

DEPRESSION, ANXIETY AND QUALITY OF LIFE IN PATIENTS WITH PSORIASIS

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Abstract

Background: Psoriasis is one of the prevalent skin conditions in the India. This chronic condition has a significant negative impact on patients' quality of life. Psoriasis has been linked to the depression and suicidal tendencies in the patients. The costs associated with decrements in quality of life, lost productivity, and work absenteeism may be enormous, increasing overall costs associated with the disease management. **Materials and Methodology:** The study was a cross sectional study done at Sri Aurobindo Medical College and Post-Graduate Institute, Indore. 60 patients were interviewed while receiving services at the Department of Dermatology, Venereology and Leprosy of the institute and their data was collected after receiving informed consent. This review attempts to outline different quality of life measures available for psoriasis and describes their use in studies examining patient reported outcomes associated with pharmacological interventions for psoriasis. Factors associated with quality of life in psoriasis patients are described. It further describes physician's role in the psoriasis management to improve patients' overall well-being. **Conclusion:** Although the socio demographic and illness factors play a significant role in the prevailing quality of life of patients, but the overall pre-existing levels of anxiety and depression and their effect on quality of life needs a detailed evaluation and management.

INTRODUCTION

Psoriasis is reported to a major global problem according to the World Health Organization, in 2016. The prevalence of psoriasis in India is 0.44-2.8%.^[1] Due to the visible physical and dermatological symptoms of psoriasis, those suffering from this disorder usually face severe embarrassment, leading to decreased self-esteem, anxiety and depression. While the previous studies show that the incidence of suicidal ideations among those suffering from psoriasis is nearly 5.5% and that of passive death wishes is nearly 9.7%,^[2] the overall incidence of anxiety was nearly 16% among these patients. Patients with psoriasis are 1.5 times more likely to experience depression compared to those without psoriasis.^[3]

Psoriasis is a chronic inflammatory, immune-mediated disease of the epidermis with systemic involvement. Psoriatic lesions are itchy, reddish raised plaques which are covered with silvery scales. It is a common recurrent, chronic, immune mediated disease of joints and skin.^[4] Although it is a dermatological disorder, it also causes multiple mood symptoms. As these lesions can appear

anywhere all over the body, those appearing on the uncovered areas of the body such as face, hands etc. lead to a stigmatizing experience for the patient, so does being out casted due to the myths of psoriasis being a contagious disorder and hence lead to these people being excluded from schools, work places and denied many basic rights. Thus, these stigmatizing experiences lead to exacerbation of previously existing depressive and anxiety symptoms in the patients suffering from psoriasis. While the coexisting presence of psoriasis and depression and anxiety can worsen the overall prognosis of illness, there are multiple factors such as age, gender, religion, socio-economic status, educational status and residence of the patient along with duration, onset and treatment received during the course of the illness which also contribute to the development and course of this chronic dermatological illness.

MATERIALS AND METHODS

The study was a cross sectional study done at Sri Aurobindo Medical College and Post-Graduate Institute, Indore.

60 patients were interviewed while receiving services at the Department of Dermatology, Venereology and Leprosy of the institute and their data was collected after receiving informed consent. Ethical clearance was obtained from the institutional ethical committee of the hospital.

All the biopsy proven cases of chronic plaque stable psoriasis who were more than 18 years of age were selected and those with any other co-morbid dermatological or psychiatric illnesses were excluded.

Socio-demographic data and clinical information were collected using semi structured proforma.

The Hamilton Anxiety Rating Scale (HAM-A) was applied to rate the severity of patient's anxiety⁵

The Hamilton Rating scale for Depression (HAM-D) was used to measure the severity of patients Depression.^[6]

The Dermatology Life Quality Index (DLQI) is a 10-question questionnaire which is used to measure the impact of skin diseases on the quality of life of an affected person.^[7-9]

Hamilton Anxiety Rating Scale (HAM-A)

The HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety and somatic anxiety. Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe.

Hamilton Depression Rating Scale (HDRS)

The HDRS (also known as the Ham-D) is the most widely used clinician-administered depression assessment scale. The original version contains 17 items (HDRS17) pertaining to symptoms of depression experienced over the past week. Method for scoring varies by version.

For the HDRS17: a score of 0–7 is generally accepted to be within the normal range (or in clinical remission), a score of 20 or higher (indicating at least moderate severity).

