



## Psychiatric Morbidity, Depression and Anxiety in Psoriasis and Vitiligo Patients in Comparison With General Medical Patients

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### ABSTRACT

Background: Patients with skin conditions have significant psychiatric morbidity when compared to patients with other general medical conditions. Purpose: To study the psychiatric morbidity in psoriasis and vitiligo patients and compare with that in patients with general medical conditions. Methods: Study was conducted in Stanley Medical College Hospital. Three groups of patients were taken which include psoriasis, vitiligo and general medical patients. Psychiatric morbidity was assessed using GHQ-28 by psychiatrist and diagnoses of depression or anxiety made by ICD-10 criteria. HAM A and HAM D scales were given. Findings: Significant psychiatric morbidity was seen in both dermatological conditions (56.7 % in psoriasis and 53.3% in vitiligo) compared to general medical patients (23.3%). Depression and anxiety were the most common findings. Conclusion: This study shows that many patients with psoriasis and vitiligo suffer from psychiatric morbidity. Hence, screening and referral of such patients by psychiatrists may be required.

### KEYWORDS

Psoriasis, Vitiligo, Psychiatric morbidity, depression, anxiety

### INTRODUCTION

The relation between the mind the body has been well known.<sup>1</sup> Any condition affecting one has potential to affect the other. Many studies have revealed that psychiatric morbidity is seen in 20 to 50 % of patients with various medical conditions.<sup>1</sup>

Among medical conditions, dermatological conditions have reported to have more psychiatric morbidity. Many studies have reported psychiatric morbidity from 20 to 70%.<sup>2,3,4</sup> There are many reasons why skin conditions have more psychological impact. The skin is an important organ of expression and communication. It is said that a healthy skin is equated with a better self-image and a sense of confidence.<sup>5</sup> Skin diseases often manifest by lesions that are obvious to others. Dermatological conditions visible to others can lead to stigmatisation and social isolation.<sup>6</sup> Dermatological conditions like psoriasis and vitiligo also invoke the concept of disfigurement. The psychological impact of disfigurement is very high.

From a scientific perspective, the relationship between skin and psyche can be understood by the fact that brain and skin originate from the same germ layer, the embryonic ectoderm, and are affected by the same hormones and neurotransmitters. Among the psychiatric morbidity in dermatological conditions, the most commonly encountered are depression and anxiety.<sup>7</sup> Hence in this study, these were the two psychiatric diagnoses assessed in addition to general psychiatric morbidity.

This study aims to assess the prevalence of psychiatric morbidity, depression and anxiety in psoriasis and vitiligo patients and compare with general medical patients.

### OBJECTIVES

- To assess the prevalence of psychiatric morbidity, depression and anxiety in psoriasis and vitiligo patients and compare these parameters in patients with general medical conditions who are taken as controls.
- To study the relationship between the socio demographic variables and the psychiatric morbidity in psoriasis and vitiligo patients

To study the relationship between variables like exposure, extension, facial involvement and duration of illness and the psychiatric morbidity in psoriasis and vitiligo patients.

### MATERIALS AND METHODS

**Study Sample:** The sample consists of a total of 90 patients. This included 30 patients each with psoriasis, vitiligo and 30 patients with general medical conditions considered as controls. General medical patients were patients with chronic medical conditions like COPD, Hypertension, etc. Patients were taken from both outpatient clinic as well as wards. Informed consent was obtained from all the patients. The study was approved by the ethical committee board present in the hospital. Sampling was simple random sampling.

### STUDY SETTING:

The Study was conducted in departments of dermatology and general medicine in Stanley Medical College Hospital, Chennai from July to October 2013.

### Inclusion Criteria:

- Patients with psoriasis and vitiligo from the dermatology department were taken as cases.
- Patients from general medicine department were taken as controls.

### Exclusion Criteria:

- Patients less than 18 years and more than 60 years
- Previous history of psychiatric illness.
- History of any major medical condition was an exclusion criteria in cases
- History of either psoriasis or vitiligo was an exclusion criteria in controls.

### Instruments Used:

- Semi-structured proforma used, which included the socio demographic details and clinical information.

The scales used were:

### General Health Questionnaire – 28

(GHQ – 28) which is a screening tool designed to detect nonpsychotic psychiatric illnesses and which has been shown

to be reliable and valid.<sup>8</sup>

**Hamilton Rating Scale for Depression (HAM D)** which is a standardized tool for assessing severity of depression.<sup>9</sup>

**Hamilton Rating Scale for Anxiety (HAM - A)** as standardized tool for assessing severity of anxiety and is reliable and valid.<sup>10</sup> Diagnosis of depression and anxiety were made by psychiatrist with ICD-10 criteria.

