DEPARTMENT OF DERMATOVENEREOLOGY

QUALITY OF LIFE ASSESSMENT IN PATIENTS WITH ALOPECIA AREATA AT ALERT HOSPITAL, ADDIS ABABA, ETHIOPIA.

BY: DR. BLEN YOSEF (MD, DERMATOVENEREOLOGY YEAR III RESIDENT)

A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY SCHOOL OF HEALTH SCIENCES, DEPARTMENT OF DERMATOVENEREOLOGY, FOR PARTIAL FULFILLMENT FOR THE REQUIREMENT OF SPECIALTLY.

ADDIS ABABA, ETHIOPIA

DECEMBER,2025

Quality of life assessment in patients with Alopecia Areata at ALERT Hospital, Addis Ababa, Ethiopia

Advisors –

1. **Dr. Ahmed Mohammed (Assistant Professor Of Dermatovenerology)**
2. **Dr. Mihretu Woldeyes (Assistant Professor Of Dermatovenerology)**

Addis Ababa, Ethiopia

December ,2025

Acknowledgements

To start with, I would like to acknowledge that Addis Ababa University, Department of Dermatovenerology provided me with this chance to conduct such research; I would like to express my sincere gratitude to Dr. Ahmed Mohammed and Dr. Mihretu Woldeyes who supported me throughout the whole research process and gave me a piece of good advice in the very beginning. Lastly, however, I would like to express my gratitude to the seniors in the Dermatovenerology Department and the rest of the residents who provided me with ideas during the creation of this Thesis.

Contents

List of acronyms

AAU:	Addis Ababa University
ALERT:	All African Leprosy Rehabilitation Training Center
AA:	Alopecia Areata
DLQI:	Dermatology Life Quality Index
ETB:	Ethiopian Birr
G.C:	Gregorian calendar
HRQL:	Health-related quality of life
IL:	Interleukin
IQR:	Inter Quartile Range
IRB:	Institutional Review Board
OPD:	Outpatient department
PI:	Principal Investigator
QoL:	Quality of life
SD:	Standard deviation
SPSS:	Statistical Package for Social Sciences version 27
USA:	United States of America
WHO:	World Health Organization

List of figures

List of tables

Abstract

Background: Alopecia areata (AA) is a non-scarring, autoimmune hair loss disease that has the same sex distribution, and an estimated prevalence of 1-6.7 percent by the general population. It is chronic and may greatly diminish quality of life (QoL).

Objective: This study was aimed at measuring QoL among AA patients at the ALERT hospital Dermatovenerology clinic in Addis Ababa, Ethiopia.

Methods: A prospective cross-sectional study on 68 AA patients (May-Oct 2025). The Dermatology Life Quality Index (DLQI) was used to measure QoL. Checklist was used to gather data and analyzed using SPSS 27. Median (IQR) and frequency (%) are used to present continuous and categorical data, respectively. Tests of associations were performed on Mann-Whitney U, Kruskal-Wallis H, and Spearman correlation test (significance: $p<0.05$).

Result: The mean age of the respondents (69.1% females) was 29.4 +- 11.6 years. Most (63.6%) were aged 16-34. The average length of disease was 12.67 +- 15.70 months. Nearly all (97.1%) had patchy AA. The average SALT score was 4.54 +- 3.62; all the cases mild (SALT<25%). Median DLQI score was 7 (IQR: 4-11). Younger age, high SALT score ($p=0.043$), disease duration ($p=0.043$), prevalence of scalp involvement ($p=0.019$) and positive family history were significantly correlated with higher DLQI (worse QoL).

Conclusion: AA has a significant effect on deteriorating QoL. The worse impact is associated with the younger age, higher SALT scores, and longer duration of disease, beyond scalp involvement, and positive family history. Psychosocial burden of AA is not only cosmetic and, therefore, needs to be addressed in healthcare.

Key words: Quality of life, Alopecia Areata, ALERT, Ethiopia

1. Introduction

1.1. Background

Alopecia areata (AA) is a non-scarring, autoimmune disease characterized by partial or complete loss of hair sparing the hair follicles and potentially the nails. Various studies show that AA has an impact on 1-6.7% of general population and the risk is 1.7 in lifetime. The condition may assume any age including childhood with 40% of the patients having their initial attack at the age of 20. The occurrence is not usually different in sexes. There is significant evidence that AA is an autoimmune disorder which has been influenced by genetic as well as environmental factors (1-3).

AA is a condition that could affect any portion of human hair with varying degrees of disability. Its clinical characteristic is an abrupt onset of patchy hair loss on the scalp or the body with no scar and is inflammatory-free. Changes in nails range up to 30 per cent with fine pitting in 0.6-11.4 per cent adults and trachyonychia in 8 to 14 per cent. Despite the existence of several classification systems, Severity of Alopecia Tool (SALT) is the most widespread one. SALT scoring is a technique founded on visual depiction of the proportion of the scalp hair loss by a clinician in four regions (back 24 percent and top 40 percent and each side 18 percent). The severe AA is a score of above 50 percent participation (1, 4, 5).

Hair is an important psychosocial value in human civilization. The psychosocial effect of the stigmatizing nature of AA, therefore, may be severe in the victims. AA patients have a significant decline in health-related quality of life (HRQoL) and especially in mental health. Though the majority of the patients do not experience any physical symptoms, the condition is frequently accompanied by significant emotional and psychosocial distress. AA has a considerable negative impact on the quality of life (QoL), in the first place, the change in self-perception. Alterations in appearance often result in a lowered sense of personal well being resulting in self-consciousness, embarrassment, and self esteem as well as depression and a lack of social interaction. This has a great influence on psychological, emotional, and social functioning. As clinical evaluation does not always correlate with the perceptions of the patient, QoL is a more probable indicator of the severity of the disease than clinical assessment (2, 5).

The level of quality of life is becoming a more relevant parameter of measuring the severity of a disease, as compared to clinical assessment. As it was reported, patients with a history of hair loss may have lower QoL compared to patients with cardiovascular disease, diabetes, and cancer. The value of QoL measurement in assessing the results of the treatment of patients with hair loss has become widely accepted in recent years (6-8).

Some dermatology-specific DLQi questionnaire, hair disease-specific Scalpdex, or AA-specific Alopecia Areata Symptom Impact Scale or Alopecia Areata Quality of Life Index is proposed to

be used, although limited experience in fighting some of them has been acquired yet. The commonest of these HRQoL instruments is the dermatology specific Dermatology Life Quality Index (DLQI) that has been the most prevalent in AA studies (9).

1.2 Statement of the problem

Hair loss can have tremendous impacts on the self-confidence and the emotional state of a person. Social stigmatization may be perceived or be a reality, which may prompt patients to behave in a shy, cautious aggressive, withdrawn, evasive or defensive manner. Taking into consideration the primary role hair plays in the self-image, alopecia mata patients tend to have adverse emotions and altered understanding of their bodies. Studies also show that alopecia is a more serious issue to some patients than their medical care providers (7, 10).

Although AA is often considered medically harmless, a large proportion of patients experience their hair loss as one of the key issues that affect them and lead to severe distress, changes in everyday living, and deterioration of health related quality of life (HRQoL). Physicians and patients have different criteria of measuring the severity of alopecia. Clinical signs and symptoms are usually evaluated by the physicians, and the patients pay attention to the limitations in their activities and the general quality of their life. As a result, the effect of alopecia on the QoL of the patient is very important to consider its severity. In such situations as AA, when the treatment opportunities are minimal, it is important to identify psychological issues and address them through medical intervention and psychological assistance (7, 11).

It has chronic, recurrent, and unpredictable course, seems to appear on the surface of the skin, and the fact that the treatment that can be employed is limited to topical, intralesional, and systemic corticosteroids; topical immunotherapy; and others, is the reason why AA carries significant psychological burden to the patients. Another factor that measures the outcome of treatment that has been defined in recent years with regards to hair loss is the quality of life. Health-related quality of life (HRQoL) is an umbrella concept, and it deals with the health of a person and it tends to encompass physical, role-related, social and psychological wellbeing and dysfunction. Therefore, it is important to discuss the effect that the alopecia areata can have on the quality of life (QoL) of a patient (7, 11-14).

1.3 Significance of the study

i. The research assists in determining the quality of life among patients with alopecia areata that were referred to ALERT hospital.
ii. Since no studies have been published regarding QoL assessment of AA conducted in Ethiopia, the present study will provide an insight into the psychosocial, marital status, and patterns of life style of the affected patients, which can also serve as a pivot of research to help the patients cope with their issues.
iii. Enable the clinicians to be educated on how to attend to such patients and how to enhance the quality of care by including the factors that influence the quality of life of the patients.
iv. The current study can also prompt other researchers to conduct more research on the field using it as a springboard.

