Defining cosmetic surgery

Nicola R Dean PhD FRACS,1,2,3 Kristen Foley BAppSc (OT) MPH,2 Paul Ward BA (Hons) MA PhD2

1 Flinders Medical Centre
Bedford Park, South Australia, AUSTRALIA
2 Flinders University
Bedford Park, South Australia, AUSTRALIA
3 Section Editor
Australasian Journal of Plastic Surgery
St Leonards, New South Wales AUSTRALIA

Abstract
An agreed definition of ‘cosmetic surgery’ would be helpful for the purposes of discourse on ethics, patient safety, healthcare policy and health economics. One of the problems with previous attempts at developing a definition is the narrow frame of reference and lack of engagement with the full spectrum of academics and stakeholders. This review brings together the sociological as well as the surgical literature on the topic of cosmetic surgery and examines societal, ethical and healthcare aspects. It outlines principles of constructing a definition and presents a provisional definition for further debate, namely: Cosmetic surgery is defined, for the purposes of a healthcare payer, as any invasive procedure where the primary intention is to achieve what the patient perceives to be a more desirable appearance and where the procedure involves changes to bodily features that have a normal appearance on presentation to the doctor. In contrast, surgery performed with the goal of achieving a normal appearance, where bodily features have an abnormal appearance on presentation due to congenital defects, developmental abnormalities, trauma, infections, tumours or disease does not fall under the definition of cosmetic surgery. It is a given that ‘normal appearance’ is a subjective notion. Determining whether patients have a normal or abnormal appearance on presentation will rely on the clinical assessment of the treating doctor.

Keywords: plastic surgery, healthcare, ethics, patient safety, medical economics

Introduction
Cosmetic surgery is increasing around the world with a recent American Society of Plastic Surgeons Report suggesting an increase of cosmetic procedures of 132 per cent between the years 2000 and 20161 and a 2016 ISAPS survey showing...
a 9 per cent increase in procedures in a 12 month period.\textsuperscript{2} The rise and rise of cosmetic surgery makes it an important area to consider during any discourse on healthcare policy, health economics or safe surgical practice. One of the difficulties for such discussions is that the lines between beauty treatments, cosmetic surgery and surgery for medical need are ill-defined and lack even any set principles for their construction. Presumably, each of these items should be approached and responded to differently by policy makers and perhaps practitioners, yet there is limited clarity about which procedures, performed in what circumstances, and for whom, constitute ‘cosmetic’ procedures. This paper will explore the notion of what cosmetic surgery is, how it has been viewed in society and the advantages and disadvantages of establishing a definition.

**The notion of cosmetic surgery**

There are different views on what constitutes cosmetic surgery and the value of it on moral, medical, psychological and social grounds. Frequent themes in the notion of cosmetic surgery seem to be that it is surgery that is ‘not strictly necessary’, that it is ‘trivial’ or ‘glamorous’. Others see it as ‘life affirming’ or as a ‘restoration’ to which they have a right. What does seem to be a universal understanding is that it is to do with appearance. Some think that any procedure that alters appearance is cosmetic surgery, even when the primary goal of the surgery may be for physical symptoms and where the change in appearance is a by-product. Most others understand cosmetic surgery to be primarily about improving appearance where there is nothing medically/physically wrong with the person’s appearance in the first place. Various bodies have made substantial efforts to understand what constitutes cosmetic surgery mainly with an agenda of improved regulation. These include the Royal College of Surgeons cosmetic interspecialty committee\textsuperscript{3} and the inter-jurisdictional cosmetic surgery working group.\textsuperscript{4} However, failure to find consensus seems common among such projects, perhaps due to a lack of common framework and the differing goals of participants.

