

## Research Article

# Quality of Life and Its Associated Factors Among Patients with Psoriasis Attending the Dermatology Department at Public Hospitals in Harar Town, Eastern Ethiopia

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## Abstract

**Background:** Psoriasis is a skin disorder that inflames the skin and joints, increasing susceptibility to obesity, heart disease, and diabetes. It is more common in higher-altitude areas and affects 100 million people worldwide. Understanding the subtypes and treatments is crucial for the management of the condition. **Method:** The study used a cross-sectional design to assess quality of life and identify factors associated with poor quality of life among patients with psoriasis in the region. The study involved 219 patients. Data collection was carried out through structured interviews with patients with psoriasis attending public hospitals in Harar, eastern Ethiopia. Bivariate and multivariate logistic regression analyzes were performed to identify factors associated with poor quality of life among patients with psoriasis. Variables demonstrating a p-value > 0.20 in bivariate analyzes were included in the multivariate logistic regression model. Statistical significance was determined with a p-value < 0.05. **Results:** the proportion of poor quality of life was 54.8%. Factors associated with poor quality of life could not read and write (AOR = 14, 95% CI 2.08, 94.2), Duration of more than 5 years (AOR = 3.1, 95% CI 1.49, 6.41), New body site and in disease patients at both sites (AOR = 9.2, 95% CI 2.96, 28.56) and (AOR = 7.2, 95% CI 2.37, 21.95), respectively. Moderate affected body surface area (AOR= 2.98, 95% CI 1.15, 6.41)). And have a comorbidity (AOR= 2.69, 95%CI: 1.01, 7.20). **Conclusions:** The study revealed that 54.8% of the patients experienced severe quality of life impairment, with factors such as illiteracy, duration of the disease over five years, psoriasis at new sites of the body, moderate body surface area affected, and comorbidities significantly associated with poor quality of life. The study shed light on the challenges faced by patients with psoriasis in Harar, highlighting the need for comprehensive care strategies to improve their quality of life and well-being.

## Keywords

Quality of Life, Psoriasis, Harar, Ethiopia

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## 1. Introduction

Psoriasis is a noninfectious immune-mediated skin disorder that inflames the skin and joints [1]. The World Health Organization (WHO) suggested that the community be made aware of the extent and effects of psoriasis. Patients with psoriasis may be more susceptible to obesity, heart disease, type I and type II diabetes, and other conditions due to the inflammation caused by the condition. Psoriasis patients generally have disorganized appearances, social problems, and generally poor quality of life [2]. In addition, they experience increased rates of anxiety, rage, humiliation, and sadness, leading to social disengagement and absence from work and school. Thus, patients suffer severe financial and economic consequences [3]. Research revealed that psoriasis frequently has an impact on daily activities, career performance, and sexual functioning regardless of the size and severity of skin lesions [4]. Psoriasis can occur at any age; in approximately 75% of cases, it occurs before the age of 40, and in 35 to 50% of cases, it occurs before the age of 20. There are two types of psoriasis in terms of when the disease first manifests: type 1 has an earlier onset and a positive family history, occurring before the age of 40, while type 2 manifests after the age of 40. The prevalence of the disease among male and female was equal [5].

There are several different subtypes of psoriasis based on morphologic features. Understanding the subtypes is essential for managing the appropriate treatment of the medical condition. Plaque, guttate, erythrodermic, pustular, and inverse psoriasis are the most prevalent subtypes [6]. Topical medications, systemic immunosuppressive medications, phototherapy, and, more recently, biologics are used to treat psoriasis [7]. Topical medications are frequently used to treat patients with milder, localized forms of these conditions, as well as to manage symptoms in patients with more severe or extensive skin diseases. However, due to the adverse effects of long-term use, systemic immune suppressants and biologics are only used for more serious conditions [8].

Psoriasis is more common in high-altitude areas and varies in incidence among different ethnic groups and geographical areas. The regions with the highest and lowest prevalence rates are Northern Europe and East Asia [9]. Globally, the prevalence of psoriasis ranges from 0.09 to 11.43% affecting a minimum [7] of 100 million people [10]. The epidemiology of psoriasis in Africa is not well understood. But prevalence rates range from 1.9% to 2.5% and 0.025% to 0.9% in countries of Eastern and Western Africa countries, respectively [11]. In Ethiopia, the prevalence of psoriasis was 5.4% [11].

