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PREVALENCE AND IMPACT OF PSYCHIATRIC COMORBIDITIES ON QUALITY OF LIFE IN ACNE VULGARIS PATIENTS: A TERTIARY CARE HOSPITAL STUDY

Psychiatry

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ABSTRACT

Acne vulgaris is a prevalent dermatological condition often associated with significant psychological effects, including anxiety and depression. Approximately 66.7% of acne patients experience psychiatric comorbidities, which can severely impact their quality of life and treatment compliance. Understanding the interplay between acne severity and mental health is crucial for effective management. **Aims & Objectives:** This study aimed to assess the prevalence of psychiatric comorbidities in patients with acne vulgaris and evaluate their impact on quality of life and treatment adherence. **Methods:** A cross-sectional study was conducted involving 150 patients diagnosed with acne vulgaris at Rajshree Medical Research Institute, Bareilly. Participants were screened for psychiatric conditions using validated tools such as the Hospital Anxiety and Depression Scale (HADS) and the Mini International Neuropsychiatric Inventory (MINI 6.0). Quality of life was assessed using the WHOQOL-BREF scale. **Results:** The study found that 40% of patients had anxiety disorders, and 33.3% experienced depression. Patients with severe acne had significantly higher odds of psychiatric comorbidities (OR = 2.3, P = 0.03). Quality of life scores were lower among those with psychiatric conditions, with average scores of 58 compared to 72 for those without. Treatment compliance was highest in patients without psychiatric comorbidities (75%) and lowest in those with depression (50%).

KEYWORDS

Acne vulgaris; psychiatric comorbidities; quality of life; treatment compliance; mental health.

INTRODUCTION

Acne vulgaris, a common dermatological condition, has long been recognized for its significant psychological impact on individuals, particularly adolescents.[1] Studies indicate that approximately 30% of dermatology patients suffer from psychiatric comorbidities, including anxiety and depression, which greatly exacerbate the burden of their skin condition.[2] Acne's visibility, particularly on the face, often leads to diminished self-esteem, negative self-perception, and restricted social interactions, which can further escalate into serious mental health challenges, including social anxiety and suicidal thoughts.[3,4]

The emotional toll of acne is profound, as affected individuals commonly experience frustration, anger, and social isolation. Adolescents, in particular, are vulnerable to the psychological effects of acne, as they navigate critical periods of social and personal development.[5] The condition is often associated with stigma, bullying, and a distorted body image, all of which contribute to emotional distress.[6,7] Studies have shown a direct correlation between acne severity and increased psychological distress, underscoring the complex relationship between dermatological health and mental well-being.[8]

In addition to social and psychological challenges, acne has been linked to psychiatric disorders such as body dysmorphic disorder (BDD), further intensifying the emotional burden.[9,10] Moreover, recent research highlights the significant connection between stress and acne exacerbation, reinforcing theories such as the Brain-Gut-Skin axis, which suggests that stress-related events can worsen skin conditions.[11,12]

This study aims to explore the prevalence and pattern of psychiatric comorbidities among acne vulgaris patients and assess the impact on their quality of life. By understanding the intricate interplay between acne and psychological health, this research hopes to contribute to improved dermatological care that addresses both physical and emotional aspects of the condition.

MATERIALS & METHODS

This cross-sectional study was conducted in the Psychiatry and Dermatology departments at Rajshree Medical Research Institute, Bareilly, Uttar Pradesh, over a one-year period. The study enrolled 150 patients diagnosed with acne vulgaris, determined by a single population proportion formula. The sample size calculation was based on a prevalence of 11%, with a 5% error margin and a 95% confidence level.Participants aged 18 to 60, diagnosed with acne vulgaris, and who provided valid consent were included in the study. Patients with other dermatological conditions, a prior history of mental illness, or any chronic debilitating medical or surgical illness that could influence the results were excluded. Patients were screened for psychiatric comorbidities, including body dysmorphic disorder, anxiety, depression, and social phobia, using a detailed medical history. HADS Scale (Hospital Anxiety and Depression Scale) evaluated anxiety and depression, with scores categorized as mild (8-10), moderate (11-14), and severe (15-21). MINI 6.0 (Mini International Neuropsychiatric Inventory) screening questions were used to identify significant psychiatric disorders.WHOQOL-BREF (World Health Organization Quality of Life Scale) 26-item questionnaire assessed physical health, psychological health, social relationships, and environmental health, with scores scaled from 0 to 100. Patients were further evaluated based on ICD-10 criteria for psychiatric conditions, such as depression, requiring two core symptoms and at least one additional symptom for a minimum of two weeks. Data analysed using SPSS-25, with a p-value of less than 0.05 considered statistically significant.

