# Ethical issues, dilemmas and controversies in 'cosmetic' or aesthetic dentistry. A personal opinion

M. Kelleher[1]

OPINION

**IN BRIEF**

- Helps to resolve some ethical and moral dilemmas in the appropriate delivery of 'cosmetic' or aesthetic dentistry.
- Provides an understanding of how to lower biological and legal risks when considering 'cosmetic' dentistry.
- Emphasises a cost effective, lower risk, minimally destructive approach which is both ethically sound and usually produces a win/win outcome for most patients and their dentists alike.

Stephen Hancocks' elegant editorial of 11 December 2011 raises interesting questions which deserve discussion. Most experienced dentists would agree that the less that is done to teeth for cosmetic reasons, the lesser are the risks of disappointment, failure of expectation, or threat of litigation. Yet there is an increasing number of cases where aesthetics are the primary concern for dentists and patients alike and some patients are consenting to treatment without being properly informed of the destructive nature of the procedures to their sound tooth tissue and structures to achieve the desired 'cosmetic' outcome. This raises ethical issues, as much of this overtreatment is unnecessarily destructive and goes against the healing and caring principles of the dental profession.

## INTRODUCTION

Many of us who have lectured and written about solving dental aesthetic problems by various means, usually involving minimally destructive (though not minimally interventive) dentistry, have been emphasising similar points to those raised in Stephen Hancocks' editorial of 11 December 2011[1] for many years.

Bleaching on its own or in conjunction with resin composite direct bonding, or where appropriate, orthodontic alignment, have been promoted by many speakers and writers including myself as being biologically sensible methods of overcoming most dental aesthetic problems.[2] Viewed from an ethical perspective, one attraction of this approach is that the desirable aesthetic improvements for patients can be enormous and are readily achieved without destroying their own sound tooth tissue, structural strength, or dental pulpal health as unintended consequences of this elective treatment. These usually predictable procedures help to solve many aesthetic problems and ethically one should actively seek to avoid inflicting inadvertent collateral structural or other biologic damage in the process of improving patients' dental appearance.

## 'PERMANENT' VENEERS

Sadly, some seriously destructive veneer approaches are cause for considerable ethical concern. In discussing ethics and supposedly 'cosmetic' dentistry it seems prudent to draw attention to the lack of permanence of porcelain veneers, with one study in the UK showing that only 53% of porcelain veneers were present without re-intervention after 10 years.[3]

This does not sound much like a 'permanent veneer' to me and yet that seductively attractive term is used by many dentists. It has been shown that up to 30% of sound dental tissue can be removed in the preparation for extended porcelain veneers.[4] This elective destructive treatment is done mainly for cosmetic reasons. Worryingly, the very same paper stated that between 62% and 73% of sound anterior tooth structure is destroyed during the preparation for all ceramic full coverage crowns.[4] These preparations are neither benign, nor reversible interventions.

In my opinion, it is unethical for some dentists to neglect to tell patients these relevant facts and figures in advance of any elective preparations for 'cosmetic' restorations. It is ethically flawed to pass them off as merely minor changes to their teeth that will seem insignificant at the end of treatment when the patient is rewarded with a 'Hollywood' or supposedly 'perfect' smile.

In order to give their properly informed consent, patients really do need to know these relevant figures at the planning stage given the scale of the proposed elective destruction of their existing sound tooth structure and the possible consequential pulpal problems in the long term.

Curiously, in all the records of negligence claims that I have examined that have been instigated by dissatisfied patients against their dentists in relation to unsatisfactory cosmetic outcomes, I have never seen a record in the dentist's notes stating that the patient was actually given figures in advance of treatment for the longevity of 'permanent veneers' or the amount of tooth structure that would be destroyed in the preparation for such approaches. Furthermore, I have not seen it entered in the dental notes in such cases that, on receiving this important written information, the patient subsequently agreed to have up to two-thirds of their sound tooth tissue removed purely for cosmetic reasons or so that the adjacent, but at the time mainly intact, teeth, would match the ones that really did require significant treatment. Consequently, many of these cases have had to be settled by the indemnifying organisations, often at vast expense, on the basis of breach of duty or the patient's 'lack of consent'. All the

[1]Consultant and Specialist in Restorative Dentistry and Prosthodontics, King's College London Dental Institute at Guy's, King's College and St Thomas' Hospitals
Correspondence to: Martin Kelleher
Email: martin.kelleher@virgin.net

Refereed Paper
Accepted 26 January 2012
DOI: 10.1038/sj.bdj.2012.317
©British Dental Journal 2012; 212: 365–367

patient has to prove is that they are either unhappy with the outcome of the cosmetic appearance, the instability of the 'rapid orthodontic' result, the fact that they were misled or never adequately informed of the possible negative aspects of the treatment nor told about other viable options before undergoing this elective treatment. Many would regard these sorts of complex problems as involving moral or ethical issues as much as legal ones.