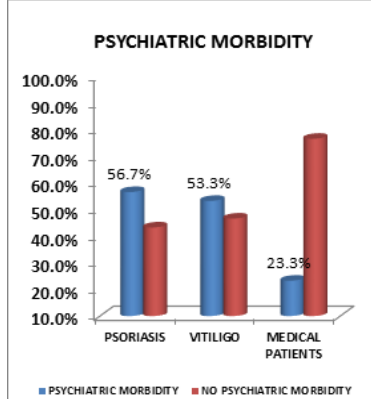
Statistical analysis of the data was done using SPSS version 20.

**OBSERVATION AND RESULTS**

There was no significant difference between the groups with respect to sex distribution, age distribution, occupation, locality, education, socio economic status, marital status or caregiver pattern. **Psychiatric Morbidity**

There was significant difference in **psychiatric morbidity** between cases and controls although there was no significant difference between the cases. By GHQ-28 scale, psychiatric morbidity was present in **56.7% of psoriasis patients, 53.3% of vitiligo patients** but only in **23.3% of patients with general medical conditions**.

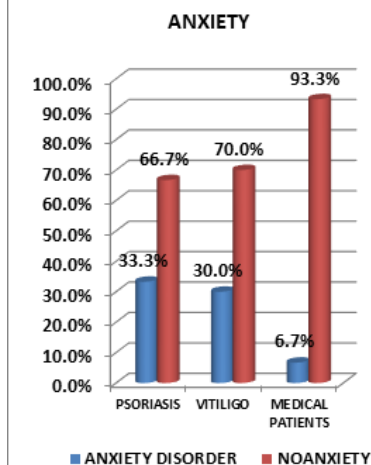
**Figure 1 Psychiatric morbidity in psoriasis, vitiligo and general medical patients**



**Anxiety**

The presence of anxiety disorder was more in the **cases (psoriasis and vitiligo) compared to controls (general medical patients)**. Anxiety was diagnosed in **33.3 % of psoriasis patients, 30% of vitiligo patients** but only in **6.7% of patients with general medical conditions**. The Mean HAM A scores were 9.77 in psoriasis patients, 9.37 in vitiligo patients and 5.4 in general medical patients.

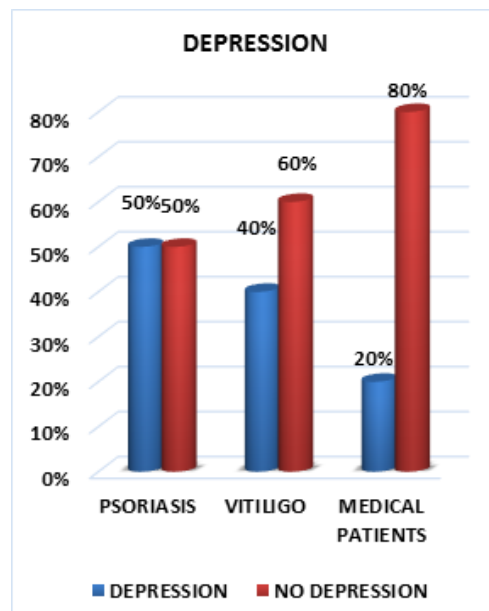
**Figure 2 Comparison of presence of anxiety symptoms between psoriasis, vitiligo and general medical patients**



**Depression**

Depression was also seen more in cases than controls. Depression was diagnosed in 50% of psoriasis patients, 40% of vitiligo patients but only in 20% of the general medical patients. There was no statistically significant difference between cases; however the difference between cases and controls was significant.

**Figure 3 Comparison of presence of depressive symptoms between psoriasis, vitiligo and general medical patients**



The mean HAM D scores were 10.8 in psoriasis, 9.23 in vitiligo and 5.5 in general medical patients. Subdividing the depression according to HAM D scores, majority of the patients had moderate depression in psoriasis (66.7%) and vitiligo (58.3%) patients, whereas in medical patients, majority had only mild depression (60%).

Sociodemographic factors and disease variables and correlations with psoriasis and vitiligo

In **psoriasis** patients, all of the younger patients in the age group 18 – 30 years (100%) and all unmarried patients (100%) had anxiety compared to anxiety in only 26 % of married patients. Also, depression was more in patients with lesions on exposed parts (66.7 % of patients with exposed lesions had depression compared to only 11 and also % in patients with non-exposed lesions) patients with extensive lesions. (77.8% of patients with more than 50% skin involvement had depression).

