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Original Article

Assessing quality of life and contributing factors in dermatological disorder patients

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Abstract

Background Dermatological disorders substantially impair physical, psychological, and social well-being.

Objective This study assessed QoL and its determinants among dermatology patients attending a tertiary care hospital in Faisalabad.

Methods An analytical cross-sectional study was conducted among 260 adults with chronic dermatological conditions. A structured questionnaire was utilized to obtain socio-demographic and clinical data. The Dermatology Life Quality Index (DLQI) indexed the quality of life in the patients. Bivariate analyses (*t*-test, ANOVA) were conducted to find out associations between variables and the DLQI scores. Variables with $p<.20$ were entered into multiple linear regression to determine independent predictors. A significance level of $p<.05$ was used.

Results The mean DLQI score was 11.9±6.7, indicating moderate to very large impairment. Overall, 59.3% of patients experienced a very large to extremely large QoL impact. Acne vulgaris (30%), eczema (16.5%), and psoriasis (16.2%) were the most frequent diagnoses. Bivariate analysis showed significant associations of DLQI with age, income, employment, disease duration, disease distribution, treatment duration, treatment type, comorbidities, and concomitant medication use. Regression analysis identified three independent predictors of better QoL (lower DLQI score): longer treatment duration (B=–0.55, $p=.004$), more extensive disease distribution (B=–1.39, $p=.017$), and longer disease duration (B=–0.58, $p=.002$).

Conclusion Dermatological disorders markedly impair QoL, particularly younger adults and those with recent or widespread disease. Early diagnosis, sustained treatment, and psychosocial support may improve outcomes. Localized interventions addressing cultural stigma and access to care are essential.

Keywords Dermatological; Disorder, Life; Patients; Quality.

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Introduction

Dermatological disorders are on the list of global public health issues of considerable magnitude, referring to chronic and acute skin diseases that have approximately one-third of the world's people suffering from them at a single moment.[1] Also, they include a huge variety of health problems, starting from acne and eczema and going all the way to chronic, inflammatory disorders such as psoriasis and vitiligo. In most cases these disorders do not endanger life, the main reason why the impact of skin diseases is so large is their visibility The skin connected to the person's inner perception, social interaction, and psychological well-being that it can cause the patient's quality of life (QoL) to get detrimentally lowered.[2] The idea of health-related QoL is a complex one that comprises physical,

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psychological, and social functioning. In dermatology, the negative consequences for these domains are widely acknowledged. Patients very often describe feelings of disgrace, being disabled, and experiencing anxiety regarding going out, which might eventually result in them withdrawing socially or getting isolated.[3] By way of illustration, diseases located in very visible places such as the face, for example, acne vulgaris or rosacea, not only make people sad but also raise the question of their acceptance in society and the way they see their bodies.[4] Likewise, chronic itching, which is one of the symptoms of atopic dermatitis (AD), disturbs sleeping habits, which in turn leads to tiredness, irritability, and poor performance during the day, thus affecting the person's well-being negatively.[5] The psychological aspect can be so pronounced that it actually turns into clinical anxiety and depression. Moreover, studies have shown that these patients are more likely than the general population to have psychiatric comorbidities.[6]

Skin conditions can limit the work ability of a patient, mainly in case the hands are involved, which is the reason why sick leave, changing jobs, or even permanent disability could result.[7] The unremitting treatment of a skin disease, along with the monetary cost of medication and the time spent on caring, is a burden that patients and their families face.[5] There are a couple of common skin disorders which illustrate this high QoL burden. The first one is acne vulgaris, and its outbreak coincides with a crucial period of physical, emotional, and social development. One of the major factors adding to the disability caused by the disease is the accompanying social difficulties and the lowered self-esteem.[4] Atopic dermatitis, causes the whole body to have inflammation and that can open the way for the penetration of pro-inflammatory cytokines through the blood-brain barrier, which might result in the activation of the neuronal groups that control the emotions to become dysfunctional.[5] Psoriasis, which is a chronic, recurring, immune-mediated disease, and still another of the main examples. The erythematous scaly plaques, along with the stigma and chronicity, are major factors that contribute to psoriasis development. The stigma and chronicity of the disease can lead to considerable psychosocial disability, impacting relationships, hobbies, and, ultimately, overall life satisfaction.[8]

