Original Research Article

STUDY OF SOCIAL ANXIETY AND ITS RELATIONSHIP TO CLINICAL VARIABLES IN PATIENTS OF ACNE VULGARIS

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ABSTRACT

Background: Acne vulgaris is one of the most common dermatoses, and the relationship between acne and psychological factors has been investigated for many years. Existing lesions in acne patients may worsen with emotional stress, and psychological and psychiatric problems may develop in patients with the exacerbation of the lesions.

Materials and Methods: This study was conducted in Department of Psychiatry in United institute of Medical Sciences, Prayagraj, U.P. This study was included total 200 participants. The duration of study was over a period of two year.

Results: This study found that clinical variables of acne on social anxiety in which our study found that amongst acne patients having social anxiety majority had acne lesions localized on face, almost all had clinically very severe acne and none of them subjectively perceived their acne lesions as mild.

Conclusion: Acne vulgaris has the potential to induce considerable psychological distress and impair social functioning.

Keywords: Acne vulgaris, dermatosis, psychological factors, psychiatric.

INTRODUCTION

Acne vulgaris is a chronic inflammatory dermatosis with a predilection for the face and upper body, particularly areas rich in pilosebaceous units. Clinical manifestations range from erythematous papules and pustules to comedones, nodulocystic lesions, and scarring, depending on the severity in patients.[1] Its primary etiopathogenetic factors include increased sebum production, abnormal keratinization of pilosebaceous units, microbial colonization, and inflammation.[2]

Acne vulgaris stands as one of the most prevalent dermatological conditions, and researchers have long explored its connection with psychological factors. Emotional stress can exacerbate existing lesions in acne patients, while the worsening of these lesions can contribute to the development of psychological and psychiatric issues in affected individuals.[3]

While acne was previously regarded primarily as a cosmetic concern, scientific research has now established its significant psychosocial effects. Studies have demonstrated that these effects tend to improve with effective acne treatment.[4] Therefore, it is crucial to consider the quality of life (QoL) issues associated with acne for comprehensive patient management. Utilizing QoL questionnaires can provide valuable insights into how acne impacts patients on a day-to-day basis and assist in evaluating the effectiveness of treatment. In this study, the Dermatology Life Quality Index (DLQI) questionnaire was employed as it assesses ten different domains of daily life activities related to general health.[5] However, there remains a scarcity of research on the psychosocial impact of acne vulgaris within the Indian context.

In contemporary Indian society, there is a growing societal emphasis, fueled by media influence, on attaining an ideal standard of external appearance, particularly flawless skin. Given the limited number of studies conducted within the Indian context, the present study aimed to evaluate two key aspects: 1) the prevalence of social anxiety and 2) the influence of clinical variables associated with acne on social anxiety levels.

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MATERIAL AND METHODS

Study Area: This study was conducted in department of Psychiatry in United institute of Medical Sciences, Prayagraj, Uttar Pradesh, India.

**Study Duration:** The duration of study was over a period of two year.

Study Population: This study were included total 200 participants.

Data Collection: The dermatologist identified acne vulgaris and determined its severity using the Global Acne Grading Scale (GAGS). Subsequently, patients with a confirmed diagnosis of acne vulgaris were referred to a psychiatrist for further evaluation. Following the exclusion of any concurrent medical, dermatological, or pre-existing psychiatric conditions through detailed history-taking, a total of 200 consecutive patients were recruited after providing written informed consent and being briefed about the study. Patients were asked to subjectively assess their acne severity using a visual analogue scale (VAS). The level of social anxiety was evaluated using the Liebowitz Social Anxiety Scale (LSAS). Clinical variables related to acne (such as lesion sites and clinical and subjective severity) were recorded using a specially designed semi-structured proforma.

Data Analysis: Data were analyzed by using Microsoft Excel.