There are relatively few studies and publications on psoriasis and its treatment in Africa and the Middle East despite its large geographical topography, cultural and ethnic heterogeneity [12]. Patients who visited dermatology clinics in West Africa were found to be 0.08–0.9% in Nigeria, 0.4% in Ghana, 0.05% in Mali and 0.3% in Angola. However, the estimated prevalence is higher in East Africa and among the

ethnically mixed populations of South Africa and Egypt. The prevalence was reported to be 3.5%, 2.8%, and 3% in Kenya, Tanzania, and Uganda, respectively. According to reports, the prevalence was 3% in Egypt [13]. The incidence of psoriasis among patients of Indian ethnic origin was reported to be 9.6% in five hospitals in Johannesburg, South Africa; unexpectedly, this incidence did not affect patients from other ethnic groups. Psoriasis is less common in African Americans of West African descent than in white people. The fact that West Africa has a lower prevalence among African countries serves as evidence of this [12].

The World Health Organization defined quality of life (QOL) as 'the perception of individuals of their position in life, in the context of the cultural and value systems in which they live and in relation to their goals, expectations, standards and concerns [14]. It suggests that subjective experience rather than observations of healthcare professionals is more important to quality of life. Subjective measures of quality of life are often not consistent with improvements in clinical indicators in clinical practice. Individuals with similar disease severity typically view their own quality of life differently. As a result, self-reporting assessment replaces observant evaluation as the primary technique for estimating QOL. However, the phrase "Health-Related Quality of Life (HRQOL)" refers expressly to the quality of life in the context of diseases, disabilities, or disorders. In contrast to the idea of general quality of life, HRQOL is primarily concerned with the factors that directly or indirectly affect one's health [15]. According to a 2019 study conducted at Alert Hospital, 44% of patients in Ethiopia had poor quality of life. Low quality of life was correlated with female gender and primary education status, most likely because women are more self-conscious about their physical appearance and body image than men. On the contrary, patients who received systemic therapy showed a strong correlation with an improved quality of life. This may be because systemic therapy is more aggressive, more comfortable, and requires less time to complete than topical therapy [16]. Despite the continued follow-up of numerous psoriatic patients, no single study was conducted on quality of life among patients in Harar public hospitals. Therefore, the purpose of this study is to evaluate how psoriasis affects patients' quality of life and to identify risk factors that contribute to QoL impairment in patients attending public hospitals in Harar, eastern Ethiopia.

## 2. Methods and Materials

### 2.1. Study Design

The study used a cross-sectional design to assess quality of life and identify factors associated with poor quality of life among patients with psoriasis in the region.

## 2.2. Study Area and Period

The study was carried out at the Jugla Referral Hospital of the Hiwot Fana Specialized University Referral Hospital located in Harar, eastern Ethiopia. Harar is the capital of the Harari regional state. The region is located in eastern Ethiopia, at a distance of 526 km from Addis Ababa (the capital of Ethiopia). There are two public hospitals in the Harari region (The Hiwot Fana Specialized University Referral Hospital and Jugla Regional Referral Hospital). The Hiwot Fana Specialized University Referral Hospital was established in 1941 and became a university-specialized hospital in 2010. The hospital serves more than 154,196 patients per year in various general and specialized clinics. The Dermatovenereology department is one of the various departments that provide a wide range of services in outpatient dermatology clinics. The Dermatology Clinic sees an average of 40-50 outpatients per day. There are five dermatologists, one dermatologist, one dermatologist, five nurses, and 13 Dermatovenereologists residents. The study period was conducted from November 2023 to February 2024.

## 2.3. Source Population

All patients with psoriasis visit the dermatology clinic of Hiwot Fana and Jugla Hospital during the study period.

## 2.4. Study Population

All patients with psoriasis who visited the outpatient dermatology departments of Hiwot Fana and Jugla Hospital who met the inclusion criteria were selected during the study period.

## 2.5. Eligibility Criteria

### 2.5.1. Inclusion Criteria

All patients with psoriasis were admitted to the dermatological outpatient department during the study period, whose Age is  $\geq 16$  years and with disease duration at least 6 months.

### 2.5.2. Exclusion Criteria

Patients suffering from mental disorders that are likely to interfere with the assessment of quality of life were excluded from the study.

Patients who have other concomitant skin diseases other than psoriasis.

