

Cosmetic Surgery and Body Image in Race/Ethnic Minorities

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REVIEW

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ABSTRACT

Research shows a growing increase in the percentage of minorities who seek cosmetic surgery over the past two decades. The focus of this brief review is to discuss the importance of multiple factors in minorities' decisions to seek cosmetic surgery and the need to assess body image motivations for this type of body modification and appearance enhancement.

Keywords: Cosmetic surgery, plastic surgery, body dysmorphic disorder (BDD), aesthetic surgery, body image, body image dissatisfaction (BID), race/ethnic minorities.

INTRODUCTION

According to cosmetic demographic data reported by the American Society of Plastic Surgeons [1] a total of 15.6 million cosmetic procedures that included 2.3 million cosmetic surgical and 13.2 minimally invasive procedures were performed in 2020. Reported gender differences revealed females received 92% of these procedures as

compared to 8% of males. These trends have continued based on a recent survey of the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS) which shows the percentage of individuals seeking aesthetic cosmetic surgery increased substantially in 2021 [2]. There was a 40 percent increase between 2020 and 2021 in procedures that included: facial plastic surgery (from 75% to 83%), neurotoxins (63%), fillers (57%), and rhinoplasty (62%) [3]. Although a greater proportion of women usually seek aesthetic surgery than do men (apart from hair transplantation), this survey shows an increasing number of men are electing to have surgeries that include rhinoplasty, neurotoxins, and blepharoplasty.

Traditionally, cosmetic surgery has been associated with Whites or Caucasians but growth in the popularity of surgical body modification procedures has contributed to greater acceptance by non-White populations. The proportion of race/ethnic group members who seek cosmetic surgery has shown a noticeable increase in the past two decades (e.g., [4]). The popularity and visibility of race/ethnic minorities in social and traditional media may underlie this recent trend to embrace surgical enhancements. Beauty pageant participants, contemporary actresses, hip/hop performers, and reality show participants who publicly acknowledge cosmetic modifications indirectly normalize surgical body procedures for others of similar race/ethnic heritages [5]. Theorists suggest that the portrayal of surgery as an immediate course of action to reduce misery and suffering and produce happiness and joy contributes to a global beautification standard that can be achieved with cosmetic and plastic surgery techniques (e.g., [6]). To further understand this increased interest in surgical body enhancements, researchers and theorist have



investigated the influence of media sources. For instance, when females spend a great deal of time on social media, follow several types of social media, and are less satisfied with their appearance, observations of females who have received cosmetic body enhancements inspire a predilection to undergo cosmetic surgery [7]. [8] used path analysis in a cross-sectional design to examine the relation between engagement with beauty content (e.g., bloggers and tutorials) in social media (e.g., Tik Tok, Instagram, YouTube, Facebook) and a consideration of cosmetic surgery among a college sample of 399 females based on the Tripartite body image influence model (i.e., parents, peers, and media) [9]. Upward facial appearance comparisons (comparisons with others seen as more attractive) and dysmorphic appearance concerns mediated the social media beauty participation and consideration of cosmetic surgery connection. However, internalization of beauty standards did not serve as a mediator for social media participation and dysmorphic appearance concerns or consideration of surgery. Yet, the internalization of societal beauty standards was relevant to the model but only after upward appearance concerns which suggests females in the sample likely internalized standards of cultural beauty early on which set the stage for engaging in certain social comparisons. In turn, the upward comparisons served to strengthen their existing beliefs about beauty. Interestingly, a direct relationship existed between engagement in beauty social media and consideration of cosmetic surgery even after other influences were controlled. These results suggest that a complex interaction of sociocultural beauty beliefs motivate participation in social media beauty based on feelings about the self and influence social comparisons that operate in a bidirectional way to guide the decision to pursue cosmetic surgery.

According to published data the acceptance of cosmetic surgery among each of the groups that comprise American Non-White race/ethnic populations has expanded. For instance, [4] found that liposuction declined among white patients but increased among Blacks (7.5%), Hispanics (4.7%), Asians (14.5%), and Native American patients (105.5%). According to the American Society of

Plastic Surgeons in 2012, Latinos are the major minority consumers of elective cosmetic surgeries (i.e., 10% in 2008, 8% in 2010, 12% in 2011, and 11% in 2012) with liposuction (11.8%), tummy tuck (11.6%), nose reshaping (10.5%), and breast augmentation (9.5%) as the most frequently chosen procedures [10]; [6]. A 2012 study of the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS) reported a 10% increase in facial plastic surgery for Hispanic, African Americans, and Asian Americans [11]. However, the physical features selected for cosmetic modification varies among the groups. For example, Caucasians more often elect to have facelifts (40%) or rhinoplasty (39%), Asian Americans are more likely to select blepharoplasty (44%) or rhinoplasty (41%), and African Americans and Hispanics are more likely to prefer rhinoplasty (80% and 65%, respectively) [11]. According to the American Society of Aesthetic Plastic Surgery there was a 56% increase in African American patients between 2005 and 2013 [12] and a 243% increase for race/ethnic minorities between 2013 and 2000. Twenty-five percent of all cosmetic plastic surgery procedures in 2013 were performed on Hispanic, African American, or Asian patients [13].

