



ASSESSMENT OF QUALITY OF LIFE IN DERMATOLOGY OUTPATIENT DEPARTMENT AT TERTIARY CARE HOSPITAL

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ABSTRACT

Dermatology involves the study of diagnosis, treatment and prevention of skin disease. This illness may result in rashes, inflammation, itching, or other changes to the skin. The DLQI [Dermatology Life Quality Index] scale contains 10 questionnaires and is used to assess the quality of life of skin disease patients. **Objective:** To analyze health -related quality of life using the dermatology life quality index (DLQI) scale. **Materials and Methods:** A prospective observational study was carried out for a period of six months at the Dermatology outpatient department of Basaveshwara Medical College Hospital, Chitradurga. **Results:** A total of 206 patient’s data were collected and analysed demographic details and DLQI scale questionnaire. Skin diseases were most commonly seen in females 111(53.9%) as compared to males 95 (46.1%), age group between 16-24 (41.3%) years had a common occurrence. The study showed that patient quality of life is significantly improved in comparison with the first visit result and follow -up visit result based on the DLQI scale, with a mean value of First visit is 9.25 compare with follow up visit is 4.89 and P value of 0.001 it indicate highly significant improvement in patient quality of life. **Conclusion:** From study conclude that, Quality of life compared from 1st visit to follow up, important to identify patients who are more likely to have a lower QOL in order to treat them more comprehensively. Assessment of drug use by analyzing prescribing pattern will rise to awareness of skin disease and enhance quality of life.

KEYWORDS: Dermatology, Quality of life, Rational Drug Usage, Dermatology Life Quality Index.

1. INTRODUCTION

Dermatology is the study of the skin and its appendages.^[1] The skin is the largest organ, and it performs vital functions as the first line of defense against radiation, harmful pollutants, and microbial infections.^[2] The skin is directly exposed to the environment and can be affected either by altering intrinsic factors like metabolic, genetics, immunological or by extrinsic factors like the environment, chemicals, infectious agents.^[1] Primary and secondary cutaneous complaints are most common in India.^[3] The skin conditions can result in skin changes such as rashes, inflammation, itching or other symptoms.^[4]

Skin disease may affect quality of life by anxiety, depression, anger and embarrassment, that leads to social isolation and absenteeism at work and school.^[5] Skin disease is effect all the age groups of people and effected by their quality of life.^[6] Drug use studies are very important for understanding drug prescribing patterns, drug use, drug interactions and finical burden of the disease to the individual.^[7] Treatment is the most

important part in both curing the disease as well as preventing the spread of communicable disease.^[8]

Quality of life includes a goals, expectations, standards and concerns, Wealth, employment, environment, physical and mental health, education and social belonging are the standard indicators of QOL.^[9] Rational drug usage means patient may get the lowest possible dose of their prescribed medications, according to their particular needs^[10], safety, cost effective, proper indications, proper dosage and formulation of medication.^[11]

Measuring QOL in dermatology by using some methods like the dermatology quality life index, dermatology quality of life scales [DQOLS], dermatology specific quality of life [DSQL] etc.^[12] The DLQI is a quality of life questionnaire that was created especially for people with skin conditions. It can be used to assess the quality of life and compare it to same people with other cutaneous conditions.^[13]

The DLQI, consisting of 10 questions, is used to assess the impact of skin disease. It is intended for those who are 16 years of age and above. The questionnaire, consisting of 10 questions, was related to topics like symptoms, embarrassment shopping and home care, clothes, social and leisure activities, sport, work or study, close relationship, sex, and treatment.^[14]

By considering the above facts, the current study has focused on the assessment of quality of life in the dermatology outpatient department.

2. MATERIALS AND METHODS

A prospective observational study conducted in the dermatology outpatient department of Basaveshwara Medical College Hospital, Chitradurga from May-2022 to October-2022. A total of 206 patients from the dermatology outpatient department who satisfied study criteria and expressed consent about participating in this study were included in the study. The inclusion criteria include- Patients aging between 16-80 years, willing to sign inform consent. The exclusion criteria include- Outpatients of age above 80 years, Psychiatry patient. The study was done after approved by the institution ethical committee of Sri Jagadguru Mallikarjuna Murugarajendra College of Pharmacy, Chitradurga. Vide **Ref No:** SJMPC/626/2022-23.

After obtaining approval from the Institutional ethical committee (IEC). Patients who satisfied the above study criteria were included in the study after obtain consent. The Patient's demographic details, past medical history, and DLQI scale questionnaire were collected from the medical records of the dermatology outpatient department and documented in a suitable designed data collection form. Answers for the DLQI questionnaire were collected from the first and follow-up visit.