RESULTS

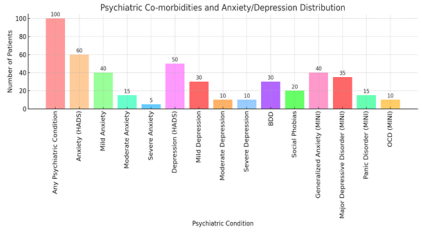

Figure 1 Psychiatric Co-morbidities and Anxiety/Depression Distribution in Acne Vulgaris

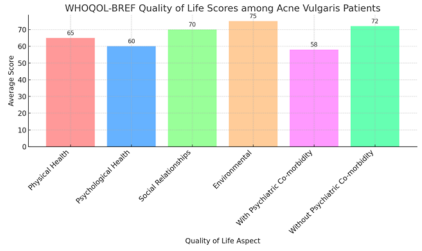

Figure 2 WHOQOL-BREF Quality of Life Scores and Factors Affecting Quality of Life in Acne Vulgaris Patients

Table 1 Features of Body Dysmorphic Disorder and Social Phobia in Acne Patients

Feature	Number of Patients	Percentage (%)
Preoccupation with Appearance	25	16.7
Repetitive Behaviors (Mirror Checking)	20	13.3
Camouflaging (with Makeup or Clothing)	15	10
Fear of Social Situations	30	20
Avoidance of Social Situations	20	13.3
Distress in Social Situations	40	26.7

DISCUSSION

This study evaluated the prevalence of psychiatric comorbidities and their impact on treatment patterns among patients with acne vulgaris. The findings indicated that a significant 66.7% of participants experienced psychiatric comorbidities, with anxiety disorders affecting 40% of patients and depression impacting 33.3%. Notably, the presence of severe acne was significantly associated with psychiatric comorbidities, as patients with severe acne had an odds ratio of 2.3 (P = 0.03), highlighting a strong correlation between the severity of acne and mental health issues. In terms of psychological features, the study found that 16.7% of patients exhibited preoccupation with their appearance, while 20% reported a fear of social situations. These findings emphasize the significant impact of body dysmorphic disorder (BDD) and social phobia among individuals suffering from acne vulgaris.

Tros et al.[13] (2023) reported similar results, noting that 25% of adolescents and young adults with acne vulgaris exhibited characteristics of BDD. Furthermore

Tasneem et al.[14] (2023) highlighted that 23.5% of their study participants experienced considerable social anxiety, aligning closely with the 26.7% found in this research. Regarding treatment patterns, topical medications emerged as the most commonly utilized treatment method, with 80% of patients receiving this therapy.

Duman et al.[15] (2016), indicated that 76% of acne patients adhered to topical treatments. The present study also revealed that patients without psychiatric comorbidities demonstrated a high compliance rate of 75%. In contrast, those with anxiety and depression exhibited lower compliance rates of 60% and 50%, respectively.

Ahmed et al.[16] (2019) corroborated these findings, reporting a compliance rate of 65% among patients without psychiatric conditions, compared to 55% among those with comorbidities.The study's assessment of quality of life (QoL) scores revealed that individuals with psychiatric comorbidities had significantly lower QoL scores, averaging 58 compared to 72 for those without such conditions.

CONCLUSION

Acne vulgaris treatment should prioritize the management of psychiatric comorbidities alongside dermatological care. The study found that a significant proportion of patients experienced anxiety and depression, which negatively impacted their quality of life and treatment compliance. Furthermore, severe acne was linked to higher odds of psychiatric conditions, indicating the necessity of a comprehensive approach that addresses both skin and mental health. The findings highlight the importance of integrating psychological support into treatment plans for acne patients to improve overall outcomes and enhance adherence to prescribed therapies.

