

PREVALENCE OF PSYCHIATRIC COMORBIDITY IN PSORIASIS PATIENTS IN A TERTIARY CARE HOSPITAL IN CHATTISGARH

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ABSTRACT:

AIM: To assess the psychiatric comorbidity among the patients seeking treatment for psoriasis and to evaluate the morbidity in all parameters of skindex in psoriasis patients in a tertiary care hospital.

METHODOLOGY: The research was conducted with a sample size of 46 in each group. One group consisted of patients suffering from psoriasis. The control group comprised of individuals free from any skin condition who are age and gender matched. The tools used to assess the psychiatric comorbidity were Self-reported Questionnaire-24 and Skindex. Data was transferred to the statistical package SPSS and statistically analyzed using chi square test with the significance value set at $p < 0.05$.

RESULTS: Most of the psoriatic patients suffered from plaque type (69.5%) followed by erythrodermic type (13%), palmoplantar type (10.86%) and guttate type (6.5%). In the psoriatic patients, 65.2% showed psychiatric comorbidity whereas in the control group psychiatric illness was observed in 21.73% which was statistically significant ($P < 0.0001$). Among the variants, guttate type of psoriasis showed 100 % correlation with psychiatric illness. Plaque psoriasis, Erythrodermic type and palmoplantar variety were associated with psychiatric comorbidity in 62.5%, 66% and 40 % respectively. Skindex tool detected a statistically significant difference in the psychiatric comorbidity between the cases and controls ($P < 0.0001$).

CONCLUSION: Patients with psoriasis have a greater degree of psychiatric comorbidity. Psychiatric evaluation is suggested in these patients. Proper treatment must take into consideration the psychiatric problems linked to psoriasis.

KEYWORDS: Psoriasis, psychiatric morbidity, self-reporting questionnaire-24, skindex

INTRODUCTION:

The skin acts as the first line of defense and it plays a key role in mental wellbeing. Therefore, healthy skin is essential for a healthy body and mind. Any deviation from normalcy may significantly impact the mental health. Psoriasis, a chronic inflammatory skin condition is characterized by well-defined salmon coloured patches with silvery scales. As the disease becomes more chronic, it will have a detrimental effect on the somatic, psychological and social wellbeing of an individual. [1,2]

The observed prevalence of depression and anxiety in patients with psoriasis was suggestively higher than that of the general population.[3]Also, the symptoms of psoriasis, particularly pruritus are associated with depression. Likewise, evidence shows that patients reporting higher stress frequently perceived pruritus than patients with low stress levels. [4]

Patients with this skin condition showed substantial impairment in the quality of life (QOL). The QOL scores in patients with psoriasis were also lower compared to other skin diseases.[5-9]Chren et al. proposed skindex to evaluate the subjective effects of dermatologic conditions on the quality-of-life of the patients.[10]This instrument evaluates two main areas i.e., Psychosocial and physical. Psychosocial dimension evaluates cognitive, social and emotional status whereas the physical effects evaluate physical discomfort or limitations. The emotional parameters further evaluates depression, fear, embarrassment and anger.

Hence it is clear that there is a deep correlation between the psychology of the patient and the natural course and outcome of the disease. Literature suggests that very few studies were performed in Indian context and there are no studies pertaining to Chhattisgarh region. Hence the aim of the present study was to assess the psychiatric comorbidity among the patients seeking treatment for psoriasis and to evaluate the morbidity in all parameters of skindex in psoriasis patients in a tertiary care hospital.

MATERIALS AND METHODS:

The present study is a hospital based case control study in a Tertiary care hospital in Ambikapur, Chhattisgarh, India. The research was conducted from January 2021 to January 2022 with a sample size of 46 in each group. One group consisted of patients suffering from psoriasis. The other group, i.e., control group comprised of individuals free from any skin condition who are age and gender matched.

Inclusion Criteria:

1. Patients aged more than 18 years diagnosed with psoriasis
2. Age and gender matched control group
3. Who can understand, read and write Hindi
4. Participants who gave consent

Exclusion Criteria:

1. Patients free from other systemic illnesses
2. Patients taking corticosteroids
3. Patients previously diagnosed with psychiatric illness before the onset of skin condition

4. Patients who are unwilling and those did not give consent

The tools used for the present study are Self reported Questionnaire-24 and Skindex. Demographic details and the completed questionnaire forms were evaluated. Data was transferred to the statistical package SPSS (Version 21.0, Armonk,NY: IBM Corp) and statistically analyzed using chi square test with the significance value set at $p < 0.05$.

