

BRIEF REPORT

Perceived impact of COVID-19 pandemic on body dysmorphic disorder and anxiety among population seeking cosmetic procedures

Abstract

Introduction: COVID-19-related anxiety and preventative actions like the widespread shutdown of beauty-related services emerged as a stressful condition for BDD patients seeking expert opinions.

Material and methods: We conducted a cross-sectional investigation to assess anxiety symptoms (by CDAS) and BDD (via BDD-YBOCS questionnaire) in patients referred to the esthetic clinic.

Results: A total of 120 individuals (106 females and 14 males; mean age: 45.53 ± 11.84) were evaluated. 13.3% of subjects were diagnosed with BDD; 79.2%, 17.5%, and 3.3% of them perceived none or mild, moderate, and severe symptoms of anxiety, respectively.

Conclusion: Anxiety was not connected with BDD in our investigation. Further evaluation of other psychiatric disorders associated with anxiety and BDD was recommended.

Patients with complaints related to BDD experienced symptoms of anxiety and depression. In this pandemic, anxiety connected with the COVID-19 era and the closure of dermatologic clinics might incommode BDD patients seeking expert opinions.⁵ In this study, we investigated the level of anxiety and BDD in individuals searching for esthetic procedures.

2 | MATERIALS AND METHODS

We designed a cross-sectional study to evaluate symptoms of anxiety and BDD in patients referred to our clinic for esthetic procedures. The study was conducted using the Corona Disease Anxiety Scale (CDAS) and Body Dysmorphic Disorder Modification of the Y-BOCS (BDD-YBOCS) [adult version] questionnaire for the assessment of anxiety and BDD, respectively, which was validated in Persian.⁶ The breakpoint of the BDD-YBOCS scale is at least 20 score for the diagnosis of BDD. Patients referred to our clinic for esthetic actions filled the questionnaires from October 12, 2020, to December 6, 2020. Descriptive statistics were considered for the overall sample, and the analysis was performed with the SPSS software version 25.

1 | INTRODUCTION

Considering the contagious design of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the coronavirus 2019 disease (COVID-19)-related complications, many governments authorized rules as preventative measures. Preventive actions such as the widespread extensive shutdown of businesses and services led to the cancelation of elective and beauty-related procedures.¹ COVID-19-related conditions emerge different psychosocial effects on the general population in the post-pandemic era. Almost 30% of individuals had experienced symptoms of anxiety in this pandemic.² COVID-19 pandemic created a particular situation in which people had to communicate with each other via online meetings. These events prompt a new condition that novel disorders like Snapchat or Zoom dysmorphia could aggravate or trigger body dysmorphic disorder (BDD).^{3,4}

3 | RESULTS

A total of 120 eligible subjects were assessed in this study (106 females and 14 males, mean age: 45.53 ± 11.84). In our studied population, 13.3% of individuals were diagnosed with BDD. The baseline demographic data regarding the presence of symptoms of BDD are presented in Table 1. In this pandemic, 79.2%, 17.5%, and 3.3% of individuals perceived none or mild, moderate, and severe symptoms of anxiety, respectively.

Younger individuals had symptoms of BDD significantly more than elderly patients. In the COVID-19 era, anxiety symptoms were correlated with the level of education in our population (Table 2). Also, younger patients experienced higher levels of anxiety in the COVID-19 pandemic. Furthermore, BDD was not associated with a level of COVID-19 pandemic-related anxiety.

TABLE 1 Association of body dysmorphic disorder with demographic data

	Non-BDD (n = 104)	BDD (n = 16)	p
Sex			
Male	11 (10.6%)	3 (18.8%)	0.343
Female	93 (89.4%)	13 (81.3%)	
Age years, Mean ± SD	46.29 ± 11.81	40.62 ± 11.21	0.044
Marital status			
Single	46 (44.2%)	7 (43.8%)	0.971
Married	58 (55.8%)	9 (56.3%)	
Educational level			
Diploma or lower	8 (7.7%)	4 (25%)	0.005
B.Sc./B.A.	41 (39.4%)	10 (62.5%)	
MSc, MD	55 (52.9%)	2 (12.5%)	
Anxiety symptoms based on CDAS			
Non or mild	83 (79.8%)	12 (75%)	0.659
Moderate to severe	21 (20.2%)	4 (25%)	

Abbreviations: B.A., Bachelor of Arts; B.Sc., Bachelor of Science; BDD, body dysmorphic disorder; CDAS, Corona Disease Anxiety Scale; MD, medical doctor; MSc, Master of Science; n, number.

