

## PSYCHIATRIC STATUS IN INDIVIDUALS SEEKING MEDICAL AESTHETIC FACIAL CHANGES

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### ABSTRACT

The global rise in demand for facial aesthetic procedures, including the use of botulinum toxin, hyaluronic acid, and poly lactic acid, reflects an increasing interest in minimally invasive methods to enhance physical appearance and self-esteem. However, the motivations behind seeking such procedures are often intertwined with underlying psychological conditions. This study examines the psychiatric profiles of 218 patients who sought facial aesthetic treatments, focusing on those diagnosed with Body Dysmorphic Disorder (BDD), depression, anxiety disorders, or personality disorders. Psychiatric assessments were integrated into the initial consultations using DSM-5 criteria, revealing that 12 patients (approximately 5.5%) had significant psychological disorders. The results emphasize the importance of incorporating psychiatric evaluations into routine clinical practice to ensure patient satisfaction and successful outcomes. Additionally, demographic analysis indicated that the majority of participants were middle-aged women from urban areas, with significant correlations found between the age of participants and their desire and timing for aesthetic procedures. These findings suggest that comprehensive psychiatric screening is crucial in managing patient expectations and improving the overall effectiveness of aesthetic treatments.

**Key words:** medical aesthetic procedures, body dysmorphic disorder, patient satisfaction, depression, anxiety disorders, personality disorders, mental health in aesthetics

### INTRODUCTION

The global demand for facial aesthetic procedures, including the administration of botulinum toxin, hyaluronic acid, and poly lactic acid, has seen a significant rise in recent years. These minimally invasive treatments are frequently perceived as quick and effective methods for enhancing physical appearance and boosting self-esteem. However, the motivations driving individuals to seek such procedures are often complex,

involving not only aesthetic desires but also underlying psychological factors. This study seeks to explore the psychiatric profiles of patients undergoing facial aesthetic procedures, with a particular focus on those diagnosed with Body Dysmorphic Disorder (BDD), depression, anxiety disorders, or personality disorders. Understanding the psychiatric status of these patients is crucial as it can significantly influence their satisfaction with the procedures and their perception of the

outcomes, as supported by existing literature. [1-4]

## MATERIALS AND METHODS

This study involved a cohort of 218 patients who sought facial aesthetic procedures. Data collection was conducted through comprehensive questionnaires, clinical interviews, and psychological assessments, ensuring a thorough evaluation of each patient's mental health status. The psychological assessments were aimed at diagnosing conditions such as Body Dysmorphic Disorder (BDD), depression, anxiety disorders, and personality disorders, following the diagnostic criteria outlined in the DSM-5.

## RESULTS

Out of the 218 patients evaluated, 12 individuals (approximately 5.5%) were diagnosed with one or more psychiatric disorders:

- *Body Dysmorphic Disorder (BDD)*: Five patients (2.3%) were diagnosed with BDD, characterized by an obsessive focus on perceived flaws in their appearance, often minor or unnoticeable to others. These patients typically sought multiple procedures and expressed dissatisfaction with previous treatments.

- *Depression*: Three patients (1.4%) were diagnosed with depression. These individuals exhibited symptoms such as persistent sadness, a lack of interest in activities they previously enjoyed, and a strong desire for aesthetic changes as a means to improve their mood and self-esteem.

- *Anxiety Disorders*: Two patients (0.9%) were found to have generalized anxiety disorder, characterized by excessive worry, particularly concerning their appearance and how they are perceived by others.

- *Personality Disorders*: Two patients

## Statistical analysis

Data analysis was performed using SPSS software version 29.0.0. Correlation analysis was employed to examine the relationships between various questions in the questionnaire, which covered aspects such as demographic information, personal perceptions of aesthetic procedures, and their impact on emotional and social well-being. Two statistical methods were utilized for this analysis: Pearson correlation for numerical and ordinal variables, and the Cramer V correlation coefficient for categorical variables. A significance level of 5% was used to test the null hypotheses, ensuring the robustness of the findings.

(0.9%) were diagnosed with personality disorders, including narcissistic and borderline personality disorders. These patients displayed extreme reactions to perceived criticisms and a profound need for validation through aesthetic enhancements.