2. Literature Review

Alopecia areata can be devastating to self esteem, self perception, and overall quality of life of the patient because of having a vague cause and being a common disorder (15).

Quality of Life (QoL) according to the World Health Organization (WHO) is vaguely defined as a methodology of how the individual perceives his/her person in life in terms of his/her culture, value and in context of his/her aims and expectations, standards and concerns. Health-related quality of life (HRQoL) is a narrower multidimensional term which is referred to the health of an individual. The dimensions typically considered as domains of well-being and functioning have to do with the physical domain, role functioning, social domain, and psychological domain, and both objective and subjective perspectives of the domains are considered (2).

A total of 176 participants (96 mild, 80 severe) who have undergone Dermatology Life Quality Index (DLQI) questionnaires were used in a prospective study by Robabeh Abedini et al in Tehran, Iran in October 2013 to October 2014. The results indicated that the severe group comprised predominantly females and has an increased unemployment rate, a longer disease course, an uneven disease course, and facial involvement. The average scores in DLQi were 10.7+- 7.5 in severe and 5.4 +-6.8 in mild with the difference being significant and showing higher impairment of QoL in severe cases. There was also a major association between overall scores of DLQI and acute stress in the last six months. The researchers found that AA has a significant influence on the quality of life that is more pronounced among patients who have a severe disease and recent acute stress (16).

A 2018 study by Fasalul Abideen et al at the Dermatology Department of Pariyaram Medical College, Kannur, Kerala, India, of 60 patients found that quality of life was affected in 70 percent of patients as measured by DLQI and 48.3 percent of patients had psychiatric morbidity. The authors have observed that extreme patterns of AA were associated with extreme QoL impairment and psychiatric morbidity. The most frequent problem was psychiatric morbidity, and the moderate to very large effect on QoL in people was predominantly seen. Their conclusion was that counseling, as well as medication, can be used with patients with low QoL, and psychiatric consultation can be useful (6).

In 2023, Anastasiya Muntyanu et al, McGill University, Montreal, Quebec, Canada published a scoping review to develop the burden of AA and, in particular, its consequences on the quality of life, mental health, and productivity (at work/school). They discovered that the consequences of AA are far comprehensive than aesthetics, in that they have a negative impact on all domains of the QoL of a person, such as mental, social/romantic, family, occupation, productivity, and financial well-being. They proposed an individual approach, which involves patient-reported outcome outcomes like QoL to treat AA patients and that the patients needed appropriate treatment to decrease the psychosocial distress they experienced as victims and to restore wellness (17).

In a publication by Aisha Ahmed et al published in Pakistan, 125 patients (59.2 percent male and 40.8 percent female) with mean age of 29.72+-11.01 years were used. The mean life expectancy of the disease was 9.45 -8.56 months. The DLQI score was 2-24 with a mean of 6.74 -4.60. Stratified analysis was discovered to establish that female (p=0.008), the duration of the disease more than 12 months (p=0.000) and severe disease (p=0.024) were found to have higher scores in DLQI. They concluded that AA is associated with the reduction in the patient QoL, which is greater in women and in patients with severe and chronic disease (18).

In a cross-sectional study, Manuel Sanchez-Diaz et al conducted in September 2021 to September 2022 at the Dermatology Unit, Hospital Universitario Virgen de las Nieves, Granada, Spain, it was established that AA has an impact on the quality of life of cohabitors, and in particular, worse overall QoL and reduced sexual satisfaction. It also established that the level of sexual satisfaction in the partners of patients was connected to the length of the disease (19).

In a systematic review, Lucy Y. Liu et al of New Haven, Connecticut, carried out in February 2016, found that hair loss due to any disease had adverse effects on quality of life and was linked to reduced self-esteem, psychosocial problems, with the most significant effects on vitality, mental health, emotion, and social functioning. They further observed that AA has a similar effect on the HRQoL as it has on other persistent, recurrent, skin diseases such as psoriasis and atopic dermatitis (11).

In a systematic review and meta-analysis study carried out in the Netherlands in 2022, Marije van Dalen et al concluded that the psychological well-being of people living with AA is a major consequence of living with AA. It demonstrated that psychologically, people with AA have

poorer results compared with those without and similar results to those with other dermatological diagnoses. They emphasized that there are still significant issues in the treatment of AA, which is either mental or medical (20).

In a 2020 cross-sectional online survey study, Natasha Mesinkovska et al note that AA has adverse effects on most spheres of life, not just cosmetic issues. Their findings demonstrated the existence of a major psychosocial effect that is not attenuated with time. According to the study, AA has the potential of changing the life course of a patient adversely, causing failures in professional and academic goals and lowered expectations of relationships and family life. Patients were not satisfied with hair concealment methods and treatments and considered it to cost a lot of time and money (21).

According to a case study represented by M Dubois et al published in the Journal of Investigative Dermatology (2010), QoL is impacted in AA with self-perception, mental health, and social life areas being most impacted. They confirmed that despite being medically innocent, AA has serious harmful outcomes on the QoL at the cost of transforming self-perception and self-esteem disrupting social life (22).

The authors found that in a study by Sara J Li et al in the International Journal of Trichology (2019) the negative sexual aspects were addressed, and the authors found that female participants with AA were strongly identified with statements of emotional nature like I feel embarrassed (n = 48, 75.0%), men with I feel anxious (n = 7, 46.7%). There was also a high level of affiliation with the two groups to I feel like I have lost something (n = 48, 76.2% and n = 7, 43.8% respectively). According to their study, AA has an adverse effect on the sexual quality of life of patients (23).

According to a study conducted by Liu Lucy et al on 292 adults (91 children and 229 family members), 77.1 percent of the adults attributed impairment in the HRQoL (mean DLQI, 7.7 +- 7.4). The study defined that the levels of embarrassment and feelings of self-consciousness were high and negative on the patients and followed by social/leisure activities. The authors also reported that the late age at the time of survey was a factor that predicted poor HRQoL (P = .0148) (24).