Table 1 shows Hispanic, African American, Asian American, and Others received 13%, 11%, 8%, and 2% of the cosmetic surgeries performed in 2020, respectively. These percentages show a decrease from 2019 to 2020 for all groups (including Caucasians) other than African Americans whose numbers remained the same. Significantly more minimally invasive procedures were performed than cosmetic surgeries. The five most preferred minimally invasive procedures are botulinum toxin type A, soft tissue fillers, laser skin resurfacing, chemical peel, and intense pulsed light as shown in Table 2. Table 3 shows specific differences in procedures selected by race/ethnic group members with African Americans and Hispanics more frequent recipients of liposuction and abdominoplasty than Asian Americans or Others. However, Hispanics and Asians were more likely to elect breast augmentation than African Americans or Others. Consistent with previous reports, members of the Asian/Pacific Islander ethnic group more

than Hispanics, African Americans or Others elected to have eyelid surgery (i.e., Blepharoplasty). However, African Americans had higher rates of participation in reconstructive surgeries than did Hispanics, Asian Americans or Others. Specifically, African Americans selected surgery for burn care (16%) and breast reduction (41%) at higher rates than the other groups.

Body Enhancement and Cosmetic Surgery Concerns

Despite significant growth in the percentages of race/ethnic group members seeking cosmetic surgery, the percentage of surgeons from the same group has not shown an equal increase. Only a limited number of White/Caucasian surgeons may have the medical training and cultural competence experience necessary to modify the body in ways acceptable to and appropriate for members of these populations. Traditionally, surgeons have reverted to a White/Caucasian standard to assess the physical features of potential patients to plan to perform surgeries. Adequate exposure to diversity during medical training is important [14]. However, the diversity knowledge of surgeons is limited as they rely on images that do not equally represent the percentage of patients in the United States. Surgeons are primarily trained with images of White/Caucasians and have few opportunities to learn about surgical techniques and cultural values of patients that influence body enhancement preferences of other race/ethnic heritages.

However, race/ethnic members generally seek surgery to enhance or better define body features or to modify physical signs of aging but expect to maintain their identities as ethnic group members. Research shows patients from each of these cultural groups usually choose to seek rhinoplasty to modify the nose to enhance their particular facial features rather than expect a nose that is more appropriate for a White/Caucasian facial structure. The nose reshaping process should also align with the bone structure and facial features of the individual. The application of surgical techniques more consistent with a European image of beauty can result in an imbalance in the face or appear unnatural for those of race/ethnic minority

status. Rhinoplasty must also consider nasal skin and soft-tissue envelope (SSTE) of race/ethnic minority patients. These factors affect the surgery process and postoperative outcomes. Knowledge of variation in the skin and soft tissue of the nose according to race/ethnicity is important to produce satisfactory surgical outcomes. [15] reported variation in thickness of the nasal SSTE among patients of different race/ ethnicities (e.g., tip SSTE thinner in White/Caucasian patients than others and SSTE thicker in African American patients than others) that has important implications for surgical procedures with each group.

The topic of melanin in the skin is culturally and physically valuable and makes cosmetic surgery considerations different for race/ethnic and White/Caucasian surgery candidates. Ethnic minority candidates for cosmetic surgery more than White/Caucasians are at risk for unfavorable skin outcomes and the darker the skin, the greater the risk. Melanin is the brown pigment in the skin that provides some protective effects from the ultraviolet rays of the sun. Melanin is also part of the body's immune system and helps to resist germs and bacteria and produces a range of skin tones between and within race/ethnic groups. Race/ethnic minority patients who choose to undergo minimally invasive enhancement procedures that require exfoliation, lasers or chemicals can experience skin changes, discoloration, and scarring.

Cosmetic techniques must be adapted to reduce hyperpigmentation (i.e., atypical darkening of the skin) and hypopigmentation (i.e., atypical lightening of the skin). Treatments can be used to reverse hyperpigmentation, but hypopigmentation is more difficult to reverse and treat [13]. A skin test can also be requested before selecting a minimally invasive procedure to assess level of risk. Consequently, modifications that involve laser surgery and light treatments need special consideration for members of these groups. Despite the risk involved with ablative resurfacing, myelinated skin can be treated with nonablative technologies that deliver light based or radio frequencies rather than laser or light sources technology that generate heat [16]. The appropriate wavelength and proper laser energy are required to efficiently perform the

procedure with minimal risk to the skin. A technique for laser skin resurfacing referred to as “fractional photothermolysis” has been used successfully to improve scarring and photo damaged skin without negative side effects [16].