Implementing psychiatric assessments in clinical practice for patients seeking facial aesthetic procedures involves integrating these evaluations into the initial consultation as a routine aspect of care, using a conversational approach to ensure comprehensive patient history and comfort.

The analysis of the demographics of study participants reveals a few key insights. The age distribution shows that the majority of participants are middle-aged, 57.3% of them being aged between 31 and 50. Participants aged 18 to 30 represent 16.5% of the total participants, while those aged 51 to 70 represent 22.5%. The smallest age group is 71-90, which includes only 3.7% of participants.

In terms of gender distribution, the gender is predominantly female, accounting for 80.7% of participants, while 19.3% are male. The area of residence further illustrates the

demographic profile, with 78.9% of participants living in urban areas compared to 21.1% in rural areas.

Multiple significant correlations were identified in the analysis (Figure 1). The age of the participants (Q1) showed a moderate

correlation with the age at which the participants wished to have their first cosmetic procedure (Q5) ( $r = 0.62$ ) and with the age at which they received their first cosmetic procedure (Q6) ( $r = 0.71$ ).

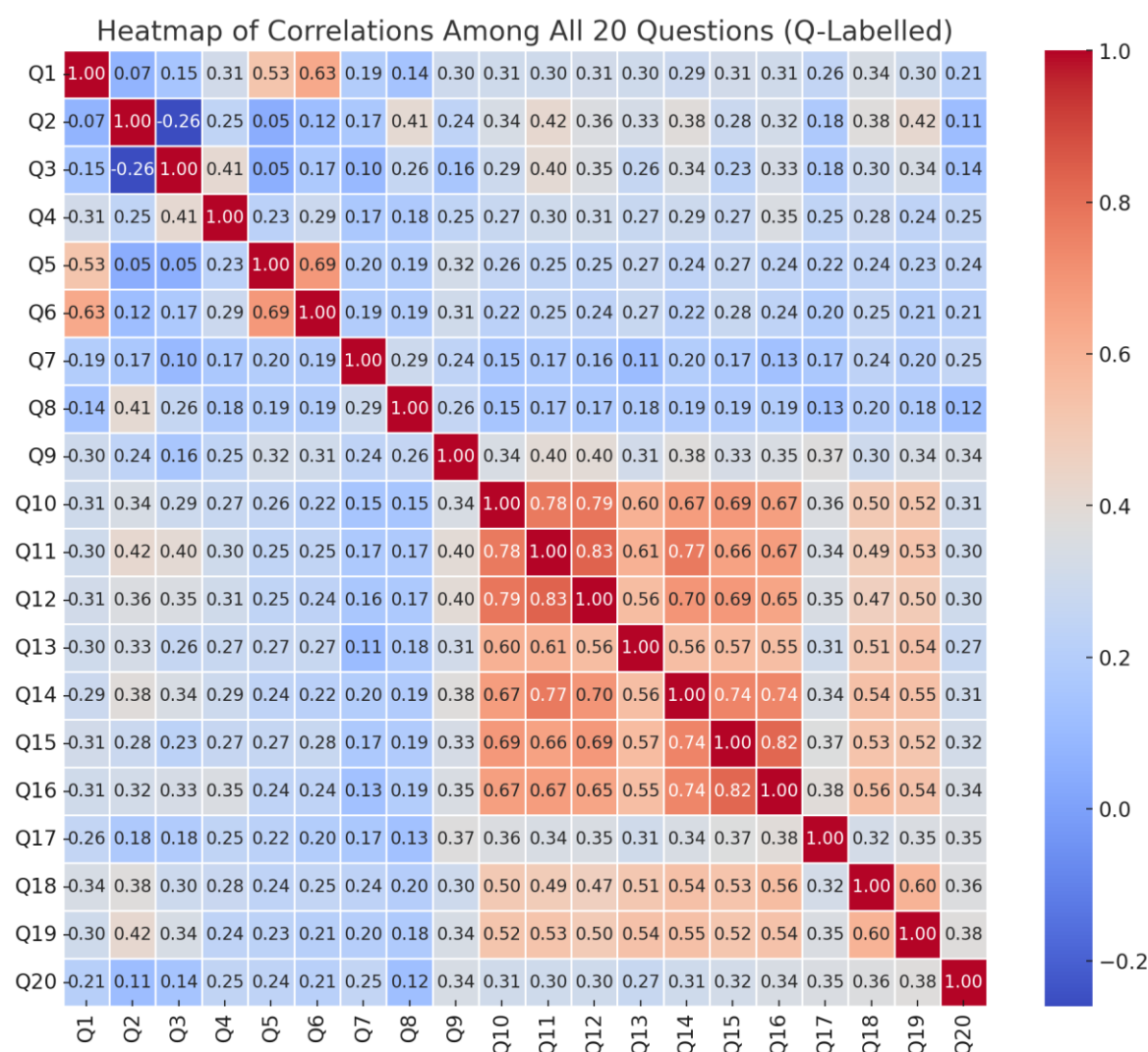


Figure 1. Heatmap of Correlations Among All 20 Questions

