

Factors Affecting The Quality Of Life Of Psoriasis Patients In The Dermatology Department - Thai Nguyen National Hospital

Dương Thi Thu Nga, Nguyen Thi Thu Hoài

¹International School – Thai Nguyen University, Viet Nam

²East Asia University Of Technology, Viet Nam

⁽¹⁾ Thai Nguyen University Of Medicine And Pharmacy – Thainguyn University

⁽²⁾Thainguyn National Hospital

Abstract:

With the objective is to assess some factors affecting the quality of life in psoriasis patients at the Dermatology Department of Thai Nguyen Central Hospital, the Author use the descriptive study, cross-sectional design on 40 psoriasis patients attending examination and treatment at Thai Nguyen Central Hospital from April 2023 to April 2024. Result is that: 100% of psoriasis patients were affected in terms of quality of life, with 70% being significantly or very significantly affected. The quality of life of severe psoriasis patients was most affected (DLQI 26.8 ± 1.92). The group of patients not using biologic drugs had a higher DLQI compared to the group using biologic drugs (16.34 ± 8.01 vs. 3.0 ± 1.22 with $p < 0.05$). Patients with psoriasis for over 10 years (DLQI: 9.42 ± 4.58) were less affected in terms of quality of life compared to those with less than 5 years (22.31 ± 8.08) and 5-10 years (12.27 ± 7.43) with $p < 0.0001$. There was no difference in quality of life between males and females, nor was there a correlation with the age group affected by the disease. The quality of life of psoriasis patients is related to the severity of the disease, duration of illness, and the medication being used.

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I. Introduction

Psoriasis is a chronic skin disease, often progressing unpredictably and significantly impacting quality of life. It affects individuals of all ages, both genders, across continents, comprising 1-3% of the world population depending on countries and ethnicities. From 1970 to 2000, the prevalence of psoriasis doubled. In Vietnam, psoriasis patients make up around 2.2% of total outpatient visits. While it poses little threat to life, its frequent relapses greatly affect aesthetics, psychology, and overall quality of life, imposing a significant healthcare burden on families and society.

While there have been numerous studies, both domestic and international, on the pathogenesis, medication usage, and other aspects of psoriasis, research evaluating factors influencing quality of life in psoriasis patients in the northern mountainous region, especially in Thai Nguyen province, remains limited. At the Dermatology Department of Thai Nguyen Central Hospital, hundreds of psoriasis patients seek examination and treatment annually, yet managing and improving the quality of life for these patients remains a challenge for healthcare professionals. The question arises: what is the quality of life like for psoriasis patients undergoing treatment at Thai Nguyen Central Hospital, and which factors influence their quality of life? Recognizing the importance of this issue, we conducted this study with the objective: **Factors affecting the quality of life in psoriasis patients at the Dermatology Department of Thai Nguyen Central Hospital.**

II. Research Methods

Research Subjects:

This study includes 40 patients diagnosed with common psoriasis undergoing outpatient or inpatient treatment at the Dermatology Department of Thai Nguyen Central Hospital.

Inclusion Criteria:

- All patients diagnosed with common psoriasis according to the diagnostic criteria of the Ministry of Health.
- Voluntary participation and consent to participate in the study.

Exclusion Criteria:

- Patients with mental illness, signs of severe heart, liver, kidney, or lung disease. Pregnant or breastfeeding women. Patients unwilling to participate in the study.

Research Location:

Dermatology Department - Thai Nguyen Central Hospital.

Research Period:

From April 2023 to April 2024.

Research Methodology:

Research Design:

Descriptive study, cross-sectional design.

Sample Size and Sampling Method:

- Sample Size: All patients meeting the study's inclusion criteria (40 patients).

- Sampling Method: Convenience sampling.

Assessment of Quality of Life:

Using the Dermatology Life Quality Index (DLQI) scale, which has been translated into Vietnamese and is currently used at the Central Dermatology Hospital.

Research Indicators:

- General information: Age, gender, occupation, duration of illness, medications currently used, disease severity (PASI).

- The impact on patients' quality of life is assessed using the Dermatology Life Quality Index (DLQI) scale with 10 questions. Each question has a score of 0, 1, 2, or 3, corresponding to no impact, little impact, moderate impact, and very much impact, respectively.

Data Processing:

Data entry and analysis will be performed using SPSS 25.0 software.

Research Ethics:

The study has been approved by the Ethics Committee of Thai Nguyen Central Hospital.