1. Over the last week, how **itchy, sore, painful** or **stinging** has your skin been?
2. Over the last week, how **embarrassed** or **self-conscious** have you been because of your skin?
3. Over the last week, how much has your skin interfered with you going **shopping** or looking after your **home** or **garden**?
4. Over the last week, how much has your skin influenced the **clothes** you wear?
5. Over the last week, how much has your skin affected any **social** or **leisure** activities?
6. Over the last week, how much has your skin made it difficult for you to do any **sport**?
7. Over the last week, has your skin prevented you from **working** or **studying**?
8. If "No", over the last week how much has your skin been a problem at **work** or **studying**?
9. Over the last week, how much has your skin created problems with your **partner** or any of your **close friends** or **relatives**?
10. Over the last week, how much has your skin caused any **sexual difficulties**?

11. Over the last week, how much of a problem has the **treatment** for your skin been, for example by making your home messy, or by taking up time?

DLQI is self-explanatory and simply handed to the patient who is asked to fill it in without the need for detailed explanation. The scoring of each question is as follows: Very much scored -3, A lot scored -2, A little scored -1, Not at all scored- 0, Not relevant scored- 0. Question 7, 'prevented work or studying' scored -3. The DLQI is calculated by summing the score of each question resulting in a maximum of 30 and a minimum of 0. The higher the score, the more quality of life is impaired.

The meaning of DLQI Score can be interpreted 0 – 1 means no effect at all on patient's life; 2 – 5 means small effect on patient's life; 6 – 10 means moderate effect on patient's life; 11 – 20 means very large effect on patient's life; 21 – 30 means extremely large effect on patient's life.

Source of data includes Medical records of outpatients and Patient / caretaker interview.

STATISTIC ANALYSIS

The obtained data was analysed by using SPSS28. Percentage, frequency, and Paired Student T test method were calculated in our study.

3. RESULTS

A Total of 206 prescription data were taken by a prospective observational study for duration of 6 months period. The study was conducted to analyzes the prescription pattern and assess the quality of life using the DLQI scale among 16-80 years old patients. The observed patient data was categorized based on.

- 3.1 Demographic include age, gender, education, occupation, past medical history, and past medication history.
- 3.2 DLQI scale questionnaires.

3.1 DEMOGRAPHIC DETAILS

1. AGE

206 prescriptions were collected; patients aged 16-26 (41.3%) had the most skin disease, followed by those aged 27-37 (41%), 38-48 (17%), and 49-59 (7.8%). The result has been represented graphically in figure No.1.

2. GENDER

Out of 206 patients, 111 were female (53.9%), followed by 95 being male (46.1%). The result has been represented graphically in figure No 2.

3. OCCUPATION

In the study population of 206 patients, 105(51%) were working followed by 101 (49%) were nonworking. The result has been represented graphically in figure No 3.

4. EDUCATION STATUS

In the education status of 206 patients, 82(39.8%) were up to PUC, 75 (36.4%) were degree holders and 49(23.8%) were illiterates. The result has been represented graphically in figure No 4.

5. PAST MEDICAL HISTORY

Among 206 patients, 126 (61.2%) had no past medical history followed by 80 (38.8%) with a history of past medication. The result has been represented graphically in figure No 5.

6. PAST MEDICATION HISTORY

Out of 206 patients, 115(55.8%) have no past medication history followed by 91 (44.2%) who have a past medication history. The result has been represented graphically in figure No 6.

7. DLQI SCORE

In DLQI scores out of 206 patients, the first visit mean value is 9.25 and the standard deviation is 6.662; the minimum score is 0 and the maximum score is 25. In the second visit or follow- up mean score is 4.89 and the

standard deviation are 5.616; the minimum score is 0 and the maximum score is 21. A paired student T-test was used for analysing the data. It shows a T value is 6.548 and a P value of 0.00. The results have been presented in table No.1 and graphically represented in figure No.7.

8. Paired Samples Test

According to the paired sample test, the results found were that the mean was 4.364, the standard deviation was 4.420, standard error mean was 0.666, the T- value was 6.548, and the P- value was 0.000.

TABLES

1. DLQI SCORE

Table No. 1: Distribution according to DLQI Score.

