

Original Research Article

Dermatological life quality index in psoriasis out patients: the changing trend

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ABSTRACT

Background: Psoriasis is a chronic inflammatory disease characterized by remissions and exacerbations, having great impact on social and psychological aspects. From mild plaque psoriasis to more severe pustular and erythrodermic forms with or without joint involvement, is known to have a negative impact on QOL (Quality of Life). Appropriate treatment will improve both disease outcome and QOL in patients. The objective of the study was to assess QOL in psoriasis patient of different age group, type, duration and severity of disease, and their response to this assessment.

Methods: A cross sectional study was done with pretested DLQI questionnaire on 101 psoriasis patients, in a government hospital. Interpretation of score and impact on QOL was done and graded as mild, moderate, considerable, severe and very severe.

Results: In our study, females outnumbered males with male female ratio of 1:1.5. The mean age 39.56±16.029 years. No significant association was noted between grade of affection and demographic variants. Most of them had moderate impact on QOL. QOL was worst affected in patients <5 years of disease duration. 85% of the patients felt happy & 15% felt neutral on being evaluated by this questionnaire.

Conclusions: It is suggested that DLQI is assessed in all new/patients with less than 5 years of disease. Appropriate systemic/photo therapy to be initiated even in mild disease if there is negative impact on the QOL. Assessment of QOL strengthens the doctor-patient rapport and improves better patient adherence to therapy and achieves faster and better control of the disease.

Keywords: Psoriasis, DLQI, Quality of life

INTRODUCTION

Psoriasis is a chronic immune mediated inflammatory skin disease manifesting clinically as erythematous scaly lesion predominantly in the extensor surface of body.¹ The chronic and recurring nature of this disease bring about a feeling of hopelessness in terms of cure.² Psoriasis affects both sexes equally, most commonly occurring between 15-25 years of age. According to National Psoriasis Foundation, it is believed that 75% of patients have moderate to large impact on their QOL.³

Psoriasis has great impact on patient's quality of life, affecting their daily and recreational activities. According to Kurd et al, depression, anxiety and suicidality have been found to be observed in patients with psoriasis.⁴ Psoriasis has profound impact on the QOL irrespective of the clinical severity, and it is believed that patients with severe disease are frustrated with the management of their disease and are unsatisfied with the therapeutic options available.⁵ With the advent of newer drugs, the QOL of patients with psoriasis is improving with proper and adequate treatment. Psychosocial impact of disease

may thus explain that the physician and patient assessment of disease severity does not always correlate.⁶ Rapp et al feel that, talking to patient's kith and kin, regarding non contagious nature of disease may decrease the negative impact and social discomfort.⁷

Psoriasis patients are socially perturbed because of their external appearance. There is no significant difference between adjusted score of multiple domains of QOL in psoriatic patients according to PASI levels.⁸ Work absenteeism is more commonly seen among psoriasis patients, which further leads to financial burden.^{9,10} Measure of body surface area affected by psoriasis is commonly used in clinical trials to assess the severity of disease, although there are other postulates which argue that, QOL standard would be a better method of determining severity of psoriasis.⁵ DLQI is the most commonly used scale to assess the quality of life, since it is more reliable and reproducible. It consists of 10 point questionnaire, covering symptoms and feeling (item 1 & 2), daily activities (item 3 & 4), leisure (item 5 & 6), work & school (item 7), personal relationship (item 8, 9) and treatment (item 10).¹¹

This study was aimed to assess QOL in psoriasis patient of different age group, type, duration and severity of disease, and patients' response to the assessment.

METHODS

We carried out a cross sectional study on 101 psoriasis patients attending our outpatient department after obtaining institutional ethical committee clearance.

Study was conducted in the Department of Dermatology, Government Stanley Medical College and Hospital, Chennai, for a period of 10 months from December 2017 to September 2018.

