Depression and Anxiety Prevalence, Quality of Life and its Consideration among Psoriasispatients: A Cross-sectional Study

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How to cite this article:
Bangaru Sudheer, Koneru Kavya Sri, Pramod Kumar Reddy M/Depression and Anxiety Prevalence, Quality of Life and its Consideration among Psoriasispatients: A Cross-sectional Study/RFP Indian Journal of Medical Psychiatry. 2022;5(2):67–73.

Abstract

Mental and neurological disorders account for 10% of Disability Adjusted Life Years lost (DALY). people suffering from recurrent and progressive medical conditions have a higher risk of developing mental health problems. Psoriasis is one such disease where psychiatric comorbidities are more prominent and common and have a negative impact on mental health leading to a poorer prognosis.

Aim and objectives: This study was conducted to determine the incidence of anxiety and depression in psoriasis patients, as well as to correlate these with psoriasis severity and quality of life.

Materials and Methods: This study was done at a tertiary care hospital at Mamata General Hospital Khammam and Mamata Academy of Medical Sciences, Hyderabad over a period of 3 months on psoriasis patients. Psoriasis Area and Severity Index were used to assess the severity of psoriasis. PHQ-9, Perceived stress scale, and GAD -7 were used for screening depression, perceived stress, and anxiety respectively. WHOQOL-BREF was used to assess the quality of life.

Statistical Analysis: Statistical Analysis was performed using Microsoft excel software and SPSS .

Results: A sum of 69 subjects had anxiety and 71 subjects had depression. 51 patients had significant stress. A remarkable positive correlation was established between psoriasis variables like severity and duration of psoriasis and psychological variables such as stress, anxiety, and depression. The severity of psoriasis had a significant negative relation to social relationships and environmental domains of WHOQOL. QoL was significantly poor in patients with psoriasis with existing comorbidities like anxiety or depression.

Conclusion: Patients suffering from psoriasis have a significant rate of depression, anxiety, and stress. This study signifies the relationship between psoriasis, Quality of life, and psychiatric comorbidities and the need to consider dermatological and psychological factors.

Keywords: Depression; Anxiety; Psoriasis; QOL.

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Received on: 05.07.2022 **Accepted on:** 24.08.2022

INTRODUCTION

Mental and neurological disorders account for ten percent of all disease related Disability Adjusted Life Years lost.[1] People with recurrent or progressive medical conditions have a higher risk of developing mental health problems, according to research.[2] Psoriasis is a psychocutaneous skin disease that affects nearly 1.4 - 2 percent of the global population, with men and women in equal proportion.[3] Many studies conducted around the

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world have found that psychiatric comorbidities are common among psoriasis patients.[4-8] Psoriatic illness has a negative impact on a patient's physical and mental well-being, which, when combined with overlapping pathophysiology, raises the chance of clinically severe psychiatric problems. These mental illnesses, in turn, have an impact on thepatient's outlook and, perhaps, prognosis. Maladaptive cognitive and affective behaviors have been found, as well as mechanisms linking anxiety, depression, and inflammation in psoriasis. Psychotherapy, such as cognitive behavioral therapy, has been studied and found to be linked to reduced disability, stress, and, most notably, psoriasis physical severity.

AIMS AND OBJECTIVES

This study aimed to measure the prevalence of anxiety and depression and levels of perceived stress in patients with psoriasis attending a Tertiary Care Hospital in Khammam and Hyderabad, India. An attempt was also made to study the correlations between psychological variables (depression, anxiety, and perceived stress), the severity of psoriasis, and quality of life.