DLQI	First Visit	Follow up
Mean	9.25	4.89
St. Deviation	6.662	5.616
Minimum score	0	0
Maximum score	25	21
T-value	6.548	
P-value	0.001	

FIGURE

1. AGE

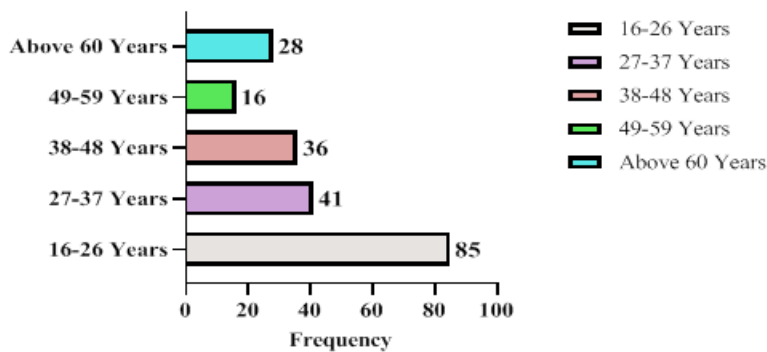
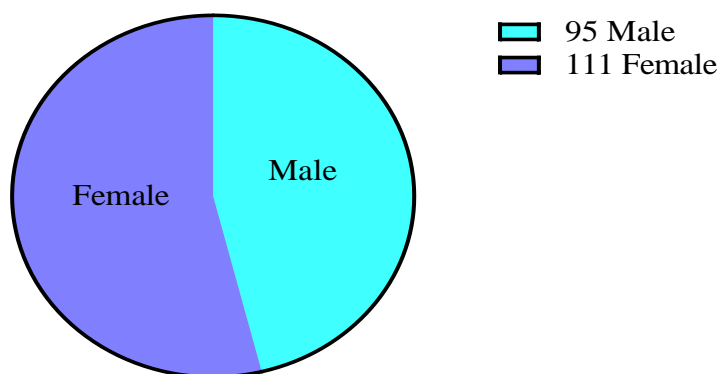


Figure No. 1: Distribution according to Age.

2. GENDER



Total=206

Figure No. 2: Distribution according to Gender.

3. OCCUPATION

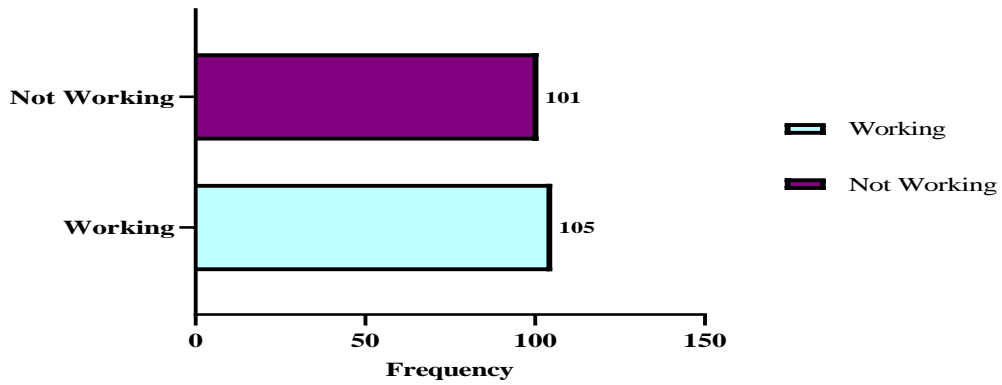


Figure No. 3: Distribution according to occupation.

4. EDUCATION

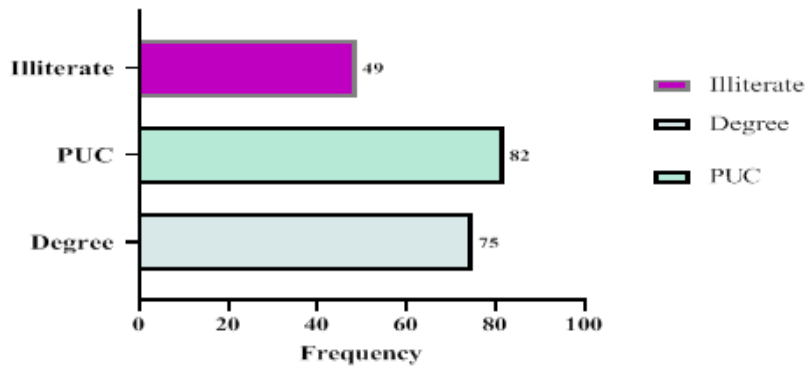


Figure No. 4: Distribution according to education status.