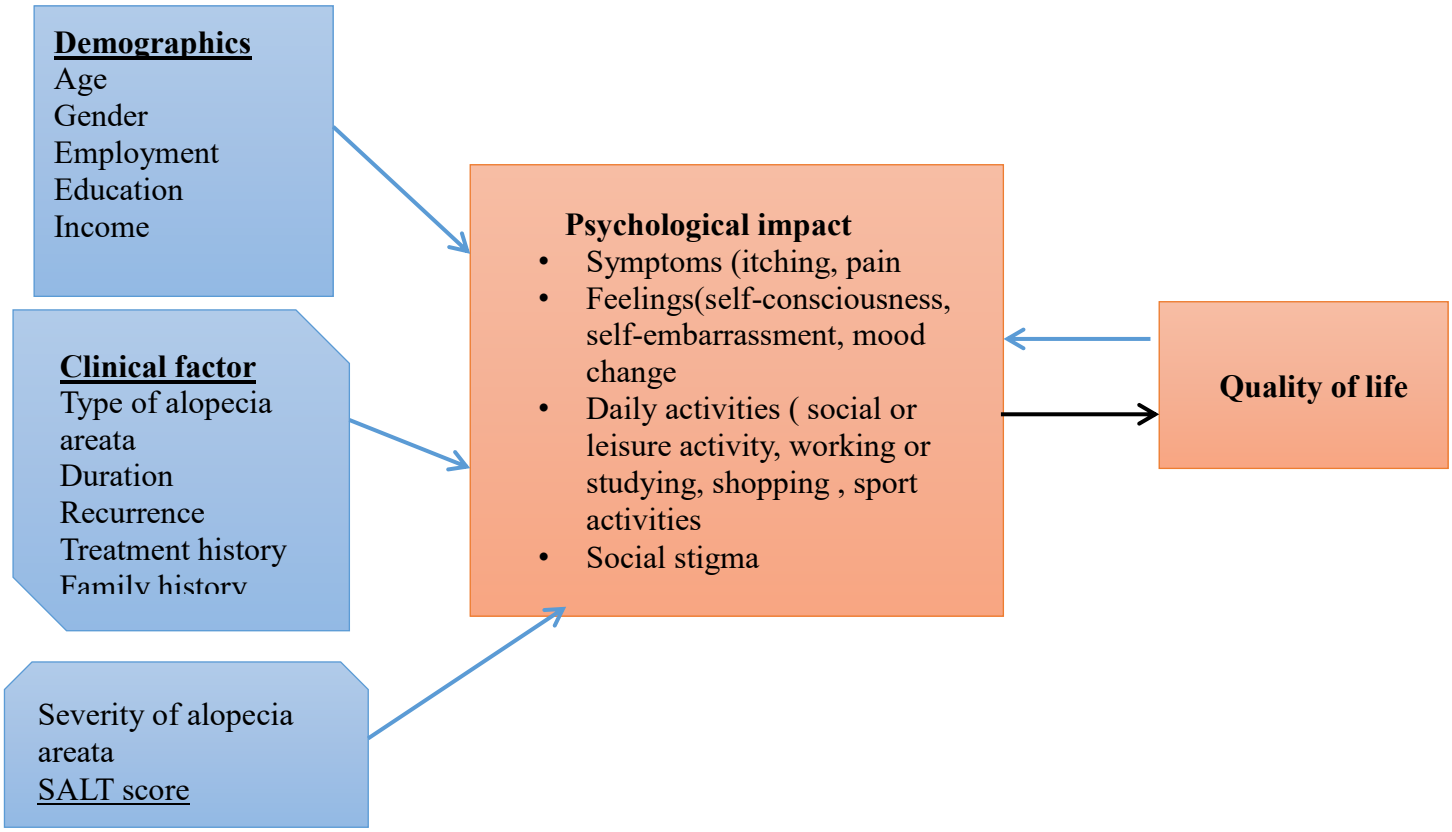


Figure 1: Conceptual framework about quality of life assessment in people with AA at ALERT hospital Addis ababa Ethiopia

3. Objectives

3.1 General objective

To identify the level of quality of life among patients with alopecia areata, in the ALERT Hospital Addis Ababa, Ethiopia, Dermatology clinic, May 2025- October 2025.

3.2 Specific objective

1. To identify the quality of life of patients with alopecia areata.
2. To establish the connection that exists between socio-demographic variables and the quality of life of alopecia areata patients.
3. To find the correlation between clinical characteristics of alopecia areata, and quality of life of patients.
4. To establish the relationship between the SALT and DLQI.

4. Methods & Materials

4.1. Study area and period

The research was carried out in the ALERT hospital which is a hospital in the Zenebework area of the Kolfe Keraniyo sub city of Addis Ababa. The period of data collection was between May 2025 G.C to October 2025 G.C. The history of this institution is quite remarkable its original foundation and functioning was a specialized department where patients with the Hansen disease also known as leprosy were being treated. At its initial stage, the hospital was specialized in the rehabilitation of these patients. It was also used as a training facility to leprosy medical staff and a hub of leprosy control programs in its area of operation.

Since then, the hospital has developed with great improvements in terms of role and services. Currently, it is the leading dermatological center in the whole country. Moreover, it is a major dermatology referral centre and has been receiving complicated cases in not only Addis Ababa but the surrounding areas as well. Besides offering its fundamental dermatology services, the hospital offers a variety of other specialized medical fields. These have full-fledged internal medicine, orthopedic, physiotherapy, and ophthalmology departments. The hospital also has reconstructive and plastic surgery specialized units.

4.2. Study design

The study was a cross-sectional study that was related to the hospital setting.

4.3. Population

4.3.1. Source population

The population of interest was all the patients who came to Alopecia Areata in ALERT hospital dermatology clinic.

4.3.2. Study population

The population was also limited to all the patients diagnosed clinically with Alopecia Areata at the ALERT hospital Dermatology clinic between May 2025 G.C. and October 2025 G.C.

4.4 Eligibility criteria

4.4.1 Inclusion criteria

The inclusion criteria included all newly diagnosed patients with alopecia who were included on follow-up and presented at the Dermatovenereology Outpatient Department (OPD) of ALERT hospital within the mentioned time of study.

4.4.2 Exclusion criteria

The patients who were excluded of the study included those who came with Alopecia Areata and also had an established chronic condition. Psychiatric, systemic, or other chronic dermatological disorders were also such complications since these comorbidities could hinder the proper psychosocial assessment of the patient. Also, a patient who was less than 16 years old was not included.

4.5 Sampling size determination and sampling technique

The sample size to be used in the study was calculated by using the single population proportion formula. The calculation involved an approximate population proportion of 54.17 percent that was taken based on a previous study cited (8).

$n^o = \frac{(Z_{\alpha/2})^2 \times P(1-P)}{(d)^2}$ is used to estimate the sample size of clients to be interviewed

Where

Zα/2: is standard score value for 95% confidence level which is equal to 1.96

P: Estimated population proportion taken as 0.5417

d: is the margin of error to be tolerated =5%

n^o: is maximum sample size

n: is population adjusted sample size

N: Total number of population in the study area (which in this case is about 72)

n^x: final sample size

n^o = 383, since this is < 10,000 population I will use population adjusted formula which is $n = n^o / 1+\{(n^o -1)/N$, therefore

n=61

Considering 10% non-respondent rate

Total sample size is n^{x} =**68**

Convenience non probable **sampling technique** will be used.

4.6 Data Collection Tool and Procedures

The main tool to help collect the information was a structured questionnaire. This was done by direct face to face interviews with patients who had been diagnosed with Alopecia areata. The questionnaire consisted of three primary parts, which were the socio-demographic data, detailed clinical data, and items aimed at measuring the quality of life. The quality of life in terms of the participants was measured and evaluated by use of Dermatology Life Quality Index (DLQI). In order to conduct this assessment, the researchers used a validated and pre-tested translation of the DLQI into the Amharic language.

4.7 Data Quality assurance

The principal investigator directly participated in the data collection exercise and closely monitored the entire exercise. After questionnaires were completed daily, data obtained passed through a systematic check to ascertain complete, clarity and consistency to be accurate and reliable.

4.8. Variables

4.8.1 Dependent

- Quality of life of patients with Alopecia Areata

4.8.2 Independent

- Socio-demographic variables: Age, Sex, occupation, education, marital status.
- Site of lesions
- Duration of the disease
- Family history
- Recurrence
- History of treatment
- Modality of treatment

4.9 Operational definitions

- **Alopecia areata** is characterized by sudden onset of non-scarring hair loss in well-defined patches on the scalp, face, or body, diagnosed clinically by dermatologists or residents
- **SALT score**- Alopecia areata severity score

0%-- No hair loss	- No effect on quality of life--- DLQI 0-1
1%-20%-- Mild/limited AA	- Small effect ---DLQI 2-5
21%-49%-- Moderate AA	- Moderate effect ---DLQI 6-10
50%-94%-- Severe AA	- Very large effect--- DLQI 11-20
95%-100%-- Very severe AA	- Extremely large effect ---DLQI 21-30

Quality of Life (QoL): Quality of Life is a personal assessment of a person to their status in life. This evaluation is presented in the frames of their own culture, value system and individual goals and involves their hopes, expectations, and concerns. Dermatology Life Quality Index (DLQI) would be used as the QoL measurement tool in this study.

Dermatology Life Quality Index (DLQI): This tool is based on 10 questions according to particular domains. These domains are: symptoms and feelings (item 1 and 2), daily activities (item 3 and 4), leisure (item 5 and 6), work and school (item 7), personal relationships (item 8 and 9) and treatment (item 10) (28).

Every item contains four possible answers, including not at all, a little, a lot and very much. These answers will be rated 0, 1, 2, and 3 respectively. There is also a response option which is not relevant and the score is 0.

The score of the total DLQI is calculated as the sum of all the 10 questions. The overall score that will be obtained can be as low as 0 or as high as 30. The following scale is used to interpret the score:

- 0-1: Means that dermatological condition does not have an impact on QoL of the patient.
- 2-5: Refers to a weak impact on QoL of the patient.
- 6-10: Refers to a moderate impact on the QoL of the patient.

- 11-20: Means that there is a huge impact on the QoL of the patient.
- 21-30: This means that the effect on the QoL of a patient is incredibly large (25).

4.10 Data processing and analysis

The questionnaires were subjected to critical review after the data collection process so as to ascertain that they were complete. The information was coded and inputted into the SPSS software (version 27) to be analyzed. Data cleaning process was then performed in identifying and correcting a difference or missing record or typographical errors.

Descriptive statistics was used to analyze the socio-demographic and clinical properties of the study participants. The categorical ones were summarised using frequencies and percentages but the continuous ones were described using means and standard deviations.

The DermaBio Dermatology Life Quality Index (DLQI) scores were taken according to standard scoring instructions. The average of the general scores of the DLQI were also summarized and that too were put into the predetermined scales of severity in order to identify the extent of loss of quality-of- life experienced by the patients with Alopecia Areata.

The non-parametric tests were employed since the data about the quality-of-life (QoL) scores were not in the form that would have allowed assuming the normal distribution. Mann Whitney U test was used to contrast the scores of QoL between two independent groups. In the case of comparisons of more than two groups, Kruskal-Wallis H test has been used. The correlation between the scores of the two attributes of QoL and the continuous predictor variables was computed by rank-order correlation by Spearman. Statistically significance in all the analyses was considered as a p-value that was less than 0.05.

