

The Results of Facial Psoriasis in Patients and Determining the Psychological Factors and Quality of Life Reported by the Patient

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Abstract: Background: Psoriasis can be defined as a chronic skin condition where it can significantly decline a patient's quality of life. Aim: This study contributed to assess various clinical outcomes which connected to psychological aspects and the quality of life of people with facial psoriasis. Patients and methods: We were examined the effects of several variables on the quality of life (HRQoL) of ninety-nine face psoriasis patients, which observed in this study, where it was conducted out at different hospitals in Iraq. Moreover, the Psoriasis Area and Severity Index (PASI) data had diagnosed the severity of the illness, as well as the Dermatology Life Quality Index (DLQI) that identify to assess rates of HRQoL, where ninety people among their ages of 20 and 50 who were recruited between July 14, 2022, and August 24, 2023. Results: The gender ratio was 60% male, 4% female. The overall distribution for BMI was the following: 18.5-25 (15 instances), 25-30 (32 cases), 30-35 (30 cases), 35-40 (9 cases), and 40+ (4 cases). The type of face psoriasis was determined, with 43 occurrences of the most common types of psoriasis, included plaque psoriasis (28 patients), guttate psoriasis (13 patients), erythrodermic psoriasis (13 cases), as well as pustular psoriasis in the palms and soles (6 instances). Conclusion: Facial psoriasis significantly affects an individual's emotional state and well-being, causing low confidence, shame, and social isolation. Symptoms like redness, scaling, and itching can cause physical discomfort, hindering activities, sleep, and quality of life. Those with the condition often conceal their symptoms by wearing long-sleeved shirts or trousers. The ongoing condition can leave individuals feeling frustrated and without help.

Keywords: Skin disorder; Facial psoriasis; Dermatology Life Quality Index; and Psoriasis Area and Severity Index

INTRODUCTION

Psoriasis is a persistent, non-contagious inflammatory skin disease that results from a hereditary predisposition and abnormal epidermal growth [Wolff, K. *et al.*, 2009]. It is expected to affect between two and three percent of the total European population [NPF, 2012]. Various written materials and medical exams show that this ailment has an important impact on the people that suffer from it. Van de Kerkhof classified psoriasis as a 'life-ruining illness' because, while it does not immediately cause death, it can make life unpleasant [Persatuan Dermatologi Malaysia, 2012]. As a consequence, its impacts on quality of life are comparable to those of other diseases, including life-threatening conditions that include cancer, heart attack, diabetes, and hypertension [Hariram, P. *et al.*, 2011; Aghaei, S. *et al.*, 2009].

Individuals with psoriasis faced a significant challenge performing daily tasks such as washing, dressing, sleeping, and performing job duties [de Korte, J. *et al.*, 2004]. These problems are the direct result of the disease's impact on the human body [Hong, J. *et al.*, 2008]. These disadvantages include discomfort, irritation, and the possibility of

humiliation as a result of the public exposure of rapidly shed skin cells that enable garments to deteriorate quickly [Lin, T. Y. *et al.*, 2011].

Individuals can feel out of place since their look is seen as unclean and infectious [Gelfand, J. M. *et al.*, 2004]. This perspective could lead to emotions of self-loathing and loneliness. Those with psoriasis commonly have low self-esteem, which results in feelings of inadequacy as well as unworthiness [Lundberg, L. *et al.*, 2000; Loh, L. C. *et al.*, 2006]. This can lead to emotions of despair and hopelessness, with some considering suicide. Additionally, psoriasis patients commonly experience emotions of remorse and helplessness [Ali, F. A. *et al.*, 2012; Whitley, E. *et al.*, 2002]. The condition frequently causes anxiety regarding how their family and friends will respond, along with concerns about their appearance and feelings. As a result, many patients are unable to obtain social services, contributing to increased isolation [DLQI, 2012].

To prevent unsupportive and annoyed stares, some individuals restrict or completely abstain from

participating in social occasions. Furthermore, psoriasis affects relationships with others [Lewis, V. et al., 2004]. According to Gupta and Gupta, 40.8% of psoriasis patients indicate that the condition had an impact on their sexual lives [Basra, M. K. et al., 2008]. In addition, thirty people stated that the appearance of their skin was the cause of their decreased sexual activity [MPR, 2012]. Furthermore, physical issues like joint discomfort and itching could cause problems with a person's sex life. The type of one's career or occupation frequently relates to one's social relationships with others [PASI Training, 2012]

It can be argued that individuals lose their sources of income solely due to physical symptoms, which is also accompanied by recurrent hospitalisations and eventually leads to a refusal from work [Canadian Psoriasis Guidelines Committee, 2012]. This suggests that this 'life-ruining disease' has a detrimental effect on an individual's physical well-being. In general, subjective well-being is the primary factor influencing how individuals respond to such circumstances, regardless of the context. The theoretical assumption is that this phenomenon results from individual consciousness experiences and is expressed as cognitive satisfaction [Ferrándiz, C. et al., 2002; Globe, D. et al., 2009]. The quality of life is of significant importance in understanding how patients function, their feelings about their own lives, and the value they add to clinical data [Reich, A. et al., 2010]. A substantial corpus of literature exists in professional publications concerning the quality of life of individuals living with psoriasis. Nevertheless, research on health-related quality of life (HRQOL) has become the dominant area of study [Uttjek, M. et al., 2004].