RESULTS:

Demographic characteristics revealed that the age of the patients in psoriasis group ranged from 20 to 58 with a mean age group of 31.6 whereas in the control group, age ranged from 25 to 54 with a mean age of 30.84. Male to female ratio in both the groups is 1.55(28:18). Most of the psoriatic patients suffered from plaque type (69.5%) followed by erythrodermic type (13%), palmoplantar type (10.86%) and guttate type(6.5%) (Figure 1).

In the psoriatic patients, 65.2% showed psychiatric comorbidity whereas in the control group psychiatric illness was observed in 21.73% which was statistically significant ($P < 0.0001$) (Table 1). Among the variants, guttate type of psoriasis showed 100 % correlation with psychiatric illness. Plaque psoriasis was associated with psychiatric comorbidity in 62.5%. Erythrodermic type and palmoplantar variety showed 66% and 40 % respectively (Figure 2).

Skindex tool showed that depression was the most common type of psychiatric comorbidity followed by social problem, discomfort, cognitive impairment, embarrassment, physical limitation, fear and anger. In control group with positive psychiatric illness, patients commonly showed depression, anger and social problem.

Figure 1: Prevalence of types of psoriasis

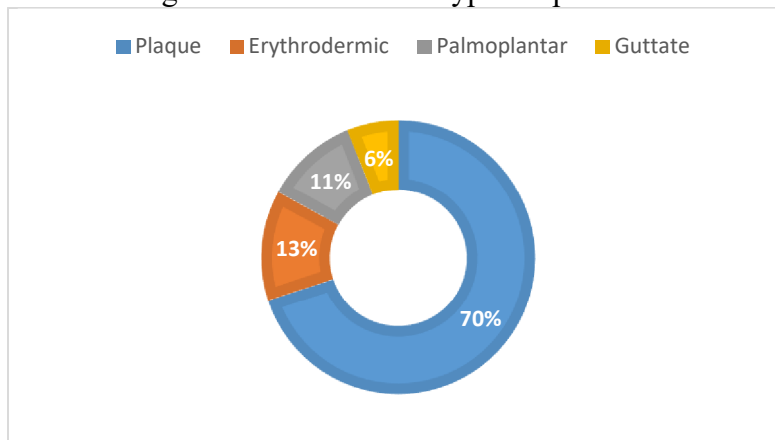


Figure 2: Psychiatric screening in Psoriasis group

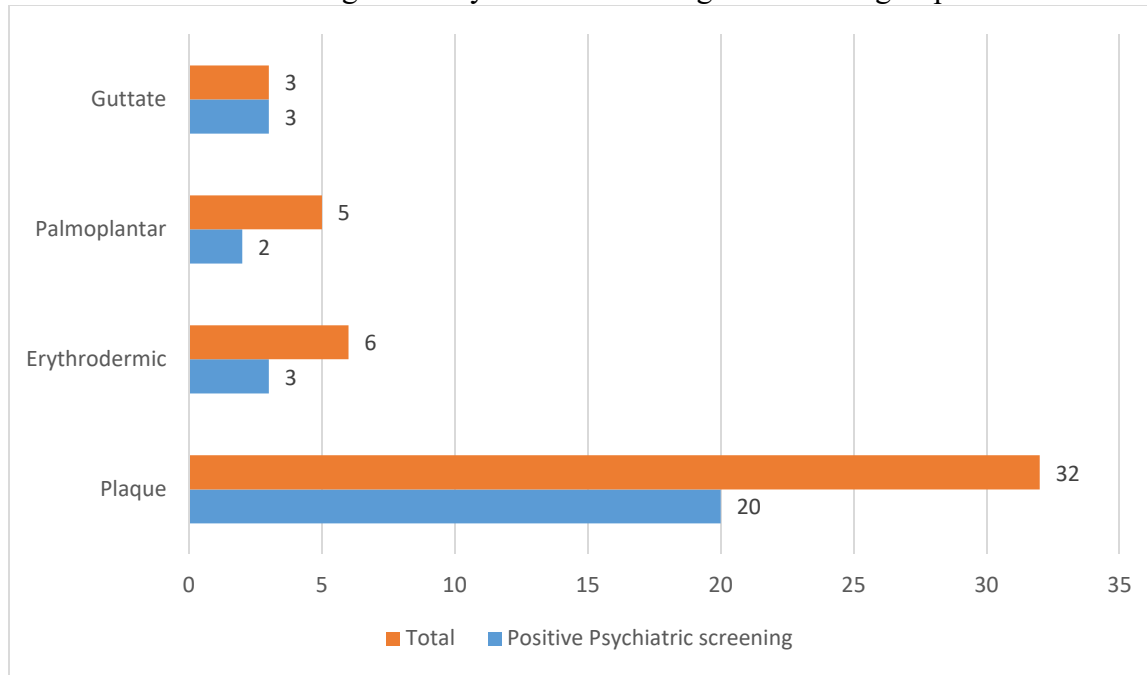


Table 1: Comparison of psoriasis patients and controls for the psychiatric comorbidity

Parameter	Cases (%)	Controls (%)	P value
Anger	22 (47%)	3 (6%)	<0.0001*
Discomfort	26 (56%)	2 (4%)	<0.0001*
Cognitive impairment	25 (54%)	1 (2%)	<0.0001*
Physical limitations	23 (50%)	1 (2%)	<0.0001*
Social problem	27 (58%)	3 (6%)	<0.0001*
Depression	28 (60%)	4 (8%)	<0.0001*
Fear	23 (50%)	1 (2%)	<0.0001*
Embarrassment	25 (54%)	2 (4%)	<0.0001*

*- statistically significant

DISCUSSION:

Psoriasis is an inflammatory dermatologic condition, which is associated with several comorbidities like metabolic abnormalities, heart diseases and psychiatric illness.[11] Irrespective of the age and gender, general population are likely to develop psychiatric problems. The mean age of onset of psoriasis in the present study was 31.6. Similar observations were observed in two other studies by Mousa et al and Mehta et al. [12,13]Results regarding the demographic data reveal that both the groups were age and gender matched to avoid any

selection bias. Male to female ratio of 1.55 suggests that the female participants were less in the present study, which could be attributed to the socio cultural background of the region where females tend to be seeking less treatment than males.