QoL assessment in dermatological patients, even though it is widely recognized, is still a topic that needs further research especially in less affluent countries like Pakistan. The quality of life is determined by various factors and may vary from one society to another depending on their perception of disease, income, healthcare facilities, and education levels.[9] The findings from world-wide studies have been very useful; however, they should not be applied completely to the Pakistani community owing to different socio-culturally and healthcare settings. For instance, the research conducted in Jazan, Saudi Arabia, concluded that skin diseases had a great influence on the mood, self-esteem, and social ties of the population,[3] while the findings from Ethiopia reported that the use of traditional medicine was quite common among dermatology patients, which might be an influencing factor on the quality of life and treatment adherence.[10] A study from Saudi Arabia reported that urticaria, eczema, and psoriasis had the highest QoL impact rates, while acne vulgaris and vitiligo were associated with a minimal impact most of the time.[9] Although the impact of dermatological conditions on quality of life varies across populations and settings, this variability itself underscores the critical need for localized research. The study deliberately included patients with multiple dermatological conditions to create a sample which accurately represents the actual patient diversity found in tertiary care dermatology outpatient clinics. Dermatology Life Quality Index (DLQI) was used because it serves as a dermatology measurement instrument which assesses patient-perceived impact from various skin diseases, regardless of their underlying etiology. This approach allows for the identification of vulnerable patient subgroups within a single healthcare setting-information that is essential for targeted psychosocial interventions and equitable resource allocation. By assessing quality of life across the full

spectrum of presenting conditions, this study aims to generate actionable, real-world evidence that can inform patient-centered care and health policy in Faisalabad, Pakistan.

Methods

An analytical cross-sectional study was performed at the Dermatology Department of Aziz Fatimah Hospital, Faisalabad, during a period of seven months from May 2025 to November 2025. The research was designed to have a total of 260 subjects, a size determined by the use of a single population proportion formula. The computation was based on an assumed 78.5% occurrence of poor quality of life (QoL) among dermatologic patients, with a 5% error margin (d) and a confidence level of 95% (Z_1-$\alpha/_2$=1.96), and a design effect of 1.[11] The study had adult patients (aged ≥18 years) with a chronic dermatological disease (e.g., psoriasis, eczema, etc.) diagnosed by a consulting dermatologist, and the disease lasting for a minimum of three months. The participants were to give their informed consent.

Data were obtained through a self-administered questionnaire, also translated into Urdu, in order to guarantee understanding by the participants. The questionnaire was organized in three parts. The first part gathered socio-demographic characteristics like age, sex, place of living, education level, and working status. The second part provided clinical profiles with the dermatological diagnosis, length of the disease, and a history of systemic or topical treatment. The third part consisted of the Dermatology Life Quality Index (DLQI) measure.[12] The DLQI is a questionnaire of 10 items covering symptoms, daily activities, leisure, work/school, personal relationships, and treatment burden, with a total score of 0 to 30; hence, a high score means low QoL. Data collection was done using paper questionnaires and confidentiality was stringently preserved.

Data were analyzed using IBM SPSS version 25. Demographic and clinical variables were summarized by descriptive statistics (means, standard deviations, frequencies, and percentages). Independent samples t-test or Analysis of Variance (ANOVA) was applied in order to find differences in mean DLQI scores across categorical groups (e.g., gender, disease type). To determine the main factors that contributed to the quality of life being rated low, a multivariate linear regression analysis was done with the variables that had a p<0.2 from the univariate analysis. A p-value of less than 0.05 was taken as the cutoff for statistical significance in all statistical tests.

Result

The socio-demographic profile of the 260 participants is detailed in **Table 1**. The majority of the cohort was young, with 70% of the participants being in the age group of 18-30 years. There was a small excess of females (53.5%). A majority of the participants were highly educated, with 69.6% having a graduation degree or higher. Almost half (40.0%) of the participants reported their monthly family income being less than PKR 50,000. The largest categories in terms of occupation were

Table 1 Socio-demographic characteristics of the study participants (n=260).

Characteristic/ Category	*Frequency (n)*	*Percentage (%)*
Age Group (years)		
18 – 30	182	70.0
31 – 40	53	20.4
≥ 41	25	9.6
Gender		
Male	121	46.5
Female	139	53.5
Education Status		
Secondary & below	4	1.5
Higher secondary	75	28.8
Graduation & above	181	69.6
Monthly Income (PKR)		
< 50,000	104	40.0
51,000 – 100,000	53	20.4
100,001 – 150,000	64	24.6
150,001 – 200,000	26	10.0
> 200,000	13	5.0
Occupation Status		
Employed	123	47.3
Self-employed	23	8.8
Unemployed	84	32.3
Homemaker	30	11.5

Table 2 Clinical and dermatological characteristics of the study participants (N=260).