4.11 Ethical consideration

The protocol of the study was reviewed and approved by the Ethical Review Board of the Addis Ababa University. The study commenced with formal written ethical approval, which was received before the study. The informed consent was obtained to recruit all the participants, and it was signed to ensure that no data collection was conducted without the informed consent. The data and feedback received by the participants were utilized solely with the aim of this research.

The research was conducted in the framework of the requirements of confidentiality. The research data did not hold any personal identifiers. All the information received was kept in a safe place and could be accessed only by the members of the research team.

4.12 Dissemination and utilization of results

At the end, the discussion will be conducted in terms of the results dissemination and use.

This study provided the findings to the Department of Dermatovenerology in the Addis Ababa University College of Health Sciences as the conditions of the final attainment of the specialty. The results have been also availed to other interested agencies and other stakeholders. More importantly, the paper that describes the research has been composed in order to be published in an academic journal.

5. Result

5.1 Demographic Characteristic of study population

A total of 68 participants were included in this study. Females constituted more than two-thirds (47, 69.1%) of the participants. The mean age of the participants was 29.4 ± 11.6 years, with the majority falling within the 16–24 years and 25–34 years age groups (each 25, 36.8%).

Regarding marital status, more than one-third of the participants were married (25, 36.8%), while 41 (60.3%) were single. In terms of educational status, the largest proportion had completed high school (30, 44.1%), followed by those holding a diploma (13, 19.1%).

Concerning occupation, more than two-thirds of the participants were unemployed (46, 67.6%), while 22 (32.4%) were employed. The mean monthly income of the participants was 6,210.34 ± 5,426.8 Ethiopian Birr.

Table 1 Demographic characteristic of AA patients during the study period

Variables		**Frequency**	**Percent**
Sex	Male	21	30.9
	Female	47	69.1
	Total	68	100.0
Age	16 to 24 Years	25	36.8
	25 to 34 Years	25	36.8
	>=35 Years	18	26.5
	Total	68	100.0
Marital status	Single	41	60.3
	Married	25	36.8
	Divorced	2	2.9
	Total	68	100.0
Educational status	Uneducated	8	11.8
	Elementary	9	13.2
	High school	30	44.1
	Diploma	13	19.1
	Degree and above	8	11.8
	Total	68	100.0
Occupation	Employed	22	32.4
	Unemployed	46	67.6
	Total	68	100.0
Monthly Income		6,210.34 ± 5,426.8	

5.2 Clinical characteristics

The clinical characteristics of the study participants showed that the mean duration of Alopecia Areata was 12.67 ± 15.70 month, 28 (41.2%) participants had symptoms for less than 6 months, while 26 (38.2%) had a duration of 6–12 months.

Concerning the site of scalp involvement, a total of 118 affected sites were recorded, as some participants had multiple lesions. The vertex was the most affected site (39, 33.1%), followed by the left temporal region (28, 23.7%), occipital region (26, 22.0%), and right temporal region (25, 21.2%).In terms of the pattern (extent) of hair loss, most participants had patchy alopecia areata (66, 97.1%), while ophiasis was observed in 2 (2.9%) cases. With regard to severe/extensive hair loss, only 5 (7.4%) participants had extensive involvement, whereas 63 (92.6%) did not.

Extra-scalp involvement was present in 5 (7.4%) participants, while 63 (92.6%) had disease limited to the scalp. Among those with extra-scalp involvement, the beard was the most affected site (3, 4.4%), followed by eyebrows and eyelashes (1, 1.5%) and eyebrows alone (1, 1.5%).

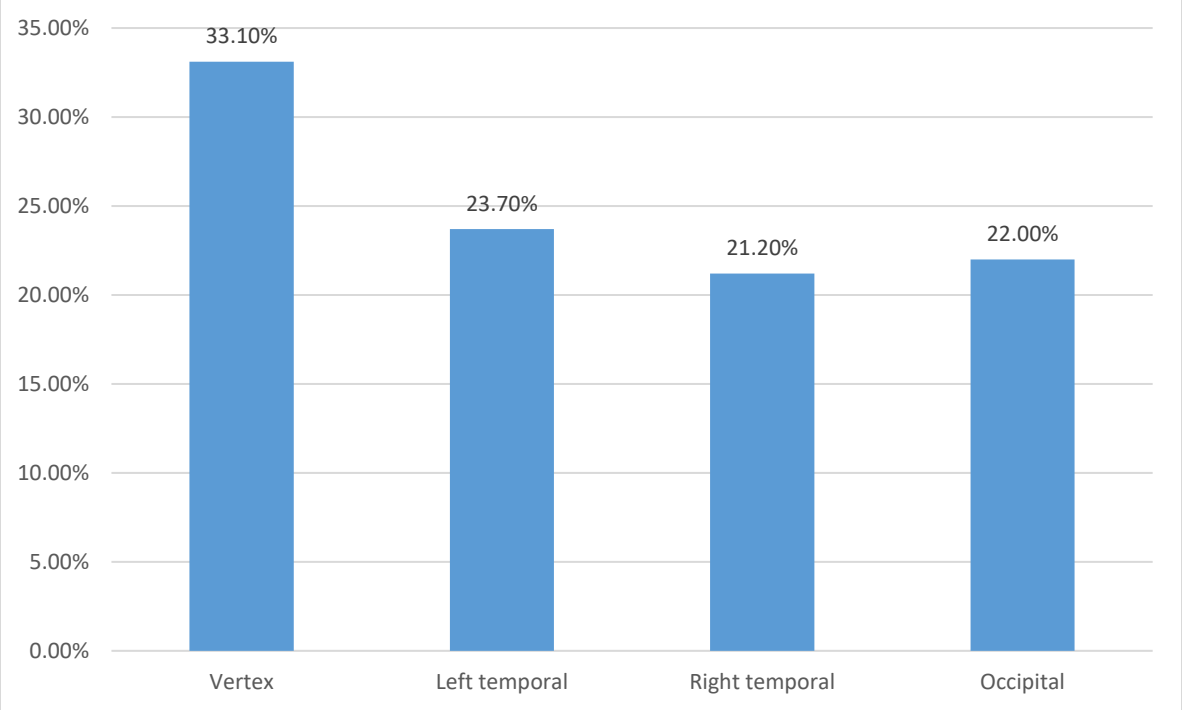


Figure 2 Affected Sites of AA patients attending ALERT hospital Addis Ababa Ethiopia

The severity of alopecia areata among the study participants was assessed using the Severity of Alopecia Tool (SALT) score. A total of 68 patients were evaluated. The SALT score ranged from 0.72 to 21.0, with a mean score of 4.54 ± 3.62 and a median score of 3.34 (interquartile range: 2.40–5.81).

Based on the standard SALT severity classification, all participants (100%) had mild disease (SALT score <25%), corresponding to S1 severity. No patients were classified under moderate or severe disease categories (SALT ≥25%).

Regarding recurrence, 20 (29.4%) participants reported a history of recurrence, while 48 (70.6%) had no such history. A positive family history of alopecia areata was reported by 3 (4.4%) participants, whereas 65 (95.6%) had no family history

Regarding previous history of treatment, more than half of the participants had received prior treatment for their condition (40, 58.8%) Among those who had received treatment topical corticosteroids (18, 39.1%) was most used treatment modality, followed closely by intralesional corticosteroids (17, 37.0%). Systemic treatment was used by 2 (4.3%) participants, while other treatment modalities were reported by 9 (19.6%) participants.

Table 2: Clinical Characteristics of patients with Alopecia Areata attending at the ALERT Hospital 2025GC

		Frequency	Percent
Duration	<6month	28	41.2
	6-12 month	26	38.2
	>12 month	14	20.6
	Total	68	100.0
Site	Vertex	39	33.1%
	Left temporal	28	23.7%
	Right temporal	25	21.2%
	Occipital	26	22.0%
	Total	118	100.0%
Extent of hair loss	Patchy	68	97.1%
	Ophiasis	2	2.9%
	Total	70	100.0%
Extra scalp involvement	No	63	92.6
	Yes	5	7.4
	Total	68	100.0
Involved extra scalp site	Beard	3	4.4
	Eyebrows and eye lashes	1	1.5
	Eyebrows	1	1.5
	Total	5	7.4
SALT Score	Mild: <=25%	68	100.0
History of Recurrence	No	48	70.6
	Yes	20	29.4
	Total	68	100.0
Family History	No	65	95.6
	Yes	3	4.4
	Total	68	100.0
Previous history of treatment	No	28	41.2
	Yes	40	58.8
	Total	68	100.0
Modality of Treatment	Topical steroid	18	39.1%
	Intralesional steroid	17	37.0%
	Systemic treatment	2	4.3%
	Others	9	19.6%
	Total	46	100.0%

5.3 Quality of life of patients with Alopecia Areata

The instrument used in this study was a standardized 10 question quality-of-life scale Dermatology Life Quality Index (DLQI) that was the measures of the impacts of Alopecia Areata on patients. This tool provides the summative score of 30. The overall quality-of-Life difference across all patients was determined by determining their total score on the DLQI to be within a given interpretation band: a score of 0 to 1 represented no effect; 2 to 5 represented small effect; 6 to 10 represented moderate effect; 11-20 represented very large effect; 21-30 represented extremely large effect on the quality of life of the patient.

