Evaluation of social appearance anxiety in patients with acne vulgaris

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Abstract

Objective This study aims to calculate the mean social anxiety score among individuals with acne vulgaris.

Methods This Descriptive, cross-sectional study was done in Dermatology Department, P.A.E.C General Hospital Islamabad from 15th July 2021 to 14th January 2022. The data included 704 individuals with moderate to severe acne, ranging from eighteen to thirty-five years of age. Chronic renal failure, chronic liver disease and polycystic ovarian syndrome were excluded. Written-inform content was taken from participants. Data was collected by proforma prepared specifically for this research including all demographics (age, gender, residency, and education).

Results The study's participants ranged in age from 18 to 35, with a mean age of 26.24 and 3.88 years. The average age of the 324 patients (46.02%) was between 18 and 35. In our investigation, we discovered that acne vulgaris patients had a mean social appearance anxiety score of 34.36±7.56.

Conclusion According to the study's findings, psychotherapy treatments can be used to enhance the quality of life while lowering morbidity by appropriately assessing social appearance anxiety levels in these specific patients.

Key words
Acne vulgaris; Social appearance; Education; Anxiety score.

Introduction

Acne vulgaris is a chronic inflammatory pilosebaceous gland disease that affects the face, chest, and back.[1] It has an impact on all aspects of an adult's health-related quality of life (HRQol), particularly on interpersonal connections, feelings, emotions, social life and activities, and employment chances.[2]

Young adolescents are most frequently affected by acne vulgaris during this period of peak physical, psychological, and hormonal change as well as increased self-awareness and social awareness. They thus feel more negative feelings, including decreased self-worth, self-confidence, self-esteem, and attitude.[3,4]

Social appearance anxiety can be defined as anxiety stemming from overall appearance and the fear of being judged negatively by others.[5] The number of studies being conducted on social appearance anxiety in people with acne is quite low.[6,7] According to a recent cross-sectional

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study, anxiety was notably higher (mean score 37.69±13.53) in adults with acne compared to the control group of healthy persons (mean score 32.48±9.34). This increment in social appearance anxiety levels was attributed to the severity of the disease.[8]

To assess the overall psychiatric morbidity, this study looked into social anxiety in adolescents with acne. To better manage these patients, this will highlight the significance of psychological evaluation and, in turn, the significance of psychotherapy therapies in addition to pharmaceutical treatment.

Methods

This descriptive cross-sectional study was carried out by the dermatology division of P.A.E.C. General Hospital Islamabad between July 15 and January 14, 2022. The mean social appearance anxiety score of acne vulgaris patients was 37.69±13.53, and a sample size of 704 cases was established with a 95% confidence interval and 1% absolute precision.[8]

Through the non-probability, consecutive sampling method, 704 participants with education matriculation and above, of both sexes, between the ages of 18 and 35, were included. Their Global Acne score ranged from moderate to severe (A score of 1-8 was considered mild, 19 to 30 was moderate, 31 to 38 was severe, and more than 39 was very severe). Patients with chronic renal failure, chronic liver disease, and polycystic ovarian syndrome were excluded.

The Social Appearance Anxiety Scale, developed by Hart *et al*. in 2008, consists of 16 self-reported items that assess social anxiety related to acne vulgaris patients' altered appearance.[9]

After receiving official approval from the hospital's ethical review committee, the study was launched. The study included 704 patients who met the criteria. The goal and significance of the research were explained to the participants. Participants provided written information that was then compiled. Performa was used to gather data, which covered all demographics (age, gender, place of residence, and level of education).

The statistical analysis was examined with SPSS version 25.0. Age, acne vulgaris duration, and social anxiety score's means and standard deviations were computed. For gender, marital status, level of education, and place of residence, frequencies and percentages were computed.

Through stratification, effect modifiers such as age, gender, acne severity, marital status, level of education, and location of residence were managed. Using a post-stratification independent "t-test," a p-value of 0.05 was considered significant.

Results

The study's participants ranged in age from 18 to 35, with a mean age of 26.24±3.88 years. According to **Figure 1**, the majority of the 380 patients (53%) were between the ages of 26 and 35. **Figure 2** displays the patient distribution by gender.
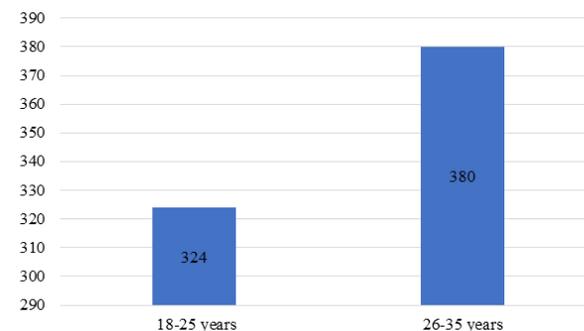

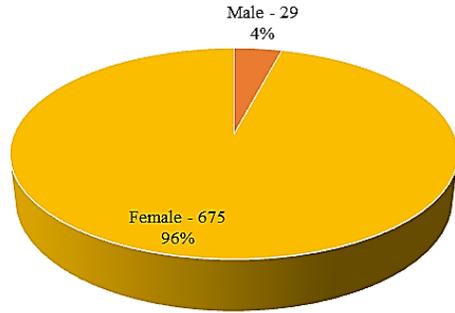**Figure 1** Distribution of patients according to Age (n=704). Mean±SD=26.24±3.88 years.