III. Results

General Characteristics of the Study Patients

Table 3.1: General Characteristics of the Study Patient Group

Characteristics	Quantity (n)	Rate (%)
Group of age (age)		
< 16	0	0
16-39	9	22.5
40-60	9	22.5
>60	22	55
Group of gender		
Male	28	70
Female	12	30
Duration of illness (years)		
<5	13	32.5
5-10	15	37.5
>10	12	30
Occupation		
Worker	7	17.5
Civil servant/Retired	16	40
Farmer	10	25
Students	0	0
Others	7	17.5
Degree of illness severity(PASI)		

Week (PASI < 10)	5	12.5
Average (PASI tür 10 - 20)	15	37.5
Heavy. (PASI ≥ 20)	20	50
Use of biologic drugs		
Yes	5	12.5
No	35	87.5

The impact of psoriasis on patients' quality of life

Table 3.2. Impact of psoriasis on the quality of life of typical patients (n=40)

Degree of impact	Quantity	Rate (%)
Very much	12	30
Much	16	40
Little	12	30
No effects	0	0

(Effects Very much DLQI 20-30 points, Effects Much DLQI 10-19 points, Effects Little DLQI 1-9 points, No effects DLQI = 0)

Comments: Psoriasis significantly affects the quality of life of patients. 100% of patients are affected in their quality of life. Of these, Much and Very much impacts account for 70%. The remaining 30% of patients are affected to a lesser extent in their quality of life.

The relationship between epidemiological and clinical factors with the impact on the quality of life of patients

The relationship between age and the impact on the quality of life of psoriasis patients

Table 3.3. Quality of life of psoriasis patients by age group

Age	DLQI	p
16-39	13,89±10,48	>0,05
40-60	18,56±9,37	
>60	13,41±7,58	

Comments: The DLQI scores of the age groups 16-39, 40-60, and >60 are 13.89±10.48, 18.56±9.37, and 13.41±7.58, respectively. The difference is not statistically significant with p>0.05.

The relationship between gender and the impact on the quality of life of psoriasis patients

Table 3.4. Quality of life of psoriasis patients by gender

Gender	DLQI	P
Male	14,29±8,45	>0.05
Female	15,58±9,64	

Comments: The DLQI scores of male and female patients are 14.29±8.45 and 15.58±9.64, respectively. The difference is not statistically significant with p>0.05.

The relationship between disease severity and the quality of life of patients

Table 3.5. Quality of life of psoriasis patients by disease severity

Degree of illness severity	DLQI	p
Week	10,07±7,42	<0,05
Average	15,10±7,68	
Heavy	26,80±1,92	

Comments: Psoriasis patients with severe disease severity have a significantly higher DLQI (26.80±1.92) compared to those with moderate and mild disease severity (DLQI being 15.10±7.68 and 10.07±7.42, respectively). The difference is statistically significant with p<0.05.

The relationship between duration of illness and quality of life

Table 3.6. Quality of life of psoriasis patients by duration of illness

Duration of illness	DLQI	p
< 5 years	22,31±8,08	<0,0001
5-10 years	12,27±7,43	
>10 years	9,42±4,58	

Comments: The DLQI score in the group with a duration of illness <5 years (22.31±8.08) is significantly higher than that in the group with a duration of illness 5-10 years (12.27±7.43) and >10 years (9.42±4.58). This difference is statistically significant with p<0.05.

The relationship between current medication usage and quality of life

Table 3.7: Quality of life of patients according to current medication usage

Use of biologic drugs	DLQI	p
No	16,34±8,01	< 0,05
Yes	3,0±1,22	

Comments: The DLQI score in the group of patients using biologic agents is 3.0±1.22, significantly lower than that in the group of patients not using biologic agents (16.34±8.01). This difference is statistically significant with p<0.05.

IV. Discussion

During the period from April 2022 to April 2023, 40 patients diagnosed with typical psoriasis participated in this study.

In our study, 100% of psoriasis patients were affected in their quality of life, with 70% of them being significantly or severely affected. These results indicate a heavy burden of psoriasis on patients' quality of life. Psoriasis is a chronic condition, characterized by recurring episodes and lasting throughout life. It is related to the immune system, and so far, there is no complete cure for it. The symptoms of psoriasis, such as itching, irritation, redness, pain, scaling, and thickening of the skin, cause discomfort, loss of confidence, fatigue, sleep disturbances, prolonged nervous tension, affecting health and work. They are also among the facilitating factors for exacerbating psoriasis[2]. Itching, pain, redness, extensive scaling, anxiety, and sleep disturbances are related to each other and form a vicious cycle of the disease, leading to a decreased quality of life, patient embarrassment, and self-consciousness. Our results are consistent with other studies in Vietnam and around the world. The rate of patients affected in their quality of life was 92% in the study by Nguyen Minh Dau at Can Tho Dermatology Hospital[3]. In the survey by the National Psoriasis Foundation in the United States, nearly 75% of patients rated psoriasis as moderately to severely affecting their quality of life[9].