Individuals of African and Asian heritage have been found to experience keloids and hypertrophic scars when incisions are made. However, it is difficult to predict if members of these groups will experience scarring in response to wound recovery. These scars are thick raised skin that appear alongside the incision due to the production of collagen and are problematic for cosmetic surgery. Keloids and hypertrophic scars are formed in a similar way when the normal wound healing process goes awry and an exaggerated amount of collagen forms. However, the behavior and appearance of keloids (excessive scar tissue that extend beyond the wound) differ from hypertrophic scars (excessive scar tissue specific to the wound area) [17]. Less invasive cosmetic techniques produce less injury to underlying layers of the skin. These incisions can be concealed in less noticeable body locations or treated with medication, pressure therapy or surgical removal [13]. However, [17] report that evidence to support dark skin is a risk for hypertrophic scars are more expert opinion based than empirical. These are important concerns that deserve attention to create a positive surgery experience and satisfactory outcomes for race/ethnic minority patients. However, these factors also interact with sociocultural and psychosocial influences specific to the body.

Body Image and Body Dissatisfaction with Physical Features

Based on a cognitive-behavioral conceptualization [18] [19] defined body image as a multidimensional construct influenced by biopsychosocial factors that includes evaluations of and investment in physical attributes. Negative or unfavorable evaluations of the global body and/or specific body parts and the belief that the body is perceived by others as unattractive refers to body dissatisfaction. This dissatisfaction ranges on a continuum

from reports of low or moderate distress to significant and elevated levels of distress. Dissatisfaction with the body is usually associated with specific features but also covers general body image concerns. However elevated or severe body dissatisfaction can also signify clinical body dissatisfaction consistent with the DSM-5 diagnostic criteria for body dysmorphic disorder (BDD). Body dysmorphic disorder is a somatoform psychological disorder that consists of extreme or excessive preoccupation with a perceived flaw in appearance that may seem invisible or only minor to observers but represent ugliness or deformity to the individual which is assumed to elicit mockery or teasing. Consequently, these individuals engage in time-consuming activities to reduce discomfort (e.g., seeking reassurance from others, avoiding social situations, using clothes to hide perceived flaws, dieting, engaging in excessive exercise, comparing body to others) which interferes with social, occupational, and interpersonal functioning. Medical rather than psychological or psychiatric assistance is typically sought to reduce the discomfort of BDD and associated symptomatology. Potential patients are likely to contact dermatologists and plastic and cosmetic surgeons for consultations about features and conditions that create appearance concerns [20] [21]. Cosmetic surgical procedures are pursued to alter any perceived physical defects assumed to produce distress and discomfort [22].

Researchers report a prevalence of BDD in the general population between 0.7% to 2–4% [23]. [24] research review from national and international data bases revealed a prevalence of 19.2% of BDD for patients requesting cosmetic surgery. Their findings support studies that show the prevalence of BDD is higher among those who seek cosmetic surgery than the general population. Studies with samples from several countries indicate a prevalence between 5-15% of BDD among those who seek cosmetic surgery [25] and BDD has a prevalence of 7-8% for this population in the United States [26]. Research also shows that patients with suspected BDD may be at risk in both major and minor cosmetic surgery settings [27]. Unfortunately, cosmetic surgery procedures do not revise

the symptoms or implications of a BDD clinical diagnosis and may result in greater problematic postoperative outcomes. Patients with BDD who seek cosmetic surgery often express dissatisfaction with surgical procedures even when the procedure is well executed and engage in maladaptive and dangerous behaviors (e.g., suicide ideation, self-harm behaviors, threats to sue or harm physicians) [28] [29] [30]. Therefore, given that psychological disorders in general are more common among those who seek cosmetic surgery (e.g., substance use, histrionic personality disorder, narcissistic personality disorder) than in the general population and BDD is highly prevalent, patients with this disorder must be clearly identified.

BDD, Body Dissatisfaction and Race/Ethnic Minority Patients

Despite growth in the percentage of race/ethnic minorities who have undergone cosmetic surgeries and the associations among body dissatisfaction, BDD and these types of body “perfection” procedures, few studies have examined BDD among minority populations. The literature on body image has consistently reported that Asian American and Hispanic females experience more body and appearance dissatisfaction than African Americans (e.g., [31]). Body dissatisfaction for these two groups appears to relate to their internalization of a White/Caucasian ideal of body beauty. [6] proposes that cosmetic surgery provides the occasion to produce a “refined” image consistent with the concept of Maja beauty for Latina females (e.g., white or light skinned,...brown, green, or preferably, blue eyes, a “fine” “feminine” or European nose, is curvaceously thin and has light brown—or a shade of blonde long flowing hair.” pp. 55). However, the interpretation that African American women do not experience body dissatisfaction is based solely on studies that highlight physical thinness and low body weight as the preferred body ideal (e.g., [32] [33]). Research established on a culturally valued conceptualization of the ideal body standard for African Americans demonstrates that the women are not immune to body dissatisfaction but maintain a different ideal preference for physical appearance than those of other

