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Original Research Article

Quality of life in alopecia areata: A disease specific questionnaire

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ABSTRACT

Background: Alopecia areata (AA) is an autoimmune disease, impacts 2% of the population worldwide and has a significant impact on the quality of life (QOL) of individuals.**Aims:** To assess quality of life in patients with alopecia areata using Dermatology Life Quality Index (DLQI). To study the quality of life in relation to age group and gender.**Materials and Methods:** In this study 40 patients with alopecia areata were enrolled and asked to complete the DLQI questionnaire.**Results:** Out of the 40 patients with AA, there were 26 (65%) males and 14 (35%) females with a male to female ratio of 1.85: 1. A majority (58.03%) of patients were between 31 and 40 years of age. Employees and students were more affected. Patients with longer duration had moderate to very large effect on QOL. 65% patients were concerned about their disease.**Conclusion:** This study indicates that alopecia areata has a small to very large effect on the quality of life of the patients. Hence, Psychological evaluation and support should be considered.This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.For reprints contact: reprint@ipinnovative.com

1. Introduction

Alopecia areata (AA) is chronic, immune-mediated, relapsing, nonscarring disorder that causes hair loss and affects people of all races and genders, occurring in about 2% of the population.¹⁻⁴ Both genetic predisposition⁵⁻⁹ and environmental factors^{10,11} contribute to its onset.

AA is classically characterized by a rapid onset, during which individuals experience hair loss in well-circumscribed patches. This condition mostly affects the scalp or beard area; however, complete loss of hair on the scalp could be observed in severe cases.¹² Body hair involvement and nail changes might also be present in some patients.¹³

Despite being benign, AA can cause significant psychological distress in patients and their family

members.¹⁴ Previous studies have shown that this condition could increase the prevalence of mood disorders, including anxiety and depression,¹⁵ and other studies have demonstrated a tight correlation between AA and psychiatric disorders.

It has been well documented that anxiety and depression induced by this chronic disorder could negatively affect the disease's course via stress mediators.¹⁶ Although quality of life (QoL) assessment was almost unknown in dermatology until about 20 years ago, it has become increasingly important due to the visibility of dermatological diseases affecting patients' appearance and impairing emotional status and social interactions.¹⁷

In this study, we assessed the quality of life in patients with alopecia areata using the Dermatology Life Quality Index (DLQI).

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2. Aim of the Study

To assess quality of life in patients with alopecia areata using Dermatology Life Quality Index (DLQI). To study the quality of life in relation to age group and gender.

3. Materials and Methods

All patients diagnosed with alopecia areata who attended the Dermatology Outpatient Department (OPD) between February 2024 and May 2024 were included in this study. The study protocol was approved by the institutional ethics committee. Patients who met the inclusion and exclusion criteria were enrolled after providing informed consent. The diagnosis of alopecia areata was established based on clinical evaluation.

3.1. Inclusion criteria

All the patients with clinical signs of Alopecia Areata who are between 20 and 70 years old visit the Dermatology OPD.

3.2. Exclusion criteria

Patients who have visible cutaneous deformities

Patients with mental retardation or psychiatric disorders which prevent the right judgment of the person.

Those not consenting participate in the study.

The clinical details including age, sex, occupation, age of onset, duration of the disease, family history of AA, site of onset, sites affected, precipitating / aggravating factors, associated diseases with special reference to atopic disorders, thyroid disease, or any other significant disease were recorded for all the patients .

The Dermatology Life Quality Index questionnaire given by Finlay et al.,¹⁸ was used, which had a total of 10 questions related to symptoms, feelings, friendships, sports activities, family activities, clothing pattern, work, studies, sexual activities, and treatment.

3.2.1. Dermatology life quality index (dlqi) questionnaire

1. How itchy, sore, painful or stinging has your lesion been?
2. How embarrassed or self-conscious have you been?
3. How much has the lesion interfered with you going shopping or looking after your home or garden
4. How much the lesion influenced the clothes you wear?
5. How much has the lesion affected any social or leisure activities?
6. How much has the lesion made It difficult for you to do any sport?
7. Has the lesion prevented you from working or studying?
8. How much has the lesion created problems with your partner or any of your close friends or relatives?

9. How much has the lesion caused any sexual difficulties?

10. How much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time?

Each question was answered by 'not at all', 'only a little', 'quite a lot' or 'very much'. The maximum score for each of the 10 questions was 3, making a maximum possible score of 30. The validated DLQI score bandings used were:

Table 1: Interpretation of DLQI score

Score	Interpretation
0 – 1	No effect at all
2 – 5	Small effect
6 – 10	Moderate effect
11 – 20	Very large effect
21 – 30	Extremely large effect

3.3. Statistical methodology

Data was entered in MS excel and descriptive statistics done. Percentages, line diagrams, pie charts were used for the analyzation of the data.