The correlation between the quality of life of psoriasis patients and certain epidemiological factors can be observed from the results in Table 5, where the group of patients with severe disease severity had the most significantly affected quality of life, followed by the moderate disease severity group. Both of these groups had significantly higher DLQI scores compared to the group of patients with mild disease severity. Many authors have shown a correlation between improvement in PASI and improvement in DLQI[8]. This could be because patients in the active phase of severe disease may experience pessimism, anxiety, and a greater decrease in quality of life. This forms a cycle where the disease worsens due to psychological stressors triggering flare-ups. A reduction in PASI by at least 75% can significantly improve the quality of life of psoriasis patients. Therefore, effective treatment and disease control are crucial to improving the quality of life of patients with typical psoriasis.

In our study, patients with a shorter duration of illness (<5 years) had higher DLQI scores than those with a longer duration of illness. This may be because patients newly diagnosed with psoriasis tend to experience more anxiety, embarrassment, and self-consciousness than those who have had the disease for years, leading to greater impact on daily activities, learning, work, and social relationships.

In our study, the quality of life of patients using biologic agents was minimally affected compared to those not using biologic agents. Our results are similar to those of Nguyen Trong Hao and colleagues[5], which also showed that psoriasis patients treated with biologic drugs experienced significantly greater improvements in quality of life compared to those treated with other conventional methods. Patients using biologic agents were all responding very well to treatment, with clinical symptoms almost completely improved: no more itching or soreness, complete clearance of scales, thickening of the skin, or redness. This minimizes the impact of the disease on psychological well-being and daily activities, resulting in very minimal effect on quality of life.

In our study, there was no difference in the impact of quality of life among age and gender groups.

V. Conclusion

100% of psoriasis patients are affected in their quality of life, with 70% significantly or severely affected. The quality of life of psoriasis patients is greatly affected by disease severity, with more severe disease resulting in greater impact. The group of patients using biologic agents is minimally affected in their quality of life compared to those not using biologic agents. Patients with a longer duration of illness are less affected in

their quality of life compared to those newly diagnosed with the disease. There is no difference in the impact on quality of life between genders or age groups.

References

- [1] Ministry Of Health. (2015). Decision No. 75/Qđ-Byt Dated January 13, 2015, On The Issuance Of Guidelines For Diagnosis And Treatment Of Dermatological Diseases. Hanoi.
- [2] Dermatology Department, Hanoi Medical University. (2017). Psoriasis. In Dermatology Volume 1 (Pp. 103-113). Medical Publishing House.
- [3] Nguyen Minh Dau, & Huynh Van Ba. (2023). Study On Clinical Characteristics, Quality Of Life Of Plaque Psoriasis Patients At Can Tho Dermatology Hospital And Fob International Aesthetic Dermatology Research Institute In 2022-2023. Can Tho Medical Journal, 61(2023), 163-168.
- [4] Dang Van Em, & Tran Nguyen Anh Tu. (2020). Related Factors And Clinical Characteristics Of Patients With Common Psoriasis Attending The Examination At Ho Chi Minh City Dermatology Hospital. Clinical Medicine Journal 108, 15(5), 2020.
- [5] Nguyen Trong Hao, & Pham Thi Uyen Nhi. (2020). The Level Of Improvement In The Quality Of Life Of Psoriasis Patients Treated With Biologics Compared To Treatment With Conventional Methods At Ho Chi Minh City Dermatology Hospital. Clinical Medicine Journal 108, 15(2), 2020.
- [6] Vo Quang Dinh. (2010). Survey Of Favorable Factors, Clinical And Some Clinical Differences Between Early And Late Onset In Hospitalized Psoriasis Patients. Journal Of Practical Medicine, 1(696), 42-48.
- [7] Phan Huy Thuc, & Pham Van Thuc. (2011). Study Of Clinical Characteristics Of Psoriasis Treated At The Dermatology Department, Vietnam-Tep Hospital, Hai Phong. Journal Of Practical Medicine, 6(771), 56-58.
- [8] Pham Bich Ngoc, & Le Duc Minh. (2024). Impact Of Psoriasis On Patients' Quality Of Life. Vietnamese Medical Journal, 534(1b), 163-167.
- [9] Krueger, G., Koo, J., Lebwohl, M., Menter, A., Stern, R. S., & Rolstad, T. (2001). The Impact Of Psoriasis On Quality Of Life: Results Of A 1998 National Psoriasis Foundation Patient-Membership Survey. Archives Of Dermatology, 137(3), 280-284.
- [10] Affandi M. A., Et Al. (2018). "Epidemiology And Clinical Features Of Adult Patients With Psoriasis In Malaysia: 10-Year Review From The Malaysian Psoriasis Registry (2007-2016)", Dermatol Res Pract, 2018, P. 4371471.
- [11] Basavaraj K. H., Et Al. (2010). "The Role Of Drugs In The Induction And/Or Exacerbation Of Psoriasis", Int J Dermatol, 49(12), Pp. 1351-61.