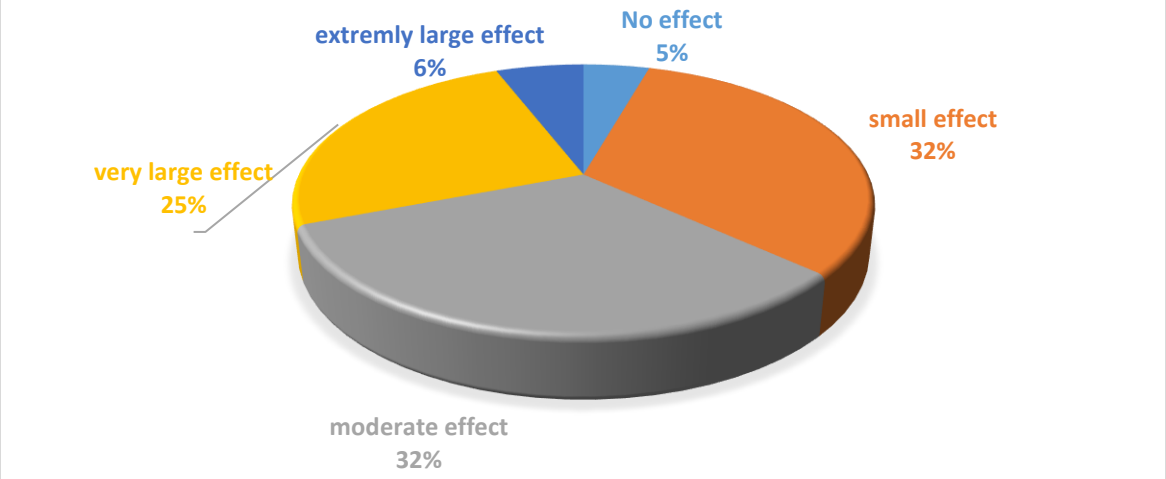


Figure 3 Impact on quality-of-life patients with Alopecia Areata attending ALERT, Addis Ababa, Ethiopia, 2025GC

Regarding the overall impact of Alopecia Areata on quality of life, Nearly one third of participants had a small to moderate effect, with 22 (32.4%) experiencing a small effect and an equal proportion 22 (32.4%) had a moderate effect. A very large effect occurred in 25.0% of participants (n = 17), while 4 (5.9%) experienced an extremely large effect. Only 3 (4.4%) participants reported no effect.

Table 3: Quality of Life Impact of AA patients attending at the ALERT, Addis Ababa, Ethiopia, 2025GC

QoL	Question	Not at all %	A little %	A lot %	Very much %
QOL1	Over the last one week, has your skin been	19.1	69.1	8.8	2.9

	itchy, sore, pained, or stinging?				
QOL2	How ashamed or embarrassed have you been over your skin in the last week?	4.4	41.2	45.6	8.8
QOL3	Over the last week, to what extent has your skin disrupted any of your activities such as shopping or taking care of your home or garden?	20.6	47.1	27.9	4.4
QOL4	In the last week, to what extent has your skin been in control of your dressing?	32.4	39.7	22.1	5.9
QOL5	Over the last one week to what extent has your skin influenced your social or leisure activities?	36.8	38.2	17.6	7.4
QOL6	In the last one week, how often has your skin left engaging in sports challenging to you?	82.4	10.3	4.4	2.9
QOL7	Did your skin hold you back in working or studying in the last one week?	91.2	8.8		
QOL7A	If yes, to what degree?	91.2	5.9	2.9	
QOL8	How often has your skin been a problem with your partner or any close friends or relatives during the last week?	39.7	38.2	16.2	5.9
QOL9	Over the last one week, how much has your skin caused sexual problems in you?	52.9	29.4	13.2	4.4
QOL10	How problematic has your skin treatment been in the past week i.e. caused mess in your home or spent a lot of time?	75.0	14.7	7.4	2.9

5.4 Association between Variables and QOL Score

In order to examine the relationship between quality of life (QoL) and sociodemographic/clinical variables in patients with Alopecia Areata, non-parametric tests were chosen because the QoL scores were non-normal data.

It was statistically noted that QoL score is negatively related to the age of the patients (spearman $r = -0.274$, $p = 0.024$). This negative correlation shows that the younger patients were willing to have worse quality of life. There were also significant positive correlations between QoL scores and two clinical parameters SALT score ($r = 0.246$, $p = 0.043$) and duration of the disease ($r = 0.247$, $p = 0.043$). Such correlations imply that a greater severity of the disease (in terms of SALT score) and the length of time one has the condition are related to poor quality of life.

The dichotomous variables were analyzed in clinical with a significant difference being found in the levels of impaired QoL scores between patients who had extra-scalp involvement (e.g., on the face or the body) and those who did not ($p = 0.019$). Poor quality of life was also strongly linked with positive family history of the condition ($p = 0.029$).

On the other hand, none of the variables, including sex, employment, monthly income, education level, recurrence of the disease, specific location of the involvement of the scalp, history of previous treatment, or type of treatment given were found to have statistically significant associations with the QoL scores. There was a borderline relationship between involvement of the right temporal scalp and QoL ($p = 0.051$) that was below the level of statistical significance.

Table 4 Association between Quality of Life (DLQI) score and sociodemographic and clinical variables at the ALERT, Addis Ababa, Ethiopia, 2025GC

Predictor variable	Statistical test	Test statistic	p-value	Interpretation
Age	Spearman correlation	$\rho = -0.274$	**0.024**	Significant (negative)
Sex	Mann–Whitney U	U = 392.5	0.179	Not significant
Employment status	Mann–Whitney U	U = 491.0	0.844	Not significant
Educational status	Kruskal–Wallis	H = 8.922 (df = 4)	0.063	Not significant
Monthly income	Spearman correlation	$\rho = 0.237$	0.215	Not significant
Vertex involvement	Mann–Whitney U	U = 516.5	0.542	Not significant
Left temporal involvement	Mann–Whitney U	U = 528.5	0.694	Not significant
Right temporal involvement	Mann–Whitney U	U = 384.5	0.051	Borderline
Occipital involvement	Mann–Whitney U	U = 428.5	0.137	Not significant
Extra-scalp involvement	Mann–Whitney U	U = 58.0	**0.019**	Significant
History of recurrence	Mann–Whitney U	U = 362.0	0.111	Not significant
Family history	Mann–Whitney U	U = 24.5	**0.029**	Significant
Previous treatment history	Mann–Whitney U	U = 538.5	0.788	Not significant
Topical steroid use	Mann–Whitney U	U = 193.0	0.891	Not significant
Intralesional steroid use	Mann–Whitney U	U = 171.5	0.508	Not significant
Systemic treatment	Mann–Whitney U	U = 31.5	0.685	Not significant
SALT score	Spearman correlation	$\rho = 0.246$	**0.043**	Significant (positive)
Duration of disease	Spearman correlation	$\rho = 0.247$	**0.043**	Significant (positive)

6. Discussion

Although alopecia areata is not deemed as a life-threatening disorder its effects go way beyond the cosmetic appearance as it may greatly affect the emotional and psychological health of the individuals affected (25). This was a prospective cross-sectional study based on the ALERT Comprehensive Specialized Hospital in Addis Ababa, Ethiopia, and was aimed at describing the clinical profile and measuring the quality of life among patients with Alopecia Areata. In the study, 68 patients (between May 2025 and October 2025) were enrolled.

Females were over two-thirds of the respondents in our study (47, 69.1%). Caldarola et al. (2024) and Jankovic et al. (2015) have also found a comparable percentage of female participants (77.4% and 73.3, respectively) (4, 5). Nevertheless, in a study conducted in Pakistan, 59.2% males dominated (18), A. Ahmed et al. (2022) reported. This is possibly because of the higher health-seeking behavior among women and also due to the small size of our study group which comprises mostly of females.

