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REVIEW ARTICLE

Part of the problem or part of the solution? Plastic surgeons and body image dissatisfaction

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Abstract

An estimated two out of three people of all ages experience body dissatisfaction. A substantial body of evidence now attests to a range of negative impacts of this dissatisfaction on psychological wellbeing and on key aspects of living including health, education, work and relationships. This article considers why this social issue is worthy of attention from plastic surgeons and their teams, and outlines ways in which the profession might contribute to a collective response. Suggestions include educating surgeons to enhance their understanding of the psychological factors involved in seeking and responding to appearance-enhancing surgery; training to improve standards of clinical practice (including patient selection, assessment and follow-up; promoting fully informed shared treatment decision making; the routine collection of pre- and post-procedural data) and the adoption of socially responsible business practices.

Keywords: body image, health education, surgeons, patient selection, follow-up studies.

Introduction

An estimated two-thirds of children and adults experience body dissatisfaction.[1,2] A substantial body of evidence charts the negative impacts of body dissatisfaction on psychological wellbeing and on key aspects of living, including health, education, work and relationships.[3] In response to growing concern, reflected in calls to action from governments, policy makers, professional bodies and youth organisations, this article considers why this public health and social issue is worthy of attention from plastic surgeons and their teams. Ways in which plastic surgeons might contribute to a collective response are also considered,

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including training to increase understanding of the psychological factors that play a part in all aspects of plastic surgery.

In view of a dearth of evidence regarding the psychological impacts of plastic (particularly cosmetic) surgery, the case is also made for a commitment to the routine collection of pre-and post-procedural data. In time, these data will underpin the development of definitive assessment and screening tools, and appropriate methods of psychological support and intervention either as an adjunct or, in a small minority of cases, as an alternative to surgery. Plastic surgeons are also well placed to pioneer socially responsible business practices in the cosmetic industry sector, and to champion community-based interventions designed to promote positive body image and an appreciation of diversity in appearance as part of the collective effort needed to reverse the current tide.

The nature and consequences of body image

Body image refers to a person's thoughts, feelings and behaviours in relation to the appearance and functionality of their body.[4] It incorporates aspects of evaluation (such as satisfaction or dissatisfaction with appearance), investment (for example, the importance of appearance to an individual's sense of self) and embodiment (that is, an individual's experience of engaging their body with the world).[5,6] Historically, research has focused on negative body image.[7] This includes dissatisfaction with a particular feature (including weight, shape or other aspect of appearance), an over-investment in appearance (for example, deriving self-confidence predominantly from appearance) and problematic behaviours (such as avoiding social and other life activities due to appearance concerns).

More recently, attention has been paid to understanding aspects of positive body image. Positive body image is not merely the absence of body dissatisfaction.[7] Positive body image refers to 'love and acceptance of one's body (including aspects inconsistent with societally-prescribed ideals) and appreciation of its uniqueness and the functions it performs.'[8] Studies suggest that individuals may simultaneously hold aspects of positive and negative body image.[9,10] For example, a person may be dissatisfied with a particular aspect of their face but hold a positive disposition, respect and appreciation towards their appearance and bodily function overall. Furthermore, for people with a visible difference (for example, a congenital condition such as cleft lip or palate, scarring from an accident or an altered appearance after medical treatment), the severity of the difference is not necessarily predictive of the level or nature of body image concerns experienced by that person;[11] a person with very noticeable facial scarring resulting from burns may be well adjusted and experience an overall positive body image, whereas a person with minor scarring from adolescent acne may experience severe body image concerns despite these scars being scarcely noticeable to others.

