

Typical symptoms of Body Dysmorphic Disorder (BDD) in patients seeking preventive and corrective medical-aesthetic treatments: Analysis of differences and potential predictors

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Abstract. *Background:* Body dysmorphic disorder (BDD) is a condition characterized by excessive concern for perceived physical defects, often associated with the demand for medical aesthetic treatments. However, psychological differences between patients seeking preventive or corrective treatments and possible predictors of BDD remain unclear. *Aim:* This study analyzed symptomatic and behavioral differences between patients requesting preventive and corrective medical aesthetic treatments, assessing the presence of typical BDD symptoms and possible predictors to improve screening, reduce inappropriate treatments, and optimize clinical approaches. *Methods:* A total of 136 participants completed online self-report questionnaires investigating demographic and anamnesis data and motivations for medical aesthetic treatments. The COPS, MAIA, IACS, and E-pgm questionnaires assessed BDD symptomatology, body perception, social media comparison, and post-procedure expectations. *Results:* Among participants, 56.6% belonged in the corrective group, while 43.4% were in the preventive group. The corrective group had significantly higher scores in COPS ($p = 0.01$), social media comparison ($p = 0.001$), and post-treatment expectations ($p = 0.01$), whereas the preventive group showed higher body confidence ($p = 0.05$). In the preventive group, BDD correlated with social media comparison ($r = 0.575$, $p < 0.001$) and post-treatment expectations ($r = 0.403$, $p = 0.004$), whereas in the corrective group, BDD correlated with age, body perception, dissatisfaction, self-esteem, and post-operative expectations ($p < 0.001$). *Conclusion:* In the preventive group, social media comparison was the only predictor of BDD, while in the corrective group, age, body perception, and social media comparison were significant predictors. BDD is often underdiagnosed and may lead to post-treatment dissatisfaction. A thorough screening of expectations and psychological characteristics could reduce the risk of inappropriate interventions, improving selection criteria for medical aesthetic treatments and patient satisfaction.

Key words: Body Dysmorphic Disorder (BDD), Medical-Aesthetic Treatments, Social Media Comparison, Preventive vs. Corrective Treatments, Psychological Predictors, Patient Screening

Introduction

Body Dysmorphic Disorder (BDD), also known as dysmorphophobia, is a psychopathological condition characterized by excessive concern over perceived physical defects, which are often nonexistent

or minimal in the eyes of others¹. This disorder, classified in the DSM-5 under obsessive-compulsive and related disorders, manifests through symptoms including compulsive behaviors, repeated mirror-checking, concealment of perceived imperfections, and a significant impact on quality of life⁵. Individuals with

BDD experience high levels of anxiety, depression, and, in severe cases, suicidal ideation²⁻⁴, with suicide attempt prevalence reaching up to 18% of diagnosed patients⁶⁻⁸. The etiology of BDD is multifactorial, involving genetic, biological, and environmental components. Neurobiological evidence suggests abnormalities in the structure and function of the brain in BDD patients, while sociocultural factors such as unrealistic beauty ideals promoted by the media, experiences of bullying, and criticism of physical appearance play a key role in the disorder's development. BDD predominantly manifests during adolescence, a critical period for the formation of body identity and self-esteem⁹⁻¹². A significant aspect of BDD in clinical practice is its comorbidity with other psychiatric conditions, including anxiety disorders, depression, and obsessive-compulsive disorder. Additionally, gender differences emerge in symptoms and associated behaviors: while men tend to focus on muscles, hair, and genitals¹³, often engaging in excessive exercise and steroid use, women express broader concerns about weight, skin, and body hair, frequently seeking dermatological and aesthetic treatments^{12,13}. In recent years, the growing influence of social media has amplified the BDD phenomenon, encouraging constant comparison with idealized beauty standards and promoting a culture of aesthetic perfection. Recent studies have highlighted a correlation between excessive use of digital platforms such as Instagram and TikTok and increased body dissatisfaction, significantly impacting the mental health of younger individuals¹⁴⁻¹⁵. The phenomenon of "selfie dysmorphia", the tendency to undergo cosmetic surgery to resemble filtered social media images, represents an emerging challenge for mental health and aesthetic medicine professionals⁷. To date, the impact of aesthetic medicine in modern society has become increasingly significant and continues to grow. This phenomenon is linked to the evolution of communication and socialization, strongly influenced by social media, which has revolutionized body image perception, serving as both a resource and a double-edged sword. In this context, the present study aims to analyze Body Dysmorphic Disorder in patients seeking medical-aesthetic treatments by exploring the underlying motivations and the types of treatments performed. The study examines two patient

