**Psychological Assessment**

**Abstract**

Although research relating to the psychology of the cosmetic surgery patient is still in its infancy, there is a consensus amongst researchers that various combinations of psychological factors play a key role in the recent increase in demand for cosmetic surgery, in the motivation of prospective patients to undergo surgery, in their expectations of outcome and in their post-operative adjustment. An appreciation of the psychological aspects of cosmetic surgery is therefore crucial and will place surgeons in a stronger position to evaluate a patient’s appropriateness for surgery. Indeed, appropriate patient selection is considered a vital part of a surgeon’s role in ensuring effective care and treatment. This chapter addresses why an understanding of psychological factors contributing to all stages of the treatment process is important to the provision of appropriate care and offers a framework for pre and post-operative assessment.

**Keywords**

Psychological assessment, psychosocial factors, referral pathways, expectations, appearance concerns, motivations, psychiatric disorders

**Why is it important to understand the psychology of cosmetic surgery patients?**

Understanding the psychology of the cosmetic surgery patient is important for a number of reasons:

(a) *Psychosocial factors affect levels of interest in cosmetic surgery in the general population and determine why some people decide to seek surgery*.

A variety of forces have conspired to produce and fuel unprecedented levels of dissatisfaction with appearance. The media offers a continual diet of idealised images of beauty and promotes the notion that appearance is central in a person’s attractiveness to others, to their identity and in their chances of happiness and success (Halliwell and Diedrichs, 2012). The internet ensures that appearance ideals are universally shared, reducing cultural differences and diversity in preferences for appearance. Magazine articles & TV programmes identify ‘faults’ in appearance and stigmatise the visible signs of ageing. Repeated exposure leads people to internalize appearance ideals, to believe that their looks are flawed and inadequate and to experience pressure to reduce the gap between their own looks and those depicted in the media.

As a result of these processes, it is now normative for males and females of all ages to be dissatisfied with their appearance. However, individuals vary in the extent of their susceptibility to messages in the media and in their levels of dissatisfaction. Greater psychological vulnerability to dissatisfaction with appearance is associated with higher levels of investment in appearance, a greater emphasis on the opinions of others in defining self-esteem, greater susceptibility to messages relating to appearance ideals, higher levels of internalisation of societal beauty ideals, less favourable self-perceptions, social anxiety, worry and (Halliwell and Diedrichs, 2012) more favourable attitudes towards cosmetic surgery (von Soest, et al., 2006).

This research is of particular relevance to practitioners in this field, as there are indications that the population seeking cosmetic surgery contains a larger proportion of people characterised by psychological vulnerabilities which may affect the outcomes of surgery. Von Soest, et al. (2012), for example, found in a population based study that prospective cosmetic surgery patients had more mental health problems than non-patients including higher rates of depression, anxiety, deliberate self-harm, a higher frequency of conduct problems and more frequent use of illicit drugs.

*(b) Psychological factors affect expectations of the process and outcomes of surgery and satisfaction with the post-operative result.*

Psychological vulnerability to the messages inherent in advertising and the media can promote unrealistic expectations of the aesthetic results that can be achieved by surgery (for example, the patient may expect liposuction to leave them with washboard abs’). Prospective patients may also anticipate psychosocial benefits from surgery that are unlikely to occur (for example, the salvaging of a failing relationship).

A review by Honigman, Phillips and Castle (2004) indicated that factors associated with poor psychosocial outcome following surgery include unrealistic expectations of outcomes pre-operatively, being driven to undergo surgery by relationship issues, a history of depression, anxiety, personality disorders or Body Dysmorphic Disorder. Prospective research has found that high rates of preoperative psychological problems, low pre-operative self-esteem, spontaneous decisions to undergo surgery and the influence of others in the decision making process are related to more negative perceptions of one’s own postsurgical appearance compared to evaluations by patients in better psychological health (von Soest, et al., 2011).

Those who view cosmetic surgery as a ‘quick fix’ for appearance dissatisfaction are likely to lack awareness about the side effects of surgery, such as postoperative pain, swelling and scarring. They may also pay less attention to risk information offered during the pre-operative consultation or assume that any risks apply to others and not to themselves (Weinstein, 1984). Clarke (2012) has pointed to findings demonstrating that people are more likely to ignore or downplay risks when the anticipated rewards are high.