Furthermore, the absence of a comparison between patients and their healthy counterparts is a significant limitation [Menting, S. et al., 2014]. The concept of health-related quality of life is a narrower one than that of overall quality of life, since it is inclined towards how disease and therapy affect an individual's subjective well-being. Conversely, poor health does not necessarily equate to poor quality of life. Some individuals adapt to their illness and pursue their objectives [Norris, D. et al., 2017].

PATIENTS AND METHODS

Study design

A simple, standardized questionnaire was utilized to gather data on the following variables: age, sex, education, duration of psoriasis, age of onset, and

history of psoriasis in the family. Trained dermatologists subsequently confirmed that the patient was suffering from psoriasis. The degree of disease severity was indicated using the PASI scale, which evaluates the following parameters: erythema, infiltration, desquamation, and affected body surface area. The PASI score can range from 0 to 72, with lower scores indicating less severe forms of the disease. In our study, a PASI score of ≤ 3 Was considered indicative of mild psoriasis. The rationale for selecting these cutoff points (values) is because our work was conducted at hospitals located within different hospitals in Iraq, where important dermatological cases are normally handled.

The majority of patients with severe psoriasis would be grouped together, rather than enabling comparison, when a lower cut-off is used for the majority of studies. In order to assess the severity of the condition in the context of everyday functioning, including work-at-home or school-related conditions, relationships between friends and family members outside professional activities or hobbies, as well as side effects from treatment methods, a scale known as the Psoriasis Disability Index (PDI) was employed. The PDI comprises 15 questions that describe impairments caused by the condition's existence in daily life. Questions were presented about incidents that had transpired in the previous four weeks. The responses were scored on a scale of zero to three, where zero representing "never at all," 1 representing "a small," Two representing "a much," and three indicating "very much." It produced a possible score range of 0–45. This was demonstrated that when the score increased, the quality of life declined. A 15-item modified Psoriasis Life Stress Inventory (PLSI-15) was utilized to assess the stress experienced by persons with psoriasis on a daily basis.

Patients

A cross-sectional study was conducted in different hospitals in Iraq between 14 July 2022 and 24 August 2023. The study was limited to 90 consecutive patients with facial psoriasis of either sex, aged between 20 and 50 years, who had been suffering from the disease for at least five months immediately prior to the investigation. The patients were all in the acute phase of their facial psoriasis condition. None of the patients had received systemic therapy prior to examination.

Statistical Analysis

The variables were normally distributed in our minds, and the data was described with the aid of

mean (M), standard deviation (\pm SD), or percent (%). The analysis of the difference of means was approximately an independent t-test or one-way ANOVA test. The relationship between two continuous variables was tested using Pearson

correlation. Multiple regression linear analysis was used to investigate the effect of some independent variables on quality of life (dependent variable).

RESULTS

Table 1: Demographic and clinical characteristics outcomes of patients observed in this study.

Characteristics	Number of patients [90]	Percentage [%]
Age, years		
20 – 29	18	20%
30 – 39	27	30%
40 – 50	45	50%
Gender		
Male	54	60%
Female	36	40%
BMI, N (%)		
18.5–25	15	16.67%
25–30	32	35.56%
30–35	30	33.33%
35–40	9	10.00%
>40	4	4.44%
Duration of disease (months)	4.62 \pm 2.10	
Length of use of biologics (years)	5.30 \pm 1.36	
Comorbidities		
Yes	70	77.78%
No	20	22.22%
Hypertension	58	64.44%
Diabetes	38	42.22%
Asthma	23	25.56%
Heart failure	16	17.78%
Obesity	60	66.67%
Kidney diseases	35	38.89%
Anxiety and depression	72	80.0%
Smoking		
Yes	48	53.33%
No	42	46.67%
Family history of psoriasis, N (%)		
Yes	32	35.56%
No	58	64.44%
Marital status		
Single/Unmarried	13	14.44%
Married	67	74.44%
Divorced	7	7.78%
Widowed	3	3.33%
Education level		
No formal education	6	6.67%
Primary	7	7.78%
Secondary	9	10.00%
College	30	33.33%
University	38	42.22%
Occupational status		
Working	36	40.0%
Student	7	7.78%

Working stopped because of psoriasis	2	2.22%
Housewife	15	16.67%
Retired	27	30.0%
Unemployed	3	3.33%
Total monthly household income (RM)a		
< 400	32	35.56%
400 - 700	42	46.67%
> 700	16	17.78%

Table 2: Determining findings related to symptoms of facial psoriasis.