groups: preventive patients, who focus on minor aesthetic imperfections perceived as potentially worsening over time, despite being often imperceptible to others. These patients exhibit high anxiety related to aging and an obsession with maintaining a youthful appearance. The second group, corrective patients, focuses on existing imperfections that cause significant distress. Many of these patients have already undergone aesthetic treatments without being satisfied with the results, displaying high levels of dissatisfaction, anxiety, and, in some cases, depression. The primary objective of this study is to compare these two groups and identify predictive factors of Body Dysmorphic Disorder in patients seeking aesthetic medicine, a condition often underdiagnosed. Many of these patients choose to consult an aesthetic physician rather than a psychiatrist, highlighting the need for greater psychological assessment before performing aesthetic treatments. Understanding these dynamics is essential to prevent inappropriate interventions and provide targeted support to individuals experiencing significant distress related to their body perception.

Materials and Methods

This research was conducted following approval from the Ethics Committee for Psychological Research Area 17 at the University of Padua. Participation in the study was voluntary. Participants were recruited via WhatsApp and Facebook groups, where a self-report questionnaire link was distributed through the Qualtrics platform. Participants reviewed and signed the informed consent form, receiving information about the study's objectives, the tools used, data processing, confidentiality rights, anonymity, and the ability to withdraw at any time without explanation or penalties. After providing informed consent, participants completed an information sheet and a battery of self-report questionnaires, which took approximately 10-15 minutes to complete. The instruments included COPS, MAYA, IACS, and E-pgm. The information sheet collected demographic data (gender, age, height, weight), personal details (marital status, education, and occupation), and medical history, focusing on organic and psychological disorders. The questionnaire

also included open-ended questions about the reasons for seeking aesthetic medicine, the type of perceived imperfections, and past medical or surgical-aesthetic treatments, if any. The self-report questionnaires examined how patients correlate emotional distress with bodily distress, body awareness, body experience, BDD symptomatology, physical appearance comparison on social media, and expectations related to aesthetic medicine interventions. Statistical analyses were conducted using SPSS for Windows (version 29.0).

Statistical analysis

Descriptive analyses were performed to evaluate demographic data and motivations for requesting aesthetic treatments. To compare differences between patients requesting preventive and corrective treatments, an independent samples t-test was applied, considering variables such as age, BMI, body awareness (MAIA), BDD symptoms (COPS), social media comparison (IACS), and aesthetic expectations (E-pgm). Pearson correlations (r) were used to analyze relationships between variables, distinguishing between the two patient groups. Specifically, correlations between BDD (COPS), body perception (MAIA), social media comparison (IACS), and aesthetic expectations (E-pgm) were examined.

Based on these correlations, hierarchical block regression analyses were performed to evaluate the impact of predictive variables on BDD symptomatology. In the preventive group, the model included the Trust scale (MAIA) in the first block, three E-pgm subscales in the second block, and IACS in the third block. In the corrective group, the first block considered age, the second MAIA scales, the third six E-pgm subscales, and the fourth IACS.

Results

The analysis of data obtained from the COPS questionnaire, used to investigate the underlying motivations for seeking aesthetic medical treatments, revealed that the most common reason was the improvement of personal well-being ($n = 92$), followed

Table 1. Demographic Characteristics.