## 2.6. Sample Size and Sampling Procedure

The sample size was determined using a single population proportion formula, considering  $Z_{\alpha/2} = Z$  value for a confidence level of 95% that is 1.96  $d$  = the degree of confidence tolerated marginal error ( $5\% = 0.05$ )  $P$  = Proportion of psoriatic patients with poor quality of life according to a previous

study conducted at the University of Gondar Comprehensive Specialized Hospital which is 68.93% [17].

$$n = \frac{(Z_{\alpha/2})^2 p(1-p)}{d^2}, n = \frac{(1.96)^2 0.689(1-0.689)}{(0.05)^2}, n = 330$$

On the basis of the above assumptions, a total of 330 patients were required for the study. Since the total population for this investigation is the sum of the total number of patients with psoriasis in the two selected hospitals, the total psoriasis population for the previous 8 months of HMIS data in the two hospitals is 500 (269 seen at Hiwot Fana Hospital and 231 seen at Jugla Hospital). That is less than 10,000 so we should use a correction formula.

$$nf = \frac{no}{1 + \frac{no}{N}}, nf = \frac{330}{1 + \frac{330}{500}} = 199$$

Taking a 10% nonresponse rate, the final sample became 219. By proportional allocation to their size, from Jugla 101 and Hiwot Fana 118 patients were selected.

### Sampling Technique

Due to the small number of patients with psoriasis who visited the emergency department of the patient, from previous records, all patients with psoriasis attending dermatological OPD that meet the inclusion criteria were included in the survey during the data collection period.

## 2.7. Study Variables

### 2.7.1. Dependent Variable

Quality of life of patients with psoriasis.

### 2.7.2. Independent Variables

Age, sex, educational status, marital status, occupation, monthly income, substance use, comorbidity, type of psoriasis, site of the injury, duration of the illness, type of treatment administered, body surface area.

## 2.8. Operational Definitions

The criteria for the diagnosis of psoriasis were clinical based on the following, and the diagnosis should be made by a dermatologist.

- 1) Well-delineated erythematous plaques with silver scale that may be round, oval, irregularly shaped and with positive Auspitz sign were supportive.
- 2) If there is confusion or difficulty of diagnosis, it should be confirmed by skin biopsy.

### Quality of Life

Definitions are defined by the WHO as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns [18]. It is an all-inclusive concept that encompasses the physical, social, oc-

cupational, and psychological well-being of an individual.

*The Dermatology Life Quality Index (DLQI)*: The scores are classified as follows [19]:

- 1) Total scores of 0-1 have no effect on patient life
- 2) 1-2 has a small effect on patient life
- 3) 6-10 has a moderate effect on the patient's life.
- 4) 11-20 have a very large effect on patient life.
- 5) 21-30 have an extremely large effect on the patient's life.

*Substance Use*

*Use of Alcohol*

>2 drinks/day for men and >1 drink/day for women that started after the diagnosis of psoriasis or were used to alleviate the stress of the disease.

*Smoking*, which started after the diagnosis of psoriasis or was used to relieve stress from the disease.

## 2.9. Data Collection Procedure

The questionnaires were formed in electronic form using the ODK mobile application and installed on the data collector's mobile phone. Data were collected by face-to-face interview using structured questionnaires after clearly explaining and taking written consent from patients who met the inclusion criteria. Three data collectors were assigned and trained for 2 days. Regarding the questions, initially there were questions about sociodemographic status and further questions about the situation of the disease, which is believed to have an impact on quality of life and is adopted from the previous study. The impact of psoriasis on quality of life was assessed using the Dermatology Quality of Life Index (DLQI), which is a simple and widely used tool. It consists of 10 items that measure how much the skin problem has affected several aspects of life over the past week. The questions can be categorized into six domains: symptoms and feelings (Question 1 and 2), daily activities (Question 3 and 4), leisure (Question 5 and 6), work and school (Question 7), personal relationship (Question 8 and 9), treatment-caused burdens (Question 10). Each question is answered by choosing: 'not at all', 'a little', 'a lot', and 'very much'. Each item was rated from 0 to 3 and the scores were totaled to provide a range of 0 (no impairment in quality of life) to 30 (maximum impairment).