heritage groups. [34] found that most of both groups prefer an hourglass body shape but differ on the specific features that make this shape desirable. Black women view a curvaceous body type as more attractive as compared to White women who perceive a slender body as more attractive. Whereas both value medium size breasts as ideal, Black women prefer larger buttocks and an average weight level as ideal but White women prefer smaller buttocks and a lower weight to be ideal. This variation in body type ideals is associated with different outcomes in body dissatisfaction. Whereas both groups are impacted by the discrepancy between ideal and actual body weight and breast size, Black women with smaller buttocks show more body dissatisfaction than those with larger buttocks. Dissatisfaction with these body features predict body shame and body surveillance. Body dissatisfaction with and concern for this feature may encourage interest in gluteal augmentation to modify the size, shape, and contour of the buttocks. The buttocks are central to the body beauty and sexual attraction of women and aesthetic gluteoplasty has shown a significant increase as a body enhancement procedure in the past few years [35] [36].

Based on an evolutionary theory of body image, [37] [38] proposed that the female body type with a waist-to-hip ratio (WHR) of (0.7) is perceived as universally attractive to heterosexual men [39]. showed that a surgically appropriate buttocks augmentation is achieved for a woman when the WHR is contoured to approximate Singh’s 0.7 body ideal. This ideal is seemingly becoming smaller given the visibility and influence of social media and media performers (e.g., 0.6 to 0.5) [40]. However, this WHR ideal varies according to race/ethnicity of the women based on preferred buttocks size, lateral buttocks fullness, and lateral thigh fullness with greater fullness preferred by Hispanic and African American women [39]). The preference for a shapely and curvaceous “thick” body type by women of Latina and African cultural heritages has interacted with shapely female media images in hip/hop music videos, lyrics of songs that emphasize shapely and protruding buttocks (e.g., Sir Mix-A-Lots single, Baby Got Back), and actresses that display this body type to encourage women from all

ethnic groups to admire a different body shape than in previous years. [41] refers to this body type as “slim-thick” and conceptualizes the recent amalgamation of the Black thick body with Caucasian thinness in an “appropriation and commodification” of Black sexuality that is associated with perceptions of the Caucasian self as “too skinny” or manly and the desire for curves. This body type is known as “thin-thick” in the literature and refers to a large buttocks and thighs, but a relatively flat stomach and thin waistline and is associated with more unfavorable and detrimental body evaluations than the thin or fit body size and shape for some undergraduate females [42]. [43] reported that body ideals of Latinx women show favor for an hourglass curvaceous body shape but smaller noses and lighter skin that implies preference for a White/Caucasian body type. Dr. Matthew Schulman a Park Avenue surgeon highly sought after for buttock enhancement surgery who performs 6 to 8 surgeries a week and is well known for his “Scoop Lift” technique, commented during an interview with [44] that he services a diverse patient population and “75% of his patients are Black and Hispanic women.” He further noted “I don’t think the patients who’ve done this with me are the typical serial plastic surgery patients”. The main way to enhance the buttocks is with gluteal implants, liposuction, and autologous micro fat grafting with implants as the typical method of buttock augmentation. However, this method is associated with several complications, namely wound dehiscence (i.e., improper healing that leads to separation of wound edges). Consequently, autologous micro fat grafting and liposuction are recommended [39]. Cosmetic facial concerns such as acne, rosacea, and facial hyperpigmentation that produce appearance related distress for race/ethnic minority populations [45] and aesthetic facial concerns that include dyschromia, benign growths, hyperkinetic facial lines, volume loss, and skin laxity also motivate visits to cosmetic surgeons [46]. Given the complexity of the multiple factors that shape minorities’ decisions to undergo body modification with cosmetic surgeries it is important to understand the interactions among social, physical attributes and BDD symptoms in

relation to pre and postoperative behaviors and experiences of minority patients.

Most of the literature on race/ethnic minorities and body concerns have used female samples and focus on body image attitudes but BDD has not been studied systematically for this population. More than twenty years ago, [47] examined the prevalence of BDD in an ethnically diverse high school sample using the Body Rating Scale. The prevalence in the sample was 2.2% and gender and race were related to BDD. Adolescent girls were more concerned about their bodies than same age boys and African American adolescents were less dissatisfied with their bodies than those of other ethnic groups. [48] examined demographic variables and BDD symptomatology to measure the prevalence of BDD in a large non-clinical southeastern undergraduate population. They found that Caucasians had an estimated prevalence of BDD higher than the prevalence of the total sample, but the estimated prevalence was below the level for Latinos/as, Asian Americans, and African Americans. However, in a sample of high school females, [51] found that Black/African American and Hispanic females reported an increased desire for cosmetic procedures and were most affected by BDD. [52] used one question from the BDDQ to assess clinically significant BDD in a self-report internet study and observed similarities in BDD across African American, Asian, and Latino participants with some minor differences. Body parts of concern and BDD behaviors did not differ between Latino and African Americans as compared to Caucasians and most did not differ between Asians and Caucasians. Hair, skin, and nose were the most common body features of concern for all ethnic groups. Asians were more likely to endorse “hair being too straight” and skin “too dark” and less likely than Caucasians to endorse dissatisfaction with body shape concerns (e.g., stomach, hips, waist, and buttocks). Asians were also more likely to engage in excessive exercise than Caucasians but less likely to engage in grooming, camouflaging, and touching as compared to Caucasians. However, rhinoplasty is the cosmetic surgical procedure most frequently requested by race/ethnic minority patients including African Americans, Asians, and Hispanics [49] [6]