**Cosmetic surgery and society**

There is a significant body of anthropological and sociological literature on cosmetic surgery which Plastic Surgeons are not normally exposed to, but which is interesting to consider in this context of an exploration of a definition. Parker, a sociologist who performed an in-depth qualitative study on cosmetic surgery interviewing both patients and surgeons, chronicles changing social attitudes to cosmetic surgery in her book *Women, doctors and cosmetic surgery*, noting that ‘beauty surgery’ was initially seen as ‘quackery’ and was a pejorative term in the late 1800s and early 1900s.\textsuperscript{5} In his history of the cultural history of aesthetic surgery, Professor Sander Gilman likewise sets out the early history of cosmetic surgery and society’s opinions of it, explaining the vacillating levels of respect given to the practice since its modern origins in the early 1800s.\textsuperscript{6} Both note that a turning point in societal attitudes to appearance altering surgery was the development of the plastic surgical interventions which came with the two world wars and which were focussed on restoring the appearance of soldiers damaged by combat. Restoring these service men to a socially acceptable state brought a different societal perspective on the surgery of appearance and it was recognised as important and valuable work which was morally commendable. Parker argues that up until the World War II, cosmetic or reconstructive surgery was generally undertaken so that people could ‘pass’ in society—to look ‘normal’ as opposed to looking beautiful or different to others. Gilman and Parker report that this phenomenon of surgery for ‘passing’ in society—continued in the post-war period, especially in the USA, but this time took the form of Jewish or Italian Americans requesting rhinoplasties in order to look ‘less ethnic’ and therefore ‘pass’ in American society. The professor of sociology, Anthony Elliott, in his review of the social aspects of cosmetic procedures argues that similar processes of ‘passing’ continue today, citing the more recent phenomenon of Asian patients requesting surgery to look more like Caucasians, to feel part of the ‘society’ promoted as ideal in the mass media.\textsuperscript{7} The idea of using surgical transformation to fit in to a subset of society that is perceived to be more desirable is therefore a
major theme in understanding the sociological perspective on cosmetic surgery.

Feminist studies in the early 1990s portrayed women undergoing surgery as the ‘victims’ of a patriarchal society brainwashed by an abundance of media portraying female beauty stereotypes. However, other academic literature in this area accepts that this framework is over simplistic and that women are highly engaged and educated about their decisions for surgery, acting with ‘agency’ and even describing a sense of empowerment relating to such surgery. A part of this latter conceptual framework describes women seeking surgery not to conform to some perfect beauty ideal but to re-attain a body they feel fits better with their own self-image, that is, to restore some sort of balance between their own self-perception and bodily reality. Davis argues that a woman’s choice to have surgery was a way of them taking back some control over their bodies. Gimlin took issue with the negative stereotyping of women having cosmetic surgery, arguing that it is often a final option for correcting a tormenting problem for women, as opposed to them simply being subservient to patriarchal values. Llewelyn Negrin, an academic in the field of aesthetics in contemporary culture, points out that ‘while cosmetic surgery may appear to offer some sort of short term ‘remedy’ to women’s problems of estrangement, it can actually hinder the progress towards any lasting solutions by deflecting attention away from the underlying causes for women’s dissatisfaction with their bodies’. Elliott argues that there are three key driving forces behind the increase in cosmetic surgery: rising importance of celebrity and media portrayal of fame through celebrities; increase in consumerism and the idea that people can ‘buy beauty’; and the globalisation through the media of what he calls ‘ambient fear’ whereby people feel the need for regular re-invention in order to be competitive in various different marketplaces, particularly as they age: ‘[M]any are calculating that a freshly purchased face-lift or suctioning of fat through liposuction is the best route to improved lives, careers and relationships’. Parker interviewed women who had undergone cosmetic surgery and identified three particular groups, none of whom were seeking beautification or knowingly pandering to celebrity status—rather, all the women were focused on ‘passing’ within their social worlds. Firstly, some women had a part of their body that they regarded as an ‘intruder’ (for example, a large nose)—something they were born with, often were teased or ridiculed for at school and which impacted on their self-esteem, anxiety and feelings of self-worth. Secondly, women who had given birth to and breastfed their children talked about the need to get back to their ‘normal’, pre-children body size/shape, particularly with reference to tummy overhangs and so-called ‘saggy’ breasts. Again, women wanted to ‘pass’ in society, as opposed to look like a celebrity. Thirdly, women of older age within the workforces wanted to ‘pass’ or be accepted in reference to younger colleagues, fitting with Elliott’s idea of ‘ambient fear’ in the workplace. These women did not want to look younger or more ‘beautiful’, just to feel good about themselves and compete successfully in the workplace environment. All of these three typologies suggest the need for women to ‘fit in’, ‘blend’ or ‘pass’ within particular contexts, as opposed to stand out in something akin to a beauty pageant. Whilst all are ‘cosmetic surgery’, these women’s accounts describe a psychological ‘need’, a feeling of necessity rather than choice.

