



PSYCHIATRIC CO-MORBIDITIES IN VITILIGO PATIENTS ATTENDING A TERTIARY CARE CENTRE IN WESTERN UTTAR PRADESH: A CROSS-SECTIONAL STUDY

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ABSTRACT **Background:** Vitiligo is a chronic acquired depigmenting disorder. While medically benign, its visible nature and chronicity cause profound psychological distress, anxiety, and depression. **Aim:** To assess the frequency of psychiatric co-morbidities and their association with quality of life (QOL) and disease severity in vitiligo patients. **Methodology:** Fifty adult patients with vitiligo were evaluated. Psychiatric co-morbidities were screened using the Hospital Anxiety and Depression Scale (HADS), QOL using WHOQOL-BREF, and disease severity using the Vitiligo Area Scoring Index (VASI). **Results:** Psychiatric co-morbidity was present in 48.0% of patients (anxiety: 48.0%, depression: 40.0%). Co-morbid patients exhibited significantly higher mean VASI scores and longer disease duration than those without psychiatric morbidity. QOL was significantly lower in all domains for co-morbid patients ($p < 0.001$). **Conclusion:** Psychiatric co-morbidities are highly prevalent in vitiligo, correlating with severe disease and reduced quality of life.

KEYWORDS : Vitiligo; Psychiatric co-morbidity; Anxiety; Quality of life

INTRODUCTION

Vitiligo is a chronic acquired depigmenting disorder characterized by selective destruction of melanocytes, resulting in well-defined depigmented patches affecting the skin and mucous membranes (Mattoo et al., 2002). It affects approximately 0.5–2% of the global population, with comparable prevalence in India, and commonly manifests before age 30 (Sharma et al., 2001). Although medically benign, its visible and unpredictable course contributes to significant psychosocial distress (Picardi et al., 2000).

The social stigma associated with altered physical appearance leads to negative self-perception, lowered self-esteem, and impaired interpersonal relationships (Silverberg & Silverberg, 2015). Cultural beliefs and societal attitudes toward skin color further intensify the psychological burden, particularly in developing countries like India, where cosmetic appearance plays a crucial role in social acceptance (Wang et al., 2011). Consequently, vitiligo is increasingly recognized as a psychodermatological condition with substantial mental health implications rather than a purely cosmetic issue (Saleh et al., 2012).

Several studies have documented a high prevalence of anxiety and depression among vitiligo patients (Kent & Al'Abadie, 1996; Ongene et al., 2005). Anxiety often arises from fear of disease progression and social rejection, while depressive symptoms are linked to chronicity and diminished quality of life (Parsad et al., 2003). These psychological disturbances may worsen subjective disease perception, impair treatment adherence, and adversely affect prognosis (Papadopoulos et al., 1999).

Disease-related factors like extent of depigmentation, involvement of visible areas, and longer duration correlate with higher psychological distress (Picardi et al., 2003). Patients with more extensive vitiligo experience greater emotional and social impairment, particularly affecting psychological health and social relationships (Zachariae et al., 2000; Gieler et al., 2001).

Despite these dimensions, psychiatric co-morbidities often remain underdiagnosed in routine dermatological practice (Hedayat et al., 2016). Early identification through validated screening tools may facilitate holistic patient care and improve long-term outcomes (World Health Organization, 1992). In this context, this cross-sectional study assesses the frequency of psychiatric co-morbidities, disease severity, and quality of life in vitiligo patients attending a tertiary care centre in Western Uttar Pradesh.

AIM

To assess the frequency and pattern of psychiatric co-morbidities, and

their association with disease severity and quality of life, in vitiligo patients attending a tertiary care centre in Western Uttar Pradesh.

MATERIAL AND METHOD

A cross-sectional study was conducted on 50 vitiligo patients aged 18–65 years diagnosed as per ICD-10 (L80) criteria at a tertiary care centre in Western Uttar Pradesh. Patients with prior psychiatric illness, substance abuse, or comorbid dermatological disorders were excluded. Sociodemographic and clinical details were documented. Psychiatric evaluation was performed using the Hospital Anxiety and Depression Scale (HADS), and quality of life was assessed using the WHOQOL-BREF questionnaire. Disease severity was measured using the Vitiligo Area Scoring Index (VASI). Statistical analyses included Chi-square and Student's t-tests.

OBSERVATION AND RESULT

A total of 50 patients with Vitiligo fulfilling the inclusion and exclusion criteria were evaluated in the present study. The results are presented in accordance with the stated objectives and are summarized in Tables 1 to 4.

Sociodemographic and Clinical Characteristics

Out of the 50 patients evaluated, the majorities were aged 31–45 years (42.0%), male (54.0%), married (64.0%), and had non-segmental vitiligo (76.0%). Disease duration was 2–5 years for 38.0% of patients and over 5 years for 28.0% (Table 1).

Table 1: Sociodemographic and Clinical Characteristics of Vitiligo Patients (N = 50)

Variable	Category	n	%
Age group (years)	18–30	14	28.0
	31–45	21	42.0
	46–65	15	30.0
Gender	Male	27	54.0
	Female	23	46.0
Marital status	Married	32	64.0
	Unmarried	18	36.0
Duration of vitiligo	< 2 years	17	34.0
	2–5 years	19	38.0
	> 5 years	14	28.0
Type of vitiligo	Non-segmental	38	76.0
	Segmental	12	24.0

Psychiatric Co-Morbidities

Using the Hospital Anxiety and Depression Scale (HADS), anxiety symptoms were identified in 48.0% of patients (24.0% borderline,

24.0% abnormal), and depressive symptoms in 40.0% (22.0% borderline, 18.0% abnormal). The overall prevalence of psychiatric morbidity was 48.0% (Table 2).