Demographic Data		
Males, <i>n</i> /total <i>n</i> (%)	9/136 (6,6%)	
Females, <i>n</i> /total <i>n</i> (%)	127/136 (93,4%)	
Age (years), Mean (DS)	44,92 (12,12)	[18-68]
BMI (kg m ²), Mean (DS)	22,41 (3,7)	[14,53-34,01]

Table 2. Education (A), Marital Status (B), and Occupation of Participants (C).

A	
	EDUCATION
Middle school diploma	8 (5,9%)
High school diploma	39 (28,7%)
University degree	86 (63,2%)
Other	3 (2,2%)
B	
	CIVIL STATUS
Single	23 (16,9%)
In a relationship (not cohabiting)	20 (14,7%)
Married	58 (42,6%)
Cohabiting	24 (17,6%)
Separated	5 (3,7%)
Divorced	5 (3,7%)
Widowed	1 (0,7%)
C	
	JOB
Student	2 (1,5%)
Full-time employment (employee and/or self-employed)	104 (76,5%)
Part-Time	7 (5,1%)
Homemaker	3 (2,2%)
Unemployed	6 (4,4%)
Retired	4 (2,9%)
Temporary/Precarious employment	3 (2,2%)
Other	7 (5,1%)

by the desire to feel more attractive ($n = 34$), physical maintenance ($n = 35$), rejuvenation ($n = 34$), and increased self-esteem ($n = 19$). Less frequent reasons included the enhancement of professional image ($n = 12$), weight loss ($n = 9$), curiosity ($n = 15$), being more

attractive to a partner ($n = 8$), post-pregnancy phase ($n = 1$), post-menopause ($n = 3$), and other reasons ($n = 8$, e.g., wrinkle reduction or post-bariatric surgery treatments); results are reported in Table 3. Regarding the most requested procedures, 30% of patients reported using botulinum toxin, 27% hyaluronic acid fillers, 13% biostimulation, and 7.5% chemical peels. Additionally, body treatments were reported, including carboxytherapy (10.6%), mesotherapy (3%), laser treatments (3%), and cryolipolysis (1.5%). Based on declared motivations, the sample was divided into two groups: the corrective group ($n = 77$, 56.6%), which sought treatments to correct existing imperfections, and the preventive group ($n = 59$, 43.4%), which aimed

Table 3. Underlying Motivations for Requesting Aesthetic Medical Procedures.

Underlying Motivations for Requesting Aesthetic Procedures	
<i>Feeling better about oneself</i>	92
<i>Being more attractive to one's partner</i>	6
<i>Curiosity</i>	3
<i>Rejuvenation</i>	34
<i>Feeling more beautiful/handsome</i>	34
<i>Improving professional and/or work-related image</i>	12
<i>Physical maintenance</i>	35
<i>Weight Loss</i>	9
<i>Boosting self-esteem</i>	19
<i>Post-pregnancy</i>	1
<i>Post-menopause</i>	3
<i>Other</i>	8

Table 4. Types of Requested Aesthetic Medical Treatments.

Type of Treatment	Percentage of Total
Botulinum Toxin	30%
Filler with HA	27%
Biostimulation	13%
Peeling	7,5%
Mesotherapy	3%
Carboxytherapy	10,6%
Laser	3%
Cryolipolysis	1,5%

to prevent future aesthetic changes. Results are shown in Table 4. From a demographic perspective (age and BMI), no significant differences were observed between the two groups ($p > 0.05$). However, statistically significant differences were found in some psychological variables. The corrective group showed significantly higher scores in the COPS ($M = 18.22$, $SD = 11.78$) compared to the preventive group ($p = 0.01$). Similarly, in the IACS questionnaire, social media comparison was higher in the corrective group ($M = 2.64$, $SD = 1.12$) than in the preventive group ($M = 1.99$, $SD = 0.87$, $p = 0.001$). Moreover, expectations of post-treatment life changes were significantly lower in the preventive group ($M = 2.79$, $SD = 2.49$) compared to the corrective group ($M = 4.26$, $SD = 2.99$, $p = 0.01$). Conversely, body confidence, measured through the Trust subscale of MAIA, was higher in the preventive group ($M = 3.80$, $SD = 1.09$) than in the corrective group, although the result was at the threshold of statistical significance ($p = 0.05$). Results are reported in Table 5.

