

A study of Body Image and Quality of Life in Patients with Psoriasis: a study from a tertiary care center

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Abstract

Background: One form of psoriasis that can affect the skin and be seen by others is called psoriasis discolorans (PD). As a result, psoriasis patients' quality of life (QoL), self-esteem (SE), and body image (BI) can be adversely affected by the condition.

Aims and objectives: We aimed to assess the effects of psoriasis on the QoL, SE, and BI.

Materials and methods: The study comprised 102 patients with psoriasis and 101 healthy individuals serving as control groups. We wrote down the patients' demographics and figured out their Psoriasis Area Severity Index (PASI) scores to see how much psoriasis affected each person's life. To conduct a more in-depth examination, the Dermatology Life Quality Index (DLQI), a BI scale, and a SE scale were scrutinized.

Results: QoL of the psoriasis group was significantly worse than that of the control group ($P < 0.00$), and SE and BI were found to be significantly lower in the control group. SE and BI were significantly influenced by educational status ($P < 0.001$), but QoL was not ($P = 0.673$). There was a positive correlation between PASI and the QoL ($r = 0.784$), but a negative correlation between PASI and BI ($r = -0.544$).

Conclusion: QoL, BI, SE, and psychosocial issues can all be negatively impacted by psoriasis. It's possible that new approaches to this problem could lead to new developments in treatment and rehabilitation.

Keywords: Psoriasis Area Severity Index, body image scale, Dermatology Life Quality Index, psoriasis, quality of life

Introduction

Inflammation of the skin that can be seen on the skin's surface is a hallmark of psoriasis. Since patients are dealing with the disease daily, they face a wide range of psychosocial issues.¹

An individual's belief and confidence in their worth, strengths, efficacy, and success is defined as self-esteem (SE). It is a subjective state of feeling formed by an individual's realistic evaluation of themselves.²

In psychology, the term "body image (BI)" refers to an individual's subjective perceptions of their physical appearance, shaped by conscious and unconscious thoughts, feelings, and beliefs about their bodies. The present study examines how psoriasis affects a person's quality of life (QoL), SE, and BI.

Materials and Methods

Plaque psoriasis was diagnosed clinically or histopathologically in 102 participants, and

101 healthy individuals with similar age, gender, and educational attainment served as the study's control cases. It was a cross-sectional study, and ethics committee approval was obtained.

Patients who could not read or write, had an additional systemic or psychiatric disease had a body mass index (BMI) of less than 30 kg/m², or refused to complete the questionnaire were excluded from the analysis. The control group was made up of otherwise healthy people. The contributors were categorized into elementary school, secondary school, high school, and university-based on their educational backgrounds. Classified as having a low educational status, those who graduated from elementary and secondary schools were considered a more advanced education than those who graduated from high school and university. It was determined that the PASI (Psoriasis Area Severity Index) scores ranged from 5 to 10 (mild to severe).

There are ten questions in the Dermatology Life Quality Index (DLQI), a dermatology-specific scale. Each question has a range of 0 to 3, with 0 being the lowest and 3 being the highest. Patients' lives were affected in different ways depending on the level of severity of the DLQI score. For example, a score of 0–1 meant no effect on the patient's life; 2–5 meant mild impact; 6–10 meant moderate impact, and 11–20 meant significant implications. The higher the score, the worse the quality of life is. Hovardaoglu conducted validity and reliability studies for the BI scale. (Hovardaoglu S 1993) The lowest possible score is 40, while the highest potential is 200; a high score indicates an increase in positive evaluation. A case is considered to have low BI if its scale score falls below

135, and a case is considered to have high BI if its scale score is greater than 135. Uhadarolu conducted studies on the validity and reliability of Rosenberg's Self-Esteem Scale. When assessing SE, researchers used the first 10 statements on a scale developed for that purpose. We asked participants to rate each question on a four-point scale ranging from "strongly agree" to "disagree." Zero–one is considered high, two–four is deemed to be moderate, and five to six is considered low on the evaluation guide of the scale.

Statistical analysis

A version 25 of the Statistical Package for the Social Sciences (SPSS) software was used to analyze the data (SPSS Inc, Chicago, Illinois, USA). Mean and standard deviation were used to express continuous data, and frequency and percentage were used to express categorical data. The independent groups were compared using a student's t-test for continuous variables. The Chi-square test was used to compare two distinct categorical groups. Analysis of variance (ANOVA) was used to compare the mean values between groups, and Pearson's correlation analysis was used to determine correlations. The significance of a P value of less than 0.05 was accepted.

Results

Both the control and psoriasis groups had mean ages of 33.32±9.28years and 36.43±11.25years, respectively. The control group had 45 males (44.56%) and 56 females (55.44%), while the psoriasis group had 54 males (52.94%) and 48 females (47.06%). There were no statistically significant differences in age or gender between the two groups (P values of 0.126 and 0.825, respectively). Table 1 shows the patients' characteristics.