Patients with pustular, erythrodermic and arthropathic psoriasis were excluded. Patients were randomly selected. This study was carried out with structured DLQI questionnaire consisting of Ten Domains in local language, with a maximum score of 3 for each giving a maximum total score of 30.

The first part of questionnaire such as age, sex, marital status and education was filled by the Dermatologist, whereas the second part of the questionnaire with ten domains were filled by the patient. The ten domains included the following:

- Itching, soreness, pain or stinging
- Embarrassed or self-conscious
- Interfered daily routine shopping or looking after home
- Influenced the clothes needing change
- Affected social and leisure activities
- Difficulty in sporting/ games
- Prevented the work/study

- Had problems with parents/ partner or friends or relatives
- Difficulties in private life/ Caused difficulties in going to school or college
- Problems because of treatment of skin disease

Each domain has 4 alternatives 0,1,2,3 (0- not at all, 1- little, 2- lot, 3- very much) and the total score will sum up to be 30.

Interpretation of score & impact on QOL is done as 00-01= nil (Grade 1), 02-05= mild (Grade 2), 6-10= moderate (Grade 3), 11-15= considerable (Grade 4), 16-20= severe (Grade 5), 21-30= very severe (Grade 6).

Statistical analysis

Data collected was analyzed by SPSS version 23. For the multivariate analysis, one way ANOVA was used. To assess the relationship between the variables, Pearson's Correlation was used.

RESULTS

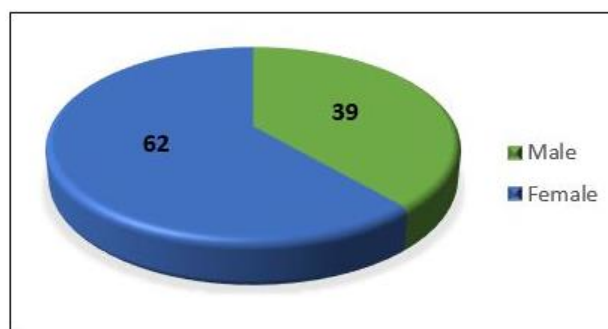


Figure 1: Sex distribution.

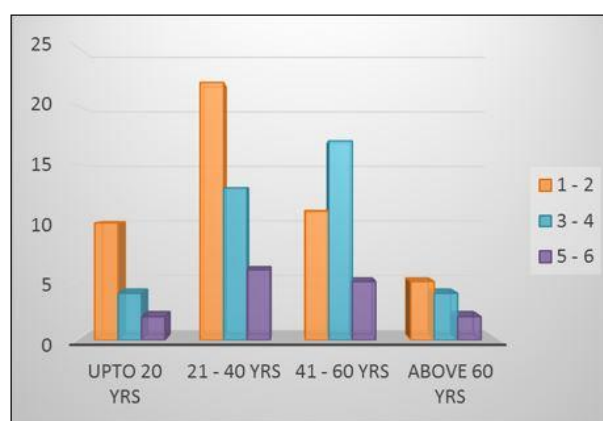


Figure 2: Grade of affection - age wise.

There were more females than males in our study, with 62 females and 39 males showing a M:F ratio of 1:1.5 (Figure 1). Mean age was 39.56±16.029 yrs. The youngest and oldest age recorded was 10 and 74 years respectively. We grouped psoriasis patients age wise into

the following categories, <20 yrs (n=16), 21-40 yrs (n=41), 41-60 yrs (n=33), >60 yrs (n=11). Comparison of age, sex, duration of disease with grade of affection was done. While comparing the grade of affection and age, most of the psoriasis patients came under the age group of 21-40 yrs. Moderate impact on QOL was seen in 40-60 yrs (Figure 2). Comparing the grade of affection and sex, females have significant variation than male, which may be due female predominance in our study (Figure 3).