Despite burgeoning research and advocacy efforts focused on promoting positive body image, body image dissatisfaction remains prevalent. A 24-country study found 25–61 per cent of adolescents are dissatisfied with their bodies.[1] Young Australians aged 11–24 consistently identify body image as one of their top three concerns in life.[12] However, body image is not just an issue for young people. Concerns are prevalent among younger and older adults, particularly around key life events such as puberty, pregnancy and menopause.[2,13,14] While boys and men are affected by body image dissatisfaction, girls and women tend to be disproportionately affected (see, for example, Al Sabbah and colleagues[1]). This is likely due to range of reasons, including that societal ideals of appearance are particularly prescriptive for women; women's social capital is often intertwined with their appearance and perceived attractiveness, and women's bodies are more likely to be objectified than men's.[15,16] In fact, researchers in the mid-1980s described body dissatisfaction among women as a 'normative discontent'.[17]

The widespread prevalence of body image dissatisfaction is concerning in light of extensive evidence documenting its negative consequences on key areas of living, including health, education, work and relationships. Body dissatisfaction has

been shown to predict depression, low self-esteem, unhealthy weight control and exercise behaviours, substance misuse, risky sexual behaviours and suicidal ideation.[3,18,19,20] People who experience body image concerns or appearance-based discrimination are also more likely to avoid medical appointments and preventative health checks.[21,22]

A recent review documented 25 studies showing that body image impacts education, work aspirations and performance.[23] For example, body dissatisfaction is associated with poorer academic grades and performance. Girls who think they are overweight, irrespective of their actual body weight, have curtailed academic achievement.[24,25] Similarly, women with body image concerns are less likely to attend job interviews.[26] A recent 14-country study showed that 80 per cent of young girls with body image concerns, including Australians, opt out of important life activities like putting their hand up in the classroom or giving an opinion due to concerns about their appearance.[27] Studies also show that individuals with a visibly different appearance are more likely to avoid social situations due to fear of other people negatively evaluating them.[28]

Overall, the research suggests that body image concerns are prevalent and the effects are not benign. Accordingly, there have been increasing calls from health professionals, third sector organisations, governments, politicians and policy makers for body image to be recognised as a pressing public health, gender and social justice issue. The World Association for Girl Guides and Girl Scouts, the world's largest youth organisation for girls, has campaigned at the United Nations commission on the status of women since 2015 for body image to be recognised as an important issue that affects young people globally.[29] Governments have launched inquiries and initiatives to address body image in the UK, Canada, Israel, France and Spain.[30] The Australian Government proposed a national strategy for body image in 2009, stating that '[negative body image is] a mainstream problem that affects both genders and concerns people of all ages, but it most acutely threatens the health, confidence and self-esteem of our young people', and 'Governments have a role to play in addressing body image problems, particularly when the wellbeing of our community is at stake.'[31]

How does this intersect with plastic, cosmetic and reconstructive surgery?

The rising tide of body image dissatisfaction is relevant to plastic surgeons and their profession in several key ways. As trusted health care professionals and gatekeepers to 'appearance enhancing' surgery—arguably perceived by the public as one of the most effective methods of achieving appearance ideals and improving body image—plastic surgeons are in a position of considerable influence over prospective patients and the broader public with regard to body image and appearance ideals. The ethos of a plastic surgeon's professional practice (including methods of patient assessment and selection, and the language used to describe the likely outcomes of surgery) and business practices adopted in the private sector (such as advertising and marketing strategies) all have the potential to fuel or challenge current prevailing appearance norms. Thus, in the context of growing concern about the public health and social harms accruing from increasing levels of body image dissatisfaction, these are worthy of some scrutiny.

Education and training

From the origins of plastic surgery in the sixteenth century, Gaspare Tagliacozzi maintained that the goal of the discipline was to improve psychological wellbeing through surgical intervention to restore the patient to a 'normal' appearance: '[w]e restore, repair and make whole those parts which fortune has taken away, not so much that they delight the eyes, but that they may buoy up the spirit and help the mind of the beset.' When asked today about the primary motivation for their intervention, most plastic surgeons will still give primacy to their desire to improve the wellbeing of their patients. There is logic, then, in the view that the care provided should be designed to promote the best possible psychological outcomes for patients.