*(c) An understanding of the psychology of cosmetic surgery patients can facilitate effective pre-operative screening*.

Considerable interest has been shown by surgeons, psychologists and policy makers in the potential of pre-operative methods of screening to identify patients at risk of poor post-operative outcomes. A better understanding of psychological issues will help surgeons to recognise patients who are persistently unhappy and potentially litigious (Ericken and Billick, 2012).This imperative of improving methods of patient selection has been highlighted in a number of reports, including The Professional Standards for Cosmetic Practice published by the Royal College of Surgeons (2013), which have supported the priority of psychological screening for all patients undergoing cosmetic surgery.

*(d) An increased understanding of the psychology of cosmetic patients will improve the care and treatment patients receive.*

The ability to assess effectively the needs of each individual patient is a critical part of the surgeon’s role in providing optimum treatment and care. As the majority of patients are motivated to seek cosmetic surgery by psychological factors, and expect the surgery to address these psychological outcomes it is also appropriate for treatment options to include psychological assessment and interventions as adjuncts, or even in a few cases, as an alternative to surgery.

**Pre-operative steps in preparation for surgery/treatment for all patients**

As cosmetic surgery is offered almost exclusively in the private sector, the majority of prospective patients will not have been ‘filtered’ by their GP for their suitability for a surgical procedure. Although current research indicates that the majority of patients presenting for cosmetic surgery are likely to derive some degree of benefit, a minority will have a psychiatric disorder or a degree of psychological vulnerability that will considerably increase their risk of a less than optimal outcome. Effective pre-operative assessment is therefore crucial to minimise the risks for both patients and surgeons.

The goal of a pre-operative consultation should be to screen patients for the likelihood of achieving a positive outcome, and to provide the patient and the surgeon with a clear and shared understanding of the expectations and goals for the surgical procedure in question. For the majority of patients this consultation will be sufficient preparation for surgery. However, pathways for a more detailed clinic-based pre-operative assessment, and if necessary, for referring patients for a more thorough psychological assessment by a clinical psychologist should be in place (see below, and Figure 1).

[Insert Figure 1 here]

**A. Screening for Psychiatric Disorders and Psychological Risk Factors (STAGE 1)**

As the numbers presenting for cosmetic surgery continue to increase, so does the probability that most psychiatric disorders will be found within the cosmetic surgery population – particularly those disorders characterised by levels of body dissatisfaction (Crerand, MaGee and Sarwer, 2012). While elevated levels of body image dissatisfaction are to be expected in the majority of people presenting for surgery, some behaviours (e.g., avoiding social situations because of self-consciousness regarding their appearance) emotions (e.g., excessive worry about appearance) and cognitions (e.g., fear of negative evaluation by others) can be maladaptive (Sarwer, Crerand and MaGee, 2011) and may be symptomatic of a disorder of which appearance dissatisfaction is a component.

Body Dysmorphic Disorder (BDD) is recognized as a psychiatric disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM –IV- TR) and characterized by a preoccupation with an imaged or slight defect in appearance. BDD causes significant impairment in daily functioning and emotional distress (American Psychiatric Association; APA, 2000). Most patients with BDD engage in repetitive behaviours involving hiding the perceived defect with clothes, hair, or make-up, or repeatedly checking or examining the perceived defect in a mirror or reflective surface (DSM-IV-TR). People with BDD commonly seek cosmetic surgery as a way of improving their appearance concern (Sarwer, Crerand and Magee, 2011). The prevalence of BDD within cosmetic surgery settings is between 5 -15% compared with a prevalence of BDD in the general population of 1-3% (Sarwer and Spitzer, 2012).

Studies have typically found no improvement or worsening of BDD symptoms following cosmetic surgery (Phillips, et al., 2001; Crerand, et al., 2005). Postoperative dissatisfaction is common in those affected (Veale, 2000) and threats to sue or harm cosmetic surgery providers have been reported (Crerand, Franklin and Sarwer, 2008). Patients can develop new appearance concerns (Sarwer and Spitzer, 2012) and post-operative dissatisfaction can trigger suicidal ideation (Crerand, Magee and Sarwer, 2012). It is widely believed that cosmetic surgery should be contraindicated for people with BDD (Sarwer and Spitzer, 2012) and that alternative psychological and pharmacological treatments are more effective and therefore more appropriate (Phillips, 2010; Veale, 2010).