## 2.10. Data Quality Control

The validated Amharic version of DLQI was used along with the Amharic version of the checklist, the completeness of the questions was checked before entry into the ODK application and data collection. The questionnaire was pretested at 5% of the sample size in randomly selected individuals in the research area, and these individuals did not participate in the main study. During the pretest, the questionnaire was assessed for its clarity of the questions, accuracy of responses, estimate the time re-

quired, and identify any difficulties, proper functioning of the application, and modifications may be made on the basis of the findings. When the ODK questionnaires are prepared, those mandatory questions had asterisks, so that one could not proceed to the other question without answering it. The collected data were sent to the investigator who checked the completeness of the data daily.

## 2.11. Data Analysis

After collecting the questionnaires, the completeness was checked, cleaned, and coded and then exported to STATA version 17 for further analysis. Using the DLQI score as no, small, moderate, very large, and extremely large effect on patient life. The low quality of life was defined by scores on this index of more than six. Descriptive statistics, such as mean and standard deviation for continuous variables and frequency for categorical variables, were calculated. To determine factors related to poor quality of life, a binary logistic regression analysis was performed. Variables that demonstrated a  $p$ -value > 0.20 during bivariate analyzes were included in the multivariate logistic regression model. Statistical significance on the link of predictor variables with quality of life was determined with a  $P$ -value < 0.05.

## 2.12. Ethical Considerations

Ethical approval and clearance were obtained from the Haramaya University School of Medicine and Health Sciences Research and Ethics Review Committee (Ref. No. IHRERC/262/2024). Written consent was obtained from each participant after explaining the importance of the study and the benefits and risks of the study, which are well mentioned in the information sheet. For this, a two-page consent/ascent letter and information sheet were given to each participant to sign if they were willing and subsequent data collection in electronic form. The right of respondents to choose participation, confidential information, and continued care despite their choice was well explained in the information sheet.

## 3. Results

### 3.1. Sociodemographic Characteristics and Behavioral Characteristics

Of the total study participants, 54.34% of the patients were male. Out of the total, 57.53% of the psoriatic patient age was 36-65 years. 15.53% of the psoriasis patients were alcohol consumers and almost all 93.61% of the participants were not smokers (Table 1).

**Table 1.** Sociodemographic and behavioral characteristics of psoriasis patients in Harar town in public hospitals in 2024.

Variables	Frequency	Percent
Sex		
Female	100	45.66
Male	119	54.34
Age		
16-35	80	36.53
36-65	126	57.53
Above 65	13	5.94
Monthly Income		
Low income (<2000)	83	38.81
Average income (2001-3000)	47	21.46
Above average income (3001-6000)	47	21.46
High income (>6000)	40	18.26
Marital status		
Single	70	31.96
Married	126	57.53
Widowed	15	6.85
Divorced	8	3.65
Educational status		
Can't read and write	22	10.05
Primary	38	17.35
Secondary	68	31.05
Technical/Vocational	33	15.07
College or University	58	26.48
Occupational status		
House wife	41	18.72
Government employee	86	39.72
Non-government employee	92	42.01
Religion		
Orthodox	143	65.30
Muslim	46	21
Protestant	30	13.70
Alcohol use		
No	185	84.47
Yes	34	15.53
Smoking cigarette		
No	205	93.61
Yes	14	6.39

Variables	Frequency	Percent
Khat chewing		
No	204	93.15
Yes	15	6.85

### 3.2. Clinical Characteristics

More than half 67.13% of the age at the initial diagnosis of the psoriatic patient was categorized as under 40 years. Furthermore, the duration of the illness less than five years accounts for 54.34%. Out of the body surface area affected, mild body surface area accounts for 41.1% and is followed by moderate 31.51%. More than three-quarters (78%) of psoriasis patients the treatment modality was topical. And of all participants, 78% of the patients had comorbidities (Table 2).

