



## A Study of Pattern of Psychiatric Morbidity and Quality of Life in Patients With Vitiligo.

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### ABSTRACT

**Objectives:** To study pattern of psychiatric co-morbidity & quality of life in vitiligo patients.

**Methodology:** 100 vitiligo patients and 100 subjects as control group were evaluated for neurotic disorder & quality of life by Hospital Anxiety Depression Scale (HADS), WHO Quality of Life – Bref's Scale (WHOQOL-BREF'S). Data were tabulated, analyzed & suitable statistics applied (i.e. chi square, T-test).

**Results:** The rate of psychiatric co-morbidity was significantly higher in the vitiligo group (62% v/s 25%). 37%, 18%, & 7% vitiligo patients suffered from Mixed anxiety and depressive disorder, Depressive disorder & Generalized anxiety disorder respectively. Declining Quality of life were responsible for increasing incidence of psychiatric co-morbidity.

**Conclusion:** Vitiligo generates psychological distress, disrupts social relationship & creates stress-vitiligo vicious cycle.

### KEYWORDS

vitiligo, anxiety, depression, stress, quality of life.

### Introduction

Vitiligo associated with a great psychological burden than other chronic skin diseases. Skin diseases are associated with psychological abnormalities including anxiety, depression, psychosomatic symptoms including pain and discomfort, embarrassment, social inhibition and suicidal ideation. Effective treatment of vitiligo need to accompany improvement in self-esteem, affect, shame, embarrassment, body image, social assertiveness and self-confidence.

Psycho-dermatologic disorders fall into three categories. (1) Psycho-physiologic disorders (e.g., acne, vitiligo, psoriasis and eczema) are skin problems, not directly connected to the mind but react to emotional states, as stress. (2) Primary psychiatric disorders that result in self-induced cutaneous manifestations. eg. trichotillomania and delusions of parasitosis. (3) Secondary psychiatric disorders that results in psychological problems. eg. decreased self-esteem, depression or social phobia.

Vitiligo, in India, is referred as "ven kushtam" meaning white leprosy.<sup>[1,2]</sup> Parameters used to assess the severity of vitiligo are area of involvement, disfigurement, progression of disease/disease stability, potential for re-pigmentation & psycho-social impact. The patients of vitiligo report embarrassment, helpless and low self esteem leading to emotional stress and social isolation, particularly if the disease develops on exposed areas of the body. These feelings can affect their relationships with friends, co-workers and even family members, which in turn increases the risk of depression and other psychosocial disorders.<sup>[3,4,5,6]</sup>

Vitiligo has a major impact on the quality of life (QOL) of patients. skin is the largest and most visible organ of the body and any patches may considerable influence on patients' psychological well-being. It causes cosmetic disfigurement and leading to psychological trauma to the patients. Moreover, many patients suffer from poor body image and low self-esteem, which results in social lives that are quite distressful.

### Material & methods

Present study had planned to study the patterns of psychi-

atric co-morbidity & it's impact on quality of life of patients with Vitiligo.

The present study was a single centre, cross sectional, single interview study that was approved by the institutional ethics board. 100 Vitiligo patients attending OPD in department of Dermatology aged 13 years and above, who were ready to give informed consent & literate enough to understand the questionnaire constituted study group & 100 suitably matched subjects preferably the relatives of the patients constituted the control group, who had no known dermatological or psychiatric disorders. Subjects with mental retardation, psychotic disorder, dementia, delirium and other amnesic disorders and who had not given consent after preliminary interview were not included in the study.

The selected patients (study group) & controls (control group) were interviewed in detail and were evaluated on three tools. First tool was specially designed semi structured proforma to collect identification data, socio-demographic data, past history of psychiatric illness, illness characteristics, clinical diagnosis (confirmed by Dermatologist). Second tool was Hospital Anxiety and Depression Scale (HADS) to determine level of depression and anxiety & third tool was World Health Organization Quality Of Life- Bref (Hindi Version) WHOQOL-BREF for quality of life assessment in the four domains, which were (i) physical health, (ii) physiological well-being, (iii) social relations, (iv) environment.

Information and data so collected were tabulated, analyzed & subjected to suitable statistical methods (mean, Chi square test) and conclusions were drawn.

### Results & Discussion:

The results of the study have been depicted in table 1 & table 2.

In one earlier study of Hita Shah et al,<sup>[3]</sup> who had reported that: (a) majority of the patients were in their second decade of life (b) their marital, sex life and intimacy were affected. Our findings are also in conformity with these ob-

servations. In our study more than ¾ patients (79%) were in the age group 13 to 45 years and 21% were in 45years & above. The difference in the both groups was statistically highly significant (p <0.0001). This was because of fact that majority of population was of parents or guardians in control group. In our study group 56% were married, 43% unmarried, 1% were divorcee while in control group respective percentages were 72%, 26%, 2%. The difference between study and control group was statistically significant (p< 0.05). Majority of the sample in study group were males (67%) and rest 33% were females, while in the control group 69% were male and 31% females, which was supported by Wang X et al.<sup>[4]</sup> So these factors generate psychological distress and disrupts the social relationship, which creates a vicious stress-vitiligo cycle.

