ASSESSING QUALITY OF LIFE IN PATIENTS WITH SKIN DISEASES USING SKINDEX 16 QUESTIONNAIRE

Mable Babu*[1] and Raghu M. T.[2]

[1]Department Of Pharmacy Practice, S.J.M College of Pharmacy, Chitradurga, Karnataka, India-577502.

[2]Assistant Professor, Department of Dermatology, Basaveshwara Medical College Hospital & Research Centre, Chitradurga, Karnataka, India-577501.

*Corresponding Author

Mable Babu

Department Of Pharmacy Practice, S.J.M College of Pharmacy, Chitradurga, Karnataka, India-577502.

ABSTRACT

Dermatological disease significantly affects patient's health-related quality of life (HrQoL). An accurate, sensitive but brief quality-of-life outcomes measure is needed for studies of dermatologic care. Skindex is one of the most frequently used dermatology-specific HrQoL measures. The objectives of our study were to assess the quality of life of the patients attending the dermatology department using Skindex-16 questionnaire and to estimate the sample distribution with respect to age, gender, diagnosis, residence area, educational level, marital status and occupational status. A prospective observational study was carried out on dermatological diseased patients for a period of two months at Dermatology Department of Basaveshwara Medical College Hospital and Research Centre, Chitradurga, Karnataka. A total of 100 patients data were collected among which 40 were males and 60 were females in which infective eczema was more commonly diagnosed. The Skindex-16 questionnaire assessed their bother from experiences; responses were reported as three scales, symptoms, emotions and functioning. For 6 items of the 16-item version 38%, more than 50% of patients responded 'Never'. Minimum score was 0 and maximum score was 6. Highest score was observed in Infective eczema 62.51. On scaling the score, maximum number of patients had scores within the range of 0-10. Sociodemographic characteristics were assessed and urban residents, highly educated, married and employed participants were more prevalent for the dermatological condition. In conclusion, Skindex-16 are validated measures of the effects of skin diseases on quality of life that accurately and sensitively measures how much patients are bothered by their skin conditions.

KEYWORDS: Dermatology, Health-related quality of life, Skindex-16, Validated.

INTRODUCTION

The impact of diseases on physical health, work performance and their implications on the familiar and personal life increase the treatment context.[1] The measurement of quality of life (QoL) has increasingly become part of the overall assessment of a patient's health, both in the clinical and the research setting, as it provides a more complete picture of the health of the patient.[2] QoL is a crucial outcome of skin diseases and its measurement is especially challenging.

Skindex is an American instrument to measure the effects of skin disease on patients QoL.[1] This dermatology specific questionnaire has been extensively studied and refined in different population samples.[3] It is a self-administered questionnaire originally created in English. The questionnaire assesses areas considered essential in any instrument purported to assess QoL, such as burden of symptoms, social function and emotional state. Initially, Skindex comprised 61 questions but was then modified to 29 questions. Later, a brief version consisting of 16 questions was introduced, which is known as Skindex-16.[1]

Measuring Health Related Qualty of Life (HRQoL) is an important part of overall patient care. HRQoL assessments allow patients to express their opinions about the value they place on health and how their illness and its treatment affect quality of life. For patients with chronic illness, HRQoL assessment measures changes in the patient's well-being throughout the course of the disease. The study thus, reviews and discusses the issues related to the HRQoL assessment in skin diseases.[4]

MATERIALS AND METHODS

1. Study design: A prospective observational study.

2. Study site: The study was conducted at Dermatology Department of Basaveshwara Medical College Hospital & Research Centre, Chitradurga.

3. Study period: The study was conducted over a period of two months.

4. Study subjects: All patients who were presented to the Dermatology department of the hospital during a two month period were eligible for enrolment. Patient who met the following criteria were enrolled.

a. Inclusion Criteria

- Patients with any kind of dermatological diseases or disorders.
- Patients who were willing to participate in the study.

b. Exclusion Criteria

- Patients above the age of 80.

5. Sources of data

The patient demographical data, clinical data and various other relevant and necessary data were collected from:

- Patient's prescriptions
- Medical records of patients
- Interviews with patients and/or care givers.

6. Study procedure

• The patients who met the study criteria were enrolled in the study.

• Dermatological diseased patients were identified and collected their demographic details, clinical data such as diagnosis, sociodemographic characteristics like residence area, educational level, marital status, occupational status and other relevant details were obtained and documented in a suitably designed case record form (CRF).