The SRQ screening tool used in the present study is comparable to General Health Questionnaire (GHQ) 12 or 28 for evaluating psychiatric illness. [14] The skindex tool used in the present study measures the quality of life in psoriasis patients considering the eight dimensions. The psychiatric morbidity in the present study was assessed to be 65.2%, which is higher when compared to 24.3% psychiatric morbidity reported in a study by Mattoo et al.[15] This variation in the results could have been due to the variation in the tool used for the psychiatric assessment. They employed GHQ tool which doesnot take into consideration the psychotic aspect.

However, similar results were observed in most of the studies ranging from 58-62% for various skin conditions including psoriasis. The persons who were positive in psychiatric screening had high skindex values in all eight parameters studied which is statistically significant. This observation can be correlated to poor quality-of-life in these individuals.

In the present study, depression was the commonly observed psychiatric illness among the psoriasis patients. Similar observations were made in the studies by Kumar S et al. and Han et al. [16,17] Kumar V et al in their study compared the psychiatric morbidities in the patients suffering from psoriasis and pemphigus and stated that the most commonly observed psychiatric illnesses in these patients were depression and adjustment disorder.[7] The shared etiopathogenic mechanisms between psoriasis and depression include abnormal calcium homeostasis, elevated concentrations of substance P, defect in β -adrenergic function, decreased melatonin secretion, increased levels of pro-inflammatory cytokines.[18-22]

SRQ-24 tool revealed that psychiatric comorbidity was highly prevalent in psoriasis group compared to the control group. Guttate type of psoriasis showed highest psychiatric co-morbidity followed by erythrodermic plaque and palmoplantar type. This shows that severity of psoriasis is linked to poor quality of life thereby increasing the psychiatric co-morbidity among the psoriasis patients.

Limitations of the present study are the small sample size and no comparison with other dermatologic conditions. The present study also did not consider the areas affected by the skin condition for comparisons. Hence further research should focus on well designed randomized control trials with large sample size comparing different dermatologic conditions.

CONCLUSION:

Within the limitations of the present study, it can be concluded that the patients with psoriasis have a greater degree of psychiatric comorbidity. Psychiatric evaluation is suggested in these patients. Proper treatment must take into consideration the psychiatric problems linked to psoriasis.

CONFLICTS OF INTEREST: NIL

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