cases	50	37	87
Age (mean \pm SD)	8 ± 3.7	33 ± 17.4	18 ± 17.05

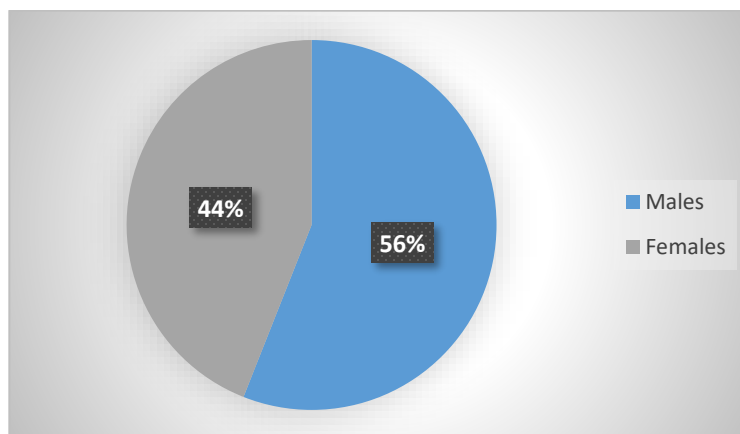


Figure 1. Distribution of cases according to gender

Among 87 patients (children and adults) the effect of AD on their quality of life were (55%) of patients had very large effect on quality of their life, (25%) moderate effect followed by (17%) had extremely large effect and (2%) had low effect on their quality of life.

Regarding dermatology life quality index, about (59.8%) of cases were suffered very much from pain, soreness and itching by the disease, (48.3%) were embarrassed a lot from their skin condition, (46%) were their condition a lot interfered them from go to shopping or looking after their home, for children this question modified to playing and daily activities. The disease influence (49.4%) of the cases in choosing the kind of cloths they want to wear very much.

About (47.4%) of the participants' skin condition was influenced a lot their performing of social or leisure activities, (55.3%) of cases were their AD prevented them very much from working and studying, whereas in (48.3%) the disease create a lot problems with their partners, close friends or relatives.

In question 9, where about queries if disease was causing any sexual difficulties and because patients include children and adults so this question modified for children, which asked about sleep and adults about sexual difficulties. The result revealed that about (94.3%) of cases were AD has no caused any effect at all and question 10 about (50.6%) were had a lot of problems with the treatment of AD disease.

Table 2. Showed DLQI score was statistically significant higher in adults' group than children group (p value = 0.001), which means that children's life not affected so much by the disease like adults, but there is no the difference in DLQI score between males and females was statistically insignificant (p value= 0.642), which means that the males and females affected equally not like what we may suspect that females give more interest to their skin and beauty.

Table 2. DLQI score of atopic dermatitis patients: comparison between children & adults males & females

Factor	Mean total score \pm SD	P value
Age group		
Children < 17 years	13.5 \pm 6	0.001
Adults > 17 years	17.2 \pm 4	
Sex (adult & children)		
Males	14.8 \pm 6	0.642
Females	15.4 \pm 6	
Sex (adult)		
Males	18.8 \pm 4.2	0.152
Females	16.7 \pm 3.8	

DISCUSSION

Atopic dermatitis is a common and important skin condition which most often arise in infants and children and may persist to adulthood, it has one of the greatest effects on patients' quality of life, disrupting family and relationships and interfering with daily activities, these problems can lead to environmental, social and emotional effect which negatively affect the course of the disease.

This study was done to assess the impact of AD on quality of life in children and adults, using quality of life questionnaires to determine the impact of AD on patients. Our results revealed that AD disease has very large effect on quality of life of the patients, where (55%) of patients has significant adverse impact of Atopic dermatitis on their life. This agreed with El-Mongy in 2006 [10].

The current findings revealed that the highest frequency of AD was among school age group (6-17year), whereas in comparison between the two age groups, children and adults, about the impact of AD on their life, there was difference between them which was statistically significant among adults than children (p value = 0.001). This may be due to daily life circumstances to which adults are usually exposed and not faced by children. These results agreed with Ben-Gashir (2004) and Rabung (2004) studies that reported AD patients had significantly lower dermatological life quality (DLQ) and higher anxiety index in both children and adults' groups compared to the control groups [11,12].

The present study also revealed that there was no difference of AD disease effect on the quality of life between males and females of all study groups (children and adults). However, in comparison between adult males and adult females, we found adults group had high effect of AD on their quality of life but there was no statistically difference between adult males and adult females (P = 0.152), and it was in line study conducted by Leung (2004) [13] who mentioned that adult

males and adult females equally have high effect of AD disease and both of them are facing problems associated with AD including psychosocial problems.

CONCLUSION

This study concluded that AD disease affected adults more, but males and females were equally had high impact of the disease on their quality of life. In addition, AD has a negative impact on the quality of life of those adult patients on their social relationships, work, study and on performing daily activities.

Healing the skin and keeping it healthy are of primary importance both in preventing further damage and enhancing the patient's quality of life. To achieve this, we need further multi-centric studies to investigate the relationship between severity of AD, anxiety level and dermatological life quality index in children and adults suffering from atopic dermatitis.

Disclaimer

The article has not been previously presented or published, and is not part of a thesis project.

Conflict of Interest

There are no financial, personal, or professional conflicts of interest to declare.

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