

ORIGINAL RESEARCH

Assessment of psychiatric comorbidities, self-esteem, coping skills, and quality of life in patients with Psoriasis affecting physical appearance in a tertiary care teaching hospital

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ABSTRACT

Aim: To assess psychiatric comorbidities, self-esteem, coping skills, and quality of life in patients with Psoriasis affecting physical appearance in a tertiary care teaching hospital. **Material and Methods:** The present cross-sectional study was conducted among 29 Patients diagnosed to have psoriasis visiting Out-patient Dept. of Dermatology, Sri Siddhartha Medical College & Hospital. After obtaining the consent, semi-structured proforma, MINI, HAM-D and HAM-A was administered by the principal investigator. The scales RSES, PACS-R BREF-COPE, and BBQ scale were given to the participants to complete. **Results:** In psoriasis, 9 patients had no depressive symptoms, 12 patients showed mild depressive symptoms and 8 patients showed moderate depressive symptoms. In psoriasis patients, 2 patients had no anxiety symptoms, 24 patients had mild anxiety view and 3 patients showed moderate anxiety symptoms. **Conclusion:** Major depression disorder is the most frequent psychiatric disorder seen in patients with psoriasis. Mild to moderate anxiety levels are seen in patients with psoriasis. Low self-esteem is seen in patients with psoriasis. Even after having significant anxiety, depression and emotional instability patients psoriasis would cope well. Patients having psychiatric illness were suffering from low quality of life.

Keywords: Psoriasis, Anxiety, Depression

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INTRODUCTION

Skin is not only the largest organ of the body but it is also the interface between individual and environment. It plays a vital role considering the body image, bonding between mother and infant and plays a powerful role in communication throughout the life(1). It is an organ which responds to emotions with blushing, pallor, piloerection and perspiration and provides self-esteem (2).

The origin of brain and skin is from the same germ layer, the embryonic ectoderm and are affected by same hormones and neurotransmitters (3). That's why the term Psycho-dermatology term has been in use since many years which describes an interaction between dermatology and psychiatry and psychology (4). Psychiatry is more concerned on the 'internal'

non visible diseases and dermatology on 'external' visible diseases. Moreover, psychiatric diseases and dermatological diseases have been associated with each other. However, whether psychiatric diseases cause dermatological diseases or dermatological diseases cause psychiatric diseases remains a dilemma and topic of study (5-7). Various studies have reported 30-60% of psychosocial and psychiatric comorbidity in patients with dermatological conditions (8).

Psoriasis is a relatively common psychophysiological disorder which has chronic and inflammatory course of illness and hyper proliferative skin disease that occasionally requires systemic therapy (9). It affects approximately 125 million people worldwide, approximately 2-3% of total population. It has long been reported that stress trigger psoriasis (10). It is

associated with a diversity of psychological difficulties like anxiety, depression, poor self-esteem, suicidal ideation and sexual dysfunction. Psoriasis is associated with considerable impairment of health-related quality of life (HRQOL), which negatively has impact on psychological, vocational, social and physical functioning (11). Psychiatric symptoms which are most commonly attributed to psoriasis include disturbances in body image and impairment in social and occupational functioning (12). In Psoriasis quality of life may be severely affected by chronicity and visibility of lesions as well as life-long treatment. There are five dimensions of stigma associated with psoriasis: (1) Prediction of rejection, (2) feelings of being flawed, (3) sensitivity towards the attitude of society, (4) guilt and shame and (5) secretiveness (13). Around 15% patients reported depression, 9.7% of patients with psoriasis has expressed death wishes and 5.5% has active suicidal ideas. Often the degree of psychological disability in skin diseases misinterpreted and even not, fewer than 33% receive mental health care, affecting the outcome of skin disease. Improvement in the clinical severity and symptoms of psoriasis decreases the frequency of psychiatric disturbances (14).

SCOPE OF THE STUDY

Dermatological conditions which specifically affect physical appearances are a source of stigma in Indian population. This is more so in adolescents and young population. Adequate self-esteem and appropriate positive coping skills are essential to have a good life quality. Psychiatric problems may also arise due to perceived disfigurement. While these dermatological conditions have been evaluated for quality of life, there are some studies including all three diagnoses (psoriasis). Self-esteem, coping skills have not been stressed elsewhere. Assessment of self-esteem and coping skills will give us a platform for adequate intervention and improve their life quality. The present study was conducted with the following aim and objectives.

AIM

Assessment of psychiatric comorbidities, self-esteem, coping skills, and quality of life in patients with Psoriasis affecting physical appearance in a tertiary care teaching hospital.