Characteristic/ Category	*Frequency (n)*	*Percentage (%)*
Primary Diagnosis		
Acne Vulgaris	78	30.0
Eczema	43	16.5
Psoriasis	42	16.2
Hyperpigmentation	23	8.8
Urticaria	21	8.1
Skin Infections	20	7.7
Seborrheic Dermatitis	17	6.5
Hair Disorders	16	6.2
Disease Distribution		
Localized	136	52.3
Generalized	64	24.6
Both Localized & Generalized	60	23.1
Disease Duration		
< 3 months	98	37.7
3 - 6 months	54	20.8
6 months - 1 year	19	7.3
1 - 2 years	21	8.1
2 - 5 years	12	4.6
> 5 years	15	5.8
Unknown	41	15.8
Current Treatment		
Multiple Therapies	113	43.5
Topical Only	64	24.6
No Treatment	39	15.0
Other	25	9.6
Systemic Only	15	5.8
Phototherapy Only	4	1.5
Treatment Duration		
< 3 months	112	43.1
3 - 6 months	46	17.7
No Ongoing Treatment	50	19.2
6 months - 1 year	14	5.4
1 - 2 years	14	5.4
Unknown	13	5.0
2 - 5 years	8	3.1
> 5 years	3	1.2
On other Medication		
No	159	61.2
Yes	101	38.8
Presence of Chronic Disease		
No	182	70.0
Yes	78	30.0

employed people (47.3%) and students (32.3%).

Clinical and dermatological features of the participants are presented in **Table 2**. The most frequent diagnosis was acne vulgaris (30.0%), followed by eczema (16.5%) and psoriasis (16.2%). The disease was mostly localized (52.3%), and in a substantial number of patients (37.7%), the duration was less than three months. The predominant treatment option was a mix of several therapies (43.5%), while 15.0% of patients were not receiving any treatment during the study. It was revealed that 38.8% of participants were using other medications, and 30.% had at least one other chronic health issue.

Table 3 shows the distribution of Dermatology Life Quality Index (DLQI) scores. The average DLQI score across all participants was 11.9 (±6.7), and the median was 13.0 (IQR: 7.0-18.0), which means that the quality of life was significantly impaired. The categorized data showed a very high burden of disease: 59.3% of the respondents experienced a 'very large' or 'extremely large' effect on their life. This result emphasizes that dermatological problems greatly affect the mental health of patients in this group.

Table 4 presents the findings from the bivariate analysis. The DLQI scores were significantly affected by the multiple factors. The strongest associations were found between clinical and treatment-related variables, which included the duration of treatment ($F=15.484$, $p<0.001$), distribution of the disease ($F=35.861$, $p<0.001$), and the duration of illness ($F=12.314$, $p<0.001$).

The patients receiving no treatment at the moment had the lowest average DLQI score (4.8±4.7) which means the highest quality of life. On the contrary, it was the patients undergoing recent diagnostic or treatment procedures that had the highest scores.

Table 3 Description of Dermatology Life Quality Index (DLQI) scores among participants (n=260).

DLQI Measure	*Value*
DLQI Score (Continuous)	
Mean±Standard Deviation	11.9±6.7
Median (Interquartile Range)	13.0 (7.0-18.0)
Range (Minimum - Maximum)	0 - 28
DLQI (Categorical)	n (%age)
No effect at all on patient's life (0-1)	24 (9.2%)
Small effect (2-5)	31 (11.9%)
Moderate effect (6-10)	51 (19.6%)
Very large effect (11-20)	139 (53.5%)
Extremely large effect (21-30)	15 (5.8%)
Total	260 (100%)

Table 4 Factors associated with Dermatology Life Quality Index (DLQI) scores in bivariate analysis (n=260).