The recent rise of cosmetic surgery for men to some extent destabilises the notion of cosmetic surgery as a purely masculine mechanism of oppression of women. However, it is identified that a ‘gender-specific’ relationship exists between cosmetic surgery and psychological variables. The annual report of the American Society of Plastic Surgeons for 2016 found that 85 per cent of both surgical and ‘minimally invasive’ cosmetic procedures are performed on women. Although the idea of cosmetic surgery as a purely gendered issue is perhaps lessening there is increasing concern about the driving forces towards the homogenisation of bodies to some sort of abstract ‘ideal’. This is manifested in surgery to ‘reverse’ aging, surgery to alter eyelids and noses in some racial groups and procedures to lessen the features
of genetic conditions such as Down syndrome.\textsuperscript{16} The effects of the potential loss of visual diversity in society is an intangible and, as yet, unstudied field. To some extent the unifying concept between all these types of surgery is the idea of trying to attain a ‘better me’, with the ‘better’ being some abstract idealised form. The ‘better you’ as a product you must buy, is a massive commercial enterprise, including not only the cosmetic surgery industry but also the fitness, health food and fashion industries. As such, it could be hypothesised that cosmetic surgery is just part of the package of consumer society. Although this ‘product’ is undoubtedly more risky and invasive than many of the other consumer products available, the guarantees and regulation of it are often less. The limited regulatory status of cosmetic surgery in some countries, including Australia, obfuscates many of the details regarding how, where, when, and on whom cosmetic surgery is performed.\textsuperscript{7,17}

The role of media in promoting images of being young, slim and Caucasian as the desirable society to belong to has been shown to be influential and often problematic, especially among teenagers and even primary school aged children.\textsuperscript{18} A Swiss study exposing women to cosmetic surgery advertising found increased body dissatisfaction after exposure to advertising material when compared to a control group.\textsuperscript{19} The level of dissatisfaction of women and girls with their bodies is at an all-time high with only 16 per cent of women and 27 per cent of men reporting that they like the way they look in the mirror and 46 per cent of men and 62 per cent of women reporting feeling ashamed of the way they looked.\textsuperscript{20}

**Is cosmetic surgery effective?**

The idea of effectiveness usually refers to treatment of a pathological condition. Where there is no pathological condition present it could be argued that it is an irrelevant metric in this group, and that other measures become more important. Cano and colleagues identify that plastic surgeons must be more concerned with patient perception and quality of life measures because they are not operating with a view to reduce morbidity or mortality.\textsuperscript{21}

If ‘satisfaction’ is the goal, there are many reports of high levels of satisfaction following cosmetic surgery, although with caveats around those who are high risk for body dysmorphic disorder.\textsuperscript{22} If improvement in psychological wellbeing is taken as the yardstick of success, rather than just satisfaction, a systematic review in 2006 found that evidence in this area was weak,\textsuperscript{23} as did a review of facial instruments in 2009.\textsuperscript{24} Part of the problem in this area has been a lack of well-validated instruments for use in outcomes measurement,\textsuperscript{23} but recent work to develop patient reported outcomes measures (PROMS) such as the BREAST-Q\textsuperscript{25} and the FACE-Q\textsuperscript{26} are likely to help to fill this knowledge deficit. A study by Alderman demonstrated significant improvement in psychosocial well-being in women undergoing cosmetic breast augmentation, although a reduced physical well-being up to six months after surgery\textsuperscript{27} and de Brito et al reported that body image and quality of life improved after abdominoplasty in a study of 25 female patients in Brazil.\textsuperscript{28} Bensoussan and colleagues reviewed literature on the quality of life after cosmetic surgery between 1960–2011.\textsuperscript{29} They found that while there were some concerns about the precisions of some of the measures used, overall, there was an improvement in quality of life after procedures which tended to plateau over time. They also found that individuals who sought cosmetic surgery tended to have a lower QoL score compared with control subjects. In interviews with women over 55 in Finland, Kinnunen outlined that women saw cosmetic surgery as an investment in a better quality life. In this instance, women described cosmetic surgery as a tool to resist ageing stereotypes and achieve ‘respectability’, and others underwent surgery to develop a less classically Finnish appearance, an evaluation which points to the varied motivation for cosmetic surgery.\textsuperscript{30} Parker’s interviews with cosmetic surgeons in the US found that those surgeons regarded cosmetic surgery as being more effective than psychological therapy on the mental health of women, fitting in with the notion of cosmetic surgery as ‘psychology with a scalpel’.\textsuperscript{31} Parker argues that cosmetic surgeons are not necessarily trained in psychological therapy and ought to be working
more with mental health teams. A longitudinal population study of young people in Norway, with more than 3000 initial participants, commencing in adolescence, which followed the cohort over a full 13 year period, compared the characteristics of those who underwent cosmetic surgery (n=71) with those who did not and found that although cosmetic surgery increased women’s satisfaction with their breasts in breast augmentation, the mental health of patients was on average worse after surgery rather than better. In terms of factors that predicted whether a participant would undergo cosmetic surgery, they found that those with a history of a suicide attempt were more than three times more likely and those with depression and anxiety were twice as likely to undergo cosmetic surgery. Anxiety and depression increased in the years following surgery.32 Although the numbers of cosmetic surgery patients were fairly small in the final analysis, these findings do seem to contradict the idea that cosmetic surgery is psychotherapeutic and reinforce the suggestion that access to mental health services for those requesting cosmetic surgery should be readily available.