RESULTS

This study included 200 cases of acne, focusing on individuals aged 15 to 30 years. The study revealed that the highest number of cases fell within the 21-25 age group (87), followed by the 15-20 age group (81), and the 26-30 age group (32). Additionally, the study identified 72 cases of social phobia, 78 cases of social anxiety, and 64 cases of social avoidance among the participants. Regarding the clinical variables of acne affecting social anxiety, the study observed that a majority of acne patients with social anxiety exhibited lesions primarily localized on the face. Furthermore, almost all patients with social anxiety had clinically severe acne, with none subjectively perceiving their acne lesions as mild. [Table 1]
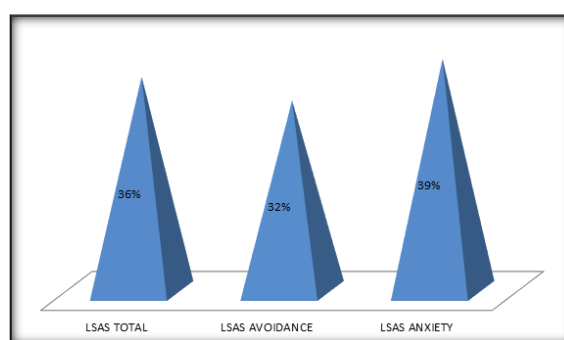
Figure 1: Graph showing Liebowitz Social Anxiety Scale

Table 1: Distribution of cases according to age group

Age group	Number
15-20	81
21-25	87
26-30	32
Total	200

Table 2: Distribution of cases according to Social phobia, anxiety & avoidance

Social phobia	72
Social anxiety	78
Social avoidance	64
Total	200

Table 3: Distribution of cases according to localization

Clinical Variables		LSAS more than cut off Social Anxiety		Total	P value
		Yes	No		
Localization	On face	66	114	180	
	On body	4	10	14	0.922
	On face & body	2	4	6	

Table 4: Distribution of cases according to Clinical Acne Severity by GAGS

Clinical Variables		LSAS more than cut off Social Anxiety		Total	P value
		Yes	No		
Clinical Acne Severity by GAGS	Mild	24	34	58	
	Moderate	32	76	108	
	Severe	8	18	26	0.297
	Very severe	8	0	8	

Table 5: Distribution of cases according to Subjective Acne Severity

Clinical Variables		LSAS more than cut off Social Anxiety		Total	P value
		Yes	No		
Subjective Acne Severity	Mild	0	0	0	0.943
	Moderate	22	40	62	
	Severe	50	88	138	

DISCUSSION

This cross-sectional study evaluated 200 consecutive patients newly diagnosed with acne, aged 15 to 30 years, who presented to the dermatology outpatient department (OPD). Patients were assessed for social anxiety after excluding other dermatological, medical, and pre-existing psychiatric conditions. Considering the significance of body image and resulting cosmetic concerns, it is reasonable to expect an impact on the level of social anxiety among acne patients. Similar to our findings, a study conducted by Yarpuz AY et al. using the Liebowitz Social Anxiety Scale (LSAS) reported that 25.6%, 32.9%, and 27.7% of acne patients scored above the cutoff point on the LSAS total scores, LSAS-Anxiety, and LSAS-Avoidance subscales, respectively.[6] The high level of social anxiety observed in acne patients may stem from the fact that acne commonly occurs during adolescence, a period when individuals are learning to form relationships. Consequently, those with acne may lack the self-confidence to socialize with friends and develop interpersonal bonds. The primary concern may be the fear of negative evaluation, feelings of shame, and social discomfort, leading to social anxiety, social avoidance, and in severe cases, social phobia. In a survey conducted by Ritvo E et al., interviewing teenagers revealed that a majority of respondents who had experienced acne would abstain from using Facebook for a year (59%) or refrain from dating for a year (30%).[7]

When acne primarily affects the face, it significantly impacts psychological well-being, whereas when it appears on the back or chest, it can be concealed with clothing, resulting in less distress. A study by Korczak et al. found that frequent recurrence of acne, particularly when lesions are on the face, can lead to disappointment and anxiety among sufferers. Despite finding no statistically significant difference among localization groups (face, body, or equal distribution), our study revealed that the majority of acne patients with social anxiety had lesions predominantly on the face. In contrast to the findings of Gupta et al., who reported that even mild to moderate acne severity can induce stress and social anxiety, our study observed that patients with social anxiety predominantly had clinically severe acne and subjectively perceived their acne as severe. Another study indicated that patients tend to evaluate the severity of acne, especially when it affects the face, higher than clinicians do.[8-10]

In our present study, out of 200 consecutive patients with acne vulgaris presenting to the dermatology OPD, 36% exhibited social anxiety. Among acne patients with social anxiety, the majority had facial lesions. Patients with clinically and subjectively severe acne were more likely to experience social anxiety. Although a clinician's assessment provides an objective and precise evaluation, the patient's self-perception significantly influences their psychological well-being.

CONCLUSION

This study conclude that, Acne vulgaris possesses the capacity to evoke notable psychological distress and hinder social functioning to a significant degree, impacting various aspects of an individual's social interactions and overall well-being.

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