Category	*n*	*Mean DLQI ± SD*	*Test Statistic*	*p-value*
Treatment duration			F=15.484	<0.001
No ongoing treatment	50	4.8 ± 4.7		
> 5 years	3	14.3 ± 8.5		
1 - 2 years	14	11.6 ± 7.6		
6 months - 1 year	14	13.4 ± 7.1		
3 - 6 months	46	14.2 ± 5.2		
< 3 months	112	14.2 ± 5.7		
Disease distribution			F=35.861	<0.001
Both localized & generalized	60	6.2 ± 5.9		
Localized	64	13.1 ± 6.1		
Generalized	136	13.9 ± 5.9		
Disease duration			F=12.314	<0.001
Unknown	41	5.6 ± 5.0		
> 5 years	15	8.7 ± 5.6		
2 - 5 years	12	8.4 ± 6.5		
1 - 2 years	21	12.5 ± 7.2		
6 months - 1 year	19	14.2 ± 6.3		
3 - 6 months	54	13.5 ± 4.3		
< 3 months	98	14.1 ± 6.7		
Age group			F=19.328	<0.001
18 – 30	182	10.4 ± 6.9		
≥ 41	25	14.4 ± 4.6		
31 – 40	53	16.1 ± 4.2		
Occupation status			F=8.445	<0.001
Unemployed	84	9.1 ± 6.8		
Self-employed	23	11.9 ± 6.5		
Homemaker	30	13.3 ± 5.3		
Employed	123	13.5 ± 6.4		
Monthly income (Pk.Rs.)			F=7.922	<0.001
51,000 – 100,000	53	9.8 ± 7.1		
< 50,000	104	10.6 ± 6.3		
> 200,000	13	11.5 ± 7.4		
150,001 – 200,000	26	12.5 ± 5.3		
100,001 – 150,000	64	15.6 ± 6.1		
Treatment form			F=22.234	<0.001
No Treatment	39	5.2 ± 5.9		
Other	25	9.4 ± 8.0		
Topical Only	64	11.2 ± 5.1		
Systemic Only	15	14.1 ± 4.9		
Multiple Therapies	113	14.7 ± 5.7		
Phototherapy Only	4	16.3 ± 6.9		
Presence of chronic disease			t=1.974	0.049
No	182	11.4 ± 7.1		
Yes	78	13.2 ± 5.5		
On other medication			t=4.649	<0.001
No	159	10.4 ± 7.0		
Yes	101	14.3 ± 5.3		
Education status			F=2.028	0.134
Higher secondary	75	10.6 ± 6.8		
Graduation& above	181	12.4 ± 6.6		
Secondary & below	4	12.8 ± 8.8		
Gender			t=1.454	0.147
Female	139	11.3 ± 6.5		
Male	121	12.6 ± 6.9		

Besides, age (31-40 years), income, and employment status were also the key socio-demographic factors significantly associated with the quality of life that was rated as poor. These variables along with others that were associated at the $p<0.2$ level were selected as candidates for inclusion in the multiple linear regression model.

A multiple linear regression analysis was applied to detect the independent determinants of the DLQI scores including all variable with a bivariate relationship of $p<0.2$. The model was found to be statistically significant and accounted for 34.5% of the variance in DLQI scores (Adjusted $R^2=0.345$, $p<0.001$). In **Table 5**, it is clearly indicated that three factors were responsible for the complete independence of a lower DLQI score, implying a greater quality of life: longer treatment period (B=-0.55, 95% CI [-0.91,-0.18], $p=.004$), more extensive disease distribution (B=-1.39, 95% CI [-2.53, -0.25], $p=.017$), and longer disease duration (B=-0.58, 95% CI [-0.95, -0.21], $p=.002$).

Discussion

The current research focused on determining the quality of life (QoL) of patients with skin diseases and the factors that affect it, who were attending a hospital in Faisalabad province that provides the highest level of care. With a mean DLQI score of 11.9±6.7, the study suggested a moderate to very large impact on quality of life, which corroborates the reports from all over the world that dermatological diseases severely affect the daily routine, mood, and social contacts of the suffering individuals. Studies conducted in those countries shown the same extent of skin-related psychosocial discomfort, thus establishing the international nature and magnitude of this problem.[13-16]

Table 5 Independent determinants of Dermatology Life Quality Index (DLQI) scores: multiple linear regression analysis (n=260)

Predictor Variable	*Unstandardized Coefficient (B)*	*95% Confidence Interval*	*p-value*
(Constant)	22.33	17.00-27.65	<0.001
Treatment duration	-0.55	-0.91-0.18	0.004
Disease Distribution	-1.39	-2.53-0.25	0.017
Disease duration	-0.58	-0.95-0.21	0.002
Occupation status	-0.65	-1.32-0.02	0.058
On other medication	-1.53	-3.21-0.16	0.075
Treatment form	-0.36	-0.86-0.15	0.170
Age	0.52	-0.82-1.85	0.446
Income	0.18	-0.48-0.83	0.595
Chronic disease	-0.32	-1.91-1.26	0.688
Gender (female)	0.01	-1.43-1.45	0.993