**Why would it be desirable or useful to have a definition of cosmetic surgery?**

Developing discourse around the ethics of cosmetic surgery, the media and society requires a common understanding of terms and a definition of cosmetic surgery would surely be useful in such an arena. From a health economic perspective, a definition would also be helpful. Health expenditure in Westernised countries is rising at a rate beyond what is affordable for governments.33,34 In an era when complex health care technology is increasingly being used and where people live longer with chronic health conditions, the healthcare payers are looking to ensure that there is no unnecessary expenditure from the public purse.35,36 Despite a lack of a definition for cosmetic surgery, most countries' governments seem to agree that it is not the role of the tax payer to fund cosmetic surgery. The notable exception is Brazil, who espouse that ‘even the poor have a right to beautiful’.37 In the Australian healthcare system, there is a mandate to provide universal access to healthcare for problems of ill health, congenital abnormality and disabling conditions, either through the public hospital system or via rebates for designated procedures in the private hospital system, but not to provide access where there is nothing medically wrong with the individuals seeking the procedure. Other countries have similar mandates and have adopted similar views about which procedures are unnecessary from a medical perspective. The potential for cosmetic surgery to be inadvertently funded by the taxpayer through loop holes or misuse of rebate systems is a significant financial consideration for health care payers. If a consensus can be reached in terms of what defines cosmetic surgery, this could aid in conserving health care dollars, meeting community expectations and standardising access.

As well as the argument for a definition of cosmetic surgery being useful for healthcare policy makers in the economic arena, it could also assist when determining what type of procedures should only be performed within designated medical premises, or accredited surgical facilities, by appropriately trained practitioners. This point has been brought sharply into focus with the deaths that have occurred in women undergoing cosmetic procedures.38,39 Legislators have become interested in developing legislation and regulations in this area for the protection of the community. It is critical that the medical/surgical community likewise pursues necessary measures to ensure patients and practitioners are protected by the mandate/s under which they operate.

A final rationale for developing a definition of cosmetic surgery is to allow comparisons between healthcare providers, techniques and outcomes in a research setting. This type of transparency and accountability would yield as yet unavailable opportunities to explore the breadth of factors influencing ‘effective’ results in the field of cosmetic surgery.
**Box 1. Rationale for definition**

Rationale for having an agreed definition of cosmetic surgery:
- Facilitate discourse on ethics of cosmetic surgery, media etc.
- Assist in Healthcare funding and policy discussions
- Enable progress on regulation
- Facilitate audit and research

**The difficulties of developing a definition of cosmetic surgery**

The disparity of views on whether cosmetic surgery is a frivolous and unnecessary undertaking or whether it is a valid empowering process unsurprisingly leads to difficulties in deriving a definition. What does seem to be a universal understanding is that it is related to appearance.

The report of the inter-jurisdictional cosmetic surgery working group to the 2011 Australian health ministers' conference covered much ground in terms of understanding different perspectives on cosmetic surgery and finding consensus. This was a thorough and broad investigation into the area, but the definition arrived at from this report (Box 2) has not met universal acceptance. One area of contention is that self-esteem, within that definition, is implied to be unimportant, whereas in fact, self-esteem is acknowledged among psychiatrists to be a vital component of adolescent development and mental health. Another area of ambiguity in this definition is that of congenital deformity; because there is no contradistinctive statement that deformities are secondary to congenital conditions, disease or trauma are excluded from being defined as cosmetic, then there is a lack of clarity on this. To some extent this notion can be understood by thinking of the status of the patient at presentation to the doctor. A further criticism of this definition is one of redundancy—while it is true that colour or texture change can be achieved by cosmetic surgery, this is always done for the purpose of improved appearance, so it would be more economical to leave these specifics out of the definition.