The correlational analyses revealed that, in the PREVENTIVE group, BDD symptomatology (COPS) was significantly correlated with social media comparison (IACS, $r = 0.575$, $p < 0.001$), expectations related to the outcome of the aesthetic procedure ($r = 0.335$, $p = 0.018$), and post-operative expectations ($r = 0.403$, $p = 0.004$). Additionally, an inverse correlation was observed with MAIA-Trust ($r = -0.279$, $p = 0.032$). However, no significant correlations were found with age ($r = -0.012$, $p = 0.93$), BMI ($r = 0.201$, $p = 0.13$), body self-regulation ($r = -0.052$, $p = 0.67$), body awareness ($r = 0.044$, $p = 0.74$), dissatisfaction ($r = 0.241$, $p = 0.097$), self-esteem ($r = -0.246$, $p = 0.09$), body satisfaction ($r = -0.106$, $p = 0.47$), job satisfaction ($r = 0.142$, $p = 0.33$), family satisfaction ($r = -0.148$, $p = 0.309$), and emotional satisfaction ($r = -0.190$, $p = 0.19$). Results are reported in Tables 6 and 7.

In the CORRECTIVE group, significant correlations with BDD symptomatology were more numerous and stronger compared to the preventive group. Specifically, correlations were observed with age ($r = -0.377$, $p = 0.001$), MAIA self-regulation ($r = -0.509$, $p < 0.001$), MAIA body listening ($r = -0.517$, $p < 0.001$), MAIA trust ($r = -0.537$, $p < 0.001$), social media comparison (IACS, $r = 0.616$, $p < 0.001$),

Table 5. Differences Between Patients Seeking Preventive and Corrective Aesthetic Procedures in the Investigated Characteristics.

		T (136)	P-Bilateral	Mean	Standard Deviation
<i>Età</i>	PREVENTIVE CORRECTIVE	0,19	0,85	45,13 44,75	12,10 11,38
<i>BMI</i>	PREVENTIVE CORRECTIVE	0,56	0,571	22,62 22,25	3,45 3,89
<i>COPS</i>	PREVENTIVE CORRECTIVE	-2,29	0,012	13,91 18,22	9,44 11,78
<i>MAIA self-regulation</i>	PREVENTIVE CORRECTIVE	1,75	0,082	3,33 3,01	1,02 1,077
<i>MAIA body-listening</i>	PREVENTIVE CORRECTIVE	0,59	0,554	3,22 3,09	1,29 1,15
<i>MAIA trust</i>	PREVENTIVE CORRECTIVE	1,97	0,051	3,80 3,41	1,09 1,18
<i>IACS</i>	PREVENTIVE CORRECTIVE	-3,30	0,001	1,99 2,64	0,87 1,12
<i>Expectation - Procedure Outcome</i>	PREVENTIVE CORRECTIVE	-1,22	0,222	5,34 6,04	3,17 2,84
<i>Expectation - Life Change</i>	PREVENTIVE CORRECTIVE	-2,77	0,006	2,79 4,26	2,49 2,99
<i>Dissatisfaction</i>	PREVENTIVE CORRECTIVE	-4,44	0,00	2,52 4,22	1,77 2,17
<i>Self-Esteem</i>	PREVENTIVE CORRECTIVE	1,76	0,081	7,04 6,15	2,54 2,68
<i>Body Satisfaction</i>	PREVENTIVE CORRECTIVE	1,69	0,093	6,24 5,42	2,57 2,49
<i>Work Environment Satisfaction lavorativo</i>	PREVENTIVE CORRECTIVE	-0,69	0,490	5,93 6,31	2,96 2,79
<i>Family Life Satisfaction</i>	PREVENTIVE CORRECTIVE	-1,25	0,212	6,95 7,55	2,88 2,14
<i>Emotional Life Satisfaction</i>	PREVENTIVE CORRECTIVE	0,914	0,363	6,59 6,11	2,97 2,57

Table 6. Hierarchical Regression Analysis – Preventive Group.