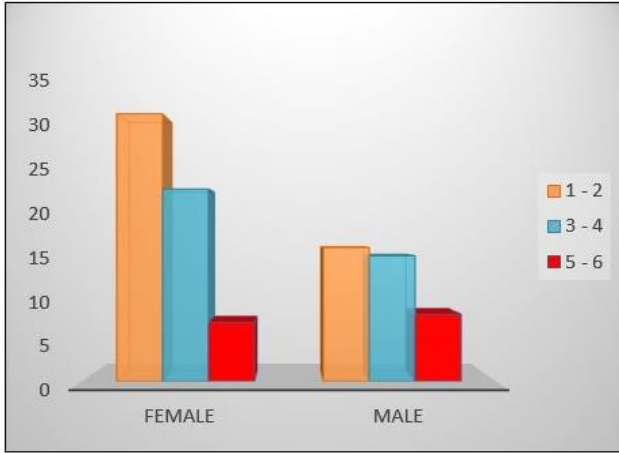


Figure 3: Grade of affection – sex wise.

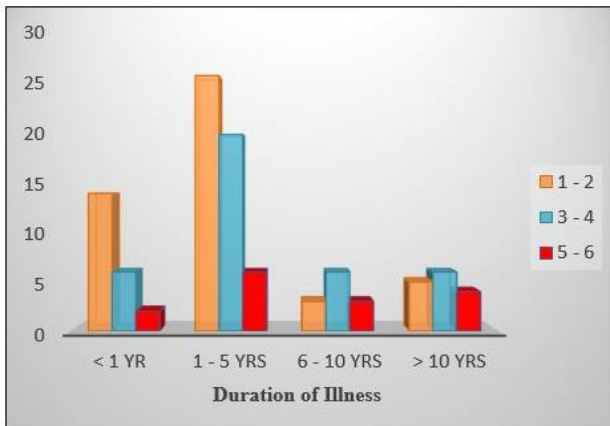


Figure 4: Grade of affection – duration wise.

Comparing the grade of affection with the duration of disease, 75% of patients in our study come under <5 yrs duration, 26% of patients with >5 years duration. Patient with <5 years duration have moderate to severe impact on QOL than other groups depicted in Figure 4.

In our questionnaire, we received the maximum response for pain, itching and burning sensation, followed by social embarrassment. The least response was received for, disturbance in sports activities. Response to different domains are depicted in Figure 5.

Most of the psoriasis patients in our study had moderate impact (score= 6-10) on QOL. 85% of the patients felt

happy and 15% felt neutral on being evaluated by this questionnaire (Figure 6).

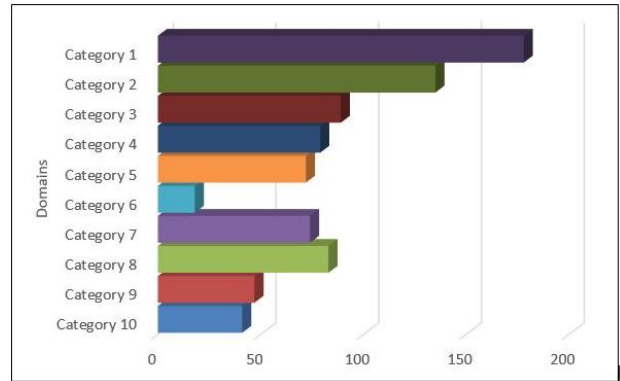


Figure 5: Response to different domains in questionnaire.

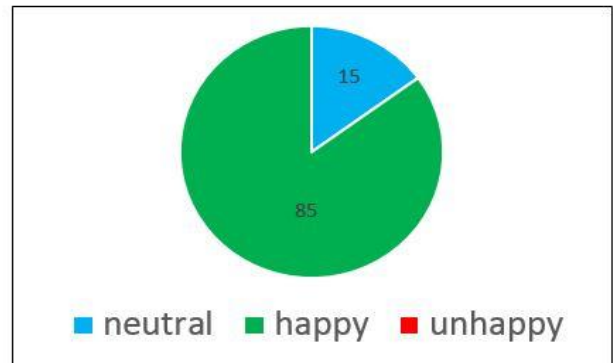


Figure 6: Patient response on being evaluated for quality of life.