**Box 2. Australian health ministers’ conference inter-jurisdictional cosmetic surgery working group definition**

Cosmetic medical and surgical procedures are surgical operations and other procedures that revise or change the appearance, colour, texture, structure or position of normal bodily features with the sole intention of achieving what the patient perceives to be a more desirable appearance or boosting the patient's self-esteem.

BAPRAS has the following definition for those visiting its website:

*The term ‘cosmetic surgery’ refers to a range of surgical procedures that are carried out to alter and enhance a patient's physical appearance.*

The advantage of this definition is that it is simple but it again lacks the scope to include the cause of altered appearance and state of appearance at presentation.

A definition which includes only the core elements of what cosmetic surgery involves is more likely to meet acceptance from the full range of stakeholders. These elements are the concepts of a ‘normal appearance’ at presentation, and the concept of procedures to improve appearance as the primary goal. It is important to frame any definition of cosmetic surgery hand in hand with what appearance-altering procedures are not regarded as cosmetic, as this counterpoint reinforces the definition itself.

**The dangers of over-reach in terms of defining what is normal**

Although it seems reasonable for governments to want to secure a definition of cosmetic surgery for purposes of demarcating when the procedure should be funded under taxpayer money, it should be recognised that there are dangers in trying to pin down objectively every element of such a definition. ‘Normal appearance’ is a key concept, but is intrinsically a subjective notion, which depends on context, including age, family, cultural background etc. The history of governments trying to define what is ‘normal appearance’ in objective terms of measurements and rules is extremely sinister. Cautionary sociological reflections spell out some of the potential consequences of constructing a ‘normal’ way of being, whether this
applies to peoples’ bodies, thoughts, or lifestyles. While this conversation could be labelled as largely philosophical, Durkheim’s ideas about the pragmatic utility of a concept like ‘normal’ should be remembered:

We must not forget that the advantage of distinguishing the normal from the abnormal is principally to throw light upon practice.42

Governments and bureaucracies must therefore accept that not every element of the definition of cosmetic surgery can or should be enforced by objective means. Clinical autonomy, supported by knowledge which emerges from the doctor-patient relationship, must remain an important factor in the decision-making process because it is in this space that the broader context of patients’ lives and their clinical needs are understood and contextualised. However, a guiding definition of cosmetic surgery could support and resource clinicians to be more reflective about their reasoning and justification when making decisions about patient selection for government funded/subsidised surgery and when assisting patients in weighing up the risks and benefits for surgery that services medical need versus surgery for appearance improvement alone.

Desirable elements to a definition of cosmetic surgery

With the plastic surgical and sociological literature in mind, as well as the limitations of existing definitions of cosmetic surgery, the authors suggest that the following points are important in forming a useful definition for cosmetic surgery:

• Meaning which is understood by the breadth of the community (which is why the term ‘cosmetic’ is used instead of ‘aesthetic’).

• Not trying to be everything to everybody. The key driver for this is health care policy. A definition focussed on mental health, for example, may be different. Trying to meet the requirements of all interested parties would not be possible, so the authors have focussed on a definition fit for the purpose of healthcare policy. This does not mean it cannot be used for research or other purposes as a secondary role.

• Not including extraneous concepts unnecessary to the core of what all agree is important to the essence of cosmetic surgery, which is the idea of appearance.

• Bringing in the idea of ‘normal appearance at presentation’ as a pre-requisite and recognising that not all surgery to alter appearance, or all surgery that results in an improved appearance, is cosmetic surgery.

• Recognising the key role that the assessing doctor (rather than the government or health care payer) has in assessing the normality of appearance at presentation, in the context of the medical history, and the familial, societal and cultural context as well as the physical examination.

The proposed definition in Box 3 is one that meets the criteria outlined above and may be a helpful preliminary version for healthcare policy and research purposes. There are limitations to this framework and to this study; for example, persons with gender identity disorders may have a ‘normal’ appearance but one that does not match their identified gender. The definition proposed would not work for such cases and as such requires further development. As this field is complex in itself, the authors were not able to cover it within the scope of this paper.