and most sought after by patients with BDD [50]. This facial change is central to the identity shared with the social group to which one belongs that can increase the risk of postoperative dissatisfaction and disillusionment with a new physical image despite the objective success of surgery. The progressive growth in cultural diversity shows that there is no longer a single standard of beauty and each race/ethnic and cultural group experiences body dissatisfaction relative to internalized ideals and norms. These findings have important implications for multicultural variations related to race/ethnic differences in body dissatisfaction, BDD and the consideration of cosmetic surgery to enhance specific physical features.

The empirical neglect of BDD and body image factors in the cosmetic and plastic surgery experiences of race/ethnic minority patients may mirror their access to psychological treatment and participation rates in national mental health. According to the National Center for Health Statistics, Non-Hispanic white adults (24.4%) were more likely than non-Hispanic black (15.3%), Hispanic (12.6%), and non-Hispanic Asian (7.7%) adults to have received any mental health treatment in 2020 [53]. These data suggest that minorities experience psychological distress at rates comparable to and higher than their population representation. Diagnostic disorders and mental health conditions for race/ethnic minorities have not been discussed or evaluated but have the potential to offer insight into the growth in requests for cosmetic surgeries. Findings that patients with preoperative mental health/psychological problems do not demonstrate the same benefits from cosmetic surgery as do more mentally/psychologically healthy patients suggest that body dissatisfaction and unidentified BDD symptoms of race/ethnic minorities may relate to their recent pursuit of body modifications.

The results of studies with clinically disordered patients on the outcomes of cosmetic and plastic surgery that examine patient satisfaction or the impact of surgery on postoperative psychological outcomes [54] [55] [56] [57] are relatively mixed. Kam et al. (2022) conducted a literature review to investigate the differential influence of

invasive cosmetic surgical procedures on physical and psychological outcomes of patients and reported a general improvement in body image but a lack of improvement in the psychological variables (i.e., self-esteem, depression, and anxiety). These results were consistent with the hypothesis that surgery had a greater impact on the physical or functional than the psychological or emotional dimension. Likewise, a great deal of controversy relates to BDD as a contraindication to invasive and non-invasive surgical procedures (e.g., [59] [22] [60] [61]). Findings of some studies report that more than 90% of individuals diagnosed with BDD report an absence of change or an exacerbation in BDD symptomatology in the cosmetic postoperative stage (e.g., [62] [63]). For instance, [64] examined the impact of the severity of preoperative body dysmorphic symptoms on patient's satisfaction with rhinoplasty surgery and quality of life and found those with more severe symptoms reported less satisfaction and patients with moderate symptoms reported a lower quality of life than did those with less severe or no symptoms at the preoperative stage. [65] also found that patients who suffered from BDD were more dissatisfied with the results of aesthetic medical procedures than general aesthetic patients. BDD also negatively influenced patient's self-assessment regarding nasal function during the preoperative phase of rhinoplasty [66] and produced worse mental health outcomes five years after surgery compared to the preoperative stage [67].

Yet, there is evidence that pre-existing psychological conditions may not have a negative impact on the surgery process or satisfaction with outcomes. [68] found that patients with poor mental health were not less likely to be satisfied or benefit from rhinoplasty than those of high mental health status. Both groups (regardless of preoperative mental health status) showed improvement in nasal function assessed by patient-reported outcome measures and objective airflow measures. [69] examined BDD in rhinoplasty patients and found BDD and non-BDD groups were equally satisfied with the outcomes of the surgery. Other studies imply that patients with mild to moderate BDD symptoms may benefit from cosmetic

surgery. [70] found that a year after rhinoplasty surgery 81% of an all-female patient sample with mild to moderate BDD symptoms during the preoperative assessment experienced full remission and 90% reported satisfaction with the postoperative surgical outcomes. All the patients who expressed nasal discomfort in the mild deformity group were of African descent, but ethnicity was not associated with a low self-image and did not prevent patients from reporting reduced postoperative BDD symptomology. Yet, these findings have been questioned based on methodological concerns (e.g., [71]). Physicians who adhere to a continuum or multidimensional perspective of BDD also posit that the disorder can be classified into categories that designate levels of impairment and yield varied postoperative outcomes. [72] found that the presence and severity of BDD symptoms in a rhinoseptoplasty sample were not associated with negative postoperative surgical outcomes. Cosmetic surgery procedures were associated with improvements in quality-of-life outcomes in all three groups (none, mild to moderate, severe) related to nasal function and aesthetic aspects, and surgery was associated with lower postoperative BDD symptoms (even for the severe group). According to this continuum approach, patients with mild-to-moderate BDD with little to no impairment in functioning, realistic surgery expectations, and a single appearance focus may benefit from cosmetic surgery as contrasted with patients who demonstrate significant broad impairment in functioning, multiple appearance concerns, and avoidant behavior with extreme and unrealistic beliefs and expectations for the procedure.

