"DEPRESSION AND SOCIAL ANXIETY AMONG PATIENTS WITH PRESENTING ACNE VULGARIS"

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ABSTRACT

Background: Acne Vulgaris is a common skin condition seen on the face, and is associated with a wide range of emotional and psychological challenges like**,** issues of body image, socialization, sexuality, embarrassment, self-consciousness, lack of self-confidence, and social dysfunction such as reduced/avoidance of social interactions with peers and opposite gender. The aim of this study is to determine the magnitude of social anxiety and depression in patients suffering from Acne Vulgaris.

Material & Method: Present cross-sectional study was conducted among the patients aged 16 to 35yrs with consent attending to Departments of Dermatology and Psychiatry OPD, tertiary care hospital, between December 2022 to June 2023 with diagnosis of acne vulgaris. Data was collected using a proforma to collect sociodemographic and clinical information about the patients and Scales used to assess the social anxiety and depression in patients with acne vulgaris and comparison group. (Liebowitz Social Anxiety Scale, HAM-D). A p-value of <0.05 was considered statistically significant and all the analysis was performed using SPSS v21 operating on windows 10.

Result: In present study, total of 254 patients fulfilling inclusion criteria are included with mean age of 24.99±4.14yrs with 30% males and 70% female patients. On assessment of the various scores between the cases and control, there is significant higher mean score of social fear score, performance fear score, social avoidance, performance avoidance, and also the total scores in cases compared to the patients in control group. (p<0.05)

Conclusion: The present study concluded that there is significant higher incidence of social anxiety and depression among the patients with acne vulgaris. Also, the study documents the

prevalence among the teenagers and also female preponderance. The study helped to identify the risk of development of the social anxiety and depression among the patients with acne.

Keywords: Acne Vulgaris, Depression, Anxiety, Risk, HAMD.

Introduction:

Skin, the largest part of our body, plays an important role in fitness, physical, mental and social wellbeing. Any disorder affecting the skin lead to major psychosocial stress and emotional distress, especially now due to the rising social media and unreasonable beauty constructs.[1]

Acne Vulgaris is a common skin condition. It affects 9.4% of the world's population, making it the eighth most prevalent disease worldwide.[2] Since acne is most commonly seen in the face, it is associated with a wide range of emotional and psychological challenges like, issues of body image, socialization, sexuality, embarrassment, self-consciousness, lack of self-confidence, and social dysfunction such as reduced/avoidance of social interactions with peers and opposite gender.[3,4] Depression and suicide are also more common among acne sufferers. Although various research on anxiety, depression, and personality traits in acne patients have been conducted, only a few studies have attempted to assess the extent of Social Anxiety in acne in India. Because early detection leads to better outcomes, understanding the frequency and diagnosis of social anxiety and depression is critical for patient therapy.[5,6]

Teenagers are extremely concerned with their looks and can be a very sensitive problem of social acceptance among their peers.[7] Acne has a detrimental influence on teenage psychological well-being, producing despair, suicidal thoughts, anxiety, psychosomatic symptoms, guilt, embarrassment, and social inhibition. They may also exhibit psychiatric symptoms such as sleeplessness, hypersomnia, and anorexia or hyperphagia. Academic performance decline, social disengagement, absenteeism, and delinquent behaviour.[8,9]

Expected Outcome is the increased incidence of Social Anxiety and Depression in patients with Acne Vulgaris in Southern part of India. Early screening and diagnosis of psychiatric disorders, will improve the prognosis of the disease. Hence, psychiatric evaluation in dermatological disorders will play a valuable role. The aim of this study was to determine the magnitude of social anxiety and depression in patients suffering from Acne Vulgaris.

Material & Method:

Present cross-sectional study was conducted among the patients aged 16 to 35yrs with consent attending to Departments of Dermatology and Psychiatry OPD, tertiary care hospital, between December 2022 to June 2023 with diagnosis of acne vulgaris. The patients aged 16 to 35 yrs diagnosed with acne vulgaris and willing to be part of study were included in presents study. Patients on treatment with systemic steroids and per-existing psychiatric illness were excluded from the study.