Box 3. Proposed definition of cosmetic surgery

Cosmetic surgery is defined, for the purposes of a healthcare payer, as any invasive procedure where the primary intention is to achieve what the patient perceives to be a more desirable appearance and where the procedure involves changes to bodily features that have a normal appearance on presentation to the doctor.

In contrast, surgery performed with the goal of achieving a normal appearance, where bodily features have an abnormal appearance on presentation due to congenital defects, developmental abnormalities, trauma, infections, tumours or disease does not fall under the definition of cosmetic surgery. It is a given that ‘normal appearance’ is a subjective notion. Determining whether patients have a normal or abnormal appearance on presentation will rely on the clinical assessment of the treating doctor.

Conclusion

Cosmetic surgery is a growing phenomenon within our society and it behoves specialist plastic surgeons to lead the way in facilitating public discourse on ethics, healthcare reform and regulation in this field. To do this we need to have a broader cognisance of the academic research outside of our usual sphere and to develop a lexicon of common terms, concepts, and concerns. The definition presented here is neither perfect nor exhaustive,
but may serve as a starting point for such critical discussion.

Acknowledgements
Thanks to Eva Ullinger for proof reading and editorial comments. Thanks to Mary Warner for insight into Australian Government processes.

Disclosure
The authors have no financial or commercial conflicts of interest to disclose.

Funding
The authors received no financial support for the research, authorship, and/or publication of this article.

References
1. American Society of Plastic Surgeons. Plastic surgery statistics report—2016 cosmetic plastic surgery statistics. Chicago, 2016. [Cited 1 October 2017.] Available from URL: https://www.plasticsurgery.org/news/plastic-surgery-statistics
2. ISAPS. International survey on aesthetic/cosmetic procedures performed in 2015. Hanover, New Hampshire, 2015.
3. Khoo C. Towards the regulation of cosmetic surgery. In: ISAPS. Australasian Journal of Plastic Surgery Volume 1 Number 1 2018
4. Australian Health Ministers’ Advisory Council, Inter-jurisdictional Cosmetic Surgery Working Group, Clinical, Technical and Ethical Principal Committee. Cosmetic medical and surgical procedures—a national framework. New South Wales: Australian Health Ministers’ Conference, 2011.
5. Parker R. Women, doctors and cosmetic surgery. London: Palgrave Macmillan, 2009.
6. Gilman SL. Making the body beautiful: a cultural history of aesthetic surgery. New Jersey: Princeton University Press, 1999.
7. Elliott A. Making the cut: how cosmetic surgery is transforming our lives. London: Reaktion Books Ltd., 2008.
8. Morgan KP. Women and the knife: cosmetic surgery and the colonization of women’s bodies. Hypatia. 1991; 6: 25–53.
9. Bordo S. Unbearable weight, feminism, western culture and the body. London: University of California Press, 1993.
10. Davis K. Reshaping the female body: the dilemma of cosmetic surgery. New York: Routledge, 1995.
11. Gimlin D. Cosmetic surgery: beauty as commodity. Qualitative Sociology 2000; 23: 77–98.
12. Negrin L. Cosmetic surgery and the eclipse of identity. Body & Society. 2002; 8: 21–42.
13. Blum V. Flesh Wounds: The culture of cosmetic surgery. Berkeley: University of California Press, 2003.
14. Soest T, Kvalem I, Wichstrom L. Predictors of cosmetic surgery and its effects on psychological factors and mental health: a population based follow-up study among Norwegian females. Psychological Medicine. 2012; 42: 617–26.
15. Davis K. Dubious equalities and embodied differences: cultural studies on cosmetic surgery. Lanham: Rowman and Littlefield Publishers, 2003.
16. Kaw E. Steven Polgar Prize Essay (1991). Medicalization of racial features: Asian American women and cosmetic surgery. Medical Anthropology Quarterly. 1993; 7: 74–89.
17. Australian Society of Plastic Surgeons. Unregulated office-based cosmetic surgery a risk to patient safety. Media Release, 2015; 2.
18. De Vries DA, Peter J, Nikken P, de Graaf H. The effect of social network site use on appearance investment and desire for cosmetic surgery among adolescent boys and girls. Sex Roles 2014; 71: 283–95.
19. Ashikali E-M, Dittmar H, Ayers S. The impact of cosmetic surgery advertising on Swiss women’s body image and attitudes toward cosmetic surgery. Swiss Journal of Psychology 2017; 76: 13–21.
20. Halliwell E, Diedrichs PC. Influence of the media. In: Rumsey N, Harcourt D (eds). The Oxford handbook of the psychology of appearance. Oxford: Oxford University Press, 2012: 217–38.
21. Cano SJ, Klassen A, Pusic AL. The science behind quality-of-life measurement: a primer for plastic surgeons. Plast Reconstr Surg 2009; 123: 98e–106e.
22. Honigman RJ, Phillips KA, Castle DJ. A review of psychosocial outcomes for patients seeking cosmetic surgery. Plast Reconstr Surg. 2004; 113: 1229–237.
23. Cook SA, Rosser R, Salmon P. Is cosmetic surgery an effective psychotherapeutic intervention? A systematic review of the evidence. J Plast Reconstr Aesthet Surg. 2006; 59: 1133–151.
24. Kosowski TR, McCarthy C, Reavey PL et al. A systematic review of patient-reported outcome measures after facial cosmetic surgery and/or nonsurgical facial rejuvenation. Plast Reconstr Surg. 2009; 123: 1819–827.
25. Cohen WA, Mundy LR, Ballard TN et al. The BREAST-Q in surgical research: a review of the literature 2009-2015. J Plast Reconstr Aesthet Surg. 2016; 69(2): 149–62.
26. Klassen AF, Cano SJ, Schwitzer JA, Scott AM, Pusic AL. FACE-Q scales for health-related quality of life, early life impact, satisfaction with outcomes, and decision to have treatment: development and validation. Plast Reconstr Surg. 2015; 135: 375–86.
27. Alderman AK, Bauer J, Fardo D, Abrahamse P, Pusic A. Understanding the effect of breast augmentation on quality of life: prospective analysis using the BREAST-Q. Plast Reconstr Surg, 2014; 133: 787–95.
28. De Brito MJA, Nahas FX, Barbosa MVJ et al. Abdominoplasty and its effect on body image, self-esteem, and mental health. Annals of Plastic Surgery. 2010; 65: 5–10.
29. Bensoussan J-C, Bolton MA, Pi S, Powell-Hicks AL. Quality of life before and after cosmetic surgery. CNS Spectrums. 2014; 19: 282–92.
30. Kinnunen T. ‘A second youth’: pursuing happiness and respectability through cosmetic surgery in Finland. Sociology of Health & Illness. 2010; 32: 258–71.
31. Fraser S. The agent within: agency repertoires in medical discourse on cosmetic surgery. Australian Feminist Studies. 2003; 18: 27–44.
32 Van Soest T, Kvalem IL, Wichstrøm L. Predictors of cosmetic surgery and its effects on psychological factors and mental health: a population-based follow-up study among Norwegian females. Psychological Medicine. 2011; 42: 617–26.