OBJECTIVES

- To determine psychiatric comorbidities in patients with dermatological conditions affecting physical appearance.
- To assess self-esteem and coping skills in patients with dermatological conditions affecting physical appearance.
- To assess quality of life in patients with dermatological conditions affecting physical appearance.

MATERIALS AND METHODS

Setting: Outpatients of Department of Dermatology, Sri Siddhartha Medical College and Hospital.

Study Design And Period: Cross-sectional, 18 months (November 2019-April 2021)

Sampling Method: Purposive sampling

Sample Size: Prevalence of psychiatric comorbidity in psoriasis is found to be 15%. (4)

Sample size is calculated using the formula:

$$n = \frac{[z(1-\alpha)]^2 * p * q}{d^2}$$

Where, n – sample size,

p – Proportion in population possessing the characteristic of interest = 14%

q – (1 – p) = 86%

d – Acceptable deviation = 8%

z (1- α) – value of two tailed α error = 1.96 The sample size is estimated to be a minimum of 23

Taking into consideration 10% non-response rate, the sample size was minimum of 25.

Inclusion Criteria

- Patients diagnosed to have psoriasis visiting Out-patient Dept. of Dermatology, Sri Siddhartha Medical College & Hospital.
- Including age above 15 years and both sex.
- Patient who gives consent.

Exclusion Criteria

- Patients with known psychiatric disorders which have started before the dermatological problems.
- Patients who are found to have any psychiatric illness other than depression, anxiety spectrum, somatoform and body dysmorphic disorder.
- Patients with any other chronic medical conditions.

Instruments:

- Semi-structured proforma
- Mini-International Neuropsychiatric Questionnaire (MINI scale)
- Hamilton depression scale (HAM-D)
- Hamilton anxiety scale (HAM-A)
- Rosenberg Self Esteem Scale (RSES)
- Physical Appearance Comparison Scale-Revised (PACS-R)
- Brief-COPE
- Brunnsviken Brief Quality of Life Scale (BBQ)

Procedure: The participants were given verbal explanations and description about the topic of research. Informed consent was obtained. After obtaining the consent, semi-structured proforma, MINI, HAM-D and HAM-A was administered by the principal investigator. The scales RSES, PACS-R BREF-COPE, and BBQ scale were given to the participants to complete. Any assistance required in understanding the questionnaire was provided by the principal investigator. The interview took around 20-25 minutes.

STATISTICAL ANALYSIS

All statistical assessments were done by Microsoft Excel 2016 and Epi-Info version 7.2.2.6. Data

collected from the semi structured proforma was analysed and recorded. Quantitative data was expressed in number and percentage. Chi-square test was applied to compare the statistical results obtained.

RESULTS

In this study, 12 persons around 41.4% are in age group of 26-35, 8 persons (27.6%) in 36-45 years of age and 9 persons (31%) are in age group of >45 years. Among 29 patients with psoriasis – 16 patients (55.2%) are males, 13 patients (44.8%) are females, 82.8% were hindu,13.8% were Muslims and 3.4% were Christians. 77.5% were from urban area and 22.5% from rural area. 20.7% were single, 69%

married and 10.3% widowed. 20.7% are illiterate, 24.1 % were high school, 55.2% were graduate. 27.6% were un-employed, 3.4% were un-skilled, 27.6% semi-skilled, 41.4% were skilled, 51.7% had income<10000, 13.8% had income 10000-20000 and 34.5 % >20000. 55.2% had duration of illness <=5yrs, 44.8% DOI- 6-10yr. 17 patients were taking only Drugs, 1 patient were taking only phototherapy, 11 patients were on both drugs and phototherapy. 25 patients had no comorbidities, 2 patients had DM and 2 patients had HTN. In psoriasis, 9 patients had no depressive symptoms, 12 patients showed mild depressive symptoms and 8 patients showed moderate depressive symptoms (table 1).

Table 1: Association between HAM-D and skin disease

HAM-D		Psoriasis	Chi Square, p value
Normal	N	9	5.046, 0.283
	%	31.0%	
Mild	N	12	
	%	41.4%	
Moderate	N	8	
	%	27.6%	
Total	N	29	
	%	100.0%	

In psoriasis patients, 2 patients had no anxiety symptoms, 24 patients had mild anxiety view, and 3 patients showed moderate anxiety symptoms (table 2).

Table 2: Association between HAM-A and skin disease

HAM-A		Psoriasis	Chi Square, p value
Normal	N	2	10.046, 0.040
	%	6.9%	
Mild	N	24	
	%	82.8%	
Moderate	N	3	
	%	10.3%	
Total	N	29	
	%	100.0%	

In psoriasis, 23 patients had low self esteem (table 3).