## SMILE DESIGN DAMAGE

It is a matter of grave concern, therefore, that articles in some populist dental journals exhibit cases of significant amounts of apparent over-prescription and dental destruction being undertaken on adjacent or uninvolved teeth. Presumably this extra treatment involving variable amounts of dental damage is incorporated into the 'ideal smile design', in order that eventually the repaired teeth will match one another or conform to a particular fundamentalist formula. Sadly, they often do indeed 'match', but arguably in an unnatural, false tooth, de-personalised, monochromatic way.[5] However, just imagine in terms of the ethical implications of over-prescription if one had to have a terminally arthritic knee replaced and the friendly orthopaedic surgeon kindly offered to also replace your other asymptomatic knee at the same time just 'so they matched'. Would you be tempted? No? Really?

Could there possibly be some worrying ethical issues involved if such a wonderful offer conveniently doubled the fee for doing so? Yet somewhat bizarrely, judging on the basis of recently published cases in some (mainly non-peer reviewed) journals, that sort of approach now seems to be endemic in supposedly 'cosmetic' dentistry. Innocent adjacent or opposite teeth, or sometimes an entire group of teeth, seem to get reduced to a pile of dental dust in minutes just so that the resulting repaired teeth can 'match' or meet patient demands.[5]

Unfortunately in some of these articles the ethical principles of 'firstly do no harm' or 'extreme remedies should be reserved for extreme diseases' seem to have been either blissfully ignored or conveniently forgotten.

It was very much to the credit of the current organising committee of the British Academy of Cosmetic Dentistry (BACD) that they now appear to me to have had a significant change in their thinking or emphasis. This might be based on a better understanding of the longer term biological consequences of significant 'cosmetic' interventions and an increasing desire to avoid causing collateral damage. Whatever the reasons, many within the BACD appear to have now departed significantly from the 'all big white teeth and have a nice day' multiple porcelain veneer treatment philosophy as promulgated for many years by some destructive American 'gurus'.[6] In doing so, it would appear that some at least have drifted back to the centre ground and away from the more 'extreme makeover' or fundamentalist 'cosmetic smile design' concepts. I suspect that many of the BACD's more reflective dentists were already there, or had always remained there, but some others may now also find themselves much more in the middle ground that most of us have been occupying for many years.

Based on those reassurances, I was happy to accept their invitation to speak, along with Trevor Burke, at the recent meeting of the BACD in London to which Stephen Hancocks' editorial referred. One session was delivered by myself and Trevor Burke on a minimally destructive approach to tooth wear involving pragmatic aesthetics – a topic that we had both addressed a year previously at the Dental Update day in London and separately on many previous occasions both nationally and internationally.

I would, therefore, challenge Stephen Hancocks' statement that seemed to me to imply that all the 'hecklers' were at the far end of the cosmetic spectrum shouting 'thou shalt not touch an enamel prism under any circumstances'.[1]

It is quite possible to be critical of the more fundamentalist extreme makeover over-treatments without necessarily being extreme in one's own views. For instance, in politics it is possible to be critical of the extreme right (for which one could read 'extremely destructive makeovers') or the extreme left ('do nothing because the state says it is only cosmetic'), while still maintaining a much more centrist ('it all depends') position oneself.

Generally speaking when discussing ethics and aesthetics/cosmetics, much depends on the severity of the aesthetic problems and the patients in whom those problems occur. For many years now there has been mounting evidence to support quite a number of procedures that can be undertaken with appropriate training to improve patient's dental appearance without having to resort to doing destructive dentistry.[6] It is the unnecessary destruction of sound tooth tissue that is one of the main targets in my arguments about ethics and 'cosmetic' dentistry.

It is certainly not the case that one does not want to help improve the appearance of some unfortunate people's teeth. However, ethically one does not want to cause massively inappropriate long-term, collateral biologic damage in the process of trying to help them.[2,7] As in most aspects of dentistry, there is a balance to be struck between doing 'aesthetic good' and avoiding doing long-term biologic harm. However, that does not mean that there are no worries about the current fashion for using rapid action 'orthodontic gizmos' to move teeth to unstable positions and then trying to keep them there in the long term. Unstable tooth positions are exactly that, regardless of the promises made for supposedly 'permanent retention'. Removal of the retainers risks relapse.

In Stephen Hancocks' editorial there is an allusion to the daughter test as being 'wheeled out' and some fancy footwork being used in trying to out-moralise others.[1] I found this to be a curious mixture of metaphors.

The actual title of the daughter test[8] is probably relatively unimportant. This sort of test has probably existed in some form, perhaps described in different words, during many sensible ethical or moral discussions about supposedly 'cosmetic' (but in reality destructive) interventions or when trying to avoid invoking the 'law of unintended consequences'.

To me and many others who do have a daughter (for which you can read any close family member that one is trying to mind for the rest of their life), it just happens to be a convenient way of thinking about the available supposedly cosmetic, but actually irreversibly damaging, options. At its core this test is articulated in order to try to help avoid doing more destructive procedures than are appropriate, especially when much less destructive, predictable, scientifically proven approaches would produce a more than acceptable

result for most reasonable patients, but without doing long-term serious damage to their precious teeth as needless collateral damage.