The age of participants mean was 29.4 +- 11.6 with most of the participants aged between 16-24 and 25-34 years. This is in line with the findings of A. Ahmed et al. (2022), who gave a mean age of 29.72 +- 11.01 years (18). Abd elrahem et al. (2024) state that, although alopecia areata may affect children of any age, they identified that the majority of patients were aged 20-29 (15). Masmoudi et al. (2013) and Qi et al. (2014) report relatively higher mean ages, 32.92 +- 11.81 years and 38.8 +- 12.0 years, respectively (8, 26). We agree with the claim that alopecia areata is a disease that affects mostly young adults, as various previous studies have found that the highest incidence of the disease occurs in the second and third decades. This age group is also at risk under the influence of psychosocial outcomes of hair loss, such as the lack of self-image, interactions, and emotional well-being that are typically measured by the DLQI.

The median DLQI score was 7 (IQR: 4-11), which means that the effect of alopecia is not high regarding quality of life. This is the same as a study by C. Vestergaard et al. (2025) that also attested to a median DLQI score of 7. Almost two-thirds of our respondents (64.8) reported a small to medium change to QoL, which is similar to the results of S. Qi et al. (2014) and Velez-Muniz et al. (2019) (54.6% and 56.4% of patients, respectively) (8, 27). However, according to Abideen et al. (2018) the most significant percentage (85) of patients did not belong to the

categories of large to no effect (6). This difference can be attributed to the fact that our study population is mainly composed of young adults, who, perhaps, can be more concerned about their condition and have an improved healthcare-seeking behavior in an early period. The second reason can be a rather small number of extensive or severe cases of alopecia areata in our study.

The other result was that QoL and age had a negative correlation ($r = [?]0.274$, $p = 0.024$), meaning that younger patients with alopecia areata had a higher QoL impairment. This outcome is consistent with findings of other researchers who have identified a deeper psychosocial effect on younger persons. Hanson et al. (2025) received more DLQI scores among adolescents than adults, and the result could be in agreement with Zhang et al. (2017), who found that the mean scores and poorer QoL in younger patients compared to older ones were observed regardless of the severity of alopecia (7, 28). It could be attributed to the fact that more focus on physical appearance, social acceptance, and self-image are involved at the adolescence and early adulthood, and older patients can be more psychologically adjusted to the condition.

Higher SALT scores ($r = 0.246$, $p = 0.043$), extra-scalp involvement ($p = 0.019$), and longer disease duration ($r = 0.247$, $p = 0.043$) had been linked with worse QoL in the present study. This is in line with various past studies that have reported that the more intense and extended the loss of hair is, the more the impairment of the QoL. A Chinese investigation discovered that an elevated DLQI score was greatly related with an extended disease period and more severe ($P<0.05$). Equally, S. Qi et al. (2014) found that the duration of over 12 months and the severe AA were linked with poorer QoL (greater DLQI score) ($P < .001$) (7, 8). Greater SALT scores denote the increased visibility of the scalp, which may enhance the sense of embarrassment, social anxiety, and self-esteem low. Moreover, due to the long-term nature of the disease, there might be cumulative emotional stress, recurring treatment failures, and the fear of chronicity, which will further deteriorate the quality of life. On the other hand, Vestergaard et al. (2025) demonstrated that the relationship between the scores of DLQI and SALT was weak, which means that the level of hair loss is not strongly linked to the scores of QoL (29). All these findings point to the fact that both clinical severity and chronicity should be considered in assessing the psychosocial effects of alopecia areata.

The positive family history of patients with AA in this study resulted in a significant change in the scores of DLQI ($p = 0.029$) indicating the low quality of life. The etiology of alopecia areata is partly genetic, and meta-analyses have found a familial aggregation (30). Nevertheless, a majority of previous studies on the quality-of-life in AA have not associated family history with it significantly. In one case study, a cross-sectional study of 178 AA patients conducted in China showed the following results: DLQI scores have a significant relationship with age and disease duration and none with family history of alopecia. In the same vein, S. Qi et al. (2014) discovered that family history did not impact the quality of life (7, 8). A possible explanation could be that individuals who experienced diseases with a family history are more aware of the possibility of a longer disease course and of its unpredictability because of the experiences of the family members which can lead to a decreased QoL.

7. Limitations of the study

This study provides an insight into the valuable impact of alopecia areata on quality of lives of affected patients. Being the pioneer study of its type in our country, it offers useful evidence. Nevertheless, there are some shortcomings that one must admit:

- Its sample size is quite small which can influence the external validity of the results.
- Quality of life was measured on the self-reported DLQI, which is not a disease-specific measure of alopecia areata.
- Existing quality of life measurement tools in the case of alopecia areata are not disease specific and are not validated.

8. Conclusion

Overall, the results of this research prove the first hypothesis that alopecia areata is a major issue that worsens the quality of life of the patients diagnosed with it in the form of the Dermatology Life Quality Index (DLQI), which, in turn, is evaluated based on the socio-demographic and clinical variables. Although most of the participants were female, the analysis revealed some important factors that were linked to greater scores in DLQI, implying a worse quality of life.

These were younger age, higher SALT score (more severe disease), longer duration of the disease, loss of hair outside of the scalp, and positive family history.

These findings underscore the fact that clinicians should be prepared to work hard in mitigating the significant emotional and psychosocial effects of alopecia areata in patients. The treatment of this condition cannot be limited to the physical manifestation of the condition which has deep-rooted implications on the well-being well beyond being merely an aesthetic issue.

9. Recommendations

Based on the findings of the study, the following recommendations are forwarded

For ministry of health / health policy makers

- Allocate budget /fund to conduct a large-scale and multicenter research on Alopecia areata, in order to better assess its population level impact and evaluate the effectiveness of targeted interventions
- Promote public awareness programs to reduce stigma associated with hair loss of Alopecia areata

For ALERT Hospital and Healthcare Workers

- Recognize the psychosocial impact of alopecia areata, despite its benign clinical nature.
- Incorporating assessment of quality of life into patient evaluation at the dermatology clinics in order to address psychosocial concerns and provide patient education and counselling

For future Researchers on the condition

- Conduct a larger, multi centric studies to validate and generalize these findings
- There is a need to develop and validate Alopecia areata specific quality of life measuring tools for better assessment.

10. Reference

1. Sibbald C. A contemporary review of alopecia areata. J Cutan Med Surg. 2023;27(3):241-259.

2. Prendke M, Kanti-Schmidt V, Wilborn D, et al. A systematic review of quality of life in pediatric and adolescent patients with alopecia areata. J Eur Acad Dermatol Venereol. 2023;37(6):1281-1292.

3. Vu BK, Tuson H, Harricharan S, et al. Systematic literature review of the epidemiology of alopecia areata in different global regions. Value Health. 2022;25(12):S202.

4. Caldarola G, Raimondi G, Samela T, et al. Italian multicenter study evaluating a quality-of-life measure for patients with severe alopecia areata. Front Public Health. 2024;12:1415334.

5. Janković S, Perić J, Maksimović N, et al. Cross-sectional hospital-based assessment of quality of life in patients with alopecia areata. J Eur Acad Dermatol Venereol. 2016;30(5):840-846.

6. Abideen DF, Thy Valappil A, Mathew DP, Sreenivasan DA, Sridharan DR. Cross-sectional study on quality of life in alopecia areata patients at a tertiary dermatology center. J Pak Assoc Dermatol. 2018;28(2):175-180.

7. Zhang M, Zhang N. Evaluation of quality of life in Chinese patients with alopecia areata and androgenetic alopecia. Patient Prefer Adherence. 2017;11:151-155.

8. Qi S, Xu F, Sheng Y, Yang Q. Quality-of-life assessment in Chinese patients diagnosed with alopecia areata. Psychol Health Med. 2015;20(1):97-102.

9. Chernyshov PV, Tomas-Aragones L, Finlay AY, et al. Position statement from the EADV Task Force on measuring quality of life in alopecia areata. J Eur Acad Dermatol Venereol. 2021;35(8):1614-1621.

10. Ito T, Kamei K, Yuasa A, et al. Assessment of health-related quality of life using norm-based comparisons in Japanese patients with alopecia areata. J Dermatol. 2022;49(6):584-593.

11. Liu LY, King BA, Craiglow BG. Systematic review of health-related quality of life outcomes among patients with alopecia areata. J Am Acad Dermatol. 2016;75(4):806-812.e3.

12. Toussi A, Barton VR, Le ST, Agbai ON, Kiuru M. Systematic review of psychosocial and psychiatric comorbidities and their effect on health-related quality of life in alopecia areata. J Am Acad Dermatol. 2021;85(1):162-175.

