

## FREQUENCY AND PATTERN OF PSYCHIATRIC DISORDERS IN PATIENTS WITH VITILIGO

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**Background:** Vitiligo affects one to four percent of the population, regardless of age, race or sex. People with this disorder may experience emotional stress, particularly if vitiligo develops on visible areas of the body, such as face, hands, arms, feet, or on the genitals. Some feel embarrassed, ashamed, depressed, or worried about how others will react. Several indices have been used from time to time to measure the extent of psychiatric disability caused by skin disorders. Regarding vitiligo, not much work has been done in Pakistan. This study was aimed to determine the frequency and pattern of psychiatric disorders amongst patients with vitiligo.

**Methods:** This cross sectional study was conducted in the Departments of Psychiatry and Dermatology, Ziauddin University, KDLB campus, Karachi and Institute of Surgery and Medicine, Karachi from April 2004 to March 2006. Clinically diagnosed cases of vitiligo, belonging to both sexes, aged above 15 years, fulfilling the inclusion criteria were enrolled in the study. The study was conducted in 2 stages. In the first stage, psychiatric illness was detected with the help of GHQ 12 (Urdu version), a validated tool for screening general population. In the second stage, "Psychiatric Assessment Schedule", Urdu version was administered to every patient with high scores as per GHQ 12 to differentiate between the most frequent psychiatric disorders. All the findings were recorded, compiled and tabulated. **Results:** A total of 100 patients comprising 62 females and 38 males ranging between 15-60 years with a mean age of 24.6 years completed the study. Exposed parts of the body were involved in 64 patients while covered sites in 36. Of the patients studied, 54 were married and 46 unmarried. In accordance with the GHQ-12 screening, 42 patients were positive for psychiatric caseness comprising 26 females and 16 males, 17 patients being married. Psychiatric caseness featured in patients below 30 years of age (28 patients) and those having exposed parts of the body being involved (27 patients). On evaluation with Psychiatric Assessment Schedule (PAS), major depressive illness (15), was the most frequent psychiatric illness followed by generalized anxiety (10), mixed anxiety and depression, social phobia, agoraphobia and sexual dysfunction. **Conclusion:** Psychiatric caseness has a probable association with vitiligo, the frequency being influenced by variables of disease and life. Major depression and anxiety remain the most common psychiatric disorders in these patients.

**Keywords:** Vitiligo, Psychiatric caseness, depression, Anxiety

### INTRODUCTION

Presentation of psychological and emotional problems is very common in general population as well as clinics of general practitioners and consultants<sup>1</sup>. Disfigurement of skin can be a potential source of emotional distress and psychiatric illness, leading to impaired psychosocial adjustments. Vitiligo affects between one and four percent of the population, regardless of age, race or sex. People with this disorder can experience emotional stress, particularly if vitiligo develops on visible areas of the body, such as face, hands, arms, feet, or on the genitals. Adolescents, who are often particularly concerned about their appearance, can be devastated by widespread vitiligo. Some people feel embarrassed, ashamed, depressed, or worried about how others will react<sup>2</sup>. Mood disturbances including irritability and depression are common, particularly in teenagers<sup>3</sup>.

Children with vitiligo deal with the disease well or be devastated by it, often depending on the

attitude of their parents, relatives, teachers, friends, baby sitters etc<sup>4</sup>. The field of psychodermatology has developed as a result of increased interest and understanding of the relationship between skin disease and various psychological factors<sup>5</sup>. An appreciation for the effect of sex, age, and location of lesions is important, as well as the bi-directional relationship between skin disease and psychological distress<sup>6</sup>. Several indices have been used from time to time to measure the extent of psychiatric disability caused by skin disorders<sup>7</sup>. Not much work has been done on vitiligo in Pakistan. Current study was aimed to determine the frequency and pattern of psychiatric disorders amongst patients with vitiligo.