	R	R squared	Adjusted R-squared	Standard error	Change in R-squared	Change in standard error	df1 (degrees of freedom 1)	df2 (degrees of freedom 2)	Significance of F-change
Block 1	.275 ^a	0,076	0,056	9,89163	0,076	3,770	1	46	0,06
Block 2	.511 ^b	0,261	0,193	9,14604	0,186	3,602	3	43	0,02
Block 3	.650 ^c	0,422	0,354	8,18297	0,161	11,717	1	42	0,001

Table 7. Hierarchical Regression Analysis – Preventive Group.

		B	Errore Standard	Beta	t	p
Blocco 1	Constant	23,222	4,919		4,721	0,000
	MAIA_trust	-2,455	1,265	-0,275	-1,942	0,058
Blocco 2	Costante	11,380	6,325		1,799	0,079
	MAIA_trust	-1,438	1,289	-0,161	-1,116	0,271
	Expectation - Procedure Outcome	0,862	0,449	0,269	1,922	0,061
	Expectation - Life Change Post-Operation	1,091	0,613	0,270	1,780	0,082
	Emotions Associated with Dissatisfaction	0,124	0,865	0,022	0,144	0,886
	IACS_tot	5,166	1,509	0,446	3,423	0,001
Blocco 3	Costante	0,741	6,457		0,115	0,909
	MAIA_trust	-0,718	1,173	-0,080	-0,612	0,544
	Aspettative esito procedura	0,511	0,414	0,159	1,234	0,224
	Aspettative cambiamento vita post-operatorio	0,622	0,565	0,154	1,101	0,277
	Emozioni associate a insoddisfazione	0,459	0,780	0,080	0,588	0,560
	IACS_tot	5,166	1,509	0,446	3,423	0,001

dissatisfaction ($r = 0.502$, $p < 0.001$), expectations regarding the procedure outcome ($r = 0.401$, $p = 0.001$), post-operative expectations ($r = 0.436$, $p < 0.001$), self-esteem ($r = -0.487$, $p < 0.001$), and emotional satisfaction ($r = -0.305$, $p = 0.015$).

Hierarchical block regression analyses showed that, in the preventive group, social media comparison (IACS) was the only significant predictor of the COPS score ($p = 0.001$), explaining 42.2% of the variance. In the corrective group, the model explained a total of 65.1% of the variance in the COPS score, with significant predictors including age ($p = 0.01$), body perception (MAIA body-listening, $p = 0.005$), and social media comparison (IACS, $p = 0.03$).

Results are reported in Tables 8 and 9.

Discussion

This study involved a sample of 136 patients, with a higher prevalence of women compared to men (127 vs. 9). This finding reflects current trends in aesthetic medicine, where the majority of patients are female. However, in recent years, there has been increasing interest from men, driven by cultural changes that have

reduced the social stigma associated with personal appearance care¹⁶⁻¹⁹. The average age of participants was 44.92 years, with a distribution that aligns with international trends in aesthetic treatments. According to data from the American Society of Plastic Surgeons, patients between 36 and 50 years of age account for approximately 30% of aesthetic procedures, while 36% are between 51 and 70 years old. This reflects a growing demand among younger patients, who undergo preventive treatments to maintain a youthful appearance, a phenomenon known as “prejuvenation”. The most requested procedures vary by age group, with non-invasive treatments such as Botox and fillers preferred by younger patients, while surgical procedures like liposuction and abdominoplasty are more commonly requested by older patients. From an occupational perspective, 76.5% of participants work full-time, and most hold a university degree. These data confirm what is reported in the literature, indicating that patients who choose to undergo aesthetic treatments primarily belong to middle-to-high socioeconomic groups, where financial resources and advanced education facilitate access to aesthetic medical procedures. Moreover, many of these patients hold high-level professional roles, such as managers, doctors, and lawyers, where

Table 8. Hierarchical Regression Analysis – Corrective Group.