Eating disorders including bulimia and anorexia nervosa are characterised by severe levels of body dissatisfaction (APA 2000). Jávo and Sørlie (2010) found that eating pathology significantly predicted women’s interest in liposuction. More research is needed to ascertain the prevalence of eating disorders among the cosmetic surgery population, the impact of eating disorders on post-procedural outcomes and whether cosmetic surgery is an appropriate intervention for people in the general population who have symptoms of disordered eating which are not extensive enough to meet the criteria of a diagnosable disorder.

The desirability of screening out those with a psychiatric illness is widely agreed (Wildgoose, et al., 2013). In addition, recent research indicates that effective screening should conceptualise psychological vulnerability to poor postoperative outcomes as existing on a continuum. Instead of focussing only on the successful identification of those meeting the criteria for BDD, eating disorders or personality disorders, all prospective patients should be assessed in relation to their profile of relative psychological vulnerability or resilience (Brunton, et al., 2014). For example, in addition to those with diagnosable psychiatric disorders, 18% of patients reported antidepressant or anxioltytic drug use during the period of their first consultation compared with a rate of 5% of non-cosmetic surgery patients (Sarwer, et al., 2004) and women seeking breast augmentation have higher rates of psychopharmacological treatment or psychotherapy compared with other women (Sarwer, 2007).

Opinions are divided about how screening should be carried out. Some advocate that all patients should be screened for adverse psychiatric and psychological symptomatology using standardised measures. However, as psychological resilience and vulnerability are determined by many factors and as knowledge is not yet sufficiently detailed in this field to identify all the key variables with confidence, this approach would result in a battery of measures for each patient and is not a practical option for routine care. Mindful of the need to provide surgeons with a brief, easy to complete measure to facilitate routine completion, the authors together with Dr Alex Clarke have developed and are currently trialling a short screening tool and follow-up measure designed for use with all patients seeking surgery, providing trigger questions for key variables, using a model of care outlined in Figure 1. Results will be reported in due course. This screen can be completed by patients prior to the initial appointment, or can be incorporated as one part of the initial assessment.

**B. Clarifying the nature and history of the appearance concern(s)**

Patients should be able to clearly describe their specific concerns and the degree of dissatisfaction with the feature in question. Judgements of ‘abnormality’ in appearance are subjective and clinicians should not expect any discernible association between the severity of the perceived defect and the degree of emotional distress (Edgerton, Langman and Pruzinsky, 1991). The clinician should ask about the impacts on the prospective patient’s psychological well-being and daily functioning (including their social, intimate and occupational life). The amount of time spent thinking about a particular feature and the frequency of appearance checking (using a mirror or other reflective surface) during a typical day should also be explored. If the amount of distress seems very disproportionate to the extent of the perceived defect, if mirror checking or rumination appears excessive and/or if their appearance concerns are perceived by the patient to be interfering with daily activities or affecting a relationship, the patient should be considered for a more detailed assessment (Sarwer and Spitzer 2012).

**C. The patient’s motivation for seeking the procedure**

Studies have found that patients who are motivated to seek cosmetic surgery for intrinsic reasons (for example, to improve their self-confidence) are more likely to be satisfied with their postoperative outcomes than those motivated by extrinsic factors (for example, to gain a new romantic partner or to achieve a job promotion) (Edgerton, Langman and Pruzinsky 1991).

In assessing the motivation for seeking surgery, Sarwer, Crerand and Magee (2011 p. 399) also recommend addressing the following topics:

1. *When did the prospective patient first start to think about undergoing surgery to alter their appearance?* Was there a particular triggering event? Have specific influences occurred that may colour their expectations of outcome in unrealistic ways?
2. *Has the prospective patient done anything else to improve their appearance?*  These questions should elicit information about any unusual or maladaptive behaviours that exist in relation to their physical appearance. (Examples of people with BDD trying do-it-yourself alterations to their appearance have been documented by Veale (2000)).
3. *Why is the prospective patient interested in surgery at this particular time?* What factors have led to the patient seeking a consultation at this moment in time? Is this in response to a significant life event (e.g., divorce), or series of events? If so, the clinician may explore the appropriateness of the proposed surgery as a response. Is the prospective patient’s motivation for surgery the result of intrinsic or extrinsic factors?