MATERIALS AND METHODS

This is a multicentered cross-sectional study. It was conducted for 3 months from February 10, 2022, to May 10, 2022, by the Department of Psychiatry and Dermatology at a tertiary hospital in Khammam and Mamata Academy of Medical Sciences, Hyderabad. The study included all individuals aged 18 to 64 years who registered at the Department of Dermatology and were diagnosed with psoriasis. The study excluded patients with concomitant skin diseases and pre-diagnosed chronic medical illnesses. The consultant dermatologist used the Psoriasis Area and Severity Index (PASI)[9] to assess the severity of psoriasis. A brief clinical interview was conducted. patients with psychotic symptoms, cognitive impairment disability, substance abuse issues, and a history of Prior diagnoses of mental illness were ruled out. Patients who were eligible for participation in the study were given a summary of the research topic and given their informed consent. A sum of 120 people has selected out of which 90 patients met the eligibility requirements. Information about the socio demographic and clinical characteristics was recorded using a structured proforma. The PHQ-9[10], GAD-7[11], perceived stress scale (PSS)[12], and WHOQOL-BREF[13] were used to screen all subjects for depression, anxiety, perceived stress, and Quality of life.

All of the analyses were carried out with the help of Microsoft Excel and the Statistical Package for Social Sciences (SPSS for Windows, Version 16.0). SPSS Inc., Chicago.

RESULTS

The average age of the participants in the study was 41.91 years. Most of the participants were between the ages of 31 and 40. 69 (76.7 percent) of the 90 patients were from the lower middle socioeconomic class, while 60 (66.7 percent) were from rural areas. Males made up the majority (56.7 percent) and were married (87.8 percent).

In the sum of 90 patients with psoriasis of 71 patients (78.9%) experienced significant depression. The prevalence of anxiety was 76.7 percent, with 69 patients testing positive. There were 51 patients who were regarded to be under significant stress. Twenty of the patients had a score of 20 or higher, suggesting significant stress.

24 patients (16.6%) reported that their QOL was “poor” - “very poor” and 35 (35.6%) patients stated “neither poor nor good.” In response to “How satisfied are you with your health?” 26 (28.9) patients reported “poor” - “very poor” and 33 (36.7%) reported “neither poor nor good.”

Table 1: Patients with psoriasis (N = 90): distribution of socio demographic variables

Variables	Categories	No. of patients n (%)
Age in years	20 and below	7(7.8%)
	21- 30	7(7.8%)
	31-40	25(27.8%)
	41-50	24(26.7%)
	51-60	24(26.7%)
	Above 60	3(3.3%)
Gender	Male	51(56.7%)
	Female	39(43.3%)

Marital status	single	11(12.2%)
	Married	79(87.8%)
Area of domicile	Rural	60(66.7%)
	Urban	30(33.3%)
Socio-economic class	Upper	0
	Upper middle	7(7.8%)
	Lower middle	69(76.7%)
	Upper lower	12(13.3)
	Lower	2(2.2%)

The relationship between socio demographic factors and psychiatric morbidity, psoriasis clinical characteristics, and quality of life

Patients with psoriasis who lived in rural locations had significantly greater rates of depression. Rural patients had a 3.28-fold increased risk of depression. However, only 5.6 percent to 8.6 percent of the variance in depression scores was explained by an area of domicile (AD). The PSS score increases by a tiny amount as the person gets older. Age, on the other hand, is a weak predictor, accounting for only 5% of the variation in PSS. Any socio-demographic category did not predict anxiety, psoriasis severity, or quality of life.

Psoriasis severity and psychiatric morbidity

Total PASI score (severity of psoriasis) had a significant positive correlation with total depression score (r = 0.465, P = 0.000), anxiety score (r = 0.515, P = 0.000) and perceived stress score (r = 0.544, P = 0.000). Patients of psoriasis with anxiety and depression had a significantly higher score on PASI in contrast to patients without anxiety and depression. The predictive relationship between severity of psoriasis (PASI) and absolute scores of depression (PHQ-9), anxiety (GAD), and PSS was statistically significant. Psoriasis severity and depression may be linked to approximately 22% of the variance in each prediction. The Psoriasis severity has a predictive association with the highest level of anxiety (30 percent variance prediction). For patients, the cumulative probability was greater. Higher PASI scores indicate a more serious grading of depression/anxiety.