• Skindex 16 questionnaire consists of 16 questions in which questions 1-4 are based on symptoms, 5-11 on emotions and 12-16 on functioning. It is a 7-point likert-type scale in which the score ranges from 0 (no effect) to 100 (effect experienced all the time). The scores were determined by transforming all responses to a linear scale of 100. If the raw score is 1-7, it had been changed to 0-6 scale by subtracting 1 from the raw skindex score. Then each raw score was multiplied by 16.6667. The scale score was the mean of a patient's responses to the items in a given scale. If any scale had more than 25% of the responses missing or with multiple answers, then the scale was considered missing. Thus, the responses for the Skindex-16 questionnaire were obtained from the patients enrolled in the study.

7. Statistical analysis

Using the Statistical Package for Social Service (SPSS) 19 version, the results were calculated, analyzed descriptively and thus reported.

RESULTS AND DISCUSSION

A total of 100 patients were enrolled. The study showed that the age group of 31-45 years had more prevalence of dermatological diseases 34%. Female dermatological diseased patients 60% were more when compared with male dermatological diseased patients patients 40%.

On comparing the disease with sociodemographic characteristics urban, highly educated, married and employed participants were more prevalent for the dermatological condition which was similar to the study conducted in Morocco where urban (77.5%) and married participants (50%) dominated when compared to rural (22.5%) and unmarried (44.2%) patients. In contrast, the study revealed that illiterate participants (38.9%) and housewives (37.4%) were more prone to the diseased condition. [1]

Table 1. Residence area

Residence	No of patients	Percentage (%)
Urban	55	55
Rural	45	45
Total	100	100

Table 2. Educational level

Educational level	No of patients	Percentage (%)
Children (<15yrs)	17	17
Illiterate	15	15
Primary	18	18
Secondary	15	15
High	35	35
Total	100	100

Table 3. Marital status

Marital status	No of patients	Percentage (%)
Single	39	39
Married	61	61
Total	100	100

Table 4. Occupational status

Occupation	No of patients	Percentage (%)
Child	9	9
Student	22	22
Employed 'ACTIVE'	28	28
Without occupation	13	13
Housewives	24	24
Retired	4	4
Total	100	100

The time taken by most patients to complete the questionnaire was 2 min. Most patients conveyed all questions to be clear and easy to understand. The study contradicted to the study held in Morocco which resolved that the time taken by most patients to be 5 min. [1]

Table 5. Time taken to complete Skindex-16 questionnaire

Time (min)	No of patients	Percentage (%)
1	7	7
2	33	33
3	28	28
4	1	1
5	31	31
Total	100	100

On the basis of the demographic details of the patient, patient history and laboratory values, the diagnosis was appropriately made. Out of 100 dermatological diseased patients, infective eczema was more commonly diagnosed.
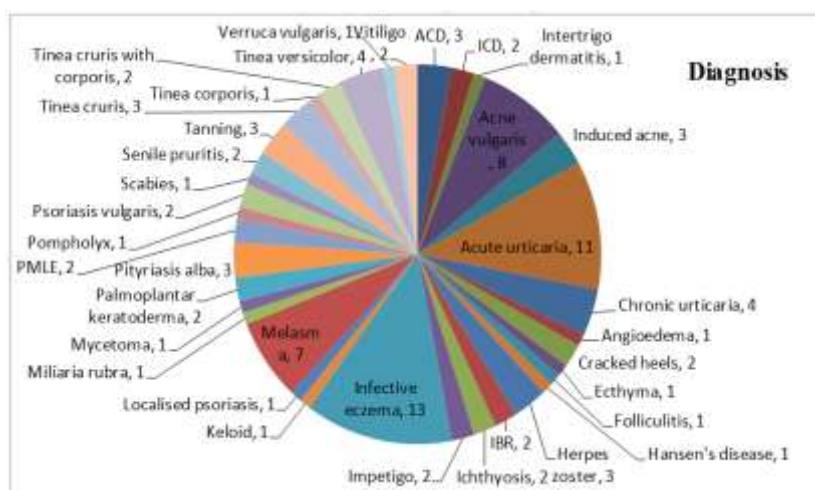
Fig 1. Diagnosis

The Skindex-16 questionnaire was administered to 100 dermatological diseased patients which assessed their bother from experiences; responses were reported as three scales, symptoms, emotions and functioning. For 6 items of the 16-item version 38%, more than 50% of patients responded 'Never'. Other studies also showed that majority of the patients responded never to 38% of the questionnaire. [5]