Table 1: Characteristic of the study population in both the groups

Characteristic	Unit	Psoriasis(n=102)	Control (n=101)	P-value
Age	Mean ± SD, year	36.43±11.25	33.32±9.28	0.126

Gender	Male, n (%)	54 (52.94)	45 (44.56)	0.825
	Female, n (%)	48 (47.06)	56 (55.44)	
Education status	Low education status, n (%)	34 (33.33)	24 (23.76)	0.622
	High educational status, n (%)	68 (66.67)	77 (76.23)	

*Groups were compared using the Chi-square test. SD: standard deviation; n: number of patients

Study participants were divided into two groups, with those with high and low levels of education, and both groups were found to have significantly higher SE and BI scores (level of education, SE $P < 0.001$; level of education, BI $P = 0.0011$) than those with low levels of education.

When QoL was compared between groups based on educational attainment, those with lower levels of education saw a more significant decline in QoL than those with higher levels of education. Still, this difference was statistically insignificant ($P = 0.673$).

Table 2: Table 2: DLQI, self-esteem, and body image data of the groups

Variable		Psoriasis (n=102)	Control (n=101)	P-value
DLQI	Very severely affected	15 (14.70)	0 (0)	<0.001
	Considerably affected	20 (19.60)	3 (2.7)	
	Moderately affected	32 (31.37)	4 (3.96)	
	Mildly affected	26 (25.49)	37 (36.63)	
	No affect	9 (8.82)	57 (56.44)	
Self Esteem	High	48 (47.06)	92 (91.09)	<0.001
	Moderate	53 (51.96)	9 (8.91)	
	Low	1 (0.98)	0 (0)	
Body Image	High satisfaction	44 (43.14)	75 (74.26)	<0.001
	Low satisfaction	58 (56.86)	26 (25.74)	

Data are expressed as no of patients (percentage). The Chi-Square test was used to obtain the p-value. DLQI: Dermatology Life Quality Index.

Table 3: Pearson correlations between PASI and quality of life, self-esteem, and body image

Variable	n	r	P-value
DLQI	102	0.784	<0.001
Self Esteem	102	0.682	<0.001
Body Image	102	-0.544	<0.001

DLQI: Dermatology Life Quality Index.

The QoL of those with mild disease was moderately affected by the PASI, but those with moderate and severe disease were significantly affected. On comparing QoL to PASI, it was found that those with lower PASI levels had a better QoL than those

with higher PASI levels. Results showed that mild disease had significantly higher PASI values than moderate and severe diseases and that this difference was statistically significant.

Discussion

Psoriasis is equally common in men and women and can appear at any age. In 70% of patients, the disease's first symptoms appear before 40 and are most common in the third decade.³ In the present study, psoriasis group gender did not differ statistically ($P > 0.05$) compared to the literature, as previously reported.

The DLQI is one of the most commonly used measures of life quality.⁴ As reported by Balci et al., the total DLQI score in the psoriasis population was 9.50 ± 6.10 , while in the control group, it was found to be less than 0.67 ± 0.80 .⁵ Patients with psoriasis had an average DLQI score of 8.8 ± 6.1 , according to Mazzotti et al.⁶ In this current research, we found that DLQI scores in the group of patients with skin condition psoriasis were significantly higher than those of the participants in the control group. According to the present study, patients with psoriasis had a lower quality of life than healthy controls.

When it comes to skin and joint issues, psoriasis can have a negative impact on SE. Psoriasis was linked to the absence of SE in a study by Kruger et al.⁷ Several studies have found that psoriasis patients are more likely to suffer from sexual dysfunction disorders, anxiety, depression, and suicidal thoughts than the general population.⁸ In this study, the findings are in line with previous research.

As psoriasis affects an individual's appearance, it may alter their perceptions of their BI.⁹ Psoriasis has a negative impact on both BI and sexuality, according to a study by Khoury et al.¹⁰ Individuals with cancers of the head, neck, or breast, colostomy, and obesity were found to be negatively affected by BI.¹¹ Patients with psoriasis were also found to have a negative impact on BI in the present study.

SE and BI are influenced by a person's education and general well-being. According to Üstünda et al., SE scores were

higher ($P < 0.05$) in the group with the highest educational attainment, whereas BI scores did not differ significantly ($P > 0.05$) between the groups.⁹ According to Kim et al., there is no correlation between a person's educational level and overall well-being.¹² The SE and BI of psoriasis patients were found to be better in the group with higher levels of education in the present study; however, the DLQI was not found to be significantly affected by educational status.

Psoriasis severity evaluations are made using the PASI scale, the most widely used method. The severity of psoriasis was found to have a negative impact on quality of life in a study by Lin et al.¹³ According to studies conducted by Moradi et al. and Norlin et al., there was a moderate correlation between the DLQI and the PASI.^{14,15} Patients with moderate to severe psoriasis (PASI 10) were interviewed in the study by Khoury et al. Among the five themes that emerged from the study of psoriatic patients' body image, sexual inhibitions, the influence of social support, decreased exercise activity, and a negative self-image was identified.¹⁶ SE of patients with PASI scores 15 in the study by Kouris was not significantly different from patients with PASI scores 15 ($P = 0.427$).¹⁶

PASI was found to correlate with the DLQI and SE positively and negatively with the BI in the current study. Patients' socioeconomic status, annual family income, and the length of their illness were not considered. As a result, these are considered a limitation of our study.

Conclusion

If psoriasis is left untreated, it can have a negative impact on one's quality of life, as well as on one's mental health. New approaches to this issue may aid in advancing treatment and rehabilitation for this disease.

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