	R	R squared	Adjusted R-squared	Standard error	Change in R-squared	Change in standard error	df1 (degrees of freedom 1)	df2 (degrees of freedom 2)	Significance of F-change
Block 1					0,117	8,112	1	61	0,006
Block 2	.631 ^b	0,398	0,357	9,80839	0,281	9,022	3	58	0,000
Block 3	.784 ^c	0,615	0,541	8,28085	0,217	4,895	6	52	0,000
Block 4	.807 ^d	0,651	0,576	7,96332	0,036	5,230	1	51	0,026

aesthetic appearance is perceived as a relevant element in their careers. Results are reported in Tables 1 and 2.

A significant aspect that emerged from the study is the correlation between the demand for aesthetic treatments and the presence of anxiety and depressive disorders. The literature indicates that patients undergoing aesthetic procedures have depression rates between 5% and 26% and anxiety rates between 11% and 22%, higher than the general population. In many cases, these patients seek aesthetic treatments in hopes of improving their psychological well-being and reducing distress related to body image, although such expectations do not always translate into an actual benefit for mental health. Analysis of questionnaire responses revealed that most patients seek aesthetic treatments to enhance their personal well-being. The most requested procedures were botulinum toxin (30%), hyaluronic acid fillers (27%), biostimulation (13%), and carboxytherapy (10%). To better understand patient motivations, the sample was divided into two groups: the preventive group, which includes those who undergo treatments to prevent signs of aging and maintain their image, and the corrective group, which seeks treatments to correct perceived imperfections.

The data collected showed significant psychological differences between the two groups. The scores obtained on the COPS, an instrument used to assess concerns about one's appearance, were significantly higher in the corrective group ($M = 18.22$, $SD = 11.78$, $p = 0.01$) compared to the preventive group, indicating a greater level of body dissatisfaction. Similarly,

the IACS questionnaire, which measures self-image comparison with social media, showed higher values in the corrective group ($M = 2.64$, $SD = 1.12$) than in the preventive group ($M = 1.99$, $SD = 0.87$, $p = 0.001$), suggesting that these patients are more influenced by aesthetic standards promoted online. Conversely, body confidence, measured using the Trust subscale of MAIA, was higher in the preventive group ($p = 0.05$), while expectations of post-treatment life changes were significantly higher in the corrective group ($M = 4.26$, $SD = 2.99$) compared to the preventive group ($M = 2.79$, $SD = 2.49$, $p = 0.01$), reflecting unrealistic expectations that may lead to dissatisfaction. Correlational analyses revealed that in the preventive group, BDD symptomatology, assessed through the COPS, was negatively correlated with body confidence (MAIA-trust, $r = -0.279$, $p = 0.032$) and positively correlated with social media comparison (IACS, $r = 0.575$, $p < 0.001$) and post-treatment expectations ($r = 0.403$, $p = 0.004$). In the corrective group, BDD symptomatology showed stronger associations, significantly correlating with age ($r = -0.377$, $p = 0.001$), body awareness (MAIA-body listening, $r = -0.517$, $p < 0.001$), body confidence (MAIA-trust, $r = -0.537$, $p < 0.001$), social media comparison (IACS, $r = 0.616$, $p < 0.001$), dissatisfaction ($r = 0.502$, $p < 0.001$), and self-esteem ($r = -0.487$, $p < 0.001$). Regression analyses revealed that in the preventive group, social media comparison (IACS, $p = 0.001$) was the only significant predictor of BDD symptomatology, explaining 42.2% of the variance. In the corrective group, however, significant predictors were age, body perception (MAIA body-listening,

Table 9. Hierarchical Regression Analysis – Corrective Group.