Data was collected using a proforma to collect sociodemographic and clinical information about the patients and Scales used to assess the social anxiety and depression in patients with acne vulgaris and comparison group (control group). (Liebowitz Social Anxiety Scale, HAM-D). All the patients data are collected in proforma and entered in excel sheet. A p-value of

<0.05 was considered statistically significant and all the analysis was performed using SPSS v21 operating on windows 10.

Result: In present study, total of 254 patients fulfilling inclusion criteria are included with mean age of 24.99 ± 4.14yrs. Among them 30% were male and 70% of female patients with female preponderance in the study.

		Frequency	Percent
Gender	Female	178	70
	Male	76	30
Religion	Christian	30	11.8
	Hindu	184	72.4
	Muslim	40	15.8
Socioeconomic status	Lower	2	0.8
	Lower Middle	120	47.2
	Upper Class	20	7.9
	Upper lower	4	1.6
	Upper Lower	58	22.8
	Upper Middle	50	19.7
Global Acne Grading System	Mild	52	40.0
	Moderate	52	40.0
	Severe	24	18.5
	Very severe	2	1.5

Table 1: Comparison of the study variables between the groups

	Control		Case		p-value
	Mean	SD	Mean	SD	
LSAS Social Fear Score	4.72	3.22	8.61	5.54	0.01*

LSAS Performance Fear Score	4.51	3.12	7.12	5.67	0.01*
LSAS Social Avoidance Score	3.42	2.81	7.61	5.89	0.01*
LSAS Performance Avoidance Score	2.41	2.2	7.12	6.7	0.01*
*p-valùe<0.05 was considered statistically significant. *p-valùe <0.01 was considered highly significant.					

Table 2: Comparison of the total scores between the groups

	Control		Case		p-valùe
	Mean	SD	Mean	SD	
LSAS Total Fear Subscale	9.31	5.29	16.1	10.3	0.01*
LSAS Total Avoidance Subscale	5.82	4.89	14.27	12.12	0.01*
LSAS Total Score	15.05	8.79	30.61	21.14	0.01*
HAMD Score	6.41	4.1	10.12	6.4	0.01*
*p-value<0.05 was considered statistically significant. *p-value <0.01 was considered highly significant.					

On assessment of the various scores between the cases and control, there is significant higher mean score of social fear score, performance fear score, social avoidance, performance avoidance, and also the total scores in cases compared to the patients in control group.(p<0.05)

Table 3: Comparison of the stùdy variables scores with severity of acne

	Mild		Moderate		Severe		p-valùe
	Mean	SD	Mean	SD	Mean	SD	
LSAS Social Fear Score	7.71	5.1	8.01	5.52	11.62	6.01	0.11
LSAS Performance Fear Score	6.21	4.61	6.75	6.12	10.21	6.61	0.12
LSAS Social Avoidance Score	5.42	3.5	8.01	4.4	10.12	6.81	0.052

LSAS Performance Avoidance Score	5.72	6.21	7.21	5.2	9.63	5.6	0.29
LSAS Total Fear Sùbscale	14.21	9.52	15.21	9.1	21.82	12.22	0.096
LSAS Total Avoidance Sùbscale	11.22	8.9	15.12	12.91	19.71	13.1	0.13
LSAS Total Score	25.31	18.62	29.82	21.70	41.51	23.80	0.09
HAMD Score	8.41	6.31	11.30	8.12	10.11	7.30	0.37
*p-value<0.05 was considered statistically significant. *p-value <0.01 was considered highly significant.							

On assessment of the scores with the acne severity, there was no significant mean difference between the groùps, however the mean scores were higher among the severe cases compared to mild and moderate severity of disease among the patients.

Discussion: Acne Vulgaris is a common skin condition. Since acne is most commonly seen in the face, it is associated with a wide range of emotional and psychological challenges like, issues of body image, socialization, sexuality, embarrassment, self-consciousness, lack of self-confidence, and social dysfunction such as reduced/avoidance of social interactions with peers and opposite gender. Depression and suicide are also more common among acne sufferers. Several research on anxiety, depression, and personality characteristics in acne patients have been conducted; however, only a few studies have attempted to assess the magnitude of Social Anxiety in acne in India. Because early diagnosis leads to improved outcomes, understanding the frequency and diagnosis of social anxiety and depression is critical for patient therapy. The expected outcome is an increase in the incidence of social anxiety and depression among Acne Vulgaris patients in and around the tertiary care hospital. Early screening and identification of psychiatric problems will enhance the disease's prognosis. As a result, psychological examination in dermatological problems will be beneficial.