REFERENCES

1. Samuels DV, Rosenthal R, Lin R, Chaudhari S, Natsuaki MN. Acne vulgaris and risk of depression and anxiety: A meta-analytic review. J Am Acad Dermatol. 2020;83(2):532-41.
2. Salman A, Kurt E, Topcuoglu V, Demircay Z. Social anxiety and quality of life in vitiligo and acne patients with facial involvement: a cross-sectional controlled study. Am J Clin Dermatol. 2016;17:305–311.
3. Mikhael NW, Hamed AM, Mansour AI, Abdelrahman ES. Serum levels of brain-derived neurotrophic factor in patients with acne vulgaris. J Cosmet Dermatol. 2019;18:1998–2003.
4. Sereflican B, Tuman TC, Tuman BA, Parlak AH. Type D personality, anxiety sensitivity, social anxiety, and disability in patients with acne: a cross-sectional controlled study. Postepy Dermatol Alergol. 2019;36:51–57.
5. Molla A, Alrizqi H, Alharbi E, Alsubhi A, Alrizqi S, Shahada O. Assessment of anxiety and depression in patients with acne vulgaris in Medina: a case-control study. Clin Cosmet Investig Dermatol. 2021;14.
6. Islam FMA, Lambert EA, Islam SMS, Hosen MA, Thompson BR, Lambert GW. Understanding the sociodemographic factors associated with intention to receive SMS messages for health information in a rural area of Bangladesh. BMC Public Health. 2021 Dec 30;21(1):2326.
7. Kanwar N, Sharma RC, Sharma DD, Ramesh, Mokta K, Mokta JK. Prevalence of Psychiatric Comorbidity among Patients of Type 2 Diabetes Mellitus in a Hilly State of North India. Indian J Endocrinol Metab. 2019 Nov-Dec;23(6).
8. Hanisah A, Omar K, Shah SA. Prevalence of acne and its impact on the quality of life in school-aged adolescents in Malaysia. J Prim Health Care. 2009 Mar;1(1):20.
9. Vermani M, Marcus M, Katzman MA. Rates of detection of mood and anxiety disorders in primary care: a descriptive, cross-sectional study. Prim Care Companion CNS Disord. 2011;13(2).
10. Feder K, Michaud DS, Keith SE, Voicescu SA, Marro L, Than J, et al. An assessment of quality of life using the WHOQOL-BREF among participants living in the vicinity of wind turbines. Environ Res. 2015 Oct;142:227-38.
11. Patro N, Jena M, Panda M, Dash M. A study on the prescribing pattern of drugs for acne in a tertiary care teaching hospital in Odisha. J Clin Diagn Res. 2015 Mar;9(3).
12. Pontone GM, Williams JR, Anderson KE, Chase G, Goldstein SA, Grill S, et al. Prevalence of anxiety disorders and anxiety subtypes in patients with Parkinson's disease. Mov Disord. 2009 Jul 15;24(9):1333-8.
13. Tros BG, Kemperman PMJH, Kuckulus J, Hoekzema R, Vulink NCC. Body Dysmorphic Disorder and Self-esteem in Adolescents and Young Adults with Acne Vulgaris. Acta Derm Venereol. 2023 Sep 13;103.
14. Tasneem T, Begum A, Chowdhury MRK, Rahman S, Macassa G, Manzoor J, et al. Effects of acne severity and acne-related quality of life on depressive symptoms among adolescents and young adults: a cross-sectional study in Bangladesh. Front Psychol. 2023 Jul 24;14.
15. Ahmed F, Husain A, Begum M, Alam MN, Ibrahim MA. Psychiatric morbidity among the patients with acne vulgaris in a tertiary care hospital. Bangladesh J Med Sci. 2019;18:773
16. Duman H, Topal IO, Kocaturk E, Duman MA. Evaluation of anxiety, depression, and quality of life in patients with acne vulgaris, and quality of life in their families. Dermatol Sin. 2016;34:6–9.