Minimum score was 0 and maximum score was 6. Highest score was observed in Infective eczema 62.51. Previous studies reported the same that patients with inflammatory dermatoses had higher scores than those with isolated lesions. [5,6,7]
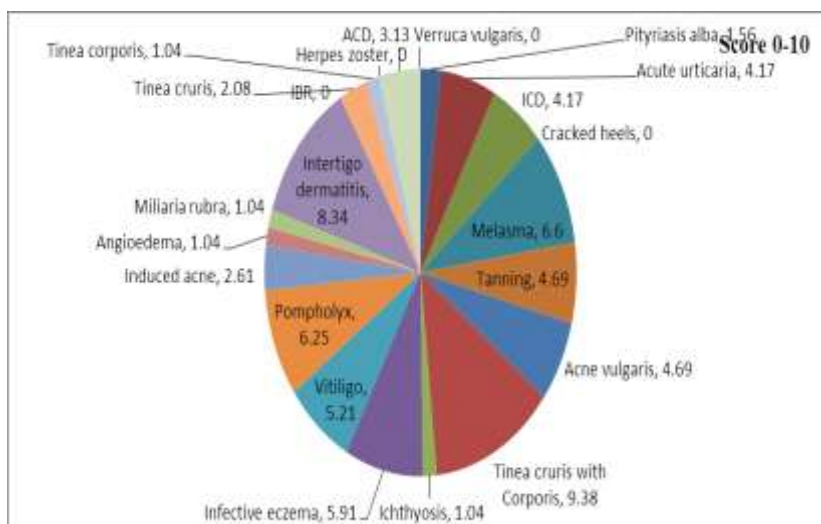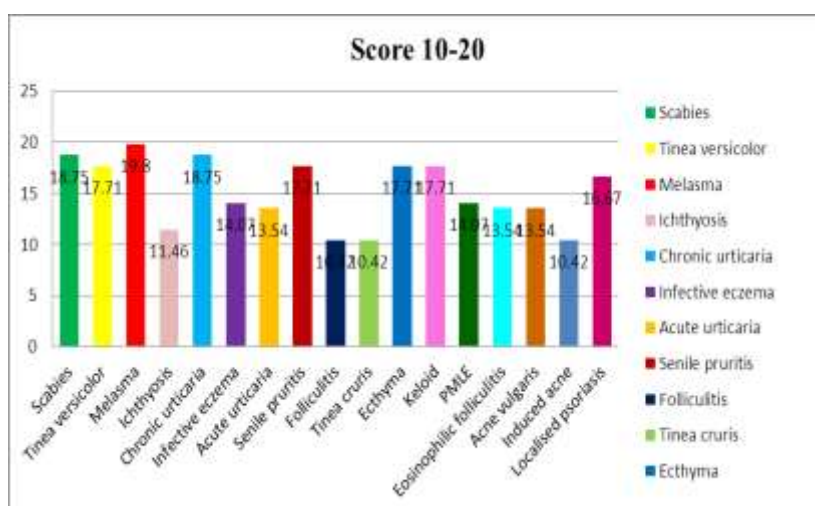
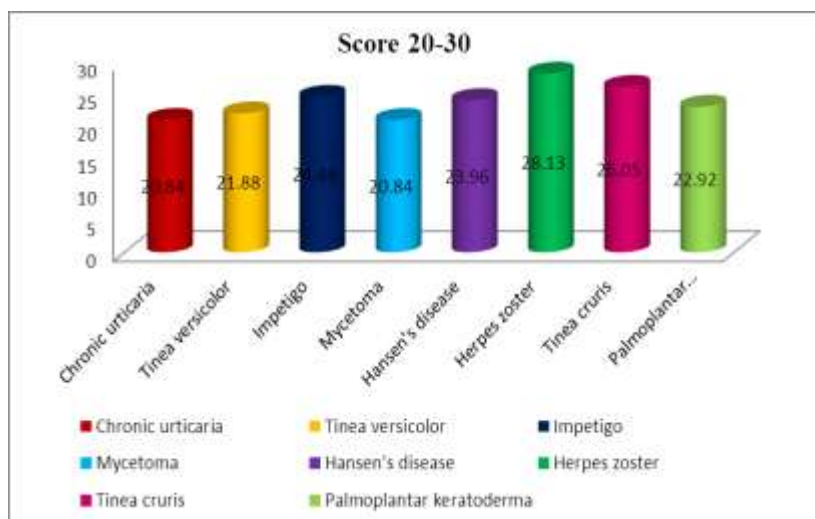**Fig 2. Skindex-16 score (0-10)**

Fig 3. Skindex-16 score (10-20)