DISCUSSION

Psoriasis is a chronic disabling disease affecting both genders in equal frequency & occurs at any age. In our study, females outnumbered males. Majority of psoriasis patients belonged to age group of 21-40 yrs, the most productive part of life that has been affected. Patient in the age group of 40-60 yrs have moderate impact on QOL, which may be due to associated comorbidities. Even though females outnumbered males in our study, we do not have gender influence on QOL statistically. Similarly in both genders, patient with <5 years duration had maximum impact, which signifies that, QOL assessment in this group will help in better management of these patients. DLQI score was low in chronic patients who were on regular treatment, while compared to those on irregular treatment which implies that, regular treatment improves both disease and QOL. It is preferable that every psoriasis patient, or at least those patients with 1-5 years of disease duration, should be assessed for QOL.

According to literature, 75% of psoriasis patients have negative impact on QOL.³ According to Soltandehghan,

Najafi-Ghezeljeh, QOL was affected with reference to variants like daily life activity, symptoms and emotions in that order of severity. Their study revealed that higher the psoriasis severity lower was the QOL.¹² According to Sampogna et al, QOL was more impaired in patients belonging to older age group. It was also observed that older women suffering from anxiety or depression had the greatest impairment of QOL.¹³

It is by and large accepted that counselling improves patient's mental and psychological condition.¹⁴ In a study conducted by Baro et al, highest DLQI Mean score - 15.21, was in younger (20-29 yrs) age group and lowest mean score of 2.6 in the older (60-19 yrs) age group.¹⁵

In our study, 85% of psoriasis patients had Negative impact on QOL as against 75% observed by National Psoriasis Foundation.³ We observed no statistical significance with the severity of disease on QOL. It was also noted that 85% were happy with answering the questionnaire. In our study, highest DLQI Mean score - 14.6 was noted in 20-40 yrs age group. Holistic approach with QOL assessment has helped us choose the appropriate therapy.

What is known: QOL is affected in psoriasis, irrespective of other demographic variants and disease severity and duration. Assessment of QOL will help improve patient management.

What this study adds: QOL was worst affected in <5 years duration, hence these patients should be carefully assessed for better compliance towards treatment and lifestyle modification.

85% of patients felt happy & satisfied on being evaluated upon this questionnaire signifying the importance of assessment of QOL in patients with Psoriasis.

CONCLUSION

There is no significant statistical correlation between QOL and age, gender and severity- [P >0.05] in psoriasis patients. Demographic variants do not have major effect on QOL. There is an increase in the prevalence of negative impact on life in psoriasis patients than before. The very diagnosis and presence of disease adversely impacts the QOL. However, those who had regular treatment showed a better QOL. In our study, 85% of patients with negative impact on QOL, felt happy & satisfied on being evaluated upon this questionnaire. This communication gave a sense of empathy and better understanding, that assured the patient of the physician's competence in managing psoriasis and hence better compliance.

Suggestions

Treatment must be aimed at removing negative thoughts about the disease and to improve their self-esteem. Even

in mild disease, QOL should be assessed to plan for better treatment outcome. Systemic therapy can be started even in mild disease if QOL is considerably affected. Costly drugs can be avoided or chosen according to the impact on QOL.

Active management of symptoms of both physical and mental health is important. Though impairment of QOL is not always associated with psychiatric comorbidities, it is worthwhile to screen those patients with greater impairment of QOL.

QOL should be assessed in all patients with psoriasis or at least in those having disease for less than five years. Assessment of QOL helps in strengthening the patient doctor rapport, better follow up, treatment adherence and outcome.

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Ethical approval: The study was approved by the institutional ethics committee

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