Table 2: Frequency and Pattern of Psychiatric Co-Morbidities Assessed by HADS (N = 50)

Psychiatric parameter	Category	n	%
Anxiety (HADS-A)	Normal (0–7)	26	52.0
	Borderline (8–10)	12	24.0
	Abnormal (≥ 11)	12	24.0
Depression (HADS-D)	Normal (0–7)	30	60.0
	Borderline (8–10)	11	22.0
	Abnormal (≥ 11)	9	18.0
Overall psychiatric morbidity	Present	24	48.0
	Absent	26	52.0

*Psychiatric morbidity includes borderline and abnormal HADS scores.

Association of Psychiatric Morbidity with Disease Severity and Duration

Patients with psychiatric co-morbidities demonstrated significantly higher disease severity (mean VASI score: 18.42 ± 6.31 vs. 10.87 ± 4.95 , $p < 0.001$) and significantly longer disease duration (4.12 ± 1.86 years vs. 2.68 ± 1.44 years, $p = 0.003$) compared to those without psychiatric morbidity (Table 3).

Table 3: Association of Disease Severity (VASI) and Duration with Psychiatric Co-Morbidities

Parameter	Psychiatric Morbidity Present (n = 24)	Psychiatric Morbidity Absent (n = 26)	p-value
VASI score (Mean $\pm$ SD)	18.42 ± 6.31	10.87 ± 4.95	<0.001*
HADS-Anxiety score (Mean $\pm$ SD)	11.26 ± 3.18	6.14 ± 2.05	<0.001*
HADS-Depression score (Mean $\pm$ SD)	9.83 ± 2.94	5.72 ± 1.98	<0.001*
Disease duration (years, Mean $\pm$ SD)	4.12 ± 1.86	2.68 ± 1.44	0.003*

*Statistically significant (Student's t-test)

Quality of Life Assessment

WHOQOL-BREF domain scores revealed significant impairment across all domains in patients with psychiatric co-morbidities ($p < 0.001$). The psychological health domain was the most severely affected (39.74 ± 6.55 vs. 61.28 ± 7.11), followed closely by social relationships (42.18 ± 8.02 vs. 56.47 ± 7.36) (Table 4).

Table 4: Comparison of WHOQOL-BREF Domain Scores in Vitiligo Patients With and Without Psychiatric Co-Morbidities

WHOQOL-BREF Domain	Psychiatric Morbidity Present (Mean $\pm$ SD)	Psychiatric Morbidity Absent (Mean $\pm$ SD)	p-value
Physical health	45.62 ± 7.84	58.31 ± 6.92	<0.001*
Psychological health	39.74 ± 6.55	61.28 ± 7.11	<0.001*
Social relationships	42.18 ± 8.02	56.47 ± 7.36	<0.001*
Environment	48.36 ± 6.91	59.52 ± 6.48	<0.001*

*Statistically significant (Student's t-test)

DISCUSSION

This study demonstrates a substantial psychiatric burden among vitiligo patients, with 48.0% exhibiting anxiety and/or depressive symptoms. This matches previous hospital-based findings reporting psychiatric morbidity rates of 30% to 60% (Mattoo et al., 2002; Sharma et al., 2001). The observed 48.0% anxiety prevalence aligns with Picardi et al. (2000), who linked anxiety to fears of disease progression and social stigma. The 40.0% prevalence of depressive symptoms is consistent with Silverberg and Silverberg (2015), who highlighted depression as a common co-morbidity in chronic dermatological conditions.

A strong association was found between psychiatric morbidity and disease severity (VASI scores). This is supported by earlier studies where greater body surface involvement correlated with heightened distress (Wang et al., 2011; Saleh et al., 2012). Kent and Al'Abadie (1996) demonstrated that extensive lesions lead to severe emotional impairment, while Ongenaie et al. (2005) indicated that chronic illness

duration compounds psychological stress.

Quality of life was significantly impaired across all WHOQOL-BREF domains in patients with psychiatric morbidity, with psychological and social relationship domains being the most affected. This is consistent with Parsad et al. (2003), who noted that vitiligo causes profound disturbances in self-esteem and social functioning, often disproportionate to clinical severity. Similar quality-of-life deficits were documented by Papadopoulos et al. (1999), reinforcing that the psychosocial impact of vitiligo can match or exceed that of other chronic diseases.

In summary, vitiligo is a psychosomatic condition requiring integrated care. Although the cross-sectional design limits causal inferences, these results highlight the value of routine psychological screening.

CONCLUSION

Psychiatric co-morbidities are highly prevalent in vitiligo and significantly associate with greater disease severity and reduced quality of life. Integrating routine psychological screening using standardized tools like HADS can facilitate holistic, patient-centered care.

LIMITATIONS

Key limitations include the cross-sectional design, which prevents causal inference, and a small sample size ($N = 50$) from a single tertiary centre, limiting generalizability. Screening was based on HADS rather than structured clinical interviews, and selection bias toward treatment-seeking patients may exist.

Conflict of Interest

The authors declare no conflicts of interest. No financial support or commercial funding was received for this study.

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