The focus on psychiatric aspects of medical disease has been on the increase in the past few decades. The concept of consultation liaison psychiatry is gaining ground as more research is being done in this area. Psychosocial management is becoming a part of treatment of chronic medical illness. More awareness is being created among physicians and evidence of effective treatment for psychiatric disorder is reducing the negative attitudes towards psychiatric disorders. This study was undertaken to systematically examine the psychiatric aspects of vitiligo focusing on the pattern of psychiatric diagnosis and its relation to health related to quality of life.

To assess psychiatric morbidity diagnostic guidelines of ICD-10 was used. It was a semi structured diagnostic interview and all available information including patient information, informant's information was used to decide diagnosis.

Though there are generic as well as disease specific instrument available to assess QOL, WHOQOL-BREF was used in this study. This is a simple scale, short and easy to administer, which basically measures health related QOL across four domains. It has been used in a variety of medical conditions. This instrument has minimum possible confounding influence on socio-cultural differences.

Most common psychiatric disorder suggested in our study was Mixed anxiety and depressive disorder 37% followed by Depressive disorder 18%, & Generalized anxiety disorder 7%. On comparing with control group 10%, 4%, & 11% patients suffered from Mixed anxiety and depressive disorder, Depressive disorder & Generalized anxiety disorder respectively, which was statistically significant (p<0.05). It was consistent with the study of Amir Mufaddel et al.<sup>[7]</sup> who compared the rates of psychiatric symptoms in patients with vitiligo, and found they were suffering from anxiety disorders (28.6%), and depression (21.9%). It showed that dermatological conditions were associated with high rates of psychiatric co-morbidities. Screening for anxiety and depressive symptoms may be helpful for early diagnosis and management of associated psychiatric symptoms.

morbidity if any after successful treatment of vitiligo.

**Observation**

**Tables 1**

TABLE 1: Distribution of psychiatric morbidity as per ICD-10 (Major Categories)

Psychiatric diagnosis	Study group (n = 100)	Control group (n = 100)	
Mixed anxiety and depressive disorder	37	10	X <sup>2</sup> = 11.69, p = 0.0029, d/f = 2, <b>significant</b>
Depressive disorder	18	4	
Generalized anxiety disorder	7	11	

Quality of life has been defined as "the subjective satisfaction expressed or experienced by an individual in his physical, mental and social situations". Various measures both generic as well as disease specific have been used to assess QOL. The domains of quality of life that were analysed included the following: Physical health, Physiological well-being, Social relations & Environment. We had taken total of every domain and grand total of all domains for analysis. On tabulation we found that domain scores of both the groups were in descending order for physical, psychological, social relationship & environmental domain. The QOL scores in all the domains were significantly lower in study group as compared to control group with mean score 197.55 vs 294.58. Thus the perceived quality of life was significantly worst for all the domains in study group. This finding was comparable to previous study done by Sangma LN et al.<sup>[8]</sup> who showed that Quality of life (QOL) in vitiligo patients declined more severely, and also there was increase in incidence of depression than in the control group. These changes were critical for the psychosocial life of the affected people. Similar results had drawn by Mishra N et al.<sup>[10]</sup>

**Conclusion:**

It can be inferred that vitiligo patients had higher rate of anxiety and depression disorders. Vitiligo generates psychological distress and disrupts the social relationship, which creates a vicious stress-vitiligo cycle. Vitiligo although a cosmetic disease without any symptoms, it carry a significant social stigma especially in Indian society. Data interpretation in this study indicates that vitiligo affects QOL in majority of vitiligo patients and such patients require more sympathetic attitude from a dermatologist and society. It was observed that improvement of vitiligo was associated with decreasing anxiety and depression.

Standardizes instruments with proven reliability and validity were used for assessment. All the variables on which data were collected were truly reflective of the problem and have got practical implication.

In view of the paucity of studies in our country concerning psychiatric morbidity in Vitiligo, our attempt to have a close look at psychiatric morbidities in a reasonable sample of Vitiligo patients may serve a platform for future research.

**Limitations of the study**

This study was a point prevalence study and it included all cases from Government hospital located in an urban centre, hence the results cannot be generalized. So a prospective study with a large sample from different centres and also considering rural population may be carried out to explore psychiatric morbidity of different population affected by vitiligo. Similarly effect of treatment of vitiligo on psychiatric morbidity was not taken in to consideration in this study. Therefore a case-control prospective study should be planned, which may demonstrate reduction in psychiatric

**TABLE 2: Distribution According to Quality of life by WHOQOL – BREF’s Scale**

Domains for Quality of life	Mean score and S.D.(±)		Unpaired t test		
	Study Group	Control Group	T score	P value	Significance
Physical	50.43±27.23	76.09±8.61	-7.719	<0.00001	Highly significant
Psychological	45.70±32.09	72.93±12.69	-6.821	<0.00001	Highly significant
Social relationship	48.41±35.91	79.02±12.61	-6.967	<0.00001	Highly significant
Environmental	53.01±28.92	66.36±11.19	-3.719	<0.00040	Significant
Total	197.55±120.75	294.58±34.44	-6.622	<0.0001	Highly significant

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