13. Nichol MB, Margolies JE, Lippa E, Rowe M, Quell J. Implementing multiple quality-of-life instruments in individuals with mild to moderate psoriasis. Pharmacoeconomics. 1996;10(6):644-653.

14. Ashcroft DM, Li Wan Po A, Williams HC, Griffiths CE. Critical evaluation of quality-of-life measurement tools used in psoriasis. J Clin Pharm Ther. 1998;23(5):391-398.

15. Abd elrahem HT, Albeah M, Desouky A. Evaluating quality of life among patients with alopecia areata. Assiut Sci Nurs J. 2024;12(1):45-52.

16. Abedini R, Hallaji Z, Lajevardi V, Nasimi M, Karimi Khaledi M, Tohidinik HR. Differences in quality of life between patients with mild and severe forms of alopecia areata. Int J Womens Dermatol. 2018;4(2):91-94.

17. Muntyanu A, Gabrielli S, Donovan J, et al. Scoping review of the burden of alopecia areata with emphasis on quality of life, mental health, and occupational productivity. J Eur Acad Dermatol Venereol. 2023;37(Suppl 4):28-38.

18. Ahmad A, Zia PM, ul Zaman S, et al. Assessment of quality of life in alopecia areata patients at a tertiary care hospital in Lahore, Pakistan. Pak J Med Health Sci. 2023;17(1):88-91.

19. Sánchez-Díaz M, Díaz-Calvillo P, Ureña-Paniego CA, Molina-Leyva A, Arias-Santiago S. Cross-sectional evaluation of quality of life and mood disturbances in cohabitants of Spanish patients with alopecia areata. Int J Environ Res Public Health. 2022;19(23):16182.

20. van Dalen M, Muller KS, Kasperkovitz-Oosterloo JM, Okkerse JME, Pasmans S. Systematic review and meta-analysis of anxiety, depression, and quality of life in pediatric and adult populations with alopecia areata. Front Med (Lausanne). 2022;9:1054898.

21. Mesinkovska N, King B, Mirmirani P, Ko J, Cassella J. Cross-sectional online survey investigating the burden of illness associated with alopecia areata. J Invest Dermatol Symp Proc. 2020;20(1):S62-S68.

22. Dubois M, Baumstarck-Barrau K, Gaudy-Marqueste C, et al. Quality-of-life assessment in a cohort of 60 patients with alopecia areata. J Invest Dermatol. 2010;130(12):2830-2833.

23. Li SJ, Huang KP, Joyce C, Mostaghimi A. Evaluating the impact of alopecia areata on sexual quality of life. Int J Trichology. 2018;10(6):271-274.

24. Liu LY, King BA, Craiglow BG. Survey of affected adults, children, and families on the impairment of health-related quality of life associated with alopecia areata. J Am Acad Dermatol. 2018;79(3):556-558.e1.

25. Firooz A, Firoozabadi MR, Ghazisaidi B, Dowlati Y. Patient perceptions and understanding of alopecia areata. BMC Dermatol. 2005;5:1.

26. Masmoudi J, Sellami R, Ouali U, et al. Quality-of-life evaluation in a sample of Tunisian patients with alopecia areata. Dermatol Res Pract. 2013;2013:983804.

27. Vélez-Muñiz RDC, Peralta-Pedrero ML, Jurado-Santa Cruz F, Morales-Sánchez MA. Psychological profile and quality of life assessment in patients with alopecia areata. Skin Appendage Disord. 2019;5(5):293-298.

28. Hanson KA, Vañó-Galván S, Messenger A, et al. Comparative analysis of Dermatology Life Quality Index scores between adult and adolescent patients with alopecia areata. Dermatol Ther. 2025;15(6):1543-1553.

29. Vestergaard C, Carrillo DR, Mandla R, et al. Patient-reported quality of life and perception of disease: a survey-based study in alopecia areata. Acta Derm Venereol. 2025;105:adv43318.

30. Huang Y, Jee E, Kim M, Liu X, Jiang X. Systematic review and meta-analysis of familial aggregation patterns in alopecia areata. J Autoimmun. 2025;151:103378.

Annex I: The Written Consent Form

Title: The proposed study assesses the quality of life of patients with alopecia areata, at ALERT Hospital, Addis Ababa, Ethiopia, through a prospective study design.

Investigator: Dr. Blen Yosef MD, Dermatovenereology Resident.

Introduction:

Hello. It is a research study that you are being invited to participate in regarding the quality of life in patients with alopecia areata at ALERT Hospital. The criterion used to select you was that you attended the follow-up clinic at the period of the study and you were diagnosed with it. Listening is quite important; and you need not be afraid to ask the investigator any questions you might wish.

Purpose of the study:

This study would set out to determine the quality of life in alopecia areata patients.

Procedure:

In case you accept to participate, you will be questioned on a set of questions. These will be the basic information about you and will concern the factors regarding the quality of life in alopecia areata. It will be completed within a few minutes.

Risks: no expected risk of participation and refusal of or acceptance will not have any further care effect.

Benefits: It will assist us in knowing the quality of life assessment in patients who have alopecia areata and therefore assist us in identifying the basic burdens, early detection and provide the correct timely recommendation and intervention.

Confidentiality: The research will remain anonymous, and the results will have a high level of confidentiality, and no identification will take place. All the data will be stored in a secured password-driven computer.

Payment: You will not receive any payment to participate in the study other than gratitude.

Confidentiality: The research will remain anonymous, and the results will have a high level of confidentiality, and no identification will take place. All the data will be stored in a secured password-driven computer.

Payment: You will not receive any payment to participate in the study other than gratitude.

Right to refuse or withdraw: You have the right to refuse any time to take part in the study and may withdraw your consent of use of the data collected.

I confirmed to participate in the study by my own signature----------

Name of interviewer_____ signature_____

Date of interview (Ethiopian calendar) _____/_____/____

የጥናትና ምርምር ተሳታፊዎች ፈቃደኝነት ማረጋገጫ ቅፅ

እኔ ዶክተር ብሌን ዮሴፍ የቆዳና የአባላዘር 3ኛ አመት የድህረ ምረቃ ተማሪ ስሆን በዘርፉ ለመመረቅ ምርምር ማድረግ ይጠበቅብኛል :: በዚህም መሠረት የጥናቱ ርዕስ የላሽ በሽታ በእለት ተለት ህይወት ላይ ያለው ማህበራዊ እንዲሁም ስነ ልቦናዊ ጫና ላይ ያተኩራል :: ይህ ጥናት በተሳታፊዎች ላይ ምንም አይነት ቀጥተኛም ሆነ ቀጥተኛ ያልሆነ ጉዳት የማያስከትል ሲሆን ጥናቱም በአዲስ አበባ ዩኒቨርስቲ እንዲሁም በአለርት ሆስፒታል የጥናት እነ ምርምር ስነ ምግባር ቢሮ መሉ እውቅና እና ፍቃድ የተሰጠው ነው :: ከታካሚዎች የሚሰበሰበው መረጃ ሙሉ በሙሉ በሚስጥራዊነት የሚጠበቅና ለሶስተኛ ወገን በማንኛውም ሁኔታ የማይተላለፍ ነው ::

በመሆኑም በሚደረገው ጥናትና ምርምር ውስጥ የእርሶ ተሳትፎ በዘርፉ ያለውን የዕውቀት ክፍተት ለመሙላት እና ህክምናውን ለማሻሻል የሚረዳ መሆኑን ተገንዝበው ተሳታፊ እንዲሆኑ በትህትና እጠይቃለው ::

ቀን : .....

የጥናቱ ተሳታፊ ፊርማ: .....