It is now clear, however, that a sole focus on aesthetic enhancement is unlikely to achieve this

aim and that earlier assumptions about the nature of the relationship between objective physical appearance and psychological adjustment have been misplaced. Research demonstrates that any relationship is far from causal and any association is, at best, weak.[32] A substantial body of evidence now indicates that the physical characteristics of a patient's 'difference' (aetiology, extent, severity) are not good predictors of their psychological adjustment, either before or after surgical intervention.[28,33] People of any appearance, age, gender or social background can be anywhere on a continuum of being very satisfied to very dissatisfied with the way they look.[11]

At one level, it may appear that surgeons and patients contemplating reconstructive surgery share the same goal of restoring 'normality' in aesthetics and function. However, recent qualitative studies [34,35] indicate that definitions of 'normality' may not be shared by both parties. Achieving 'normality' is rarely just about aesthetics and may also involve the desire to achieve a more positive body image and to feel able to behave like, and feel included by, peers in social and work situations.[35] In saying 'I just want to look normal', prospective patients may draw on their body image, their recollections of a pre-condition or more youthful appearance (which are subject to recall bias) and the degree to which they have internalised social norms and appearance ideals transmitted by social and mass media, family and peers. With regard to media in particular, as a result of digital retouching, such norms and ideals may have no basis in biological reality and may not be achievable, even after extensive, repeat surgeries. Surgeons are likely to have a less nuanced view than their patients, drawing on their own sense of aesthetics and, quite possibly, assumptions that an enhanced appearance will necessarily result in an improved quality of life for patients. The surgeon's enthusiasm for his/her own craft may lead to pressure on the patient to undergo multiple operations in pursuit of the 'best possible' aesthetic outcome. Patients may need encouraging to get off the treatment treadmill and focus on achieving optimum psychological functioning through other methods.[33]

In relation to cosmetic surgery, recent research has also highlighted that psychological factors play a key role in the motivation of potential patients to seek treatment, in their expectations of outcomes and in their responses to the actual outcomes of surgery.[36] The imperative for surgeons and their teams to familiarise themselves with recent developments in psychological research (particularly in the field of body image) through education and training is brought into even sharper relief by the current prevalence of body image dissatisfaction and the widespread perception that plastic surgery has a key role to play in people's desire to achieve current appearance ideals.

Professional standards of practice

In recent years, the numbers of people seeking cosmetic surgery have increased dramatically.[37] Research examining factors motivating people to seek aesthetic surgical enhancement is limited, however, some key trends are emerging. Pressure from families, peers and the social milieu, particularly social and broadcast media, can influence 'free choice' and agency, making it harder for prospective patients to determine what is in their best interests.[38–41] People with negative body image are more likely to express interest in surgical procedures in efforts to achieve appearance ideals[42] and it is highly likely that this group is over-represented in the increasing numbers presenting as potential patients. As the uptake of cosmetic surgery increases, so too does the probability that most psychiatric disorders will be present among prospective patients—particularly those characterised by elevated levels of body image dissatisfaction such as body dysmorphic disorder (BDD) and eating disorders.[43,44] Patient selection is key in ensuring that cosmetic surgery is an appropriate response. Indeed, the imperative of improving methods of patient selection has been highlighted in a number of reports.[37,41,45,46]

Reviews by Honigman and colleagues[47] and Brunton and colleagues,[36] together with prospective research by von Soest and colleagues,[48] have highlighted psychological factors that may affect a patient's expectation of the process and outcomes of surgery, and psychological characteristics that

increase the risk of poor psychological outcomes postoperatively. In addition, once a consultation has progressed to a discussion of risks and potential side effects of surgery, research has demonstrated that the relationship between perceived risks and behaviour can be surprisingly weak. Merely providing risk information is not sufficient to ensure that the information has been processed.[49] Potential patients who are heavily invested in undergoing plastic surgery are likely to pay less attention to risk information and/or to downplay the potential severity of risks and the perceived likelihood of the risks happening to them.[50] Thus patients seeking cosmetic surgery as a 'quick fix' for body image dissatisfaction may lack awareness (or may discount information offered by the surgeon) about the side effects of surgery, such as postoperative pain, swelling or residual scarring.

The ability to effectively assess and meet the needs and expectations of each individual patient is a critical part of the surgeon's role in providing optimum treatment and care.[51] Standards of care should include a careful assessment of these psychological drivers and of the suitability of plastic surgery as the treatment of choice in achieving the patient's psychological goals.