Table 2: Association between psychiatric morbidity, Clinical variables of psoriasis and QOL

-	-	PHQ9 total score	GAD7 total score	PSS	PASI	Psoriasis duration
PHQ 9 Total score	r	---	.919**	.854**	.465**	.382**
	p	---	.000	.000	.000	.000
GAD7 Total score	r	.999**	--	.872**	.515**	.309**
	p	.000	--	.000	.000	.003
PSS	r	.854**	.872**	--	.544**	.305**
	p	.000	.000	--	.000	.003
PASI	r	0.465**	.515**	.544**	--	.198
	p	.000	.000	.000	--	.061
Psoriasis duration	r	.382	.309	.305	.198	--
	p	.000	.000	.003	.061	--
WHO QOL Physical domain	r	-.031	.045	.249	.145	-.167
	p	.774	.677	.018	.173	.116
WHO QOL Psychological domain	r	.019	.032	.212	.018	-.162
	p	.858	.762	.044	.868	.127
WHO QOL Social domain	r	-.285	-.208	-.084	.032	-.223
	p	.006	.049	.433	.764	.035
WHO QOL Environmental domain	r	-.355	-.269	-.152	-.067	-.142
	p	.001	.010	.153	.530	.183

Psoriasis duration and psychiatric morbidity

The overall length of psoriasis had a positive connection with total depression score (r = 0.382, P = 0.000), anxiety (r = 0.309, P = 0.000), and perceived stress (r = 0.305, P = 0.000) scores. There was a statistically significant connection between the duration of psoriasis and the absolute scores of depression (PHQ-9), anxiety (GAD), and PSS. Patients with psoriasis for a longer period of time were more likely to have a severe form of depression or anxiety.

The severity of psoriasis and psychiatric morbidity in association with quality of life

Psoriasis severity was found to have a significant negative connection with two WHOQOL domains: social interactions (r = 0.285, P = 0.006) and environmental domain (r = 0.208, P = 0.049). Patients with psoriasis who also had anxiety or depression had a considerably higher proportion of patients expressing poor to very bad quality of life. Similarly, a considerably larger proportion of psoriasis patients with anxiety and depression reported low to very poor health satisfaction.

Table 3: Distribution of responses of patients to WHO QOL

Variables	Groups	Distribution of responses of patients to WHO QOL					Pearson chi-square	df	p
		Very poor	Poor	Neither poor nor good	Good	Very good			
WHOQOL	Psoriasis with anxiety/depression	12	12	30	11	9	26.715	4	.000
Question 1	Psoriasis without anxiety/depression	0	0	2	12	2			
WHOQOL	Psoriasis with anxiety/depression	16	10	30	11	7	21.141	4	.000
Question 2	Psoriasis without anxiety/depression	0	0	3	10	3			

$p < 0.05$ = Statistical significance

DISCUSSION

The prevalence and implications of psychiatric morbidity among psoriasis patients attending a Tertiary Care Centers were investigated in this study. We also looked at the impact of socio demographic and clinical factors on the mental health of psoriasis patients. The patients were additionally assessed for perceived stress was the study's greatest strength.

Psychiatric Morbidities in Psoriatic Patients

In our study, patients with psoriasis had an overall frequency of depression of 78.9 percent, with 62.2 percent having mild to moderate severe depression that would necessitate psychiatric intervention. Various research on psoriasis patients has found an incidence of depression ranging from 28% to 67 percent.[8,14-18] The prevalence of depression in psoriasis patients observed in our study is higher than in most of the other studies evaluated. To some extent, these variances could be explained by heterogeneity in the screening procedures used between investigations.

In our study, the overall prevalence of anxiety disorders among psoriasis patients was 76.7 percent. Severe anxiety requiring psychiatric assistance was seen in 22.2 percent of people. This is partially consistent with the findings of other studies examined here.[19-20] The high incidence of anxiety can be explained by the fact that patients visiting the dermatological clinic are concerned about their condition, the duration and outcome of therapy, the fear of investigations, and the financial elements of treatment. Several studies have also found that psoriasis patients had both depression and anxiety disorders.[6,14,21,22] According to our findings, 65 (72.2 percent) of patients tested positive for both depression and anxiety at the same time, which is consistent with earlier research. In other words, patients with psoriasis who have a depressive disorder are prone to experience anxiety symptoms as well.