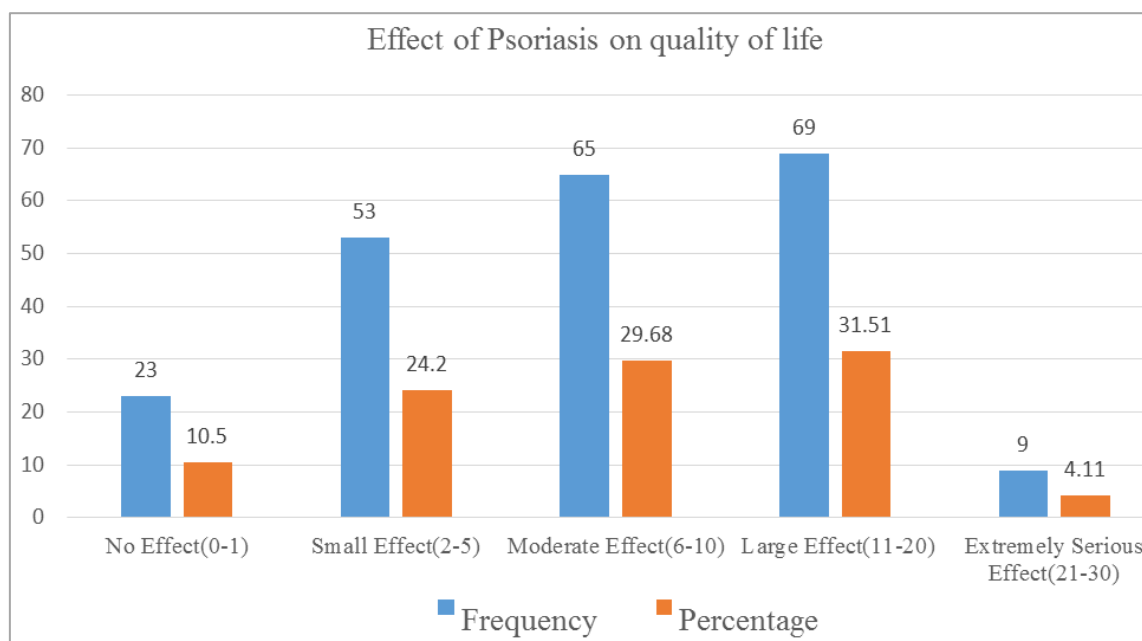
**Table 2.** Clinical characteristics of psoriasis patients in Harar town in public hospitals in 2024.

Variables	Frequency	Percent
Age at initial diagnosis		
Age at onset <40	147	67.12
Age at onset ≥40	72	38.88
Duration of the illness		
Duration <5 years	119	54.34
Duration ≥5 years	100	45.66
New body site		
Unexposed	40	18.26
Exposed	70	31.96
Both site	109	49.77
Body surface area affected		
Mild	90	41.10
Moderate	69	31.51
Severe	60	27.40
Treatment types		
Tropical	171	78.08
Systematic	48	21.92
Comorbid illness		
No	171	78.08
Yes	48	21.92

Of a total of 219 patients with psoriasis, 69 (31.51%) had a large effect (11-20) of psoriasis on quality of life and 65



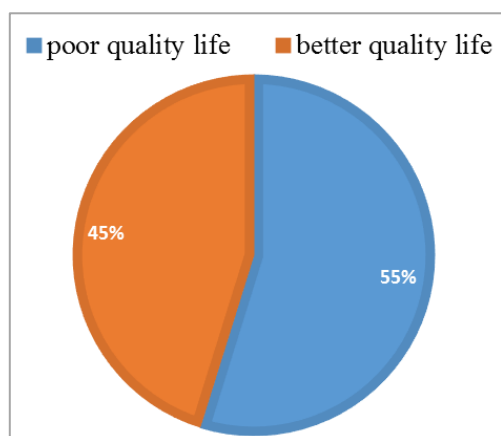
(29.68%) had a moderate effect (6-10) of psoriasis on quality of life (figure 1).



**Figure 1.** Effects of psoriasis on quality of life in public hospitals in Harar in 2024.

### 3.3. Proportion of Quality of Life in Psoriasis Patients

Among a total of 219 patients with psoriasis, more than half (55%) with 95% CI (47.9%, 61.5%) had poor quality of life, while 45% had a better quality of life (Figure 2).



**Figure 2.** Proportion of quality of life among psoriasis patients in Harar city hospitals in 2024.

### 3.4. Factors That Affect Quality of Life in Patients with Psoriasis

In the study on quality of life and associated factors among patients with psoriasis in Harar, eastern Ethiopia, several factors were found to be associated with poor quality of life among psoriasis patients. Some of these factors include: Patients who were unable to read and write had a significantly higher probability of poor quality of life (AOR = 14), Patients with a disease duration of more than five years were three times more likely to have poor quality of life compared to those with a shorter disease duration (AOR = 3.1), New Body Site and Multiple Body Sites Affected: Patients with psoriasis at new body sites or at both sites had significantly higher odds of poor quality of life (AOR = 9.2 and AOR = 7.2, respectively), Patients with moderately affected body surface area were almost three times more likely to have poor quality of life compared to those with mild involvement of the body surface (AOR = 2.98), Patients with comorbidities were also at a higher risk of experiencing poor quality of life (AOR = 2.69) (Table 3).