Business practices and social responsibility

Cosmetic surgery, operating as it does almost exclusively in the private sector, is positioned at the intersection of consumerism and the trust-based context of healthcare, leading to confusion about whether a cosmetic surgery practice is in fact a healthcare service, a business or a hybrid of the two. The proliferation of workshops at cosmetic surgery conferences and journal articles discussing commercial business practices (for example, ways of maximising turnover and profit despite fluctuating patterns in demand) would suggest that at least some surgeons are driven, at least in part, by maximising profit rather than the best interests of the patient.[41] Indeed, several aspects of cosmetic practice in the private sector are regarded by others, both from within and external to the medical profession, with considerable scepticism. Supporting this view are cases of breaches in patient safety involving special offers on procedures that a patient has not hitherto considered,[41,52] undue pressure to make quick decisions to undergo treatment through the use of incentives or discounts,[53] a cursory approach to patient assessment and selection (for example, by receptionists lacking the necessary expertise)[44] and aggressive marketing techniques, including the use of idealised and frequently digitally enhanced photographic images of 'clients', that promote false expectations of outcomes.[41,54]

Evidence for the negative impacts on consumers of these types of business practices is mounting in the psychological literature. Studies have shown, for example, that exposure to cosmetic surgery advertising results in a more negative body image for viewers.[55] Furthermore, the recent report of the Nuffield Council on Bioethics[41] puts forward the view that advertising and marketing practices in the cosmetic procedures industry are contributing to broader social harm, as they play an important role in reinforcing the desirability of unachievable appearance ideals. For example, by promoting novel techniques to address new 'faults' in appearance, surgeons are contributing to changes in perceptions of what is 'normal' and 'desirable', fuelling increasing levels of negative body image in consumers and thus increasing demand. It has also been suggested that these business practices are discriminatory—damaging society as a whole by increasing pressure on more psychologically vulnerable individuals (such as young people, people vulnerable to peer and media pressure, people with pre-existing mental health issues and people with disfigurement) to undergo surgery with unrealistic expectations of psychological benefit, while also increasing the pressure on those who choose not to do so by portraying these procedures as 'normative'.[41]

As a result of these concerns in the UK and elsewhere, the cosmetic procedures industry has been subject to government-funded investigations,[37] professional inquiries[45] and ethical scrutiny.[41] In the absence of government regulation, professional bodies in the UK, including the General Medical Council[46] and the British Association of Plastic and Reconstructive Surgeons (through the Royal

College of Surgeons of England[45]), have developed standards of care for cosmetic practice and called for the industry to self-regulate. In view of cosmetic surgeons' prominence in the appearance-enhancement market and the escalating public demand for their services, a review of the business practices of cosmetic surgeons in the private sector can be considered timely.

Evidently, there is considerable scope for the plastic surgery field to take a role in reducing body dissatisfaction among patients and the broader community. To stimulate thought on how the field may contribute to these efforts, we now turn to a consideration of the extensive evidence on causes and influences on body image and how the negative consequences of body image dissatisfaction can be ameliorated or prevented through effective evidence-based interventions.

Influences on body image

Good progress has been made in understanding key influences on body image, which has in turn informed the development of effective interventions to promote body positivity. Researchers have paid particular attention to modifiable psychological and social influences on body image, including the roles of media, peers and family.[56] Content analyses demonstrate that mass and social media play a significant role in creating and perpetuating narrowly defined unrealistic appearance ideals, including an emphasis on youth, clear skin, an hourglass figure for women and mesomorphic body shape for men, low body fat and high muscle tone.[57–59] Meta-analyses and systematic reviews conclude that exposure to appearance ideals and appearance-focused content on social media and television, as well as in advertising, films and magazines, contributes to body dissatisfaction.[60–62]

Parents also influence their children's body image through role modelling negative body image attitudes and behaviours, creating pressure on children to look a certain way.[63] Similarly, peers and friends exert an influence through appearance-based conversations and teasing, creating pressure to conform to appearance ideals.[19] Individual difference factors can also cause and exacerbate body image concerns; individuals with a greater tendency to compare their appearance to other people, or to take on society's appearance ideals as their own personal standards for beauty, are at greater risk for poor body image and are more susceptible to cultural influences like the appearance ideals portrayed in mass media.[64]