### MATERIAL AND METHODS

This study was conducted in the out patient departments of Psychiatry and Dermatology, Ziauddin University, KDLB campus, Karachi and Institute of Surgery and Medicine, Karachi. The cross

sectional study was completed over a period of 2 years from April 2004 to March' 2006.

Clinically diagnosed cases of vitiligo, belonging to both sexes, aged above 15 years were enrolled in the study. A written informed consent was taken from all these patients. Patients were enrolled irrespective of extent of the disease. Patients were studied irrespective of their marital and education status. Patients with any other concomitant dermatological problem were ruled out. Patients with subnormal mentality or any neurological problems and with any systemic disease were also not included.

This study was conducted in 2 stages. In the first stage, psychiatric illness was detected with the help of GHQ 12, a validated tool for screening general population. It is a self-rated questionnaire of 12 items. Each question has 4 possible responses, i.e. less than usual, no more than usual, rather more than usual or much more than usual. Cut off point for high scoring was set at a positive response (more or much more than usual) to at-least 3 of the 12 items.

In the second stage, "Psychiatric Assessment Schedule (PAS)", Urdu version was administrated to every patient with high scores as per GHQ 12. PAS is applicable in Pakistan as a validated tool to differentiate between the most frequent psychiatric disorders.

All the findings were recorded, compiled and tabulated. Details regarding the age, sex, marital status, disease duration, distribution and psychiatric disorders were analyzed.

Statistical analysis was done by chi square test and a "p" = 0.05 was considered to be significant.

## RESULTS

A total of 100 patients fulfilling the inclusion criteria completed the study. There were 62 females and 38 males. The age range was 15-60 years with a mean of 24.6 years (Table 1). Exposed parts of the body were involved in 64 patients comprising 41 females and 23 males. These included face, scalp, limbs, hands and feet. Covered sites with the lesions were a feature in 36 patients including 21 females and 15 males. Among the covered sites, genital involvement was seen in only 2 males. Of the patients studied, 54 were married and 46 unmarried. The group of married patients included 37 females and 17 males.

In accordance with the GHQ-12 screening 42 patients were positive for psychiatric illness comprising 26 females and 16 males. Amongst the patients with positive psychiatric illness, 17 patients were married including 11 females and 6 males. Psychiatric illness was predominant in patients below 30 years of age (28 patients) and those having exposed parts of the body being involved (27 patients).

On evaluation with PAS, the break up of psychiatric illnesses among our patients can be appreciated in Table 2. Major depressive illness, was the most frequent psychiatric illness followed by generalized anxiety, mixed anxiety and depression, social phobia, agoraphobia and sexual dysfunction.

**Table 1- Age and sex distribution (n=100)**

Age range	Females	Males	Total
15-25 years	39	22	61
26-35 years	9	7	16
36-45 years	9	5	14
46-55 years	4	3	7
56-65 years	1	1	2
<b>Total</b>	<b>62</b>	<b>38</b>	<b>100</b>

**Table 2- Pattern of psychiatric disorders in vitiligo subjects (n=42)**

Psychiatric disorders	Females	Males	Total
Major depressive illness	9	6	15
Generalized anxiety	7	3	10
Mixed anxiety and depression	3	2	5
Social phobia	6	2	8
Agoraphobia	1	1	2
Sexual dysfunction	-	2	2
<b>Total</b>	<b>26</b>	<b>16</b>	<b>42</b>

## DISCUSSION

Psychiatric morbidity is one of the major public health problems, which is reflected by a high rate of presentation not only to the general practitioners but also consultants of different specialties<sup>1</sup>. Disfigurement of skin can be a potential source of emotional distress and psychiatric illness, leading to impair psychosocial adjustments. Vitiligo leads to little physical handicap but can be a potential source of psychiatric morbidity leading to poor self esteem, poor body image, feeling of stigmatization and guilt<sup>7</sup>. Severe depression and suicidal tendencies have also been reported in these patients<sup>8,9</sup>.