The emotional and psychological impact of aesthetic procedures was evidenced by moderate negative correlations between concern about specific body parts (Q18) and sudden mood changes (Q19) with overall satisfaction with physical appearance (Q20) ( $r = -0.34$  for both variables).

In terms of the social impact of aesthetic

procedures, significant correlations were observed between denial of being in the spotlight before procedures (Q12) and refusing public contact (Q11) ( $r = 0.66$ ), as well as between refusing to appear in group photographs (Q10) and how participants felt after the effect of aesthetic procedures (Q17) ( $r = 0.69$ ).

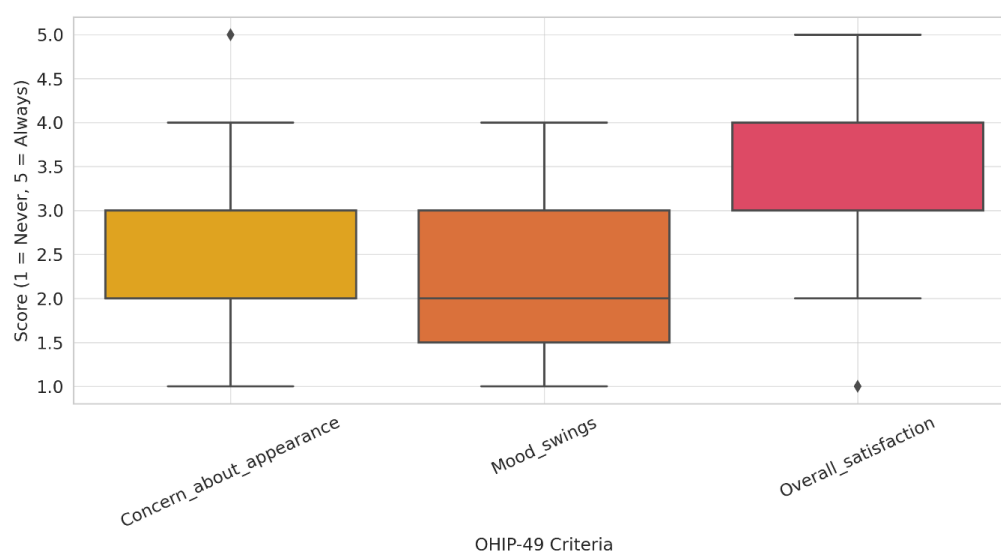


**Figure 2. Box-plot illustration of mean score values, standard deviations and medians for assessed OHIP-49-like criteria.**

Shapiro-Wilk test was used to assess the normality of distribution of the mean scores recorded for each of the 7 criteria evaluated. The results indicate an abnormal distribution of the data ( $p < 0.05$ ). The statistical analysis between the mean scores recorded by each OHIP-49 criteria was performed using non-parametrical Kruskal-Wallis test with a significance level of  $p = 0.05$ . The obtained

results showed (Figure 2) that the following criteria scores were significantly increased: Psychological Disability vs. Physical Pain ( $p = 0.046$ ); Psychological Discomfort vs. Psychological Disability ( $p = 0.034$ ); Functional Limitations vs. Psychological Disability ( $p = 0.023$ ); Functional Limitations vs. Handicap ( $p = 0.041$ ).