This test, whatever one may want to call it, is offered merely as some possible help in a very grey and contentious area.

However, sadly I have to agree with the Editor-in-Chief that there are some high profile or commercially driven, unscrupulous members of the dental profession and that these individuals also exist in many different countries with different cultures and value systems. Moreover, there are also dentists who are largely unsympathetic to people's very real or perceived aesthetic problems. In reality none of us is a paragon of virtue.

## PUBLISHED MATERIAL

In this context, however, I would like to point out that there are some fairly questionable dental editors around who readily accept dubiously aggressive 'cosmetic' or advertorial articles, some involving experimental or unproven materials or techniques.

Some editors publish these glossy, superficial, 'cosmetic' (but usually destructive or orthodontically unstable) articles, apparently without any qualms or any real evidence of their long-term efficacy. Little responsible thought seems to be given by them as to what the effects of such publications might be on some younger or more impressionable dentists, who as a consequence of reading these nicely photographed, but often ethically flawed, articles, might be tempted to carry out wholesale dental destruction simply because the patient asked them 'to improve their smiles'.

A tentative, but very understandable request from a patient does not readily translate into 'please butcher my other sound teeth in order to achieve this quickly' nor indeed to 'what I really want is some fashion driven instant dental gratification involving a swift front of mouth mutilectomy, please'. Unfortunately, discreet advertorial case reports illustrating nicely photographed short-term or 'bought pseudo-research' cases in some publications may have the effect of apparently legitimising destructive techniques including the utilisation of dubious or unproven materials to replace previously sound tooth tissue.[9]

## CONCLUSIONS

Most experienced ethical dentists are attuned to their own patient's reasonable aesthetic desires and aspirations. Many have invested in further appropriate training and are more than capable, willing and able to help with improving patient's dental appearance by using sensible, biologically sound, minimally destructive, ethical means if allowed to do so.

In essence, solving aesthetic problems ethically requires very detailed individual discussions and careful evaluation of the various options available (including the ones that other disciplines or skills could possibly provide) coupled with appropriate training and skills before there can be any real hope of achieving appropriate solutions to those problems.

In passing, it should be pointed out that cosmetic dentistry is regarded by many as just one aspect of decent restorative dentistry. Among its many objectives, restorative dentistry has always been about eliminating or minimising dental disease and improving or maintaining function, but also, where appropriate, to make things look both nicer and healthier. However, in seeking to do so, the 'risk to reward ratio' must be considered and enough time must be taken to ethically weigh up the real potential aesthetic benefits against the many risks involved. These risks include the structural or long-term biologic damage or stability, that might be involved in delivering any such changes in vulnerable patients.

This critical balance is what needs to be kept uppermost in one's mind when discussing ethics and 'cosmetic' dentistry.


1. Hancocks S. The ethics of cosmetics. *Br Dent J* 2011; **11:** 501.
2. Kelleher M G, Djemal S, Al-Khayatt A S, Ray-Chaudhuri A J, Briggs P F, Porter R W. Bleaching and bonding for the older patient. *Dent Update* 2011; **38:** 294–296, 298-300, 302-303.
3. Burke F J T, Lucarotti P S K. Ten-year outcome of porcelain laminate veneers placed within the general dental services in England and Wales. *J Dent* 2009; **37:** 31–38.
4. Edelhoff D, Sorenson J A. Tooth structure removal associated with various preparation designs for anterior teeth. *J Prosthet Dent* 2002; **87:** 502–509.
5. Rowe Jr W J, Payne W B. Enhancing nature to achieve patients desires. A smile makeover utilizing porcelain veneers. *J Cosmet Dent* 2011; **27:** 47–64.
6. Kelleher M G. Porcelain pornography. *Faculty Dent J* 2011; **2:** 134–141.
7. Poyser N J, Kelleher M G, Briggs P F. Managing discoloured non-vital teeth: the inside/outside technique. *Dent Update* 2004; **31:** 204–210, 213-214.
8. Burke F J, Kelleher M G. The 'daughter test' in elective esthetic dentistry. *J Esthet Restor Dent* 2009; **21:** 143–146.
9. Fordham N, Lewis M, Naseem S. An aesthetic midline re-alignment using CAD/CAM technology. *Dent Technician* 2012; **Jan:** 10-11.


# Corrigendum

Research article (*BDJ* 2012; **212:** E10)

*'Access to primary dental care for cleft lip and palate patients in South Wales'*

In the above research article, the authors would like to apologise for the inadvertent omission of M. Z. Morgan as a contributing author. The author list should have read: S. K. Bhatia,[1] M. M. Collard[2] and M. Z. Morgan[3]

[1*]Specialist Registrar in Paediatric Dentistry, University Dental Hospital, Cardiff, CF14 4EA; [2]Consultant in Paediatric Dentistry, South Wales Cleft Team, Morriston Hospital, ABMU Trust, Swansea, SA6 6NL; [3]Welsh Oral Health Information Unit, Applied Clinical Research and Public Health, Cardiff University School of Dentistry