The Dermatology life Quality Index (DLQI)

DLQI is a ten-question questionnaire used to measure the impact of skin disease on the quality of life of an affected person. Each question is scored from 0 to 3, giving a possible score range from 0 (meaning no impact of skin disease on quality of life) to 30 (meaning maximum impact on quality of life).

Statistical Analysis

60 cases coming to the Department of Dermatology, Venereology and Leprosy, of SAMC & PGI, Indore were be studied after satisfying inclusion criteria and taking informed consent

The data obtained was tabulated, analyzed, and presented using descriptive statistics-means (standard deviations) or as number (percentages).

To compare continuous variables, independent t-test was used, and for comparing categorical variables, Chi-square test has been used. Value of $P < 0.05$ was considered statistically significant.

RESULTS

Table 1: Sociodemographic variables.

Sr. no.	Domain	Parameters	Frequency	Percentage
1	Age			
		Less than 35 years	39	65.0
		More than 35 years	21	35.0
		Total	60	100.0
2.	Marital status			
		Married	45	75.0
		Unmarried	12	20.0
		Separated	3	5.0
		Total	60	100.0
3.	Sex			
		Female	33	55.0
		Male	27	45.0
		Total	60	100.0
4.	Education			
		Primary	6	10.0
		Secondary	27	45.0
		Higher secondary	12	20.0
		Graduation	9	15.0
		Post-graduation	6	10.0
		Total	60	100.0
5.	Occupation			
		Unemployed	10	16.66
		Unskilled	15	25.0
		Semi- skilled	16	26.66
		Skilled	12	20.0
		Professional	7	11.66
		Total	60	100.0
6.	Residence			
		Rural	21	35.0

		Urban	39	65.0
		Total	60	100.0
7.	Socio- Economic Status			
		Lower class	12	20.0
		Lower middle class	24	40.0
		Upper lower class	12	20.0
		Upper middle class	12	20.0
		Total	60	100.0
8.	Substance use			
		Yes	16	26.7
		No	44	73.3
		Total	60	100.0
9.	Hospitalization			
		Yes	39	65.0
		No	21	35.0
		Total	60	100.0

Table 2: Illness variables

Sr. no.	Domain	Parameter	Frequency	Percentage
1.	Age of onset			
		20-30 years	39	65.0
		30-40 years	18	30.0
		40-50 years	3	5.0
		Total	60	
2.	Duration of illness			
		Less than 1 year	15	25.0
		2-3 years	15	25.0
		5-6 years	18	30.0
		7-8 years	3	5.0
		More than 10 years	9	15.0
		Total	60	100.0
3.	Compliance to treatment			
		Yes	42	70.0
		No	18	30.0
		Total	60	100.0
4.	Duration of treatment			
		Less than 1 year	24	40.0
		1-3 years	12	20.0
		3-5 years	12	20.0
		More than 5 years	12	20.0
		Total	60	100.0

Table 3: HAM-A

	Frequency	Percent
Mild	9	15.0
Moderate	21	35.0
Moderate to severe	9	15.0
Severe	21	35.0
Total	60	100.0

Table 4: HAM-D

	Frequency	Percent
Mild	3	5.0
Moderate	9	15.0
Normal	6	10.0
Severe	42	70.0
Total	60	100.0

Table 5: DLQI

	Frequency	Percent
Extremely large effect	21	35.0
Moderate effect	6	10.0
Small effect	3	5.0
Very large effect	30	50.0
Total	60	100.0

Table 6: Frequency and standard deviation of depression, anxiety and quality of life among patients with psoriasis

	N	Minimum	Maximum	Mean	Std. Deviation
Age	60	20	64	34.00	11.175
HAM A total	60	5	40	25.50	8.812

HAM-D total	60	0	40	20.98	9.373
DLQI total	60	5	25	16.50	5.910
Valid N (list wise)	60				

Table 7: Relation of Depression with quality of life among patients suffering from psoriasis