**Table 3.** Binary logistic regression analysis for factors affecting quality of life in patients with psoriasis in Harar, in 2024.

Variables	Psoriasis QOL		COR (95%CI)	AOR (95%CI)
	Poor	Better		
Sex				
Female	51	49	1	1
Male	69	50	1.33 (0.78, 2.26)	1.71 (0.74, 3.99)
Monthly Income				
Low income (<2000)	47	38	1	1
Average income (2001-3000)	25	22	0.92 (0.45, 1.88)	0.75 (0.28, 2.01)
Above average income (3001-6000)	27	20	1.01 (0.53, 2.24)	0.77 (0.28, 2.16)
High income (>6000)	21	19	0.89 (0.42, 1.90)	0.67 (0.21, 2.16)
Educational status				
Can't read and write	9	13	2.78 (0.94, 8.20)	14.0 (2.08, 94.2)*
Primary	25	13	1.63 (0.61, 4.30)	4.66 (0.85, 25.73)
Secondary	36	32	1.73 (0.58, 5.16)	3.93 (0.63, 24.33)
Technical/Vocational	18	15	1.78 (0.66, 4.81)	5.54 (0.88, 34.66)
College or University	32	26	1	1
Alcohol use				
No	102	83	1	1
Yes	18	16	0.92 (0.44, 1.91)	1.15 (0.39, 3.40)
Smoking cigarette				
No	112	93	1	1
Yes	8	6	1.11 (0.37, 3.30)	1.97 (0.12, 7.75)
Khat chewing				
No	111	93	1	1
Yes	9	6	1.26 (0.43, 3.66)	1.18 (0.15, 9.07)
Duration of the illness				
Duration <5 years	52	67	1	1
Duration ≥5 years	68	32	2.74 (1.57, 4.77)*	3.1 (1.49, 6.41)*
New body site				
Unexposed	9	31	1	1
Exposed	39	31	4.33 (1.79, 10.44)*	9.2 (2.96, 28.56)*
Both site	72	37	6.7 (2.89, 15.55)*	7.2 (2.37, 21.95)*
Body surface area affected				
Mild	36	54	1	1
Moderate	45	24	2.81 (1.47, 5.39)*	2.98 (1.15, 6.41)*
Severe	39	21	2.79 (1.41, 5.49)*	1.89 (0.56, 6.21)
Treatment types				
Tropical	90	81	1	1

Variables	Psoriasis QOL		COR (95%CI)	AOR (95%CI)
	Poor	Better		
Systematic	30	18	1.5 (0.78, 2.89)	0.69 (0.24, 1.94)
Presence of Comorbid				
No	88	83	1	1
Yes	32	16	1.89 (0.96, 3.69)	2.69 (1.01, 7.20)*

## 4. Discussion

The overall proportion of severe quality of life impairment among patients with psoriasis was 54.8% (95% CI; 47.9%, 61.5%). This indicates that a significant percentage of the patients in the study reported substantial negative impacts on their well-being. The proportion of severe quality of life impairment in the study population was higher compared to the findings of other studies conducted in different regions. This finding was higher than the study conducted in Malaysia (20.5%) [20], Asia Pacific (33.6%) [21], global populations (36.5%) [22], other study in Malaysia (46%) [22], in China (48.1%) [23]. The possible justification for this variation could be due to the varied cultural and sociodemographic backgrounds of patients, their access to health services, their inability to pay for it, and the stigma associated with patients with psoriasis in the community.

The presence of comorbidity, a moderate body surface area affected, and a disease duration greater than five years, illiteracy, and psoriasis at new body sites was identified as significant factors associated with a poor quality of life among patients with psoriasis patients in the study.

Patients who were unable to read and write were found to have 14 times higher odds of experiencing poor quality of life compared to those with higher education levels. This result is supported by a study conducted in Korea [24]. This suggests that education can play a role in how individuals perceive and cope with the impact of psoriasis on their quality of life. Patients with psoriasis at new body sites had significantly higher odds of poor quality of life. This study is in line with a study conducted in a Semi-Urban Northeast Malaysia [25]. The appearance of psoriasis in new areas can impact self-image, self-esteem, and daily functioning, contributing to a decrease in quality of life. Patients with moderately affected body surface area were almost three times more likely to have a poor quality of life. The result of this study was supported by the study conducted in a Semi-Urban Northeast Malaysia [25], a study done in the US population [26], findings from the National Psoriasis Foundation Survey Data [27]. The degree of skin involvement can influence physical discomfort, social interactions, and psychological

distress, affecting overall quality of life. Patients with comorbidities were more likely to experience a poor quality of life. The presence of additional health conditions along with psoriasis may exacerbate symptoms, increase the complexity of treatment, and affect overall health and well-being.