Strategies to promote positive body image

Based on evidence for psychological, social and cultural factors that influence body image, researchers and health professionals have developed effective strategies to promote positive body image. Substantial research has focused on developing and evaluating interventions to be delivered to young people in school and community settings. Systematic reviews and meta-analyses indicate that brief multi-session interventions at schools and universities with content on media literacy, appearance-comparisons, challenging appearance ideals and peer relationships can improve body image.[65,66]

More recent research also indicates that, in some cases, the delivery of these interventions can be effectively shifted to teachers, peers and other health professionals thereby increasing the scalability of such interventions.[67,68] There are indications that brief interventions that focus on improving appreciation of body functionality are effective among adult women.[69] Although more research into the effectiveness of online interventions is required, several recent studies have shown promise. 'Face It' and 'YP Face It' are UK-based online self-guided cognitive behavioural interventions for people living with a visible difference that have demonstrated feasibility and acceptability.[70] There is also evidence that brief online interventions delivered to parents can improve both their own and their children's body image and psychological wellbeing.[71]

At a wider level, research has shown that increasing appearance diversity in advertising and media is beneficial for body image.[72,73] Social policy initiatives, such as voluntary codes of conduct to increase acceptance of diversity in appearance and promote positive body image in advertising and media have been developed in Australia, Canada and the UK.[74] However, further research is needed

to evaluate the impact of these interventions and broadscale uptake remains elusive.[75]

An opportunity for plastic, reconstructive and cosmetic surgeons

Plastic surgeons might contribute to a solution to the current challenges posed by body image dissatisfaction through several linked avenues.

1. Increase awareness of psychological aspects of plastic surgery through training for surgeons and their teams

Professional development and training could be provided to enhance surgeons' understanding of the psychological factors and processes contributing to appearance-related dissatisfaction and distress, motivations to seek surgery, unrealistic expectations of outcome and downplaying of risks of poorer outcomes. Key aspects of patient management should also be included—for example, skills in making a decision to not treat and explaining this (and/or a referral to psychology) to the patient. Training in the psychological aspects of plastic surgery could also better equip surgeons and their teams to effectively manage unmet expectations, dissatisfaction with aesthetic outcomes and post-decisional regret should these occur.[76]

2. Improve treatment protocols

Armed with a better understanding of key psychological factors, plastic surgeons and their teams will be better placed to increase the probability that patients receive the treatment and care most appropriate to their needs. Patients should be carefully assessed prior to a cosmetic treatment to identify those with psychological disorders or vulnerabilities, inappropriate motivations and unrealistic expectations of outcome.[77] This may involve surgeons and other team members educating potential patients about the diversity in appearance that is considered 'normal', and challenging patients' beliefs about the role of appearance in long-term psychological wellbeing.

The current dearth of research in this sector has hampered progress in developing definitive assessment and screening tools, however one brief assessment aid based on current understanding of the risk factors for poorer outcomes, and designed for routine use in cosmetic surgery practice, has received positive feedback from surgeons and practice managers in feasibility and acceptability studies in the UK.[51] Further research is necessary to understand the effects of this and other tools on treatment outcomes and patient-provider satisfaction, with plastic surgeons having huge potential to advance this research by participating in the design and implementation of research studies.

Once patient assessment and selection processes are completed, interventions designed to actively engage patients in shared treatment decision-making may also prove helpful. The decision-making aid PEGASUS (patients' expectations and goals: assisting shared understanding of surgery) is currently being trialled with patients undergoing breast reconstruction in the UK and has potential for use in all appearance-altering surgeries.[78]

In view of the extent of current pressures to address body image dissatisfaction and to achieve appearance ideals, achieving meaningful informed consent for surgical and less invasive cosmetic procedures has been the focus of recent debate in the UK. The Nuffield Council on Bioethics[41] recommended in 2017 that a two-phase consent process be implemented in cosmetic practice, with a mandatory cooling-off period to encourage patients to more carefully weigh up the potential risks and benefits of an aesthetic procedure.

While it might be widely accepted that routine follow-up is desirable following all forms of plastic surgery, data collection is the exception rather than the rule.[46] The imperative to acquire better quality data with which to advance understanding in the field has been widely discussed and may be an initiative to which surgeons wish to subscribe.