Figure 2 Distribution of patients according to gender (n=704).

Table 1 Distribution of patients with status of confounding variables (n=704).

Confounding variables	Frequency	%age	Mean±SD
Duration of disease (months)			
≤6	424	60.23	6.34±2.87
>6	280	39.77	months
Place of residence			
Rural	272	38.64	
Urban	432	61.36	
Marital status			
Unmarried	430	61.08	
Married	274	38.92	
Matriculation	54	7.67	
Education			
F.Sc	75	10.65	
F.A	238	33.81	
B.A	188	26.70	
Masters	149	21.16	

Table 2 Mean Social Appearance Anxiety Score in Acne vulgaris patients (n=704)

	Mean	SD
Social Appearance Anxiety Score	34.36	7.56

The distribution of patients with the status of other confounding variables is presented in **Table 1**. The mean duration of acne was 6.34±2.87 months. In my study, the mean social appearance anxiety score in acne vulgaris patients was found to be 34.36±7.56 as shown in **Table 2**. Stratification of social appearance anxiety score concerning age, gender, duration of acne, marital status, education, and place of living is shown in **Table 3**.

Table 3 Stratification of social appearance anxiety score concerning age, gender, duration of acne, marital status, education, and place of living.

	Appearance Anxiety Score		p-value
	Mean	SD	
Age (years)			
18-25	38.29	7.63	0.0001
26-35	31.00	5.65	
Gender			
Male	34.66	1.86	0.828
Female	34.34	7.71	
Duration (months)			
≤6	34.23	8.14	0.596
>6	34.54	6.61	
Marital status			
Unmarried	37.11	7.22	0.0001
Married	30.03	5.88	
Place of living			
Rural	34.55	6.58	0.595
Urban	34.24	8.12	
Education			
Matriculation	38.00	0.00	
F.sc	37.48	4.62	
F.A	34.86	9.87	0.0001
B.A	36.01	4.48	
Masters	28.58	5.70	

Discussion

Acne vulgaris is a common and distressing disorder that can have a detrimental influence on one's health-related quality of life (HRQoL), specifically feelings and emotions, interpersonal connections, sports, social life, and employment opportunities.[10] The Social Appearance Scale (SAAS) was created to gauge social anxiety levels associated with being negatively evaluated by others due to one's overall appearance, including body shape, facial features, and complexion, above and beyond symptoms of a negative body image.[9]

I carried out this study to figure out the average social anxiety score among acne vulgaris patients. My study's participants ranged in age from 18 to 35, with a mean age of 26.24 and 3.88 years. 53% of the 380 patients were between the ages of 26 and 35. Most people develop acne during puberty, affecting 85% of

teenagers, and it gradually goes away by the time they are 20 years old, while some people continue to have acne well into their 40s and 50s. Acne affects both men and women equally.[11]

Additionally, of the 704 patients in our study, 675 (95.88%) were female and 29 (4.12) were male. Males have acne vulgaris during adolescence more frequently than girls do. In contrast, women experience acne vulgaris more frequently than males do as adults.[12] The first Asian community-based survey from 2002 revealed a higher frequency among those between the ages of 15-20 than those between the ages of 21 and 25, with the latter being 43.5% as opposed to 55.8%.[13]

In my investigation, I discovered that acne vulgaris patients had a mean social appearance anxiety score of 34.36±7.56. The results of a recent cross-sectional study on social appearance anxiety in acne patients showed that this anxiety was significantly higher in adults with acne (mean score 37.69±13.53) compared to the control group of healthy individuals (mean score 32.48±9.34). The severity of the illness was blamed for this rise in social anxiety levels.[8]

A meta-analytical evaluation of 42 papers found a significant correlation between psychiatric disorders and acne. This assessment backs up the findings of our research.[15] In a bigger study, the researchers found that in 50% of adult female acne sufferers, stress was the underlying cause of the condition.[16] Adult participants in a small-scale study found that their acne might get worse during stressful times. Additionally, there is a strong correlation between changes in acne severity and increasing stress, suggesting that external emotional stress might have a significant impact on acne.[3]

Some studies suggest that the neurological and cutaneous systems have ectoderm-derived embryological origins. The two systems are therefore thought to be closely linked and share comparable hormones and neuropeptides.[17] As a result, it is assumed that one of these two systems' dysfunction will affect the other. Concomitant psychiatric disorders are present in 33.4% of individuals with dermatological issues, which explains this condition.[18]

In a recent study, 497 healthy volunteers and 543 patients with perioral dermatitis, acne, folliculitis, and rosacea in the facial region had their psychological symptoms of worry and melancholy evaluated. When compared to people with other types of face dermatoses, acne patients reported the highest degrees of anxiety and despondency.[3] Numerous studies have shown that acne reduces life quality.[19] According to research, several dermatological conditions have psychiatric symptoms as a significant predictor of quality-of-life degradation.[5]

Conclusion

This study concluded that the mean social appearance anxiety score in acne vulgaris patients was 34.36±7.56. So, we recommend that there should be a proper evaluation of social appearance anxiety score in these particular patients and psychotherapeutic interventions can be taken for improving the quality of life and decreasing morbidity.

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