



PREVALENCE OF ANXIETY, DEPRESSION, AND SLEEP QUALITY DISTURBANCES IN PATIENTS DIAGNOSED WITH PSORIASIS IN A TERTIARY HEALTHCARE CENTRE

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ABSTRACT

Background: Psoriasis is a psychophysiological dermatological condition with significant psychiatric comorbidities. However, the psychological impact remains underrecognized in clinical practice. **Objectives:** To assess the prevalence of anxiety, depression, and sleep quality disturbances and explore their inter-relationships in patients diagnosed with psoriasis. **Methods:** A cross-sectional study was conducted on 30 patients with clinically diagnosed psoriasis attending the dermatology outpatient department at ASRAM Medical College from June to September 2024. Participants were evaluated using the Hamilton Anxiety and Depression Rating Scales and the Pittsburgh Sleep Quality Index. Statistical analysis was done using the Chi-square test, and a p-value < 0.05 was considered significant. **Results:** Majority of participants were aged 21–30 years (67%) with a near-equal gender distribution (53% male, 47% female). Poor sleep quality was reported in 60% of patients, depression in 53%, and anxiety in 27%. Depression was significantly associated with younger age ($p<0.05$) and female gender. Pruritus showed significant correlation with poor sleep quality and anxiety but not with depression. Poor sleep quality was significantly associated with depression ($p<0.05$). **Conclusion:** Sleep disturbances and depression are highly prevalent in psoriasis patients, particularly in younger and female populations. Pruritus contributes significantly to these psychological symptoms. Early recognition and holistic management are essential to improve patient outcomes.

KEYWORDS : Psoriasis, Anxiety, Depression, Sleep Quality, Pruritus

INTRODUCTION

The neuro-immuno-cutaneous-endocrine model elucidates the bidirectional link between psychological stress and inflammatory skin diseases. Psoriasis, a chronic immune-mediated dermatosis affecting 2–4% of the global population, often coexists with psychiatric disorders such as anxiety, depression, and sleep disturbances. Despite the high prevalence of these comorbidities, they remain underdiagnosed and undertreated, adversely impacting patient quality of life.

Objectives

- To assess the prevalence of anxiety and depression among psoriasis patients.
- To evaluate sleep quality in these patients.
- To examine associations between psychological indices and clinical variables such as pruritus, age, and gender.

MATERIALS AND METHODS

Study Design: Cross-sectional observational study

Setting: Dermatology Department, ASRAM Medical College, Eluru

Duration: June 2024 – September 2024

Sample Size: 30 patients (convenience sampling)

Inclusion Criteria:

Age ≥ 18 years

Clinical diagnosis of psoriasis

Informed consent

Exclusion Criteria:

Co-existing dermatological or systemic illnesses

Pre-existing psychiatric diagnoses

Assessment Tools:

Hamilton Anxiety Rating Scale (HAM-A)

Hamilton Depression Rating Scale (HAM-D)

Pittsburgh Sleep Quality Index (PSQI)

Statistical Analysis: Frequencies, percentages, and Chi-square tests were used to analyze associations between variables. A p-value < 0.05 was considered statistically significant.

RESULTS

Demographics: 67% were in the 21–30 age group. Gender distribution was 53% male and 47% female.

Psychological Findings: Poor sleep quality was noted in 60% of subjects, depression in 53%, and anxiety in 27%.

Table 1: Profile Of Subjects With Psoriasis

Profile of subjects with Psoriasis		n	%
Age	< 20 years	3	10%
	21 to 30 years	20	67%
	> 30 years	7	23%
Gender	Male	16	53%
	Female	14	47%
HAM-A	Mild Anxiety (0-17)	6	20%
	Moderate Anxiety (18-24)	2	7%
	Severe Anxiety (25-30)	0	0%
HAM-D	Mild Depression (10-13)	6	20%
	Moderate Depression (14-19)	10	33%
	Severe Depression (20-26)	0	0%
Pittsburg sleep quality index	Good Quality sleep (0-4)	12	40%
	Poor Quality sleep (5-21)	18	60%
Pruritus	Present	22	73%
	Absent	8	27%

Table 2: Indices Of Subjects With Psoriasis

Indices	Percent (%)
Anxiety	27%
Depression	53%
Poor quality sleep	63%
Pruritus	73%

Associations:

Age significantly associated with depression and anxiety ($p<0.05$).

Gender significantly associated with depression, with higher rates in females.

Pruritus showed significant association with both sleep quality and anxiety ($p<0.05$).

Sleep quality significantly associated with depression ($p<0.05$), but not with anxiety.

Table 3: Comparison Of Age With Indices In Study

Age	Depression			P-Value
	Mild	Moderate	Absent	
< 20 years	1	1	1	<0.05
21 to 30 years	2	10	8	
> 30 years	1	1	5	
Age	Anxiety in study			
	Mild	Moderate	Absent	
< 20 years	1	1	1	<0.05
21 to 30 years	3	1	16	
> 30 years	2	0	5	

Age	Sleep quality index		
	Good	Poor	
< 20 years	1	2	>0.05
21 to 30 years	6	14	
> 30 years	2	5	

Table 4: Comparison Of Gender With Indices In Study

Gender	Depression			P-Value
	Mild	Moderate	Absent	
Male	2	3	11	<0.05
Female	4	7	3	
Gender	Anxiety			P-Value
	Mild	Moderate	Absent	
Male	2	1	13	>0.05
Female	4	1	9	
Gender	Sleep quality index			P-Value
	Good	Poor		
Male	10	6		>0.05
Female	8	6		

Table 5: Comparison Of Pruritus With Sleep Quantity Index

Pruritus	Comparison of pruritus with sleep quantity index		P-value
	Good	Poor	
Present	5	17	<0.05
Absent	7	1	

Table 6: Comparison Of Pruritus With Anxiety And Depression

Pruritus	Depression			P-Value
	Mild	Moderate	Absent	
Present	5	7	10	>0.05
Absent	1	3	4	
Pruritus	Anxiety			P-Value
	Mild	Moderate	Absent	
Present	1	1	20	<0.05
Absent	5	1	2	

Table 7: Comparison Of Indices With Sleep Quality Index

Pruritus	Sleep quality index		P-value
	Good	Poor	
Present	5	17	<0.05
Absent	7	1	
Depression	Sleep quality index		P-value
	Good	Poor	
Mild	2	4	<0.05
Moderate	1	9	
Absent	9	5	
Anxiety	Sleep quality index		P-value
	Good	Poor	
Mild	2	4	>0.05
Moderate	1	1	
Absent	9	13	

DISCUSSION

- In this study, most of the patients belong to the age group 21-30 years (67%), while males 53% and females 47%
- The most common affects are being poor sleep quality (60%) then followed by depression (53%) and anxiety (27%).
- In this study, when age is compared with other indices, significant correlation was found with depression and anxiety (<0.05) whereas no correlation with sleep quality.
- When compared gender with indices, significant correlation was found with depression with females being majorly involved.
- It was found that there was statistically significant correlation found between pruritus and sleep quality. Presence of pruritus is associated with poor sleep quality.
- Significant correlation was also found between pruritus and anxiety disorder with mild anxiety in majority of patients but no correlation with depression.
- When compared sleep quality with depression and anxiety, significant correlation was found with depression.

CONCLUSION

Psoriasis patients exhibit high rates of poor sleep and depression, especially those with pruritus and in younger age groups. Holistic management strategies addressing both dermatological and psychological health are imperative.

Limitations

Small sample size

Single-centre study

Cross-sectional design limits causal inference

Conflicts of interest – NONE

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