Model Fit: $R^2 = 0.370$, Adjusted $R^2 = 0.345$

The study has revealed a very interesting finding where 59.3% of the patients indicated that the impact of their skin disease on their quality of life was “very large” or “extremely large.” This figure is quite a bit higher than what has been documented in richer countries, where the provision of specialist services and early diagnosis might lessen the adverse effect on the quality of life. For instance, a vast 2023 contemporaneous multicenter study in China stated that merely 38% of the dermatology patients were placed in these severe categories.[14] By and large cultural stigma, delayed help seeking behavior, fear of negative social evaluation, and the limited knowledge of skin diseases in South Asia might also be contributing factors leading to the reported differences in prevalence rates.

In this study, the most commonly diagnosed skin condition was acne vulgaris (30%), followed by eczema and psoriasis, among others. The high share of acne is consistent with the observations of various Asian studies, which identify acne as the main skin issue anytime, especially among the youth.[13,17] However, the QoL impact of acne in this present study was surprisingly high, unlike the situation in Europe and the Middle East where acne usually leads to a slight to moderate impairment of quality of life.[15,18] Some causes of the higher disruption could be: (1) the young age of the participants in which case, looks are very much a matter of concern; (2) the great cultural importance of faces in marriage negotiations; (3) the general public having a lower threshold for skin changes; and (4) social media being one of the major factors influencing the self-image of Pakistani youth. Several factors with a strong relationship to QoL were determined in our study. The period of treatment, the location of disease, and the time of disease were the most powerful independent predictors in the multivariate model. It is worth noting that patients on long-term treatment reported significantly lower DLQI scores (indicating better QoL), possibly due to reasons like control over symptoms, response to medications, psychological adaptations to the disease, or better engagement with healthcare resources. The same scenario was observed in its entirety in recent psoriasis and eczema groups where the longer the exposure to treatment the stronger the prediction of the unfolding of good QoL outcomes.[19,21]

Patients with generalized or mixed localized and generalized disease suffered significantly worse in terms of QoL, thus confirming the vital involvement of disease area in the determination of physical and psychosocial drawbacks. This is supported by a series of research studies on vitiligo, psoriasis, chronic urticaria, and fungal infections, where visibility of lesions, area of the body involved, and duration of the disease were strong factors in the prediction of low QoL scores.[14,17,20,22] One important observation was that the patients who were not receiving any treatment at all showed the best QoL ratings, which at first may look like a contradiction. The most likely reasons are: (a) the untreated group has a mild or self-limiting disease; (b) recovery is perceived, and consequently, one stops treatment; (c) there is a mistake in diagnosis, or the cases are not severe; and (d) there is acceptance or adaptation of the psychological state. The same trend was reported in a Malaysian cross-sectional study where patients with mild skin diseases showed no impairment in QoL irrespective of their treatment status.[15] Socio-demographic variables such as age, income, and occupation were found to have significant impacts in bivariate analysis. The participants aged 31–40 yrs had the highest DLQI scores which might be due to

the fact that this is a peak period for productivity and social responsibilities, where looks and functionality have great economic implications. Such findings were seen in recent studies conducted in the Middle East and Asia linking workers of a certain age to a greater dermatological disability.[13,20] Lower income was a factor that negatively impacted QoL, which was in connection with the affordability of healthcare, the continuity of treatment, and the chronicity of diseases. The employment status of the participants was another significant factor contributing to the dissimilarity in QoL, mostly between the group of homemakers and those employed, which is in line with research showing that visible skin disorders affect work productivity, socializing and even marital relations.[17,21]

Diverse factors like cultural differences, health-seeking habits, and the socioeconomic environment, including healthcare access and the distribution of disease severity, are some of the reasons why there are some differences between the present study and previously published data. For instance, in Ethiopia, lower DLQI scores for acne patients were reported in studies than our findings, which might result from different beauty standards and less social pressure when compared to South Asian societies.[22] Similarly, the impact on QoL in European studies is not as pronounced due to the presence of structured dermatology services, early intervention, and availability of psychological counseling.[18,21] In a nutshell, the results bring to the fore the fact that QoL impairment by dermatological conditions is a result of not just the disease but also by the surrounding factors such as cultural) environment, stigma, healthcare infrastructure, socioeconomic standing, and treatment accessibility. These are crucial for clinicians at the time of establishing patient-centered interventions and are also important for policymakers when planning community dermatology programs.

