ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

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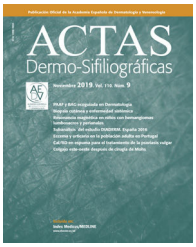

CASE AND RESEARCH LETTER

[Translated article] Evaluation of Dermatology Life Quality Index (DLQI) Scores in Patients With Psoriasis: A Cross-sectional and Correlation Study Over a 6-Year Period

Evaluación de los resultados del Índice de Calidad de Vida en Dermatología (DLQI) en pacientes con diagnóstico de psoriasis: un estudio transversal y de correlación durante un periodo de 6 años

To the Editor,

Psoriasis is a chronic inflammatory skin disease that affects patient quality of life and social and emotional well-being.[1] Its effects can be evaluated using several questionnaires, including the widely used Dermatology Life Quality Index (DLQI).[2] The aims of this study were to assess quality of life in a series of patients with psoriasis, examine which aspects of their lives were most affected, and examine correlations with other clinical measures, comorbidities, and treatment.

We performed a retrospective, cross-sectional, correlational study of patients older than 18 years with a diagnosis of psoriasis who were treated at Hospital Universitario de La Samaritana and a private dermatology clinic in Bogotá, Colombia, between 2010 and 2016. Data were collected by reviewing medical records. A total of 163 patients, selected by non-probabilistic convenience sampling, were included. Patient characteristics and clinical features, scores, and measures are summarized in Tables 1 and 2. DLQI scores according to sex and special psoriasis location are summarized, together with the results of the bivariate analysis, in Table 3. The data were analyzed in SPSS version 24.

The profile and clinical characteristics of the study population were similar to those described elsewhere. The proportion of patients with impaired quality of life according to the DLQI, 85.9%, was also similar.[3,4] In total, 41.1% of

Table 1 Demographic and Clinical Characteristics of the Study Population (n = 163).

Variable	Result
Age, mean (SD), y	48.7 (14)[a]
Male sex, No. (%)	112 (68.7)
Type of psoriasis, No. (%)	
Vulgaris (plaque)	147 (90.2)
Guttata	10 (6.2)
Pustular	3 (1.8)
Erythrodermic	2 (1.2)
Not defined	1 (0.6)
Psoriasis in special locations, No. (%)	
Scalp	59 (36.2)
Genital area	22 (13.5)
Palms/soles	7 (4.3)
Nails associated with other types of psoriasis	35 (21.5)
Comorbidities, No. (%)	
Hypertension	37 (22.7)
Dyslipidemia	48 (29.4)
Diabetes mellitus	15 (9.2)
Rheumatoid arthritis	3 (1.8)
Hypothyroidism	14 (8.6)
Psoriatic arthritis	10 (6.1)
Topical treatment, No. (%)	76 (46.6)
Corticosteroids only	50 (30.6)
Corticosteroids + salicylic acid	15 (9.2)
Calcipotriol + betamethasone	10 (6.1)
Calcipotriol	1 (0.6)
Nonbiologic systemic treatment, No. (%)	34 (20.9)
Methotrexate	26 (16)
Cyclosporine	3 (1.8)
Acitretin	1 (0.6)
Phototherapy	4 (2.5)
Biologic therapy, No. (%)	11 (6.7)
Etanercept	3 (1.8)
Adalimumab	4 (2.4)
Infliximab	2 (1.2)
Secukinumab	1 (0.6)
Ustekinumab	1 (0.6)

[a] K–S statistic ($P = .2$).

DOI of original article:
https://doi.org/10.1016/j.ad.2022.05.029

https://doi.org/10.1016/j.ad.2022.05.037

Table 2 DLQI, PASI, and BSA Values for Study Population.

Variable	Result
BSA score, median (IQR)	5 (11)[a]
BSA ≤ 10%, No. (%)	107 (65.6)
PASI score, median (IQR)	5.1 (7.4)[a]
PASI categories, No. (%)	
<5	79 (48.4)
5–10	44 (27)
>10	40 (24.6)
Total DLQI score, median (IQR)	8 (12)[a]
Impact on quality of life, No. (%)	140 (85.9)
DLQI categories, No. (%)	
No effect on patient quality of life (0–1)	23 (14.1)
Small effect on patient quality of life (2–5)	37 (22.7)
Moderate effect on patient quality of life (6–10)	36 (22.1)
Very large effect on patient quality of life (11–20)	50 (30.7)
Extremely large effect on patient quality of life (21–30)	17 (10.4)

Abbreviations: BSA, body surface area; DLQI, Dermatology Life Quality Index; PASI, Psoriasis Area and Severity Index; IQR, interquartile range.
[a] K–S statistic ($P = .000$).