In our study, the mean PSS score in psoriasis patients was 14.71. Fifty-one patients (56.7 percent) had a substantial stress score, and twenty patients (22.2 percent) had a score of 20 indicating severe degrees of perceived stress. These prevalence estimates are consistent with earlier research findings.[5,16,23-25]

QOL IN PSORIASIS PATIENTS

According to our findings, 24 (16.6 percent) of the 90 patients studied claimed that their quality of life was bad to very poor. Twenty six (28.9) patients rated "poor" to "extremely poor" health satisfaction. We discovered a negative interrelationship between psychiatric morbidity and two WHOQOL domains: social relationship and environmental domain. Thus, psoriasis patients' worse social and environmental quality of life is connected with higher psychological discomfort.

The impact of socio demographic characteristics on the prevalence of psychiatric morbidity

Patients in their third to fifth decades of life made up the majority of the study sample, with a higher proportion of male subjects. Males in their third to fifth decades of life are economically productive members of society. As a result, they are more prone to seek immediate treatment. Most of the Indian research has found a similar gender disparity in psoriasis distribution. Males have a higher prevalence of psoriasis, with the majority of individuals presenting in their third or fourth decade of life.[26-29]

Socio demographic characteristics have consistently been found to be the least useful in predicting psychiatric morbidity in psoriasis patients.[4,19] Only two sociodemographic variables were shown to have a weak connection with psychiatric morbidity: age and stress, and AD with depression.

Age had no significant relationship with anxiety and sadness in this study. The PSS score grows with age, although only by a very modest amount. Sampogna et al.[30] discovered a similar finding which states psychological distress was higher in older psoriasis patients.

We discovered that the prevalence of depression was substantially higher among psoriasis patients from rural areas. These findings can be explained by the fact that patients from rural areas typically have a poorer economic position, ongoing financial problems, lesser education, issues with basic necessities, and limited access to health care. As a result, these individuals are more likely to have poor adherence to therapy and regular follow-ups, worsening the severity of their psoriasis. However, because the majority of our individuals were from rural areas, this observation should be regarded with caution.

Clinical factors' effects on the prevalence of psychiatric morbidity

This study discovered a link between the intensity and duration of psoriasis and depression/anxiety/ stress which was similar to other studies.[14,15,23,31-33] Patients with severe psoriasis have a higher rate of psychiatric illness. Our research also found that patients with higher PASI scores are more likely to suffer from severe depression/anxiety. Similarly, people with psoriasis over a longer period of time were more likely to develop severe depression/ anxiety.

The majority of studies have found a link between the severity of psoriasis and anxiety/ depression.[14,15,17,24,23] Devrimci Ozguven et al.,[15] Akay et al.,[14] and de Korte et al.[33] discovered a link between the severity of psoriasis and psychiatric illness. As a result, our findings are consistent with past research. However, our findings contradict the findings of Fortune et al.,[31] who claimed that the severity of psoriasis has no effect on the magnitude of anxiety and depression.

Another area of study has been the association between the length of psoriasis and depression/ anxiety. Fried et al.[32] and Esposito et al.[34] discovered a link between the severity of anxiety/depression and the duration of psoriasis. Our research found a link between psoriasis severity and duration and psychological suffering (PSS score). Psychological stress has been linked to the onset or exacerbation of psoriasis.[35] As revealed in our study, most researchers have discovered high levels of stress among psoriasis patients.[6,31,32]

CONCLUSION

According to the studyanxiety,stress and depression are much higher among psoriasis sufferers. Patients with psychiatric comorbidities had significantly low quality of life. We discovered a complex link between psoriasis, psychiatric comorbidity, and quality of life, as well as the necessity for an integrated strategy for disease care. Routine screening for psychiatric comorbidities in all psoriasis patients is required, as early diagnosis of these comorbidities is the first step in effective care. According to research, psychosocial therapies improve clinical outcomes in psoriasis patients. This must be proved in the socio-cultural context of India. This would make it easier to combine psychiatric and dermatological care. This would eventually contribute to better overall health outcomes and quality of life.

Financial support and sponsorship: Nil

Conflicts of interest: There are no conflicts of interest.

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