Limitation of study First, its cross-sectional design restricts causal inference between predictors and QoL outcomes. Besides, the research took place in just one hospital of tertiary care, and thus, the results cannot be applied to the whole Pakistani community. Moreover, the severity of the disease was not evaluated by way of an objective scale and this can lead to varying interpretations of QoL. Furthermore, participants' responses on self-reported questionnaires may be influenced by their memories or the need to be socially accepted. Lastly, the sample consisted of a significant number of young and well-educated participants who might not be able to reflect the entire community of dermatology patients in less educated areas.

Conclusion

Dermatological disorders cause an appreciable deterioration of the Quality of Life. The longer duration of both the disease and its treatment, is related to a better QoL. This paradoxical association highlights that long-term disease management can lead to the development of adaptive behaviors that help to reduce the burden of the disease; as such, routine assessment of the QoL and targeted psychological interventions (especially for newly diagnosed patients) should be integrated into standard care to improve clinical outcomes.

Ethical approval Vide letter No.IEC/381-25, dated 30.04.2025 from Institutional Ethical Committee of Aziz Fatimah Medical and Dental College, Faisalabad.

Declaration of patient consent Authors certify that they have obtained all appropriate patient consent.

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Conflict of interest No conflict of interest.

Author's contribution

MUD: Have made substantial contributions to study design, acquisition, analysis and interpretation of data. Manuscript writing and critical review of the manuscript.

MMA,MUH: Have made substantial contributions to acquisition of data, study design. Critical review of the manuscript.

MD,MMJ,MAT,MA: Have made substantial contribution to analysis and interpretation of data, critical review of the manuscript.