		B	Error standard	Beta	t	p
Block 1	Constant	35,652	5,912		6,030	0,000
	Age (years)	-0,376	0,132	-0,343	-2,848	0,006
Block 2	Constant	51,107	5,956		8,580	0,000
	Age (years)	-0,251	0,116	-0,229	-2,168	0,034
	MAIA_self_reg	-2,042	1,695	-0,173	-1,204	0,233
	MAIA_body-list	-2,727	1,587	-0,255	-1,718	0,091
	MAIA_trust	-1,957	1,474	-0,191	-1,328	0,189
Block 3	Constant	40,547	7,943		5,105	0,000
	Age (years)	-0,134	0,106	-0,122	-1,270	0,210
	MAIA_self_reg	-0,874	1,623	-0,074	-0,539	0,592
	MAIA_body_list	-4,042	1,465	-0,379	-2,759	0,008
	MAIA_trust	2,131	1,718	0,208	1,240	0,220
	Emotions Associated with Dissatisfaction	1,148	0,640	0,204	1,793	0,079
	Expectation - Procedure Outcome	0,296	0,486	0,069	0,610	0,545
	Expectation - Life Change Post-Operation	0,587	0,447	0,144	1,314	0,195
	Self-Esteem	-1,309	0,550	-0,287	-2,381	0,021
	Body Satisfaction	-0,813	0,548	-0,166	-1,485	0,144
	Emotional Life Satisfaction	-0,731	0,439	-0,154	-1,664	0,102
Block 4	Constant	27,122	9,633		2,815	0,007
	Age (years)	-0,083	0,104	-0,076	-0,795	0,430
	MAIA_self_reg	-0,956	1,561	-0,081	-0,612	0,543
	MAIA_body_list	-4,109	1,409	-0,385	-2,916	0,005
	MAIA_trust	2,829	1,680	0,276	1,684	0,098
	Emotions Associated with Dissatisfaction	1,124	0,616	0,200	1,826	0,074
	Expectation - Procedure Outcome	0,091	0,476	0,021	0,192	0,849
	Expectation - Life Change Post-Operation	0,431	0,435	0,105	0,991	0,327
	Self-Esteem	-0,970	0,549	-0,213	-1,767	0,083
	Body Satisfaction	-0,584	0,536	-0,119	-1,089	0,281
	Emotional Life Satisfaction	-0,732	0,422	-0,154	-1,733	0,089
	IACS_tot	3,005	1,314	0,277	2,287	0,026

p = 0.005), and social media comparison (IACS, p = 0.03), explaining 65.1% of the COPS variance.

These findings indicate that preventive patients tend to view aesthetic treatments as a way to maintain

their appearance, while corrective patients exhibit greater distress related to body image and a higher vulnerability to social media influence. The results also confirm that the comparison with idealized images

on social media is a key factor in aesthetic perception and the demand for aesthetic medical treatments, contributing to body dissatisfaction and disorders such as BDD. Considering the significant impact of these psychological factors, it is essential to implement screening tools to assess patient expectations and identify potential indicators of psychological distress, in order to prevent post-treatment dissatisfaction and improve the clinical approach in aesthetic medicine.

Conclusions

Body Dysmorphic Disorder (BDD) is a psychopathological condition that is often underdiagnosed, as patients tend to hide their symptoms and seek specialists in aesthetic medicine rather than mental health professionals^{7, 20}. The difficulty in recognizing the disorder can lead to inappropriate aesthetic treatments without real benefits for the patient. Retrospective studies suggest that aesthetic medical treatments rarely improve BDD symptomatology, making a more in-depth evaluation necessary before proceeding with any intervention²⁰. The study results highlight significant differences between patients seeking aesthetic treatments to prevent aging and those wishing to correct existing imperfections. In the preventive group, social media comparison was the only significant predictor of BDD, suggesting that exposure to idealized aesthetic standards may negatively influence self-perception and increase vulnerability to dysmorphic symptoms. In contrast, in the corrective group, BDD was predicted by a combination of factors, including age, body perception, and social media comparison. This indicates that in patients seeking aesthetic corrections, body image distress is more complex and influenced by both individual and social factors. Early diagnosis of BDD is crucial in identifying patients who may develop post-treatment dissatisfaction due to unrealistic expectations. A detailed analysis of motivations and expectations before an intervention can help aesthetic physicians make more informed, evidence-based decisions, reducing the risk of frustration and worsening symptoms in affected patients. In light of these findings, while BDD does not represent an absolute contraindication to aesthetic medical treatments, it is essential to adopt a cautious approach, carefully

evaluating each case. Implementing screening tools and targeted clinical interviews can help identify patients at risk of post-treatment dissatisfaction and direct them towards appropriate psychological support. This multidisciplinary approach could improve not only patient satisfaction but also the overall effectiveness of aesthetic medical interventions.