Symptoms	Number of patients [90]	Percentage [%]
Red patches of skin	26	28.89%
Dryness	14	15.56%
Itching	19	21.11%
Scaling	12	13.33%
Burning sensation	10	11.11%
Swollen and stiff joints	9	10.0%

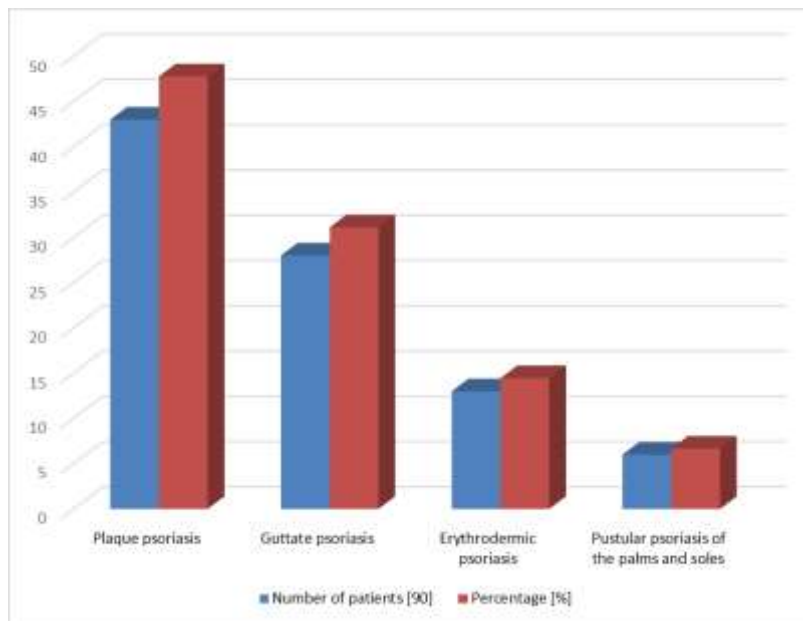


Figure 1: Identify clinical outcomes in the type of the disease

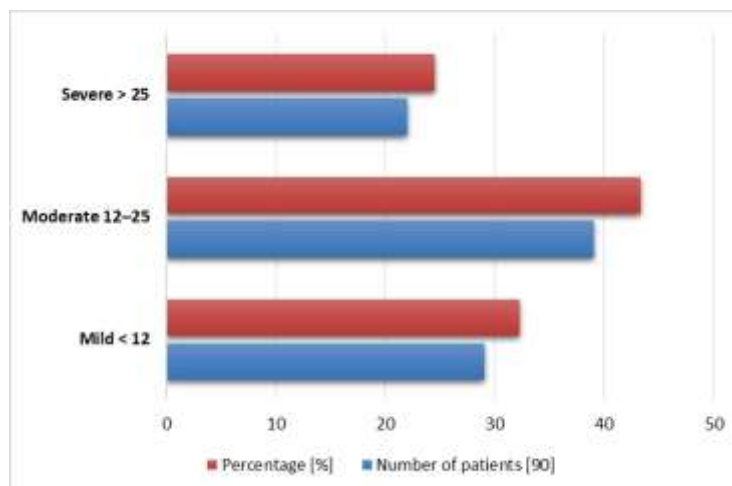


Figure 2: Distribution of patients into psoriasis area and severity index in terms of mild, moderate, and severe

Table 3: Clinical findings of quality–life indications.

Items	Mean	SD
Psoriasis area and severity index (PASI)	23.56	8.90
Psoriasis disability index (PDI)	23.36	10.24
Psoriasis Life Stress Inventory (PLSI)	19.70	10.46

Table 4: Identify clinical findings of psoriasis disability index.

QOL Items	Mean	SD
Daily activities	12.27	6.93
Employment	6.78	2.34
Personal relationships	4.56	2.43
Leisure	6.77	2.68
Treatment-related effects	2.65	1.12

Table 5: Enrolling all descriptive data associated with about HRQOL (DLQI), anxiety (GAD-7), and illness perception (BIPQ).

Items	Number of patients [N]	Percentage [%]
DLQI score		
No effect (0–1)	0	0.0%
Small effect (2–5)	40	44.44%
Moderate effect (6–10)	23	25.56%
Very large effect (11–20)	20	22.22%
Extremely large effect (21–30)	7	7.78%
GAD-7		
Negative anxiety screen (<4)	33	36.67%
Mild level of anxiety (5–9)	36	40.0%
Moderate level of anxiety (10–14)	16	17.78%
Severe level of anxiety (>15)	5	5.56%
Domain BIPQ		
Consequences score	8.36 ± 2.68	
Timeline score	9.73 ± 1.80	
Personal control score	5.20 ± 1.23	
Treatment control score	1.98 ± 1.20	
Identity score	8.54 ± 2.33	
Illness concern	7.95 ± 2.60	
Emotional representation score	6.80 ± 2.75	
Coherence score	2.88 ± 1.11	

Table 6: Determine the correlation between quality of life and clinical characteristics.