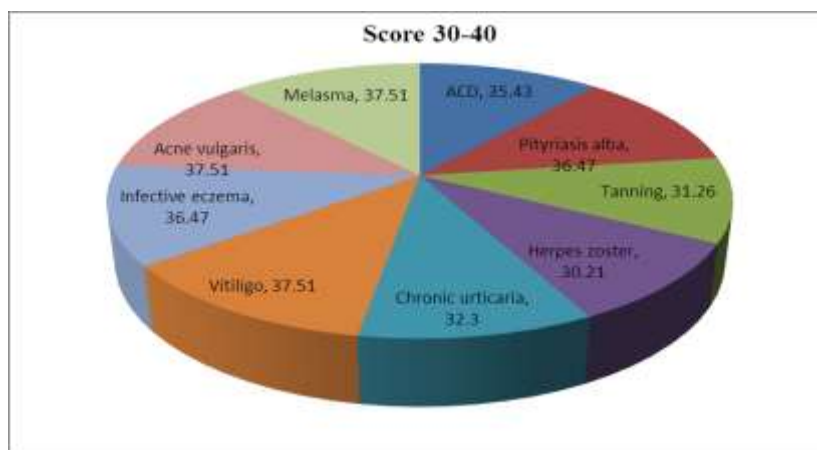
Fig 4. Skindex-16 score (20-30)
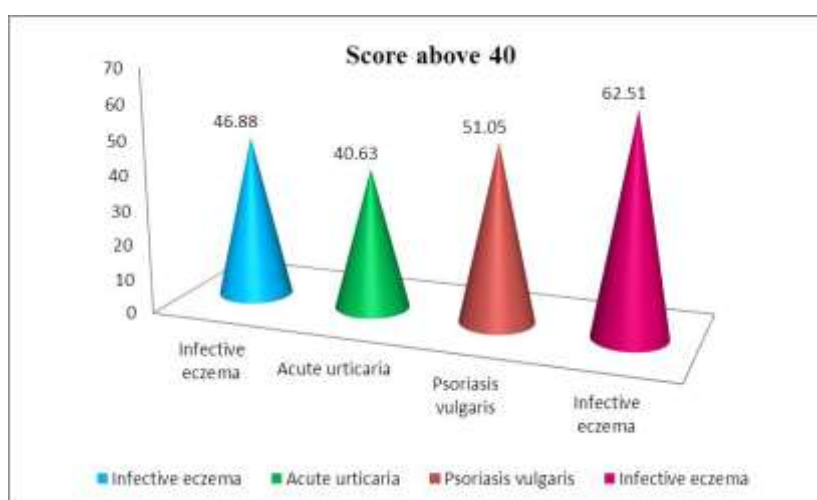
Fig 5. Skindex-16 score (30-40)

Fig 6. Skindex-16 score (Above 40)

On scaling the Skindex-16 score with the total number of patients, maximum number of patients had scores within the range of 0-10.
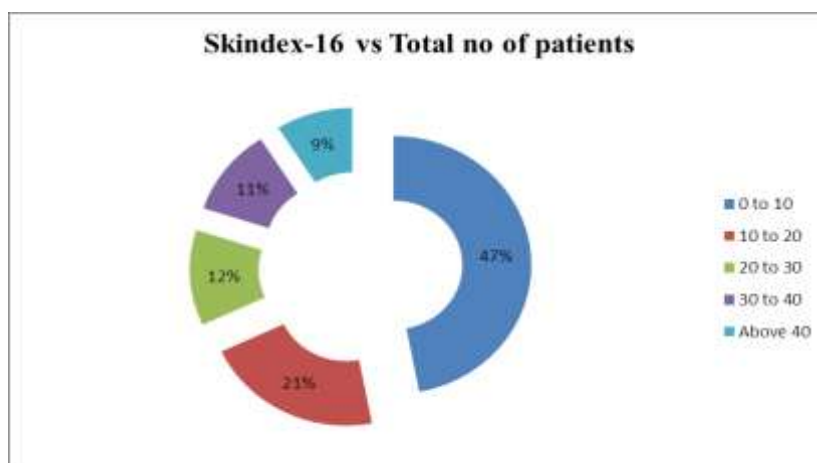

Fig 7. Skindex-16 score with total no of patients

CONCLUSION

A practical quality-of-life measure applicable to patients with skin diseases is necessary. Skindex-16 is a reliable and valid instrument for use as HrQoL instrument in patients with dermatological disease to assess experiences of their illness and its treatment. It is thus expected to be adopted into clinical practice and clinical trials to allow physicians to increase the attention paid to HRQoL of patients, not only the symptoms of dermatological disease.

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