**D. The patient’s understanding of the procedure**

The clinician should assess the prospective patient’s understanding of the potential risks (both physical and psychological) and the complications involved in undergoing the procedure(s) in question. As the patient’s processing of the information given is likely to be affected by cognitive biases (for example, biases derived from the media about the process and likely outcomes of cosmetic surgery), it is useful to assess their understanding of the information given to them by the clinician by asking them to summarise their expectations of how the surgery will proceed and the associated risks.

**E. The patient’s expectations of the likely outcome**

A successful outcome following a cosmetic procedure is related to whether the outcomes have met the patient’s goals and expectations (Honigman, Phillips and Castle 2004). A failure to achieve anticipated psychological and social outcomes can lead to disappointment, distress and potential litigation, even when the surgical result is technically sound. Key aims of the pre-procedural consultation should therefore be to establish and manage patients’ psychosocial as well as surgical goals (Grossbart and Sarwer, 1999) and to achieve a shared expectation of the likely outcomes of surgery.

Patients’ views may have been coloured by the implicit messages in the media and advertising (for example, about the psychological and lifestyle benefits that might accrue) and unrealistic expectations should be challenged (Paraskeva, Clarke and Rumsey, 2014). Furthermore, any collusion with unrealistic expectations should be avoided through the use of factual, unambiguous language when describing the procedure and likely aesthetic outcomes. Be honest about the likelihood of pain, swelling, bruising in the postoperative period, and in relation to potential longer-term complications (e.g., permanent scarring) and use words such as ‘smaller’, ‘straighter’ and, ‘symmetrical’, rather than value laden descriptors such as ‘better’ or ‘nicer’ when describing probable outcomes (Clarke, et al., 2013). If the opinions of family members, romantic partners, and close friends have influenced the patient’s decision to seek surgery, it would also be advisable to elicit patients’ perceptions of their expectations of the post-operative outcomes.

**F. Previous procedures and outcomes**

Research suggests that patients who have undergone multiple previous procedures should be assessed particularly thoroughly in relation to their suitability for further surgery. Clinicians may interpret a patient’s enthusiasm for further procedures as a sign of a satisfied customer coming back for more, however, the view favoured by researchers is that the previous procedures have failed to address underlying issues such as low self-esteem and confidence, and would recommend a more detailed assessment to ascertain whether further surgery is the most appropriate option.

**G. Referring a patient for additional assessment (STAGE 2 and STAGE 3)**

The information used to determine the suitability of the prospective patient for surgery should include observations of their behaviour and responses to the pre-surgical consultation and also interactions and communications with the clinic and office staff. For example, a patient who refuses to speak to any clinic staff except the surgeon or repeatedly cancels or misses appointments may warrant a more detailed assessment (Sarwer and Spitzer 2012).

If there are concerns regarding the psychological status of a patient, a more extensive preoperative assessment should be considered. If more detail is required about particular aspects of the patient’s psychological profile (e.g., levels of social anxiety, social avoidance; symptoms of psychiatric disorder), and if a member of clinic staff has appropriate training to administer and score standardised measures and with access to a consultant psychologist or psychiatrist to discuss the results if necessary, this could take place in the clinic setting (Stage 2). If there are signs that may be indicative of more extensive psychological vulnerability or possible psychiatric disorder, or other causes for concern, then the surgeon should make a referral for a more comprehensive psychological or psychiatric assessment by a suitably qualified specialist (ideally a clinical psychologist or psychiatrist with expertise in body image and cosmetic surgery) (Stage 3). In addition to checking for psychological contraindications, this assessment will help patients to frame their goals more effectively and to identify whether the timing of the surgery is appropriate. Although a small minority will be screened out of a surgical pathway, or may be recommended for psychological intervention as an adjunct to surgery, the overall goal of the psychological assessment is not to contra-indicate surgery, but rather to increase the likelihood of a patient achieving the anticipated changes they are seeking.

**Post-operative care (STAGE 3)**

The importance attached to follow-up as a routine part of care and the level of effort invested by clinic staff in collecting follow-up data is very variable. There are a number of reasons why the collection of post-procedural data is crucial:

Current understanding of psychological outcomes (particularly in the longer term), and of the predictors of these outcomes is limited. Understanding will only be improved through analysis of before-after and follow-up data sets. A better understanding of the post-procedural gains will be of benefit to individual clinicians, professional bodies and the broader research community.

