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ASSESSING THE IMPACT OF CHRONIC DERMATOLOGICAL CONDITIONS ON QUALITY OF LIFE: A CROSS-SECTIONAL STUDY UTILIZING THE DERMATOLOGY LIFE QUALITY INDEX (DLQI)"

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Abstract

Objective This study aimed to use the dermatology life quality index (DLQI) to evaluate the effect of illness on the quality of life of dermatological patients.

Study design: A Cross-Sectional Study

Duration and Place of Study: From January 2022 to January 2023, cross-sectional research was conducted in the dermatology outpatient department of PIMS Hospital, Islamabad.

Methods Fifty adults in a row who had a dermatological condition that had persisted for more than six months were questioned and given the DLQI. DLQI is a self-administered, comprehensive questionnaire that is tailored to the field of dermatology and is used to assess the effect of skin disorders on patients' health-related quality of life. Symptoms, emotions, daily routines, athletic pursuits, job/school, personal connections, and therapy are the six areas covered over the last week. Patients whose native language was not English had the option of using the validated Urdu version of the instrument, as well as the original English form, in our research.

Results*:* There were twenty-one women and 29 men. 38+15 years was the mean age. Among our patients, 13 different dermatological conditions were identified. Melasma was diagnosed in 14% of cases, and chronic eczema in 31% of patients. The sickness lasted anywhere from four months to twenty years, with a typical length of 11.38+4.8 years. The DLQI score ranged from 0 to 16, with a mean of 10.01+3.08. The length of the sickness was substantially correlated with the score ($p = 0.0002$, student t test). The DLQI scores did not significantly vary between the sexes (p value 0.28, student t test).

Conclusion Regardless of a specific diagnosis, dermatological conditions significantly impair patients' quality of life, with the impact increasing with the duration of illness.

Keywords: Chronic Dermatological Conditions, Quality of Life, Life Quality Index (DLQI)"

Introduction

Skin conditions are often seen as unimportant, and patients' suffering and quality of life are negatively impacted.1. It has recently been shown that the effect of certain skin conditions on quality of life may be comparable to that of several systemic ailments, such as diabetes mellitus and chronic kidney disease.2. Dermatological diseases may cause modest to severe disabilities. Disturbances in employment, leisure activities, self-perception, prejudice, humiliation, and despondency might result from the skin condition.3, 4 According to assessments, the psychological and social effects of skin patients are greater than those of cardiac patients and comparable to those of hepatic and cancer patients.5. A few Pakistani research have evaluated the quality of life degradation caused by different skin conditions.6, 7, 8, This provides an understanding of how some illnesses affect patients' lives, but it does not provide a comprehensive evaluation of how long a condition has been present and how that affects each patient's quality of life. We need to evaluate the quality of life effect on every dermatological patient we meet in any busy dermatology outpatient clinic, as the underlying theory of quality of life impairment in dermatology patients is the visibility of skin condition, leading to psychological anguish. We designed and executed this research in our outpatient environment to investigate the premise that all chronic dermatological illnesses lower quality of life.

Methods

From January 2022 to January 2023, cross-sectional research was conducted in the dermatology outpatient department of PIMS Hospital Islamabad. The study received institutional review board approval. Prior to participating in the trial, every patient provided written, informed consent. The research included all patients, regardless of gender, who were older than 20 and had a dermatological problem that had persisted for more than six months. In order to measure the quality of life of dermatology patients, patients were obliged to fill out and complete the Dermatology Life Quality Index (DLQI) instrument. The 9 DLQI is a comprehensive, self-administered, dermatology-specific questionnaire that gauges how patients' health-related quality of life is affected by skin conditions. Over the previous week, it covers six domains: symptoms, emotions, regular daily activities, sports activities, work and school, personal connections, and therapy. The poorer the quality of life, the higher the score. The five response categories that make up the DLQI score are (1) "Very much," (2) "A lot," (3) "A little." (4): "Not at all" and (5): "Not relevant." The scores for options 1-3 are 3, 2, and 1, respectively. Options 4 and 5 get a score of zero. Higher scores indicate a stronger influence on quality of life. The overall score is determined by adding the answers to each question, yielding a number between 0 and 30. For patients in our trial, the instrument was administered in their preferred language—original English or validated Urdu. Paramedics helped those who were having trouble completing the questionnaire. The questionnaire was expanded to include demographic information such as age, sex, place of residence, marital status, level of education, and socioeconomic position. The findings were presented as mean ±SD. Forms that were incomplete were scored 0 out of 3 since it was presumed that the responder thought the questions were irrelevant to them if they were left unanswered on one or both of the questions. The questionnaire as a whole was discarded if more than two questions remained unanswered. The program SPSS 17.0 (SPSS Inc., Chicago, IL, US) was used to analyze the data. The report format for quantitative data was mean ± SD, whereas frequency and percentages were used for qualitative variables. The DLQI scores were examined for normalcy using the Kolmogorov-Smirnov test. The comparison of DLQI scores between the two groups was conducted using the Mann-Whitney U-test; the comparison of scores between multiple groups was conducted using the Kruskal-Wallis method; and the post hoc analysis was performed using the Mann-Whitney U-test with Bonferroni correction. $P<0.05$ was regarded as statistically significant for all analyses.