Table 3: Association between Rosenberg self-esteem and skin disease

Rosenberg self Esteem		Psoriasis	Chi Square, p value
Normal	N	6	1.113, 0.573
	%	20.7%	
Low	N	23	
	%	79.3%	
Total	N	29	
	%	100.0%	

Table 4: Comparison of different item of Brief Cope between disease type

Items	Median	Mean	SD	Kruskal-Wallis H	P-value
Self Distraction	3.00	2.52	0.74	3.723	0.155
Active coping	3.00	2.83	0.85	0.407	0.816
Denial	2.00	2.38	0.94	0.155	0.925
Subst Use	2.00	1.89	0.99	3.150	0.207
Emotional Support	3.00	3.03	0.98	0.576	0.750
Informational Support	3.00	2.83	0.97	0.665	0.717
Behavioral Disengage	3.00	2.69	0.85	0.259	0.878
Venting	2.00	2.38	0.82	2.944	0.229

Positive Reframing	3.00	2.79	0.77	0.850	0.654
Planning	3.00	3.00	0.89	1.801	0.406
Humor	1.00	1.00	0.00	0.000	1.000
Acceptance	3.00	2.97	0.87	2.240	0.326
Religion	1.00	1.00	0.00	0.000	1.000
Self blame	3.00	2.41	0.82	2.383	0.304

Table 5: Comparison PACS-R and BBQ-Life scale between groups

Scale	Type	N	Mean	Std. Deviation	F	P-value*
PACS-R	Psoriasis	29	7.45	3.58	25.527	0.000
	Total	80	11.85	5.37		
BBQ-Llife scale	Psoriasis	29	34.55	5.33	1.180	0.313
	Total	80	34.48	4.77		

* ANOVA test

DISCUSSION

- This study was done to know the impact of skin diseases like Psoriasis on psychiatric manifestations by assessing anxiety and depression in patients with these skin disorders and to assess self-esteem, coping skills among the patients diagnosed with Psoriasis.
- In addition, this study also evaluates the comparison of physical appearance and quality of life among these patients.
- We have selected 80 patients attending outpatient department of dermatology among them 29 patients were diagnosed with psoriasis.
- Among the patients in the sample, the age distribution was, 34.3% of patients below 35 years, 38.6% were between the ages of 36 to 50 years, 27.1% belonged to the age group of above 51 years.
- Esposito et al (15) in a study of 2,391 patients with psoriasis concluded that in 62% of psoriasis patients had depressive symptomatology.
- In fact in two studies done by Gupta et al (12), an increase in stress and depressive symptoms were found to have a significant statistical correlation with an increase in psoriasis flare-ups and pruritus severity along with a more clinically disfiguring disease.
- Kashyap (16) found psychiatric co-morbidity in 35.2% of patients with psoriasis in Northern India.
- Our study reported- 41.4% patients with psoriasis had mild form of depressive symptoms whereas 27.6% had moderate form of depressive symptomatology,
- Masoud Golpour et al (17) conducted a hospital based study in Iran and found out that 45% of patients with psoriasis had mild to moderate form of anxiety.
- Hilal kaya et al (18) concluded that correlation of anxiety in psoriatic patients is highly statistically significant.
- In another study by Emily McDonough et al (19) anxiety in psoriasis patients was 36.6% which was highly statistically significant.

- In our study, 81.8% patients with psoriasis had mild form of anxiety whereas 10.7% of patients had moderate form of anxiety.
- In the study of Kruger et al (20), psoriasis was identified as being related to the absence of self esteem.
- Another study has reported that the association of poor self esteem with various psychopathologies such as sexual dysfunction disorders, anxiety, depression, and contemplating suicide occurs at high levels in patients with psoriasis.
- In our study 79.3% of patients with psoriasis had low self esteem which is almost similar to the other literature.
- Psoriasis is a chronic skin disease which affects the quality of life and has underdeveloped coping skills but with correct interventions and psychological support patients with psoriasis could cope well.
- Psoriasis may negatively affect quality of life, self-esteem, and body image, and may also cause psychosocial problems which has similar findings than our study.

CONCLUSION

- The study findings reveal, with respect to the Hypothesis that
 - No difference in gender was found in prevalence of psychiatric illness among the patients with psoriasis.
 - Most patients involved in the study are graduates.
 - Major depression disorder is the most frequent psychiatric disorder seen in patients with psoriasis.
 - Mild to moderate anxiety levels are seen in patients with psoriasis
 - Low self-esteem is seen in patients with psoriasis.
 - Even after having significant anxiety, depression and emotional instability patients psoriasis would cope well
 - Comparison in physical appearance is reported more in patients with psoriasis.
 - Patients having psychiatric illness were suffering from low quality of life.

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