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References

1. Mahfouz MS, Alqassim AY, Hakami FA, Alhazmi AK, Ashiri AM, Hakami AM, et al. Common skin diseases and their psychosocial impact among Jazan population, Saudi Arabia: A cross-sectional survey during 2023. *Medicina (Kaunas).* 2023;**59(10)**:1753. https://doi.org/10.3390/medicina59101753
2. Boonchai W, Charoenpipatsin N, Winayanuwattikun W, Phaitoonwattanakij S, Sukakul T, Chaowalitpong C, et al. Assessment of the quality of life (QoL) of patients with dermatitis and the impact of patch testing on QoL: a study of 519 patients diagnosed with dermatitis. *Contact Dermatitis.* 2020;**83(3)**:182-188. https://doi.org/10.1111/cod.13535
3. AlOtaibi HM, AlFurayh NA, AlNooh BM, Aljomah NA, Alqahtani SM, Alqahtani AM, et al. Quality of life assessment among patients suffering from different dermatological diseases. *Saudi Med J.* 2021;**42(11)**:1195-1200. https://doi.org/10.15537/smj.2021.42.11.20210560
4. Naveed S, Masood S, Rahman A, Awan S, Tabassum S. Impact of acne on quality of life in young Pakistani adults and its relationship with severity: A multicenter study. *Pak J Med Sci*. 2021;**37(3)**:727-732. https://doi.org/10.12669/pjms.37.3.2819
5. Ferrucci SM, Tavecchio S, Angileri L. Factors associated with affective symptoms and quality of life in patients with atopic dermatitis. *Acta Derm Venereol*. 2021;**101(11)**:adv00582. https://doi.org/10.2340/00015555-3922
6. Baidya S, Dey P, Mohanty R. Assessment of quality of life in vitiligo patients attending a tertiary care hospital-A cross sectional study. *Ind Psychiatry J*. 2021;**30(1)**:62-66. https://doi.org/10.4103/ipj.ipj_16_20
7. Tewelde T, Abdu N, Weldemariam DG, Bereket N, Russom M, Eyasu H. Quality of life of dermatology outpatients and its associated factors in Halibet National Referral Hospital in Asmara, Eritrea. *Sci Rep*. 2024;**14**:16272. https://doi.org/10.1038/s41598-024-67224-1
8. Kumsa SM, Tadesse TA, Woldu MA. Management practice, quality of life and associated factors in psoriasis patients attending a dermatological center in Ethiopia. *PLoS One*. 2021;**16(11)**:e0260243. doi:10.1371/journal.pone.0260243
9. Belachew EA, Sendekie AK. Health-related quality of life and its determinants in patients with different dermatological disorders at the University of Gondar Comprehensive Specialized Hospital. *BMC Res Notes*. 2023;**16(1)**:191. https://doi.org/10.1186/s13104-023-06442-8
10. Kumar D, Das A, Bandyopadhyay D, Chowdhury SN, Das NK, Sharma P, et al. Dermatoses in the elderly: Clinico-demographic profile of patients attending a tertiary care centre. *Indian J Dermatol*. 2021;**66(1)**:74-80. https://doi.org/10.4103/ijd.IJD_245_20
11. Belachew EA, Chanie GS, Gizachew E, Sendekie AK. Health-related quality of life and its determinants among patients with psoriasis at a referral hospital in Northwest Ethiopia. *Front Med (Lausanne)*. 2023;**10**:1183685. https://doi.org/10.3389/fmed.2023.1183685
12. Basra MKA, Fenech R, Gatt RM, Salek MS, Finlay AY. The Dermatology Life Quality Index 1994-2007: a comprehensive review of validation data and clinical results. *Br J Dermatol*. 2008;**159(5)**:997-1035. https://doi.org/10.1111/j.1365-2133.2008.08832.x
13. Giri MK, Khanal P, Kunwar D. Quality of life among dermatological patients in a tertiary care center of Nepal. *J Nepal Health Res Counc*. 2023;**21(1)**:40–6. doi:10.33314/jnhrc.v21i1.4603
14. Chen X, He G, Zhou C, Li Y, Wang J, Zhang L, et al. Disease burden and quality of life in Chinese dermatology patients: A multicenter cross-sectional study. *Clin Cosmet Investig Dermatol.* 2023;**16**:2127-2135. https://doi.org/10.2147/CCID.S439419
15. Wong SM, Haque MA. Quality of life among patients with dermatological disorders in Malaysia: A cross-sectional study. *PLoS One*. 2022;**17(2)**:e0263806. doi:10.1371/journal.pone.0263806
16. Ozuguz P, Akdeniz N, Yürüktümen A, Kaya İ, Polat M, Özdemir S, et al. Quality of life and associated factors in Turkish dermatology patients. *Dermatol Ther*. 2021;**34(6)**:e15104. https://doi.org/10.1111/dth.15104
17. He Z, Zhu W, Chen S, Liu X, Wang Y, Zhang H, et al. Quality of life and psychological burden in Chinese acne patients: A nationwide survey. *BMC Dermatol.* 2021;**21(1)**:6. https://doi.org/10.1186/s12895-021-00150-y
18. Maatouk I, Bouazzi R, Fakhfakh R, Ben Salem A, Ben Abdallah M, Ben Aissa M, et al. Factors affecting quality of life in acne vulgaris patients in a European cohort. *J Eur Acad Dermatol Venereol.* 2021;**35(5)**:e351-e353. https://doi.org/10.1111/jdv.16918

19. De Oliveira MF, Rocha KB, Boczar M, Sousa L, Almeida P, Costa R, et al. Impact of treatment duration on quality of life in psoriasis patients. *An Bras Dermatol.* 2022;**97(4)**:429-436. https://doi.org/10.1016/j.abd.2021.08.010
20. Yildiz H, Colgecen E, Akyol M. Quality of life and its predictors in psoriasis patients: A recent Turkish analysis. Dermatol Pract Concept. 2023;**13(1)**:e2023013. doi:10.5826/dpc.1301a13
21. Tan X, Zhang Y, Zhang L. Determinants of QoL in chronic eczema patients: A multicenter Asian study. *Skin Health Dis*. 2023;**3(4)**:e206. doi:10.1002/ski2.206
22. Abate E, Tegegne K, Molla F. Quality of life and associated factors among Ethiopian acne patients. *Dermatol Res Pract*. 2021;**2021**:6695157. doi:10.1155/2021/6695157
23. Gül Ü, Kiliç A, Gür A. Effects of disease extent on QoL among vitiligo patients in the post-COVID era. *Dermatol Ther*. 2022;**35(11)**:e15874. doi:10.1111/dth.15874
24. Luo X, Li Q, Song Y, Wang J, Chen H, Zhang W, et al. Functional impairment and QoL predictors in urticaria patients in China. *Allergy Asthma Clin Immunol.* 2023;**19(1)**:49. https://doi.org/10.1186/s13223-023-00826-4.