## DISCUSSIONS

The implementation of psychiatric assessments as part of routine clinical practice for patients seeking facial aesthetic procedures is essential. Integrating these evaluations into the initial consultation using a conversational approach not only ensures comprehensive patient history but also enhances patient comfort. This approach allows for the identification of underlying psychiatric conditions that could influence the patient's satisfaction with the procedure and their overall well-being.

Gender distribution was predominantly female, with women

representing 80.7% of the participants, while 19.3% were male. In terms of gender distribution, the female predominance suggests that females were more likely to participate in or be interested in aesthetic procedures, which was in line with global trends. [5,6]

Additionally, 78.9% of participants resided in urban areas, compared to 21.1% from rural areas. Regarding the environment of origin, the urban predominance reflected greater access to aesthetic services and possibly greater social pressure related to physical appearance in urban areas. [5-7]

On education level it can be observed

that a significant proportion of participants were well educated. 79.4% had completed higher education, while 18.8% had completed high school, college or technical school. A very small proportion of the participants, each constituting 0.9%, had only completed secondary or primary school. [8-13]

These demographic characteristics suggested that the typical participant in this study was a well-educated, middle-aged woman living in an urban area. This profile was typical of individuals who were most likely to seek out or showed interest in aesthetic procedures in line with broader social patterns. Understanding this demographic composition is essential for interpreting the study results and guiding future research or interventions in the field of aesthetic medicine. [14-16]

The demographic analysis of the study participants revealed several key insights. The majority of participants were middle-aged, with 57.3% aged between 31 and 50 years. Those aged 18 to 30 years accounted for 16.5% of the cohort, while individuals aged 51 to 70 years represented 22.5%. The smallest age group was those aged 71-90 years, comprising only 3.7% of participants.

The correlation analysis identified multiple significant relationships. Notably, the age of the participants (Q1) showed a moderate correlation with the age at which they desired their first cosmetic procedure (Q5) ( $r = 0.62$ ) and the age at which they received their first cosmetic procedure (Q6) ( $r = 0.71$ ). These findings suggest that age plays

a significant role in both the desire for and the timing of undergoing aesthetic procedures. The correlation between participants' age and the age at which they wanted or had their first cosmetic procedure indicated that older people tend to want and have cosmetic procedures at an older age, suggesting a shift in personal priorities with ageing.

The correlation between concern about specific body parts and sudden mood changes or general satisfaction with appearance suggested that emotional instability and intense physical appearance concerns were associated with a less favorable perception of self-body image, emphasizing the importance of psychological considerations in assessing the success of aesthetic interventions. [17-19]

Correlations between avoidance of being in the spotlight prior to procedures and avoidance of public contact, or between avoidance of appearing in group photographs and how participants felt after the effect of aesthetic procedures indicated that individuals who avoid social exposure prior to interventions tend to experience a significant improvement in self-perception after procedures. [20-23]

However, some associations did not demonstrate relevant statistical significance. For example, the number of annual aesthetic procedures (Q7) did not show significant correlations with most psychological or behavioral variables, suggesting that the frequency of procedures is not necessarily related to individual perceptions of body image or emotional stability.

## CONCLUSIONS

This study highlights the importance of incorporating psychiatric evaluations into the pre-procedure consultations for individuals seeking facial aesthetic changes. The findings underline the complexity of the relationships between demographic variables,

psychological perceptions, and social experiences related to aesthetic medical procedures. Age, emotional stability and concerns about physical appearance are key factors influencing self-perception and perceived success of aesthetic interventions. Identifying and addressing underlying psychological disorders is crucial for ensuring

patient satisfaction and achieving optimal outcomes. The data also suggest that demographic factors, particularly age and gender, influence the motivations and expectations of patients undergoing these

procedures. Future research should continue to explore the interplay between psychiatric status and aesthetic outcomes, with the aim of improving patient care and treatment success.

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#### **Informed Consent Statement**

Written informed consent for participation in the study was obtained from the patients.

#### **Data Availability Statement**

The data presented in this study are

available on reasonable request from the corresponding authors.

#### **Conflicts of Interest**

The authors declare no conflict of interest.

#### **Author's contribution**

The authors MP, EPA, AL, AC, NM, and DEB had an equal scientific contribution to this research as GS, the first author.

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