4. Results

Out of the 40 patients with AA, there were 26 (65%) males and 14 (35%) females with a male to female ratio of 1.85: 1. A majority (58.03%) of patients were between 31 and 40 years of age. The duration of the disease was found to be extremely variable. It varied from two weeks to several years. 65% patients were concerned about their disease.

Table 2: Age wise distribution

Sex	Female	Male	Total
Age (years)			
20-29	4	11	15
30-39	7	6	13
40-49	2	6	8
>50	1	3	4

5. Discussion

AA is a recurring, chronic illness that significantly lowers a patient's quality of life by affecting their ability to build human relationships.¹⁹

Numerous QOL tools have been validated to assess the influence of skin disorders on quality of life.²⁰

A well-validated measure unique to dermatology is the Dermatology Life Quality Index (DLQI), which is utilized in numerous disorders.²¹

Alzolibani et al. (2012) study showed men appear to be more seriously impacted by AA than women.²² Similarly in this study, males were more affected than females.

Table 3: Gender wise effect distribution

Effect	Females	%	Males	%	Total	%
No effect	4	30.76	10	37.03	14	35
Small effect	4	30.76	4	14.81	8	20
Moderate effect	3	23.07	11	40.74	14	35
Very large effect	2	15.38	2	7.4	4	10
Extremely large effect	0		0		0	

Table 4: Occupation distribution of patients

Occupation	Total	%
Home maker	08	20%
Student	10	25%
Farmer	02	5%
Employee	20	50%

Table 5: Occupation and effect

Occupation	Total	Effect of the disease			
		No effect	Small effect	Moderate effect	Very large effect
Home maker	08	2 (25%)	3(37.5%)	3(37.5%)	0
Student	10	3(30%)	1(10%)	4(40%)	2(20%)
Farmer	02	0	0	2(100%)	0
Employee	20	9(45%)	4(20%)	5(25%)	2(10%)

Table 6: Duration of the disease

Duration (weeks)	Frequency (n= 40)	Percentage (%)
1-6	18	45%
7-12	14	35%
13-18	5	12.5%
19-24	3	7.5%

Table 7: Duration and effect of the disease

Duration (weeks)	Total (n=40)	Effect of the disease			
		No effect	Small effect	Moderate effect	Very large effect
1-6	18	12(66.6%)	2(11.11%)	4(22.22%)	0
7-12	14	2(14.2%)	5(35.7%)	6(42.8%)	1(7.14%)
13-18	5	0	1(20%)	3(60%)	1(20%)
19-24	3	0	0	1(33.33%)	2(66.66%)

In this study, 50% of the patients were employees, 25% were students, 20% were home makers, 5% were farmers. The majority (75%) were employees and students.

In Abedini R et al. study,²³ it was noted that severe group had higher amount of unemployment.

In this study, Employees and students were more affected, likely due to their increased social interactions compared to homemakers and farmers. Therefore, more than 50% of the patients belonged to this group.

Patients with alopecia areata presented with durations ranging from 1 week to 6 months: 45% of patients had a duration between 1-6 weeks, 35% between 7-12 weeks, 12.5% between 13-18 weeks, and 7.5% between 19-24 weeks.

In Al-Mutairi and Eldin²⁴ found that the duration of illness did not significantly impact total DLQI scores.

Patients with longer duration had moderate to very large effect on QOL, whereas those with shorter durations (66.6%) reported no effect, with 22.22% experiencing a moderate effect.

Several studies have suggested a small but significant influence of psychological factors in the development and progression of AA.^{15,25,26}

Tan E et al. (2002) demonstrated in their study that AA partly negatively impacts health-related quality of life.²⁷

According to Al-Mutairi N, et al,²⁴ patients with severe types of AA not only experience profound negative psychological effects but also significant disruptions in social life, leading to avoidance of social gatherings,

changes in hairstyle, and alterations in clothing.

In this study, 35% were completely unaffected by the lesion, and experiencing no impact on their ability to work, study, shop, play sports, or engage in other social activities. Neither did the lesion cause issues with any of their close friends or family members.

20% experienced a small effect in terms of embarrassment and affected social activities.

35% showed a moderate effect due to itchy lesions, embarrassment, and social activity.

10% showed a very large effect due to itchy lesions, sexual difficulties, disturbance in work life, and social activity.

The lesion had no effect on sexual activity in 90% of cases.

6. Conclusion

This study indicates that alopecia areata has small to very large effect on the quality of life of the patients. Hence, Psychological evaluation and support should be considered.

7. Source of Funding

None.

8. Conflicts of Interest

There are no conflicts of interest.

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