Annex II: Questionnaires in English

A questionnaire prepared to assess the quality of life assessment in patients with alopecia areata patients, at ALERT Hospital, Addis Ababa, Ethiopia

Part one:

I. Socio- Demographic Data

1. Card No _____
2. Age the patient (years) _____
3. Sex of the patient □ Male □ Female
4. Marital status
   □ Single □ Married □ Divorced □ Widowed
5. Occupation □ Employed □ Unemployed
6. Educational status
   □ Uneducated □ Elementary □ High school □ Diploma □ Degree and above
7. Monthly income _____

II. Clinical data

- Duration of the lesion _____
- Site : □ Vertex □ left temporal □right temporal □Occipital
- Extent of hair loss: □ Patchy □ Totalis □ Universalis □ Ophiasis
- Extra scalp involvement: □ Yes □ No, if yes mention the site _____
- History of Recurrence: □ Yes □ No
- Family History of alopecia areata : □ Yes □ No

- **SALT scoring**

  a, Left side (%)_____

  b, Right side (%) _____

  c, Top (%)_____

  d, Back (%)_____

- **History of treatment**: □ Yes □ No

  If Yes, mention the modality of treatment

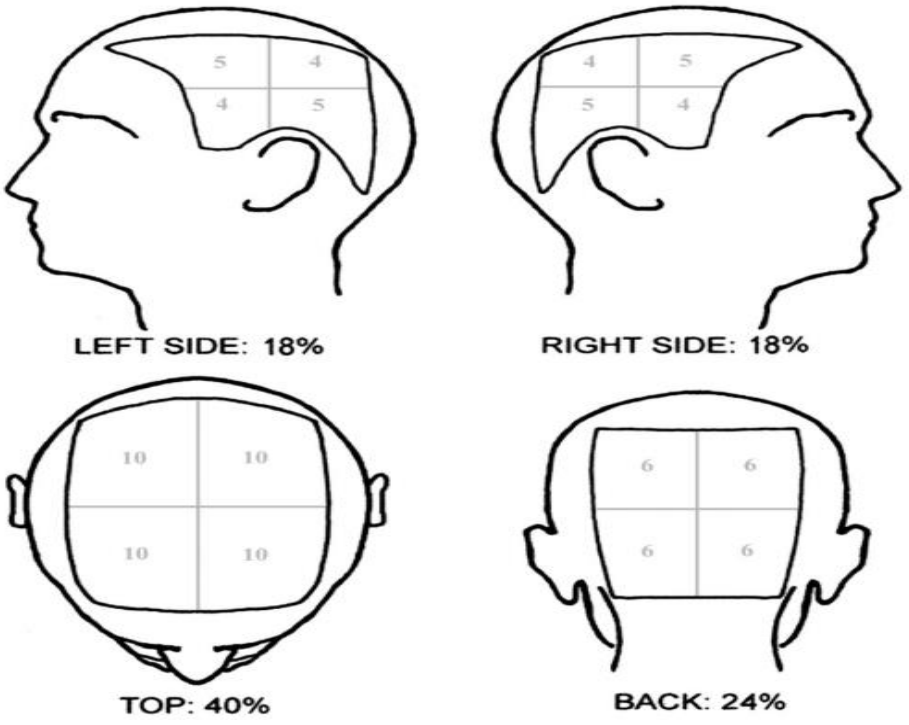
  a, Topical steroid

  b, Intralesional steroid

  c, Systemic treatment

  d, Combined

  e, Other: _____



Part Two: DERMATOLOGY LIFE QUALITY INDEX (DLQI)

The aim of this questionnaire is to measure how much your skin problem has affected your life OVER THE LAST WEEK. Please tick (√) one box for each question.

No	DLQI questionnaire	Response	
1	During the prior week, have you experienced itch, sore, pained or stung in your skin?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
2	In the past week, how ashamed or embarrass on account of your skin?	☐ Yes ☐ No If yes, how much?	☐ Very much ☐ A lot ☐ A little ☐ Not at all
3	In the past one week, how your skin has hassled you to go shopping or take care of your home or your garden?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
4	How much, in the past week, has your skin affected the clothes you wear?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
5	To what extent has your skin been able to influence any social or leisure activities in the past week?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
6	During the past week, to what extent have your skin and your skin made it hard to do any sport?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
7	In the past one week has your skin deprived		☐

	you of work or study?	☐ Yes ☐ No If yes, how much?	Very much ☐ A lot ☐ A little ☐ Not at all
8	During the past week, to what extent has your skin caused trouble with your partner or any of your close friends or relatives?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
9	In the past week, has your skin brought about any sexual difficulties?		☐ Very much ☐ A lot ☐ A little ☐ Not at all
10	In the past week, to what extent has the treatment of your skin been a problem to you, e.g. by messing up your home, or by wasting time?		☐ Very much ☐ A lot ☐ A little ☐ Not at all

Please check you have answered EVERY question. Thank you

DERMATOLOGY LIFE QUALITY INDEX: AMHARIC VERSION

1	**የሕመም ስሜት፡ ባለፈው ሳምንት ውስጥ የቆዳዎ ማሳከክ፣ መቁሰል፣ መለብለብ ወይም የሕመም ስሜት ምን ያህል ነበር?**	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በጥቡም ☐	
2	**ስነ-ልቦናዊ ጫና፡ ባለፈው ሳምንት የቆዳዎ ሁኔታ ምን ያህል ለጭንቀትና ለሃሳብ ዳርጎዎት ነበር?**	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በጥቡም ☐	
3	**የዕለት ተዕለት ክንውን፡ ባለፈው ሳምንት**	እጅግ በጣም ☐	**ግንኙነት ይለውም** ☐

	የቆዳዎ በሽታ እንደ ግብይት ወይም የቤት ውስጥ ስራዎችን በመሳሰሉ የዘወትር ተግባራት ላይ ምን ያህል እንቅፋት ሆኖብዎታል?	በጣም ☐ በመጠኑ ☐ በፍፁም ☐	
4	**የአለባበስ ምርጫ፡** ባለፈው ሳምንት የቆዳዎ ሁኔታ ልብስ በሚመርጡበት ወቅት ምን ያህል ተጽዕኖ አሳድሮብዎታል?	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በፍፁም ☐	ግንኙነት ይለውም ☐
5	**ማህበራዊ ሕይወት፡** ባለፈው ሳምንት በነበረዎት የማህበራዊ ግንኙነት እና በመዝናኛ ጊዜዎ ላይ የቆዳዎ በሽታ ምን ያህል ጫና ፈጥሮ ነበር?	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በፍፁም ☐	ግንኙነት ይለውም ☐
6	**የስፖርት እንቅስቃሴ፡** ባለፈው ሳምንት የቆዳዎ ሁኔታ ስፖርታዊ እንቅስቃሴዎችን እንዳያደርጉ ምን ያህል ከልክሎዎታል?	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በፍፁም ☐	ግንኙነት ይለውም ☐
7	**ስራ እና ትምህርት፡** ባለፈው ሳምንት የቆዳዎ በሽታ ከስራ ወይም ከትምህርት ገበታዎ እንዲቀሩ አድርጎዎታል? ካስቀረዎትስ በስራዎ ወይም በትምህርትዎ ውጤታማነት ላይ ምን ያህል ችግር ፈጥሯል?	አዎ ☐ አይደለም ☐	ግንኙነት ይለውም ☐
	የቅርብ ግንኙነት፡ ባለፈው ሳምንት የቆዳዎ በሽታ ከቅርብ ዘመዶች ወይም ከጓደኞች ጋር ባልዎት መቀራረብ ላይ የፈጠረው ተጽዕኖ ምን ይመስላል?	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በፍፁም ☐	
8	**የፍቅር/የትዳር ግንኙነት፡** ባለፈው ሳምንት የቆዳዎ ሁኔታ ከተቃራኒ ፆታ አጋርዎ ጋር ባልዎት ግንኙነት ላይ ምን	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐	ግንኙነት ይለውም ☐

	ያህል ችግር ፈጥሮ ነበር?	በፍፁም ☐	
9	**የሕክምናው ጫና፡** ባለፈው ሳምንት የሚወስዱት ሕክምና (ለምሳሌ፦ ጊዜ በመውሰድ ወይም አካባቢን በማቆሸሽ/በማመሳቀል) በኑሮዎ ላይ ያመጣው ተጽዕኖ ምን ያህል ነው?	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በፍፁም ☐	ግንኙነት ይለውም ☐
10	**የሕመም ስሜት፡** ባለፈው ሳምንት ውስጥ የቆዳዎ ማሳከክ፣ መቁሰል፣ መለብለብ ወይም የሕመም ስሜት ምን ያህል ነበር?	እጅግ በጣም ☐ በጣም ☐ በመጠኑ ☐ በፍፁም ☐	ግንኙነት ይለውም ☐

Annex III: Declaration form

This is to certify that the thesis is prepared by **Dr. Blen Yosef, quality of life in patients with alopecia areata attending Dermatovenerology clinic, at ALERT hospital, Addis Ababa, Ethiopia.** Submitted in partial fulfillment of the requirements of speciality complies with the regulations of the university and meets the accepted standards with respect to originality and quality. This thesis has not been presented for a degree in any other university, and that all sources of materials used for the thesis have been duly acknowledged.

ASSURANCE OF PRINCIPAL INVESTIGATORS

I, the undersigned, declare that this postgraduate degree thesis is my original work, has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

1.Name of the student: _____Signature_____Date. _____

APPROVAL OF THE ADVISORS

This thesis has been submitted with my approval as university advisor.

APPROVAL OF ADVISOR

Name of the first advisor: _____Signature _____ Date._____

Name of the second advisor: _____Signature _____ Date. _____

APPROVAL OF EXAMINER

Name: _____

Signature _____ Date. _____