The routine collection of post-procedural data can alert the clinician to the need for additional psychological input to resolve sub-optimal outcomes at an early stage. Should signs of dissatisfaction or distress be found, a referral for post-operative support or intervention should be made. A referral is also appropriate if there has been a failure to achieve any gains in key psychological constructs or if patients are dissatisfied and distressed following a technically sound and aesthetically successful surgical outcome (Ericksen and Billick, 2012).

Longer term follow-up appointments should also be an integral part of patient care. The patient’s view of the procedure in the relatively short-term post-operative assessment may be subject to bias. Clarke (2012) has pointed out that there are psychological explanations for why people are satisfied with purchases in which they have invested a lot of money and initial gains in psychological well-being may not be maintained.

**Summary**

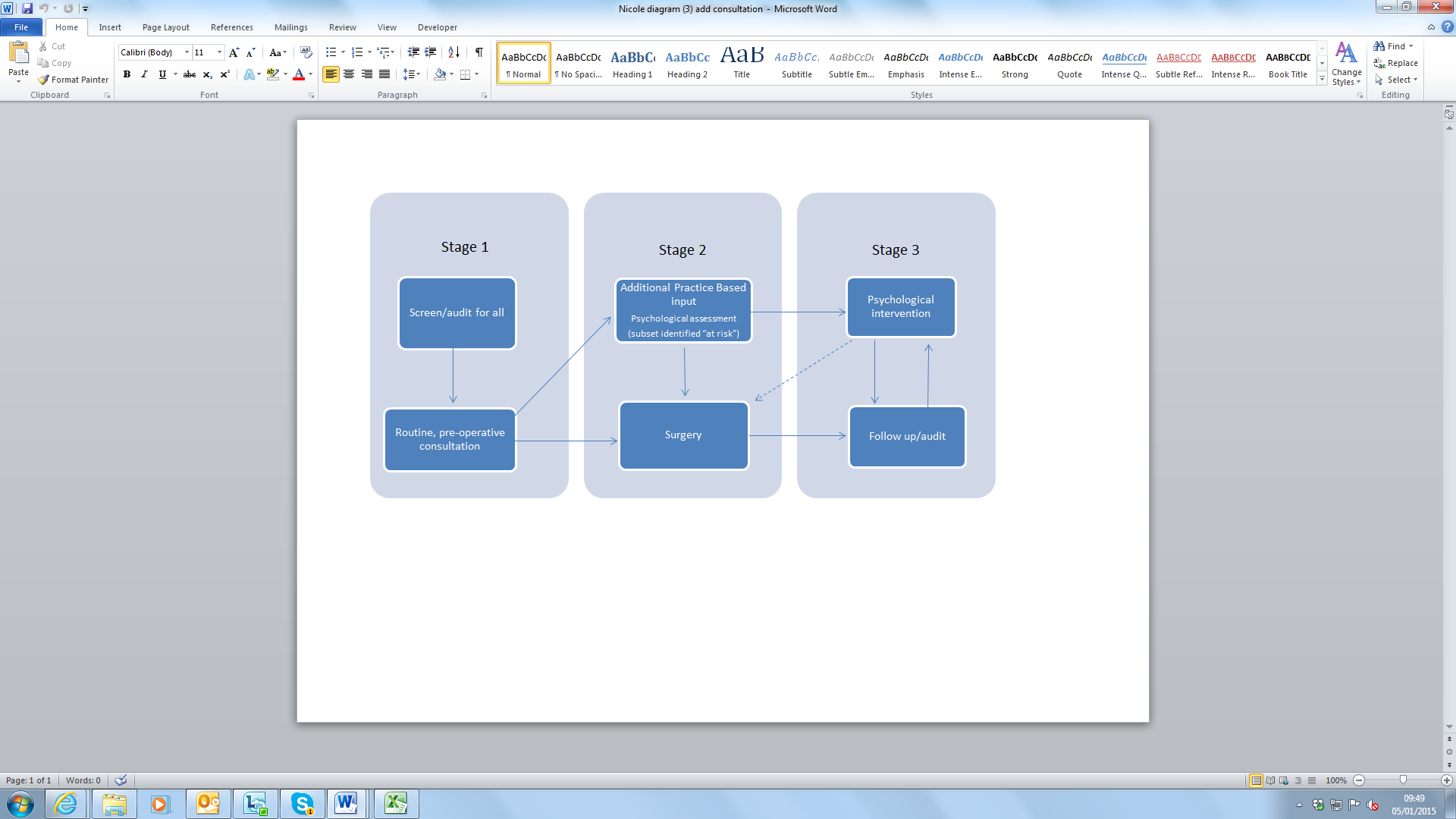
Psychological factors are crucial at all stages of cosmetic surgery. Although the majority of patients are likely to benefit, psychosocial factors contribute to an increased risk of poor outcomes in others. An appreciation of the psychological aspects of cosmetic surgery and a comprehensive pre-operative consultation will place surgeons in a stronger position to evaluate a patient’s appropriateness for surgery. Referral routes for additional assessment by a specialist as an adjunct or an alternative to surgery should be in place.