			HAM_D				Total
			Mild	Moderate	Normal	Severe	
DLQI	Extremely large effect	Count	0	5	3	13	21
		% In HAM-D	0.0%	55.6%	50.0%	31.0%	35.0%
	Moderate effect	Count	0	4	0	2	6
		%In HAM-D	0.0%	44.4%	0.0%	4.8%	10.0%
	Small effect	Count	0	0	3	0	3
		% In HAM-Dt	0.0%	0.0%	50.0%	0.0%	5.0%
	Very large effect	Count	3	0	0	27	30
		% In HAM-D	100.0%	0.0%	0.0%	64.3%	50.0%
Total		Count	3	9	6	42	60
		% In HAM-D	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8: Relation of Anxiety with quality of life among patients suffering from psoriasis

			HAM_A				Total
			Mild	Moderate	Moderate to severe	Severe	
DLQI	Extremely large effect	Count	3	12	0	6	21
		% In HAM-A	33.3%	57.1%	0.0%	28.6%	35.0%
	Moderate effect	Count	0	6	0	0	6
		% In HAM-A	0.0%	28.6%	0.0%	0.0%	10.0%
	Small effect	Count	3	0	0	0	3
		% In HAM-A	33.3%	0.0%	0.0%	0.0%	5.0%
	Very large effect	Count	3	3	9	15	30
		% In HAM-A	33.3%	14.3%	100.0%	71.4%	50.0%
Total		Count	9	21	9	21	60
		% In HAM-A	100.0%	100.0%	100.0%	100.0%	100.0%

DISCUSSION

This study was designed to determine the prevalence of depression, anxiety and quality of life among the patients suffering with psoriasis.

It was found in our study that the dermatological quality of life was significantly associated with the age of the patient, the gender of the patient, the educational status of the patient, the residence of the patient, and the socioeconomic status of the patient. It was also statistically significantly associated with duration of illness, compliance to treatment, history of substance uses and duration of treatment. These findings could be due the situations that mostly early onset of psoriasis led to a prolonged exposure to symptoms and hence worsening the quality of life. The female patients faced more stigma in the society and thus they had a poor quality of life. The educational and the socio-economic status of the patient also reflected their overall status in society along with the stigma faced by them. Due to it being a tertiary health care centre, most of the patients considered in the study belonged to an urban setting and thus it led to an overall reflection on their quality of life. The longer the duration of illness meant the patient faced an overall longer duration and stigma in the society leading to poorer quality of life. Compliance to treatment and adherence to treatment meant that the patient and their family understood the course of the illness and had a better understanding of the disease and thus led to a better quality of life.

When comparing the depression with various parameters, it was found that age of onset, marital status, gender, educational status, residence and socio-economic status along with duration of illness, compliance to treatment history of substance use and history of hospitalisation were also statistically significant. The anxiety faced by the patients suffering from psoriasis was found to have a statistically significant association with the educational status, residence, socio-economic status, marital status, gender, age of onset of illness, duration of illness, compliance, history of substance uses and duration of treatment.

The overall reasons for these observations remained same and hence all the factors were found to be co-related.

When the association between anxiety and quality of life in patients suffering with psoriasis it was found that it was associated significantly with a p value of 0.0. most people suffering from mild levels of anxiety had aneual level of declining quality of life, with those suffering from moderate levels of anxiety had an extremely large effect on their quality of life with worsening of the overall dermatological index of their life. Those with severe anxiety had very large effect on their quality of life as they had a comorbid persistent anxiety, stigma and discrimination they faced in the society.

When the association between depression and dermatological quality of life was found to be statistically significant with a p value of 0.0. all the intensities of depression had a significant presence

of a declining quality of life which led to further increase in depression and thus a vicious cycle of both the factors leading to worsening of the factors individually.

Hence, we found in our study that all the three factors are correlated and hence once a patient is affected with the dermatological illnesses, they have an increased propensity to develop psychiatric illnesses such as depression and anxiety.

Limitations

- The limitations which should be considered in our study are purposive sampling, study not being longitudinal in nature and reliance on patient report.
- As this study is Hospital based and not community-based study the actual prevalence of depression and anxiety in the patients with psoriasis, in the community may vary.

CONCLUSION

The importance of prevalence of anxiety and depression as a comorbidity needs to be evaluated in detail in the patients suffering from psoriasis as these comorbidities lead to further worsening of prognosis and thus exacerbation of symptoms. Although the socio demographic and illness factors play a significant role in the prevailing quality of life of patients, but the overall pre-existing levels of

anxiety and depression and their effect on quality of life needs a detailed evaluation and management.

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