The aim of this study is to determine the magnitude of social anxiety and depression in patients suffering from Acne Vulgaris. In present study, total of 127 patients fulfilling inclusion criteria are included with mean age of 24.99±4.14yrs. Among them 30% were male and 70% of female patients with female preponderance in the study. Female preponderance was also documented with average age of the research participants was 23.55± 3.83in study by Priyamkari A et al. [10]

The global acne grading system showed with presence of 40% with mild and moderate grade, followed with 18.5% with severe and 1.5% with very severe. On assessment of the various

scores between the cases and control, there is significant higher mean score of social fear score, performance fear score, social avoidance, performance avoidance, and also the total scores in cases compared to the patients in control group.(p<0.05) On assessment of the scores with the acne severity, there was no significant mean difference between the groups, however the mean scores were higher among the severe cases compared to mild and moderate severity of disease among the patients. Depression, social isolation, and suicidal ideation are common comorbidities of acne that should not be ignored in the treatment of acne patients. The psychological impact of acne will lay the groundwork for healthcare practitioners to impact treatment goals and interact with patients, especially those who suffer in silence.[11,12] A higher degree of social anxiety, social avoidance/withdrawal due to acne was also reported.[4]

The severity of acne does not always correlate with the severity of emotional impact; even mild cases of acne have been reported to have significant emotional impact on the patients. This highlights the importance of the dermatologist to modify and adjust medical therapy to meet the patient's individual needs.[12]

Similar to present study, Kurhan F found that the patient's and control group's average SAAS scores were 55.20 and 19.70 points, respectively. As a result, the patient group's average SAAS score was found to be substantially greater than that of the control group (p<0.01). Acne lesions on exposed skin surfaces in acne vulgaris patients induce anxiety in individuals owing to their appearance. This disease demonstrated that people with acne lesions need receive both psychological and dermatological care.[13] The acne lasted an average of 3.35 years. Among the patients, the mean PSS was 19.48 ±6.44. The average AAI score for all patients was 13.67 ±5.67. The danger AAI score was 5.82 ±3.35, whereas the avoidance AAI score was 7.09± 4.5. The amount of stress rose as the mean duration increased. The findings indicate that the PSS and AAI have psychometric qualities that may be used to determine whether improvements in cognitive processes and behaviours impact patient outcomes. The length of acne vulgaris was directly related to a higher PSS and AAI score.[10]

Geetanjali S et al., documented more than half of acne patients reported a high degree of perceived stress. Almost three-quarters of the patients struggled with poor self-esteem. Suicidal ideation was present in 5.55 percent of patients. There was no significant relationship between acne severity and reported stress, self-esteem, body image disturbance, or suicide thoughts. Body image disturbance was shown to be substantially related to subjective stress and self-esteem. A positive link of body image disturbance with perceived stress and a negative correlation with self-esteem was noted. Regardless of the objective severity of acne, all patients might feel significant felt stress, low self-esteem, and body image issues. This necessitates the use of a consultant liaison between dermatologists and psychiatrists in ordinary practise.[14]

According to Sereflican B et al., study, acne sufferers had higher levels of depression, anxiety, social anxiety, self-reported stress, anxiety sensitivity, and disability, as well as a higher prevalence of type D personality than healthy controls. A psychiatric assessment of acne sufferers may help in the diagnosis of mental illnesses.[15] Subjective stress and social appearance anxiety were highest in patients with AA, followed by acne patients, and lowest in patients with melanosis, according to Jain P et al. However, no significant difference in optimism was seen in people with melanosis, acne, or AA. The purpose of this study is to urge dermatology and mental health practitioners to examine supportive communication and to increase understanding about the issues that patients with skin diseases may face.[16]

Conclusion: The present study concluded that there is significant higher incidence of social anxiety and depression among the patients with acne vulgaris. Also the study documents the prevalence among the teenagers and also female preponderance. The study helped to identify the risk of development of the social anxiety and depression among the patients with acne.

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