In accordance with the GHQ-12 screening, 42 patients were positive for psychiatric caseness comprising 26 females and 16 males. The frequency of psychiatric caseness as assessed by the GHQ-H was reported to be lower in vitiligo patients by Sharma N et al<sup>10</sup>, in comparison with the current study. Moreover, the high frequency of psychiatric morbidity in our female patients is consistent with the reports in literature<sup>11</sup>. Noor SM et al.<sup>7</sup> have also reported that vitiligo leads to more self-consciousness and embarrassment. Likewise, avoidance of close relatives and friends has been reported to be more common in subjects with vitiligo<sup>7</sup>.

Amongst the patients with positive psychiatric caseness, 17 patients were married including 11 females and 6 males. Thus, the

frequency of psychiatric caseness was higher in unmarried subjects. People suffering from vitiligo in India are reported to be suffering from social problems, leading to psychiatric morbidity at a frequency higher than other countries<sup>3</sup>. This is seriously felt among young unmarried females<sup>3</sup>. Therefore, a young woman with vitiligo may have less chances of getting married. Similarly, a married woman developing vitiligo after marriage may have marital problems perhaps ending in divorce<sup>3</sup>.

Psychiatric caseness was predominant in patients below 30 years of age (28%). Porter & Beuf<sup>12</sup> found that age has a direct effect on well being in a sample of young patients with vitiligo, as older people are less concerned about appearance. Ginsberg and Link<sup>13</sup> also reported that patients with an older age at the onset of skin disease have lower sensitivity to other's opinions, anticipated rejection and feelings of guilt and shame. Thus our finding of psychiatric caseness being more frequent in younger age group is comparable to the reports in literature<sup>9</sup>.

In the current study, patients with psychiatric caseness having exposed parts of the body being involved were 27. People with this disorder can experience emotional stress, particularly if vitiligo develops on visible areas of the body, such as face, hands, arms and feet<sup>3</sup>. Noor SM et al<sup>7</sup> reported that patients with exposed parts of the body being involved by vitiligo suffer greater degree of psychiatric morbidity. The finding in our study also seems to be on agreement with the reports from Porter and Beuf<sup>12</sup>.

Major depressive illness was the most frequent feature, comparable to that reported by Sharma N et al<sup>10</sup>. Panic disorder was not seen in any of our patients. Similarly, Zigmond AS et al<sup>14</sup> also reported major depression to be prevalent among the patients with vitiligo as assessed by Hospital Anxiety and Depression Scale (HADS). The frequency of anxiety in our study is less than that reported by Sharma N et al<sup>10</sup>. There have been other reports of anxiety amongst patients with vitiligo<sup>3,12,15</sup>. Mixed anxiety and depression are also known to be prevalent in this disease<sup>1</sup>. Social phobia in the current study was another expected psychological illness<sup>1</sup>.

All the patients with this finding had a distribution confined to exposed parts resulting in feeling of embarrassment and depression, findings consistent with the reports in literature<sup>3</sup>. Noor SM et al<sup>7</sup> has also reported social phobia to be more prevalent in patients with vitiligo, which seems to be on agreement with that in our study. Agoraphobia has also been reported in patients with vitiligo being well known to be associated with other dermatological diseases<sup>1</sup>.

Sexual dysfunction was a feature in one male patient, who already had genital involvement. This is in contrast to the report by Noor SM et al<sup>7</sup>. Porter et al<sup>12</sup> have also reported sexual dysfunction in patients with vitiligo.

## CONCLUSION

It can be concluded from the above study that psychiatric caseness has a probable association with vitiligo, the frequency being influenced by severity, distribution and duration of the disease. Different variables of life like age, sex, marital status and employment also affect the frequency of vitiligo associated psychiatric caseness. Major depression and anxiety remain the most common psychiatric disorders in patients with vitiligo. Other associated psychiatric problems include social phobia, agoraphobia and sexual dysfunction.

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