To protect those for whom cosmetic surgery is inappropriate and to optimise psychological outcomes in all, the short and long-term follow up of patients should be routine. A comprehensive data base of agreed pre and post-operative measures should be established to facilitate research with the aim of developing reliable and fit-for-purpose screening tools, pre and post-operative assessment, and methods of effective support and intervention.

Ideally, surgeons should work in tandem with mental health professionals and should be able to offer non-surgical alternatives if necessary. At a minimum, effective referral pathways for psychological assessment, support and intervention should be in place for all patients.

**Acknowledgement**

The authors wish to acknowledge the important contribution of Dr Alex Clarke to the work reported in this chapter. The authors work on the development of a screening and assessment tool is supported by funding from The Healing Foundation.

Figure 1: Referral Pathways (Paraskeva, Clarke and Rumsey)

**References**

American Psychiatric Association, 2000. *Diagnostic and Statistical Manual of Mental Disorders, 4th edn. Text Revision (DSM-IV-TR)*. Washington, DC: American Psychiatric Association.

Brunton, G., Paraskeva, N., Caird, J., Bird, K. S., Kavanagh, J., Kwan, I., Stansfield, C., Rumsey, N. and Thomas, J., 2014. Psychosocial Predictors, Assessment, and Outcomes of Cosmetic Procedures: A Systematic Rapid Evidence Assessment. *Aesthetic plastic surgery*, 38(5), pp.1030-1040.

Clarke, A., 2012. Regulation of cosmetic surgery. In: Rumsey, N. and Harcourt, D., eds. 2012. *The Oxford Handbook of the Psychology of Appearance.* Oxford University Press, pp. 517-527. ISBN 9780199580521.

Clarke, A., Thompson, A. R., Jenkinson, E., Rumsey, N. and Newell, R., 2013. *CBT for appearance anxiety: Psychosocial interventions for anxiety due to visible difference*. John Wiley & Sons.

Crerand, C.E., MaGee, L. and Sarwer, D.B., 2012. Cosmetic Procedures. In: Rumsey, N. and Harcourt, D., eds. 2012. *The Oxford Handbook of the Psychology of Appearance.* Oxford University Press, pp. 330-349. ISBN 9780199580521.

Crerand, C.E., Franklin, M.E. and Sarwer, D.B., 2008. Patient safety: Body dysmorphic disorder and cosmetic surgery. *Plastic and Reconstructive Surgery,* (4s), pp. 1-15.

Crerand, C.E, Phillips, K.A., Menard, W, and Fay, C., 2005. Non-psychiatric medical treatment of body dysmorphic disorder. *Psychosomatics*, 46, pp.549-555.

Edgerton, M.T. and Knorr, N.J., 1971. Motivational patterns of patients seeking cosmetic (aesthetic) surgery. *Plastic and Reconstructive Surgery*, 48, pp.551-557.

Edgerton, M.T., Langman, M.W. and Pruzinsky T., 1991. Plastic surgery and psychotherapy in the treatment of 100 psychologically disturbed patients. *Plastic and Reconstructive Surgery*, 88, pp.594-608.

Ericksen, W.L. and Billick, S.B., 2012. Psychiatric issues in cosmetic plastic surgery. *Psychiatric Quarterly*, 83(3), pp.343-352.

Grossbart, T.A. and Sarwer, D,B., 1999. Cosmetic surgery: surgical tools—psychosocial goals. *Seminars in cutaneous medicine and surgery*, 18(2), pp.101-111.