Assessment Recommendations of Cosmetic Patients

Given the importance of preoperative mental health status to postoperative outcomes of cosmetic surgery, surgeons must be able to identify patients with clinical disorders. The hidden and often invisible nature of Body Dysmorphic Disorder (BDD) among candidates who seek cosmetic and plastic surgery along with its high prevalence in this population requires an organized and efficient effort for early identification. These patients can often benefit more from psychological and psychiatric

interventions than cosmetic and plastic surgery which makes it highly imperative that their needs are determined prior to acceptance and approval for surgery. The likelihood that cosmetic surgery procedures will satisfy a patient with BDD, or its severe symptoms is extremely low with a high probability of requests for additional surgery procedures. In some cases, the experience of surgery may also exacerbate patients' pre-surgery condition. Yet, many surgeons may not formally or systematically screen for BDD and therefore overlook the diagnosis. The results of a survey conducted by the American Society for Aesthetic Plastic Surgery (ASPS) members showed that 85% reported they had performed surgery on patients with a clinical diagnosis of BDD but only realized this postoperatively. Eighty-two percent of these surgeons reported the patients had unfavorable postoperative outcomes [73]. Survey results also suggest that 40% of physicians who work in cosmetic surgery settings do not view BDD as a contraindication to surgical body modifications [74]. However, the recommendations has been made to screen for BDD in those who seek cosmetic surgery [75]. Surgeons who use intuition or medical judgment may be unable to successfully identify BDD in this population [76].

The initial intake or consultation should seek to assess patients' motivations and expectations for cosmetic surgery. Whether the surgical procedure is sought for internal or external reasons is important to ascertain. Patients who express a desire for modification of features with objectives that involve reasons related to others (e.g., romantic partners, social acceptance) are at greater postoperative risk than those who offer internal motivations (e.g., to feel better about myself). Patients' beliefs and expectations related to surgical, psychological, and social outcomes following surgery are especially relevant to their adjustment and well-being [76]. Surgeons should encourage patients to consider preoperative factors such as unrealistic expectations (e.g., requests for the largest buttocks possible) and postoperative consequences that are unpredictable (e.g., improved marriages, termination of relationships) [44]. This information can guide decisions to determine appropriateness and readiness for surgery.

The topic of physical appearance and patients' perceptions and evaluations of the body should be examined with an emphasis on body dissatisfaction. A differential diagnostic assessment is important to differentiate patients with BDD from those with body dissatisfaction before cosmetic surgery is performed [77] [78]. Body image dissatisfaction must also be ruled out from more mild or moderate BDD clinical symptoms. Whereas patients with BDISS may be suitable to undergo cosmetic surgery those with clinical BDD (although with mild to moderate symptom picture) may appear stable during the preoperative stage but display extreme behavioral and emotional indications of dissatisfaction during the postoperative phase. Surgeons can also use a brief self-report tool to identify patients who can benefit from psychoeducation to assist with unrealistic surgery expectations. [79] developed and validated two instruments with patients seeking facial aesthetic or body contouring surgery to measure expectations about appearance and quality of life after surgery and psychosocial distress related to appearance (i.e., The Expectations Scale and Psychosocial Distress Scale, respectively). Both use a 4-point response option with 8 items ("Definitely Disagree to Definitely Agree"). Items on the Expectations Scale include "I will be transformed", "I will look fantastic") and Items on the Psychosocial Distress scale include "I worry that I am ugly", "I feel anxious when people look at me". The relevance of the content and abbreviated length make both scales appropriate for use during the consultation interview.

Discrepancies between beliefs about observers' perceptions of their appearance and their own emotions and appearance beliefs require in-depth assessment. Patients' concerns with physical appearance should be discussed in a nonthreatening and supportive manner. Information about degree of appearance distress, perceived impact of appearance on others, and previous efforts to alter specific features are valuable to understand. The surgeons' agreement/disagreement with the patients' appearance descriptions and any inconsistencies between reported appearance information and surgeon observations should be integrated in predictions about the potential

impact of surgery. A thorough history related to psychiatric and mental health status and functioning (e.g., prescribed medications, diagnoses, hospitalizations) is also required. BDD patients who seek cosmetic surgery have a high prevalence of comorbid Axis I disorders (e.g., depression, OCD, social phobia) and Axis II disorders (e.g., borderline, avoidant, paranoid, schizotypal) [80] that can interact to complicate outcomes. Due to the potential risks associated with behavioral and psychological surgical outcomes for BDD patients, topics of aggression and violence, suicidal thoughts, fantasies and actual attempts deserve particular attention.