Table 3 DLQI Scores According to Sex and Special Psoriasis Location and Results of Bivariate Analysis.

Variable	DLQI score by variable	
Sex, median (IQR)		
Male	8 (12)[a]	
Female	8 (14)[a]	
Psoriasis in special location, mean (95% CI)		
Scalp	13.4 (11.4–15.3)	
Genital area	17.8 (15.3–20.2)	
Palms/soles	11.8 (7.3–16.2)	
Nails associated with other types of psoriasis	12.6 (10.01–15.1)	
Bivariate analysis	R_s	*P* value
Correlation between DLQI and PASI scores	.342	<.001
Correlation between total DLQI and individual domain scores	R_s	*P* value
Symptoms and feelings	.612	<.001
Daily activities	.754	<.001
Leisure	.812	<.001
Work/school	.656	<.001
Personal relationships	.704	<.001
Treatment	.555	<.001

Abbreviations: DLQI, Dermatology Life Quality Index; IQR, interquartile range; R_s, Spearman correlation coefficient.
[a] K–S statistic ($P < .05$).

the respondents had a DLQI score of more than 10, indicating that they perceived psoriasis as having a very large or extremely large effect on their quality of life.

The most widely affected DLQI domain was the symptoms and feelings domain (questions 1 and 2), indicating that these aspects are important to patients and highlighting the tendency to experience itching and pain and feelings of embarrassment and self-consciousness. These findings were similar to those reported elsewhere.[5,6]

Patients aged 25 to 34 years had a median DLQI score of 12, the highest by age group ($P < .05$). People in this age group tend to be occupationally, socially, and sexually active and to have significant concerns and feelings of stigma about their personal appearance. Older adults, as observed in our study, appear to be less affected in these domains, probably because their situation is more stable in terms of work, social life, and personal relationships.

Supporting reports in the literature, DLQI scores were similar in men and women. Scores above the mean were observed in patients with psoriasis in special locations and patients with hypothyroidism, diabetes mellitus, or psoriatic arthritis.[4,6–8] Lower scores were observed in patients treated with biologics, although the differences were not significant when compared with other treatments ($P = .776$). We consider that the potential positive effects of biologic therapy on quality of life in our population should be confirmed using different study designs, as shown by other authors.[9]

We observed a weak correlation between DLQI and Psoriasis Area and Severity Index (PASI) scores, indicating that factors other than clinical severity influence quality of life in psoriasis. This poor correlation has been highlighted by other authors and suggests that evaluations based on visible signs and symptoms may not reflect patient perceptions or the true impact of psoriasis on quality of life.[10]

The finding of a highly positive correlation between each of the dimensions of the DLQI and total DLQI score is notable and indicates a strong association between overall quality of life and perceived effects on work, treatments, and emotional, social, and sexual functioning.[5]

The limitations of our study include potential biases due to its retrospective observational design, a low percentage of patients on biologic therapy (impeding fair comparisons with other treatments), inclusion of patients from just two centers, and a relatively small overall sample.

In conclusion, we observed high rates of quality of life impairment, in some cases severe, in this series of patients with psoriasis. Our findings confirm previous reports that factors other than clinical severity affect patient-perceived quality of life, highlighting the importance of overall assessments including physical, social, emotional, among other dimensions.

Conflicts of Interest

Dr. Piedad M. Guavita declares that she has no conflicts of interest.

Dr. Castro Ayarza has received consultancy or speaker fees for activities sponsored by AbbVie, Amgen, Biopas-UCB, Janssen, and Novartis.

Dr. Cortés Correa and Dr. Peñaranda Contreras have participated in clinical trials sponsored by Novartis, Sanofi, and

Roche and have received consultancy or speaker's fees in activities sponsored by Novartis, Sanofi, Janssen, Lilly, and Pharmalab.

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