The duration of the disease plays a significant role in the quality of life of patients with psoriasis. In the study conducted in Harar, Eastern Ethiopia, it was found that patients with a disease duration of more than five years had a higher probability of experiencing poor quality of life compared to those with a shorter disease duration. Specifically, patients with a disease duration of more than five years were three times more likely to have a poor quality of life (AOR = 3.1). This finding suggests that as the duration of the disease increases, patients can face challenges related to managing the condition over time, coping with the physical and psychological impact of psoriasis, and dealing with the potential social stigma associated with the disease. This finding was supported previous literature [28]. Early detection and prompt initiation of appropriate treatment, as well as ongoing support and monitoring, are essential in addressing the impact of long-standing psoriasis on patient quality of life.

## 5. Limitation and Strengthening

The study's cross-sectional design provides a snapshot of quality of life and associated factors at a single point in time, limiting the ability to capture changes in quality of life over time or establish causal relationships between variables. Reliance on self-reported data from psoriasis patients can introduce recall bias or social desirability bias, which can lead to inaccuracies in the data. The study findings may be specific to the Harar population of psoriasis patients and may not be generalizable to other regions or populations with different sociocultural backgrounds, healthcare systems, or access to treatment. Despite conducting multivariate analyzes, there may be unmeasured confounding variables that were not taken into account in the analysis, which could influence the relationship between the factors studied and the quality of life outcomes. The study addressed an important research gap by focusing on quality of life and associated factors among patients with psoriasis in a specific region, providing



valuable information on the challenges facing this population. By focusing on a specific geographic area, the study findings can inform targeted interventions and support strategies for patients with psoriasis in Harar, eastern Ethiopia.

## 6. Conclusion

The study on quality of life and associated factors among psoriasis patients in Harar, Eastern Ethiopia, concluded that a significant proportion of patients with psoriasis in the region experience severe impairment of quality of life, with 54.8% reporting substantial negative impacts on their well-being. This proportion was higher compared to the findings of other studies in different regions. Factors such as the duration of the disease for five years, psoriasis at new body sites, moderate body surface area affected, illiteracy, and comorbidities were identified as significant contributors to poor quality of life among psoriasis patients. The study emphasized the importance of early detection and treatment of psoriasis, using a multidisciplinary care approach that involves dermatologists, psychologists, and social workers. Providing education to patients about the disease, treatment options, and self-management strategies, as well as offering psychosocial support services to help patients cope with the emotional and social challenges associated with psoriasis. Regular follow-up of patients, public awareness campaigns, and further research on psoriasis and quality of life outcomes were also highlighted as essential steps to improve care and reduce stigma associated with the condition.

## Abbreviations

DLOI	Dermatology Quality of Life Index
HRQOL	Health-Related Quality of Life
QOL	Quality of Life
WHO	World Health Organization

## Ethical Consideration and Informed Consent

Ethical approval and clearance were obtained from the Haramaya University School of Medicine and Health Sciences Research and Ethics Review Committee (Ref. No. IHRERC/262/2024). Written consent was obtained from each participant after explaining the importance of the study and the benefits and risks of the study, which are well mentioned in the information sheet. For this, a two-page consent/ascent letter and information sheet were given to each participant to sign if they were willing and subsequent data collection in electronic form. The right of respondents to choose participation, confidential information, and continued care despite their choice was well explained in the information sheet.

## Author Contributions

**Feyisa Shasho Bayisa:** Conceptualization, Formal Analysis, Investigation, Methodology, Writing – original draft

**Teshome Demi Nimani:** Data curation, Formal Analysis, Software, Writing – original draft, Writing – review & editing

**Samuel Demissie Darcho:** Interpretation, Data curation, Writing – review & editing

## Data Availability Statement

The data sets analyzed in this study are available from the corresponding author on reasonable request.

## Conflicts of Interest

The authors declare no conflicts of interest.

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