Conflicts of Interest: The authors declare no conflicts of interest related to this study.

References

1. Phillips KA, McElroy SL. Insight, overvalued ideation, and delusional thinking in body dysmorphic disorder: theoretical and treatment implications. *J Nerv Ment Dis.* 1993; 181(11):699-702.
2. Möllmann A, Dietel FA, Hunger A, Buhlmann U. Prevalence of body dysmorphic disorder and associated features in German adolescents: a self-report survey. *Psychiatry Res.* 2017; 254:263-267.
3. Frías Á, Palma C, Farriols N, González L. Comorbidity between obsessive-compulsive disorder and body dysmorphic disorder: prevalence, explanatory theories, and clinical characterization. *Neuropsychiatr Dis Treat.* 2015; 11:2233-2244.
4. Angelakis I, Gooding PA, Panagioti M. Suicidality in body dysmorphic disorder (BDD): a systematic review with meta-analysis. *Clin Psychol Rev.* 2016; 49:55-66.
5. DSM-5 Changes: Implications for child serious emotional disturbance [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US). 2016; 52-54.
6. American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*.
7. Phillips KA. *The broken mirror: understanding and treating body dysmorphic disorder*. Oxford University Press. 2005.
8. Veale D, Neziroglu F. *Body dysmorphic disorder: a treatment manual*. Wiley-Blackwell. 2010.
9. Phillips KA, Menard W, Quinn E, Didie ER, Stout RL. A 4-year prospective observational follow-up study of course and predictors of course in body dysmorphic disorder. *Psychol Med.* 2013; 43(5):1109-1117.
10. Reddy KK, Besen J. Body dysmorphic disorder: epidemiology and specific cohorts. In: Vashi NA, ed. *Beauty and body dysmorphic disorder*. Switzerland: Springer International Publishing. 2015; 127-137.
11. Hartmann AS, Buhlmann U. Prevalence and underrecognition of body dysmorphic disorder. In: Phillips KA, ed. *Body dysmorphic disorder: advances in research and clinical practice*. New York. Oxford University Press. 2017; 49-60.
12. Phillips KA, Menard W, Fay C. Gender similarities and differences in 200 individuals with body dysmorphic disorder. *Compr Psychiatry.* 2006; 47:77-87.

13. França K, Roccia MG, Castillo D, et al. Body dysmorphic disorder: history and curiosities. *Wien Med Wochenschr.* 2017; 167(Suppl 1):5–7.
14. Fardouly J, Vartanian L R. Social media and body image concerns: current research and future directions. *Curr Opin Psychol.* 2016; 9:1–5.
15. Holland G, Tiggemann M. A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image.* 2016; 17:100–110.
16. Schwoebel J, Coslett HB. Evidence for multiple, distinct representations of the human body. *J Cogn Neurosci.* 2005; 17(4):543–553.
17. Gallagher S. Body image and body schema: a conceptual clarification. *J Mind Behav.* 1986; 7(4):541–554.
18. Veale D, Gledhill LJ, Christodoulou P, Hodsoll J. Body dysmorphic disorder in different settings: a systematic review and estimated weighted prevalence rates. *Body Image.* 2016; 18:168–186.
19. Crerand CE, Franklin ME, Sarwer DB. Body dysmorphic disorder and cosmetic surgery. *Plast Reconstr Surg.* 2006; 118(7):167e–180e.
20. Veale D, De Haro L, Lambrou C. Cosmetic rhinoplasty in body dysmorphic disorder. *Br J Plast Surg.* 2003; 56(6):546–551.

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