5. PAST MEDICATION HISTORY

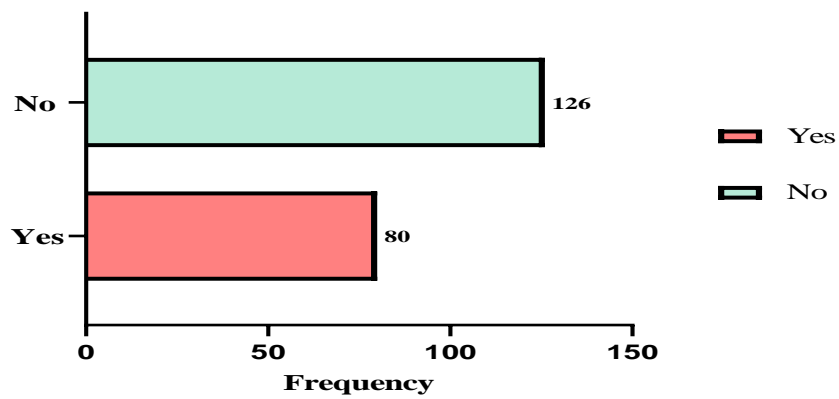


Figure No. 5: Distribution according to past medical history.

6. PAST MEDICATION HISTORY

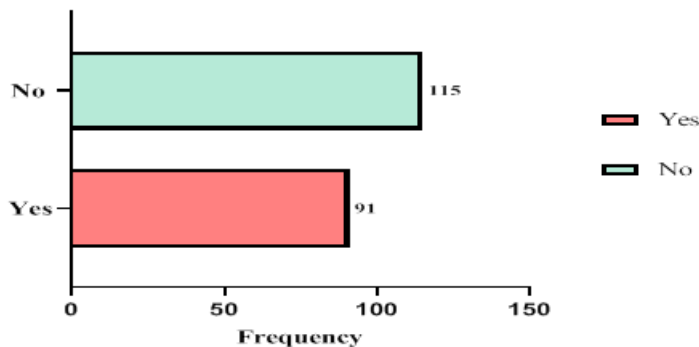


Figure No. 6: Distribution according to past medication history

7. DLQI SCALE

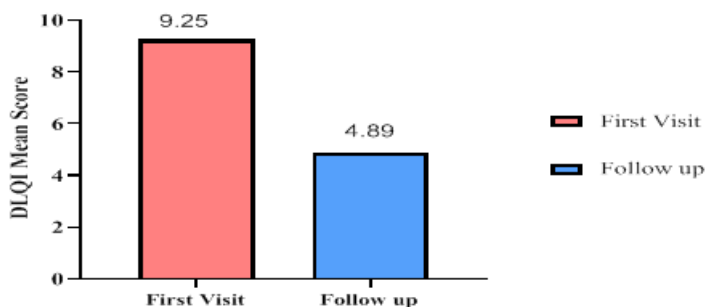


Figure No.7: Distribution according to DLQI Score.

DISCUSSION

A prospective observational study was carried out to assessment of quality of life in dermatology outpatients. A total of 206 subjects were enrolled during the study period. Total of 206 patients were included in this study. Patients aged 16-26 years (41.3%) were the most affected, followed by patients aged 27-37 (19.9%).

Out of 206 patients, female 111 (53.9%) are more affected compared to male 95(46.1%) as previously observed in various studies by **Bhandari S et al.**, where female 54.9% was slightly higher than male 45.1%². According to occupation 105 (51%) patients were working followed by 101 (49%) who were not working was observed.^[2]

Maximum skin diseases observed up to PUC are 82(39.8%); Degree 75(36.4%) and illiteracy was 49(23.8%). Our finding is similar to study conducted by **Sangeetha T et al.**, most common disease affected by illiterate patients was 93% followed by Degree 23.3%.^[5] In past medical history, 38.8% of patient’s had a past medical record, and 26% had no history of a past medical record. 55.8% patients have a past medication history, followed by 44.2% who have no past medication history.

According to this study, the mean DLQI Score of the first visit was 9.25 and the follow-up visit was 4.89. The standard deviation value at the first visit was 6.662 and at the follow-up visit were 5.616. The T-value was 6.548, and a significant P value was 0.001. It indicates highly

significant improvement in the patient’s quality of life as compared with the first visit followed by a follow-up visit, as measured by DLQI. A similar study conducted by **Sangeetha T et al.** shows a P value of< 0.01 improvement in the quality of life as measured by DLQI, respectively, at their initial and follow-up visits.^[5]

LIMITATIONS

Only outpatients were included in the study, and follow-up and patient counseling for various skin disease patients is limited to a single time. Patient consultation with one or more hospitals and patient ignorance during data collection.

CONCLUSION

Skin diseases are one of the main health issues that have the greatest effect on day –to- day life. Assessment of drug use by analysing prescribing pattern raised awareness of skin disease and enhanced quality of life. By contrasting the quality of life between the first visit and follow up, it is important to identified patients who are more likely to have a lower quality of life in order to treat them more comprehensively. Patient knowledge towards their disease and medication shows great improvement and impact of their quality of life with skin disease.

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CONFLICT OF INTERESTS

The authors declare no conflict of interest.

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

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