Several screening instruments to assist in the assessment phase are discussed in the literature. Those mentioned most often are the Clinical Global Impression Scale, Yale-Brown Obsessive Compulsive Scale, National Institute of Mental Health Obsessive Compulsive Scale, and Clinical Global Impression Scale [81]. However, these scales have not been validated or shown effective in cosmetic clinic settings during the consultation. [82] conducted a prospective prevalence study of BDD and sought to validate the Body Dysmorphic Disorder Questionnaire (BDDQ) in a clinic population with the BDD SCID, a clinician-administered, semi-structured interview (i.e., standard diagnostic measure of BDD) and found a higher prevalence of the disorder in patients undergoing cosmetic (13.1%) than reconstructive surgery (1.8%). The comparison demonstrated that the BDDQ is a valid and accurate screening tool (sensitive 100%, accurate 91.7%, specific 90.3%) that is brief, self-administered, and able to identify the presence of BDD. Findings of [83] further substantiate the importance of this validated screening instrument to assess BDD. They found that the Body Dysmorphic Disorder Questionnaire (BDDQ) successfully screened 9.7% compared to 4.0% who were clinically suspected of BDD by surgeons. Surgeons who did not use an instrument were only able to correctly identify 2 of 43 patients who screened positive for BDD on the BDDQ. Surgeons can use this standardized instrument to screen patients and follow-up the results with an interview using the BDD SCID (i.e., a clinician administered semi-structured interview) rather than rely on

intuition and judgment. Patients who clearly show the presence of a BDD clinical diagnosis and high ratings on measures of appearance concern should be referred at some point to a psychologist or psychiatrist. This does not imply that patients who score high on BDD symptoms or meet the criteria for the clinical diagnosis should not be allowed to undergo cosmetic surgery at some time in the future. However, those who are likely to demonstrate poor postoperative outcomes should receive treatment to prepare them for this potential experience. The appropriate identification of patients with BDD can make it possible that evidence-based treatment (i.e., cognitive-behavior interventions and serotonin reuptake inhibitors (SSRI) can be used to reduce severe BDD symptoms and ultimately provide coping strategies to reduce negative postoperative risks of patients approved to undergo cosmetic surgery [84]. In general, psychological disorders should receive appropriate treatment before the performance of surgical procedures to eliminate the probable negative consequences that can result from feelings of dissatisfaction and despair because of pre-existing extreme or delusional expectations [85].

Researchers propose that psychologists and psychiatrists should form close working alliances with cosmetic and plastic surgeons to promote in-depth awareness and understanding of BDD that involves assessment and evaluation, knowledge of the clinical symptom picture, and information about outcomes for the disorder [28] [76]. During the preoperative assessment phase, it is important that surgeons recognize that body and appearance ideals intricately relate to ethnicity and culture for race/ethnic minority patients. Consequently, body image attitudes, body image dissatisfaction, and body and appearance concerns are also shaped by ethnic and cultural influences; and ethnicity influences BDD symptoms ([52] [84]. Physical attributes that differentiate each race/ethnic group from the White/Caucasian group and show how these groups differ from each other serve to align them with individual cultural collectives. These features also hold value and significance because they relate to specific body image attitude differences among the groups [86]. Consequently,

surgeons need to assess the distinctive ethnic identity of patients and the influence of this identity on personal meanings of an ideal body. Understanding their identification with a specific race/ethnic cultural group as well as the degree to which they have internalized a White/Caucasian meaning of appearance will determine how to accommodate a distinct race/ethnic preference for body features without adhering to a normative White/Caucasian appearance standard.

LIMITATIONS

The rather recent growth in race/ethnic minority acceptance of cosmetic surgery to enhance the body has advanced beyond the published research. This theoretical and empirical review revealed only a few studies that have examined body image and cosmetic surgery for these groups. There are three topics that deserve indepth study to further knowledge on body image, cosmetic surgery, and Body Dysmorphic Disorder for minorities. First, future studies should seek to understand the various motivations for the rise in cosmetic surgery. Theorists refer to the influence of the social media and improved financial status to explain this rapid development. However, empirical research that examines demographic qualities with more broad questions that relate to specific surgical procedures and the role of body dissatisfaction in both qualitative and quantitative studies can provide more understanding of this recent phenomenon. Participants of diverse ages, gender groups and sexual orientations should be considered to understand the decision-making process throughout the body modification process. The present review also underscores the need to carefully study how cultural values and worldviews impact the body and appearance standards to influence responses to cosmetic surgery for members of each ethnic group. Studies that examine intragroup variation for body dissatisfaction and BDD among ethnic groups that comprise the Hispanic (e.g., Mexican, Dominican), African American (e.g., African, Haitian) and Asian American (Cambodian, Chinese) populations provide the opportunity to gain more understanding of cosmetic

surgery seeking behavior and responses to surgery procedures. It is important that researchers should give attention to the surgery seeking patterns of each group and how these patterns may vary over time with emphasis on contextual and situational factors that may shape decision making. Finally, additional research is necessary to assess the prevalence of BDD for members of each race/ethnic group discussed. The current body of data on prevalence is primarily representative of White/Caucasian patients, and more information is needed to explore the relationships among BDD, body dissatisfaction and cosmetic surgery in relation to the worldviews of each race/ethnic group. Research that addresses these and related topics can advance the understanding of minorities' decisions to embrace cosmetic surgery.