Results

Following an assessment, 50 patients in a row who met the requirements for inclusion were asked to complete the questionnaire. Up until 50 valid questions were completed, a new case was recorded for each failed questionnaire. There were twenty-one women and 29 men. 42+17 years was the mean age. Among our patients, 13 different dermatological conditions were identified. The most prevalent diagnosis, occurring in 31% of patients, was chronic eczema, which was followed by melasma in n = 5 (10%). The following diagnoses were given: asteatotic eczema n-2 (3%), hand eczema n-3 (5%), seborrheic dermatitis n-3 (6%), atopic dermatitis n-2 (4%), and chronic actinic dermatitis n-5 (10%). Table 1 provides a list of all the diagnoses. The mean length of the disease was 11.38+4.8 years, with variations ranging from 5 months to 28 years. The mean DLQI score, which ranged from 01 to 22, was 11.1+3.08. The length of the sickness was substantially correlated with the score (p = 0.0002, student t-test). Based on the student t-test, the DLQI scores did not significantly vary between the sexes (p-value 0.28).

Table 1: Distribution of Dermatological Diagnoses among Study Participants

Dermatological Diagnosis	**Frequency (n)**	**Percentage (%)**
Chronic Eczema	16	31
Melasma	5	10
Asteatotic Eczema	2	4
Hand Eczema	3	6
Seborrheic Dermatitis	3	6
Atopic Dermatitis	2	4
Chronic Actinic Dermatitis	5	10
Other	14	28
Total	**50**	**100**

Table 2: Mean Length of Dermatological Illness

Minimum Duration (Months)	**Maximum Duration (Years)**	**Mean Duration (Years)**	**Standard Deviation (Years)**
4	20	11.38	4.8

Table 3: Distribution of Dermatology Life Quality Index (DLQI) Scores

DLQI Score Range	**Mean DLQI Score**	**Standard Deviation**
0-16	10.01	3.08

Table 4: Correlation between Duration of Illness and DLQI Scores

Correlation Coefficient	**p-value**
0.0002	<0.05

Discussion

Nowadays, evaluating a patient's quality of life is crucial to understanding their illness and the changes that therapy has made to it. The questionnaire has to be designed with the patient's educational, social, cultural, and religious backgrounds in mind for the information to be accurate. Regretfully, Pakistan does not currently own any locally produced, high-quality devices for dermatology. Although they are far from ideal, translated versions of international QoL instruments are nonetheless rather good. We had a similar issue with the DLQI Urdu version with our patients since several of the questions, particularly those concerning personal matters, made the patients uncomfortable and the answers were fictitious. The remainder of the instrument was well-received by patients, and most of the responses seem to accurately represent the patients' current circumstances. Since 1994, DLQI has been the subject of substantial international study in several languages and in a wide range of skin

conditions.10 The majority of the studies were condition-specific. Our research has shown that the stigma associated with skin diseases results in a considerable reduction in the quality of life of patients, regardless of the severity of the illness or its accompanying consequences. This loss is directly proportionate to the length of the condition. In a comparison of vitiligo, alopecia areata, and psoriasis, Ghajarzadeh et al.11 reported no decline in quality of life with the length of the condition. Conversely, we have discovered a strong positive relationship between the length of the illness and the quality of life. According to our research, dermatology patients' quality of life is negatively impacted by skin diseases of all kinds in a way that is closely correlated with how long the conditions last. Rather than treating skin problems as a harmless rash that will go away, dermatological patients need to be treated with more compassion. We are unlikely to be able to help our patients with any pharmacopeia until we address their quality of life concerns.

Conclusion

Our study underscores the substantial impact of chronic dermatological conditions on patients' quality of life, as evidenced by the Dermatology Life Quality Index (DLQI) scores. Regardless of specific diagnoses, prolonged illness duration correlates significantly with heightened impairment in quality of life. Our findings emphasize the need for comprehensive assessment and management strategies for dermatological patients, considering the psychological and social ramifications of their conditions. By recognizing the profound burden these illnesses impose, healthcare professionals can strive to improve the holistic well-being of affected individuals, thereby enhancing their overall quality of life and promoting better patient outcomes.

References

1. Chowdary NK, Prabhu SS, Shenoi SD, Nayak SU. Quality of life in acne patients: A clinical and Dermatology Life Quality Index (DLQI) based cross-sectional study. Journal of Pakistan Association of Dermatologists. 2018; 28(4):415-9.
2. AlOtaibi HM, AlFurayh NA, AlNooh BM, Aljomah NA, Alqahtani SM. Quality of life assessment among patients suffering from different dermatological diseases. Saudi medical journal. 2021 Nov;42(11):1195.
3. Finlay AY. Skin disease disability: Measuring its magnitude. Keio J Med.1998; **47**:131-4. Finlay AY. Quality of life indices. Indian JDermatolVenereolLeprol.2004;**70**:143-8.
4. Dogar IA, Haider N, Naseem Setal. Comparison of quality of life among cardiac, hepatic, cancer, and dermatological patients. J Pak Med Assoc. 2012; **62**:232-5.
5. Asad F, Qadir A, Nadeem M. Quality of life in patients with acnevulgaris. J Coll Physicians SurgPak. 2002; **12**:654-6.
6. Aman S, Akbar TM, Hussain I etal. The effect of traconazole pulse therapy on quality of lifebin Pakistani patients of distolateral subungual onychomycosis. J Pak Assoc Dermatol. 2004; **14**:198-204.
7. Shaukat S, Aman S, Hussain I, Kazmi AH. The effect of oral doxycycline and topical5% benzoyl peroxide on quality of life in patients with mild to moderate acnevulgaris. J Pak Assoc Dermatol. 2013; **23**:173-9.
8. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI—a simple practical measure for routine clinical use). Clin Exp Dermatol.1994;**19**:210-6.
9. Lewis V, Finlay A. 10 Years experience ofthe Dermatology Life Quality Index (DLQI). J Investig Dermatol Symp Proc. 2004; **9**:169-80.
10. Ghajarzadeh M, Ghiasi M, Kheirkhah S. Associations between skin diseases and quality of life: A comparison of psoriasis, vitiligo, and alopeciareata. Act a MedicaIranica.2012;**50**:511-5.