33 Pozarycki MM. Rising health care costs. Annals Health L. 2006; 15: 331.

34 Australian Institute of Health and Welfare. Health expenditure Australia 2013–2014: analysis by sector. Health and Welfare Expenditure Series. Canberra: Australian Government, 2015.

35 Stabile M, Thomson S. The changing role of government in financing health care: an international perspective. Journal of Economic Literature. 2014; 52: 480–518.

36 White J. Targets and systems of health care cost control. Journal of Health Politics, Policy and Law. 1999; 24: 653–96.

37 Edmonds A. ‘The poor have the right to be beautiful’: cosmetic surgery in neoliberal Brazil. Journal of the Royal Anthropological Institute. 2007; 13: 363–81.

38 3ABC News, Woman dies after botched breast surgery at Sydney beauty salon. [Cited 1 October 2017.] Available from: http://www.abc.net.au/news/2017-09-01/woman-who-un-derwent-botched-procedure-dies/8864854

39 Mofid MM, Teitelbaum S, Suissa D et al. Report on mortality from gluteal fat grafting: recommendations from the ASERF Task Force. Aesthet Surg J. 2017; 37(7): 796–806. Recommendations from the ASERF Task Force. Aesthetic Surgery Journal. 2017.

40 Sowislo JF, Orth U. Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. Psychological Bulletin. 2013; 139: 213–40.

41 Lansdown R, Rumsey N, Bradbury E. Visibly different: coping with disfigurement. Oxford: Butterworth-Heinemann, 1997.

42 Durkheim E. The rules of sociological method. Paris: Librarie Felix Alcan, 1895.