In **vitiligo** patients, psychiatric morbidity, depressive symptoms and anxiety symptoms were more in female patients with respect to males and the difference was statistically significant. The mean GHQ, HAM-A and HAM-D were 9.0, 13.18 and 12.09 in females compared to 5.05, 7.16 and 7.58 in males respectively.

Among **vitiligo** patients, 55% of patients in age group 18-30 had anxiety compared to 11% in age 41-50. 63.6% of females had anxiety compared to 10% of males. Among the patients, 83.3% who had completed higher secondary level had anxiety. None of the patients who had completed only primary level were anxious. 80% of patients with lesions on 51-75% of body surface had anxiety compared to nil in patients with 0-25% affected area. In patients with lesions on exposed areas, 57 % had anxiety but there was no anxiety in patients with lesions on non-exposed areas. Psychiatric morbidity was present in 66.7% of patients with lesions on exposed areas and depression was present in 57.1% of patients with lesions

on exposed but for those patients with lesions on non-exposed areas, only 22% had psychiatric morbidity and none had depression. Depression was present in 83.3 % of patients who had completed higher secondary education but was present in only 10 % of those completed only primary education.

## DISCUSSION

The visible and stigmatizing nature of the skin conditions cause more psychological burden.

In this study the demographic parameters of the cases (psoriasis and vitiligo) were comparable to those of controls (general medical conditions) and hence there is no selection bias.

In this study, majority of the psoriasis and vitiligo patients expressed **embarrassment** as the major troubling aspect of the illness. This is in tandem with similar findings in other studies.<sup>3,11</sup>

The psychiatric morbidity in the cases was more (56.7% in psoriasis and 53.3% in vitiligo) than in controls (26.3% in general medical patients). This is only slightly more than the average 40% psychiatric morbidity in dermatological disorders rates reported in previous studies.<sup>7,12</sup>

The major psychiatric morbidity in the cases was depression. The rates of depression in psoriasis and vitiligo were 50% and 40% respectively, compared to the 20% depression rates in controls. In a similar study done by Bashir et al<sup>13</sup> depression was seen in 50% of psoriasis and 44.4% of vitiligo patients. We infer that depression is more in dermatological conditions compared to general medical conditions.

In this study, there was more anxiety in psoriasis and vitiligo patients compared to general medical patients. In previous studies by Aslam et al and Seyhan et al, there were similar findings.<sup>5,14</sup> This may be due to worry of future, excess self-consciousness, feelings of stigmatisation and embarrassment.

In psoriasis and vitiligo, younger patients experienced more psychiatric morbidity including more depressive and anxiety symptoms. These findings correlate well with previous studies.<sup>16</sup> This can be explained by the fact that younger individuals are inclined to place more importance on their appearance. Also, in Vitiligo patients, there was more anxiety in female patients when compared to male patients. This may be because, the society places more importance on the physical appearance of females than males.

In this study, in the cases, patients with lesions on exposed parts of body had more psychiatric morbidity, depressive and anxiety symptoms compared to patients with lesions on non-exposed parts.

In this study, patients with more extensive disease had more psychiatric morbidity, depressive and anxiety symptoms. This may be because, the more extensive the illness, the more lesions will be exposed and this additional exposure can lead to feelings of stigmatisation and lead to evolution of psychological symptoms.

## LIMITATIONS OF THE STUDY

- The small sample size of this study may deter us from making any significant conclusions for the population as a whole.
- This study was conducted in a tertiary care setting and hence these findings cannot be generalized to the community
- This study was a cross sectional study and hence has lesser significance than prospective studies.
- Children, adolescents and elderly patients were not included in this study and hence psychiatric morbidity in that age group was not assessed
- Some other factors regarding illness like sexual dysfunction, effect of treatment and other parameters were not included

- It may be suggested that future studies can focus on these aspects

## CONCLUSION

This study shows that persons with skin diseases like psoriasis and vitiligo experience more psychiatric morbidity, depression and anxiety compared to the general medical patients.

Embarrassment was the major disturbing factor about their illness rather than symptoms. The other important factors associated with increased psychiatric morbidity were younger age group, female sex, extensive illness and higher education. These factors should be taken into account while assessing patients with skin conditions and more importance should be given to such patients.

This study emphasises the importance of recognising and treating psychiatric morbidity in chronic skin diseases like psoriasis and vitiligo. Hence a healthy liaison between the departments of psychiatry and dermatology is the need of the hour. Also, there should be a psychiatric follow up for patients with skin conditions. Patients who require more psychiatric care are younger patients with significant lesions in exposed areas. By this we can definitely decrease the overall disease burden of people suffering from skin conditions.

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