Halliwell, E. and Diedrichs, P. C., 2012. [Influence of the media.](http://eprints.uwe.ac.uk/18026/) In: Rumsey, N. and Harcourt, D., eds. 2012. *The Oxford Handbook of the Psychology of Appearance.* Oxford University Press. pp. 217-238. ISBN 9780199580521.

Honigman, R.J, Phillips K.A. and Castle D.J., 2004. A Review of Psychosocial Outcomes for Patients Seeking Cosmetic Surgery. *Plastic and Reconstructive Surgery*, 113(4), pp. 1229–1237.

Jávo, I. M. & Sørlie, T. (2010). Psychosocial characteristics of young Norwegian women interested in liposuction, breast augmentation, rhinoplasty and abdominoplasty: A population-based study. *Plastic and Reconstructive Surgery*, 125, pp. 1536–1543.

Paraskeva, N., Clarke, A. and Rumsey, N., 2014. The routine psychological screening of cosmetic surgery patients. *Aesthetics*, pp.28-32.

Phillips, K.A., 2010. Pharmacotherapy for body dysmorphic disorder. *Psychiatric Annals*, 40, pp.325-32.

Phillips, K.A., Grant. J., Siniscalchi. J. and Albertini. R.S., 2001. Surgical and nonpsychiatric medical treatment of patients with body dysmorphic disorder. *Psychosomatics*, 42, pp.504-510.

Royal College of Surgeons, 2013. *Professional Standards for Cosmetic Practice* [online] Available at: <http://www.rcseng.ac.uk/publications/docs/professional-standards-for-cosmetic-practice/> [Accessed January 2015)

Sarwer, D.B., 2007. The psychological aspects of cosmetic breast augmentation. *Plastic and Reconstructive Surgery*, 120(7 Suppl 1), pp.110S-7S.

Sarwer, D. B., Zanville, H. A., LaRossa, D., Bartlett, S. P., Chang, B., Low, D. W. and Whitaker, L. A., 2004. Mental health histories and psychiatric medication usage among persons who sought cosmetic surgery. *Plastic and reconstructive surgery*, 114(7), pp.1927-1933.

Sarwer, D.B., Crerand, C.E. and Magee, L., 2011. *Cosmetic Surgery and Changes in Body Image*. In: Cash, T.F and Smolak, L., eds. 2011. Body Image A Handbook of Science, Practice, and Prevention, pp. 394-403.ISBN 9781609181826.

Sarwer, D.B. and Spitzer, J.C., 2012. Body Image Dysmorphic Disorder in Persons Who Undergo Aesthetic Medical Treatments. *Aesthetic Surgery Journal*, 32 (8), pp.999-1009.

Veale, D., 2000. Outcome of cosmetic surgery and ‘DIY’ surgery in patients with body dysmorphic disorder. *Psychiatric Bulletin*, 24, pp.218-221.

Veale, D., 2010. Cognitive behavioural therapy for body dysmorphic disorder. *Psychiatric Annals*, 40, pp.333-40.

von Soest, T., Kvalem, I. L., Skolleborg, K. C. and Roald, H. E., 2006. Psychosocial factors predicting motivation to undergo cosmetic surgery. *Plastic and Reconstructive Surgery*, 117, pp.51–62.

von Soest, T., Kvalem, I. L., Skolleborg, K. C. and Roald, H. E., 2011. Psychosocial changes after cosmetic surgery: a 5-year follow-up study. *Plastic and reconstructive surgery*, 128(3), pp.765-772.

von Soest, T., Kvalem, I. L. and Wichstrøm, L., 2012. Predictors of cosmetic surgery and its effects on psychological factors and mental health: a population-based follow-up study among Norwegian females. *Psychological medicine*, 42(3), pp. 617-626.

Weinstein, N. D., 1984. Why it won't happen to me: Perceptions of risk factors and susceptibility. *Health Psychology*, *3*(5), pp.431-457. doi:10.1037/0278-6133.3.5.431

Wildgoose, P., Scott, A., Pusic, A. L., Cano, S. and Klassen, A. F., 2013. Psychological Screening Measures for Cosmetic Plastic Surgery Patients A Systematic Review. *Aesthetic Surgery Journal,* 33(1), pp.152-159.