3. Implement routine audits and contribute data to research

Brunton and colleagues's[36] review of the evidence for psychosocial predictors and outcomes has revealed significant gaps in the existing evidence base. The few studies that have been conducted

show a number of significant methodological shortcomings, including small sample sizes, cross-sectional designs and a heterogeneity in the measures used, making meaningful synthesis of existing results difficult. Much better evidence is needed to fully understand the psychological profiles of prospective patients and their motivations for seeking treatment, together with the psychological profiles of those who benefit most and least from cosmetic interventions.

As mentioned earlier, data relating to post-procedural levels of satisfaction are particularly scant. In the few existing studies, most patients are satisfied in the short term but no information is available about whether satisfaction is maintained. Sharp and colleagues,[79] for example, reported satisfaction with aesthetic outcomes following labiaplasty, but no impact on general psychological wellbeing, life satisfaction or self-esteem.

Goodman and colleagues[80] and others have suggested that initial gains may be the result of the well-established psychological phenomenon of cognitive dissonance. The pre-surgical belief that the surgery will bring significant life benefits, together with the financial investment, time allocated and pain endured, can lead patients to judge the outcome as worthwhile in order to avoid the psychological discomfort of post-procedural regret. In addition, there are signs that, for a significant proportion of patients, the expected aesthetic, psychological and social benefits are not realised.[36]

There is an urgent need to better understand both the short- and longer-term psychological impacts of plastic surgery on recipients. The potential benefits of a profession-wide commitment to routine data collection using a common set of measures are considerable. Large sample prospective data could be invaluable in auditing outcomes and underpinning improvements in practice going forward.

4. Establish multidisciplinary care or referral routes for specialist psychological support and intervention

As the majority of patients are motivated to seek cosmetic surgery by psychological factors and expect the surgery to result in psychological gains, it could be argued that psychologists should be included as core members of the plastic surgery team, routinely participating in the assessment and support of patients, offering interventions as adjuncts or, in some cases, as alternatives to surgery if warranted. While this form of multidisciplinary care is available in some subspecialties of plastic surgery, it is the exception rather than the norm and the input is often limited. Surgeons without ready access to psychologists should develop appropriate referral routes for more specialised assessment or support for clients whenever this is indicated.

5. Consider business aspects of plastic surgery practice and related ethical issues

In view of growing interest in the role of the cosmetics industry as a contributor to widespread prevalence and negative consequences of body image dissatisfaction, a review of the social value of cosmetic surgery may be timely. Do current practices contribute (often unwittingly) to social harms? Could the development of more socially responsible business practices be a way in which the sector could withstand and respond to mounting criticism and anxiety about this pressing social issue?

In the business sector more broadly, there is a growing demand from consumers and shareholders for businesses to ‘do good’ in society while also making profit. Investigating avenues for business and corporate social responsibility may provide another opportunity for the plastic surgery field to take a role in reducing body dissatisfaction.

Conclusions

Plastic surgery has a long tradition of skilfully applying surgical techniques with the aim of improving quality of life for those challenged by trauma, congenital anomalies or disease. In recent years, social forces have combined to increase the demand for the services of plastic surgeons in pursuit of socially constructed appearance ‘ideals’, placing the profession and its practices under the spotlight. In the same way that trauma surgeons campaigned for seat belts, dermatologists for sun

cream and burn professionals for preventive safety measures, the time is right for plastic surgeons to position themselves through genuine commitment and action as part of the solution to a growing social problem of negative body image and the associated impacts on the daily functioning of increasing numbers of people of all ages.

Steps to achieving this can be taken through an enhanced understanding of the psychological factors playing a part in all stages of the plastic surgery process, along with the development and adoption of standards of practice that demonstrate a clear commitment to high quality appropriate care and the safeguarding of psychologically vulnerable patients. Furthermore, in view of their position as trusted, influential opinion-formers, plastic surgeons may wish to consider a broader advocacy role, championing the need for funding to support research into the psychological impacts of cosmetic surgery and for efforts to achieve social change through, for example, support for the regulation of advertising, industry codes of practice and evidence-based school and community interventions.[41]

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