Items	DLQI
Age	- 0.126
Duration of the disease	- 0.067
Length of use of biologics	- 0.285
Symptoms	0.345
PASI	0.525
Comorbidities	0.478
GAD-7	0.339
BMI	0.340
anxiety (GAD-7)	- 0.120
Illness perception (PIBQ)	0.505

DISCUSSION

In terms of demographic and clinical features, the findings revealed that patients with facial psoriasis were distributed across three age groups: 30-39

years (27 cases), 40-50 years (45 cases), and 20-29 years (18 cases). The gender distribution was 60% male and 4% female. The distribution of BMI was as follows: 18.5–25 (15 cases), 25–30 (32 cases),

30–35 (30 cases), 35–40 (9 cases), and >40 (4 cases). The mean duration of disease was 4.62 ± 2.10 years, and the mean length of use of biologics was 5.30 ± 1.36 years. The mean duration of biologics use was 5.30 ± 1.36 years. The prevalence of comorbidities was 77.78%, with the most common diseases being hypertension (58 cases), anxiety and depression (72 cases), and obesity (60 cases). The prevalence of smoking was 53.33%, and the prevalence of a family history of psoriasis was 35.56%.

Furthermore, the clinical symptoms related to facial psoriasis, including red patches of skin (26 cases), itching (19 cases), and dryness (14 cases), were also evaluated. Additionally, the type of facial psoriasis was identified, with 43 cases of plaque psoriasis, 28 cases of guttate psoriasis, 13 cases of erythrodermic psoriasis, and six cases of pustular psoriasis of the palms and soles. Furthermore, the classification of the Psoriasis Area and Severity Index (PASI) revealed that 29 cases were classified as mild (PASI < 12), 39 cases as moderate (PASI 12–25), and 22 cases as severe (PASI > 25).

In the assessment of Quality of Life (QoL), the mean score for Daily Activities was 12.27 with a standard deviation (SD) of 6.93, while the mean score for Personal Relationships was 4.56 with an SD of 2.43. Furthermore, we were collecting all relevant descriptive data associated with HRQOL (DLQI), anxiety (GAD-7), and illness perception (BIPQ). The DLQI score was classified into the following categories: no effect (0–1), small effect (2–5), moderate effect (6–10), very large effect (11–20) and extremely large effect (21–30). The number of cases in each category was as follows: 2–5, 40; 6–10, 23; 11–20, 20; and 21–30, 7. In terms of the GAD-7 scale, the outcomes indicated that 33 cases exhibited a negative anxiety screen (GAD-7 score < 4), 36 cases exhibited a mild level of anxiety (GAD-7 score 5–9), 16 cases exhibited a moderate level of anxiety (GAD-7 score 10–14), and 5 cases exhibited a severe level of anxiety (GAD-7 score > 15).

There were some studies in which it was noted that individuals who had facial psoriasis had experienced increased levels of depression, anxiety as well as stress behaviors when contrasted against those who have psoriasis in any other part on their bodies, where facial psoriasis is prominent can bring about this negative identity among peers creating even more torment psychologically [Obradors, M. et al., 2016; Parisi, R. et al., 2013].

Additionally, the last studies agreed social interactions, work performance, and personal relationships may be for a particular individual's quality of life if he/she has a facial psoriasis condition, which it is further compounded by physical discomfort accompanied with itching which comes along with getting the disease [Petraškiene, R. et al., 2016; Puig, L. et al., 2017].

Recent study in the United States revealed an urgent requirement for an all-inclusive treatment focus targeted towards persons who have the ailment psoriasis in their face, addressing both its physical and mental manifestations, which are related thereto, where people who have psoriasis on their faces can benefit from psycho-social help, skincare therapy as well as how they should take care themselves [Reich, K. et al., 2008].

CONCLUSION

Facial psoriasis significantly affects an individual's emotional state and well-being, causing low confidence, shame, and social isolation. The visible red marks and rough patches can evoke a range of emotions that are challenging to conceal, including feelings of low confidence and shame. This can lead to social isolation and discrimination, even from close friends and family members, as those with the condition often attempt to conceal their symptoms by wearing long-sleeved shirts or trousers. Furthermore, the symptoms of facial psoriasis, including redness, scaling, and itching, can cause physical discomfort and hinder normal activities, sleep, and quality of life. The ongoing condition can leave one feeling frustrated and with no help.

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