CONCLUSION

The relationship between cosmetic surgery and body image issues specific to race/ethnic minorities were discussed with an emphasis on body dissatisfaction and the clinical diagnosis of Body Dysmorphic Disorder (BDD). Expected changes in social factors will likely influence whether the percentage of minorities who seek cosmetic plastic surgery will experience continued growth. Cosmetic plastic surgery procedures have shown an increasing trend among Black, Hispanic, Asian, and Native Americans in the past twenty years and researchers predict that expected demographic shifts that will increase the minority population, greater cultural acceptance of cosmetic surgery, and expected growth in buying power will continue to produce growth to meet the need for body enhancements of these groups [87]. However, this diversity in patient representation is not evident in the Instagram accounts of plastic surgery journals and organizations which seem to overwhelmingly market to white patients who seek these procedures [88] and data collected from RealSelf a popular social media site for cosmetic surgery reveals an underrepresentation of both Black patients and surgeons [89]. Yet, the new phenomenon known as "social dysmorphia" described as excessive concern with and interest in beauty and standards of beauty shown in social

media can contribute to the development of BDD and deserves attention as the physical images of race/ethnic minority individuals become more visible and accessible in the mass and social media [90].

Theorists also question the dual role of the cosmetic surgeon in contemporary American society. Discussions about cosmetic surgeons' role as keepers of societal beauty standards become important when psychological well-being of the patient is a consideration. The view that surgery is sought to reduce negative feelings towards the self is presented against the perspective that cosmetic surgery has the power to relieve or to reduce suffering without regard for the basis or origin of the pain. However, an ethical dilemma relates to the difference between the role of physicians in general and cosmetic physicians specifically since the latter must decide whether to remain loyal to patients without consideration of the origin of the discomfort with the body and/or to enact loyalty to society by addressing beauty standards and norms that may be harmful and the cause for pain and distress of patients. Some theorists propose that plastic surgeons may be complicit in promoting harmful societal beauty practices and standards even as they merely seek to reduce patients' distress with surgical procedures [91] [92]. This perceived "moral" or "ethical" responsibility of the surgeon is linked to the societal emphasis on thinness and large breasts for white females and pressures to "refine" ethnic physical features for African American, Latina, Asian, and other women of color (WOC) [6]. The need for cosmetic surgeons and patients to consider "suspect" societal standards and the personal needs of patients calls for both (patient and surgeon) to examine psychosocial considerations that motivate patients to seek body modification and appearance enhancement. This can assist with meeting the complex objective to reduce body dissatisfaction and improve self-esteem but retain race/ethnic identity and individuality with careful consideration of and attention to pre and post-operative psychological status and well-being. The body changing purpose of cosmetic surgery can negatively impact patients even when surgery is executed appropriately and deemed objectively correct if features

that inherently represent belongingness to a race/ethnic and cultural group are changed to influence identity in an unexpected and undesirable manner [93].

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PEER REVIEW

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TABLES

Table 1: Cosmetic Surgery Procedures for 2019 and 2020 by Race/Ethnicity.

	2020	2019
Caucasian	10, 330,749	12, 986, 511
Hispanic	1, 985, 351	2, 066, 836
African American	1, 781, 485	1, 777, 118
Asian American	1, 207, 619	1, 277, 806
Other	290, 751	320, 394

Table 2. Minimally Invasive Cosmetic Procedures by Race/Ethnicity.

	Caucasian	African American	Asian/Pacific	Hispanic Islander	Other
Botulinum toxin type A	82%	4%	4%	7%	3%
Soft tissue fillers	78%	5%	5%	10%	1%
Chemical peel	72%	10%	3%	13%	2%
Laser hair removal	77%	8%	6%	8%	0%
Microdermabrasion	71%	5%	13%	9%	2%

Table 3. Surgical Cosmetic Procedures by Race/Ethnicity

	Caucasian	African American	Asian/Pacific	Hispanic Islander	Other
Breast Augmentation	74%	6%	7%	12%	1%
Rhinoplasty	71%	5%	11%	10%	3%
Blepharoplasty	77%	3%	11%	8%	1%
Liposuction	61%	15%	5%	18%	1%
Abdominoplasty	74%	7%	5%	12%	1%