TABLE 2 Correlation of level of anxiety with the demographic data

	Non or mild anxiety (n = 95)	Moderate-to-severe anxiety (n = 25)	p
Sex			
Male	12 (12.6%)	2 (8%)	0.521
Female	83 (87.4%)	23 (92%)	
Age years, Mean ± SD	46.68 ± 12	41.16 ± 10.29	0.034
Marital status			
Single	42 (44.2%)	11 (44%)	0.985
Married	53 (55.8%)	14 (56%)	
Educational level			
Diploma or lower	11 (11.6%)	1 (4%)	0.046
B.Sc./B.A.	35 (36.8%)	16 (64%)	
MSc, MD	49 (51.6%)	8 (32%)	

Abbreviations: B.A., Bachelor of Arts; B.Sc., Bachelor of Science; BDD, body dysmorphic disorder; CDAS, Corona Disease Anxiety Scale; MD, medical doctor; MSc, Master of Science; n, number.

4 | DISCUSSION

COVID-19 pandemic causes a substantial modification in daily social life, and many people worldwide have confronted different difficulties. Quarantine-related lifestyle changes led to different unfavorable conditions such as psychosocial distress, depression, and stress.^{2,7} COVID-19 pandemic-related studies reported higher levels of anxiety similar to the previous investigations in earlier pandemics, such as the outbreak of the severe acute respiratory syndrome-related to coronavirus in 2003. In an analysis of the Chinese population, 53.8% of individuals reported moderate-to-severe psychosocial impact associated with the COVID-19 pandemic.⁸

Higher levels of anxiety and posttraumatic stress were correlated with the presence of positive COVID-19 family member in a household.⁹ A recent study described an increased severity of depression, generalized anxiety disorder, and BDD in the COVID-19 pandemic in comparison with November 2019.⁸ However, it is unclear how the COVID-19 pandemic clearly affects specific psychological diseases like BDD.⁵

COVID-19 pandemic emerged as a unique situation where people could work and interact through virtual platforms (video-conference) entirely from home.³ Isolation at home might aggravate the attention on specific body parts, causing exacerbation of BDD.⁸ On the contrary, Trott et al. reported that BDD was not associated with lockdown due to COVID-19 restrictions.

Furthermore, the incidence of BDD did not change pre-COVID-19 era and after the first COVID-19 lockdown.¹⁰ In this study, we did not evaluate the level of anxiety and number of BDD patients before the COVID-19; furthermore, a comparison of these conditions was not possible.

Widespread closure of medical cosmetic procedures caused a deprivation of esthetic consults and visits for regular cosmetic procedure users.¹ Theoretically, up to 10% of BDD patients search for esthetic procedures, whereas 2% of individuals with eating disorders seek cosmetic procedures.⁵ Physicians usually underestimate the diagnosis of BDD in patients seeking cosmetic procedures leading to numerous unnecessary treatment modalities for changing patients' appearance and dissatisfaction.¹¹ Potentially, halt of esthetic procedures could aggravate concern of BDD patients regarding thinking of imperfection physical beauty and appearance.⁵

In another study, 15.2% of individuals reported symptoms of anxiety and body dissatisfaction, which were indicative of BDD during the COVID-19 pandemic.¹² BDD was associated with willingness to have plastic surgery despite understanding its related risk during the pandemic; Further, 36.6% of BDD patients were inclined to undergo plastic surgery compared to 6.6% of individuals without BDD.¹³

In our investigation, the prevalence of BDD was 13.3% in the COVID-19 era. Furthermore, the presence of BDD in individuals was not correlated with the level of anxiety related to COVID-19. However, 20.8% of participants reported moderate-to-severe anxiety levels associated with the COVID-19 pandemic. The prevalence of BDD have been investigated in Iranian studies, and its prevalence was 4.5%, 33.3%, and 56% among college students, patients referring to dermatology clinic, and rhinoplastic surgery applicants, respectively.^{14,15} The main limitation of this study was the limited sample size and the questionnaire-based and cross-sectional design of the study. Despite using the CDAS questionnaire, anxiety among BDD patients could affect the evaluation of COVID-19-related anxiety in the study. These data correspond with our results, and we recommend evaluating the association of BDD with other psychiatric disorders such as eating disorders and depression.

5 | CONCLUSION

In the COVID-19 era, about 20% and 13% of individuals reported moderate-to-severe anxiety and symptoms of BDD, respectively, similar to previous studies in the pre-COVID-19 pandemic. However, in this study, anxiety was not associated with BDD. For further investigations, we recommend assessing the association of other psychiatric disorders with anxiety and BDD.

KEYWORDS

anxiety, body dysmorphic disorder, coronavirus 2019, COVID-19, psychology

CONFLICT OF INTEREST


The authors declare no conflict of interest.

ETHICAL APPROVAL

The ethics committee of Skin Research Center of Shahid Beheshti University of Medical Science confirmed this cross-sectional study.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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How to cite this article: Pourani MR, Ghalamkarpour F. Perceived impact of COVID-19 pandemic on body dysmorphic disorder and anxiety among population seeking cosmetic procedures. *J Cosmet Dermatol.* 2022;21:1352-1355. doi:[10.1111/jocd.14833](https://doi.org/10.1111/jocd.14833)