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Ethical Marketing in 'Aesthetic' ('Esthetic') or 'Cosmetic Dentistry'

Part 2

Abstract: This is the second article in a series of three. It is essential to find out from patients what it is that they hope to achieve when requesting an improvement in their dental appearance. Their expectations, hopes and fears need to be explored in detail. The long-term biologic costs of some invasive procedures need to be explained to patients in advance so that they can make properly informed decisions. Failure to do so renders the practitioner vulnerable to a charge of behaving unethically. The differences between ethical marketing and selling are explained including the historic development of marketing.

Clinical Relevance: A practical approach, using a modification of the Edward de Bono *Six Thinking Hats* model is described to help ethical practitioners to develop sound treatment plans when dealing with complex aesthetic problems.

Dent Update 2012; 39: 390–406

Ethics and aesthetic dentistry

Ethics relate to a voluntary framework of guiding principles which fills the void between laws on one hand and a 'free for all' on the other. In essence, ethics involve a moral code, or a set of principles, to guide behaviour when dealing with aesthetic dental problems. Ethics are different from laws and have sometimes been described as an 'allegiance to the unenforceable'. In the case of dentistry, Dental Councils and Dental Boards in various countries have the power to suspend or to remove a dentist's registration, even when no law has actually

been broken. Professional ethics and conduct are therefore enforceable indirectly because a dentist's registration with his/her regulatory body is at stake. Ethical behaviour is essential, not optional, if one is to have a successful career in aesthetic dentistry.

Patient expectations, hopes, fears and aspirations

In general terms, patients, when they ask for help with what they might describe as 'an appearance problem' with their teeth would expect to be treated with fairness, decency, respect, honesty, truth and trustworthiness by their dentist. In seeking any aesthetic dental treatment to solve their perceived problems they would hope that their dentist would treat them as they would wish to be treated themselves.

They would also appreciate being treated with kindness, reasonableness, tolerance and responsibility. They would, probably, also desire understanding, empathy, courtesy, politeness, consistency and openness but would generally expect their dentist to

have an appropriate and reasonable range of skills to help solve their aesthetic problems.

Patient and public expectations in relation to 'cosmetic' dentistry

The public at large and patients in particular expect certain things from dentists. Maintaining ethical standards within the dental profession is a duty for all dentists because ethics represent a voluntary code of principles generated from within the dental profession for the members of the dental profession to follow. The fundamental principles on which healthcare relies are 'doing good' and 'acting in the patient's best interest' ('beneficence') and 'doing no harm' ('non-maleficence').

In seeking aesthetic or 'cosmetic' dentistry, the presumption by patients is that they will benefit from any such intervention rather than being harmed by it. If it becomes evident later on that they have been damaged in the long-term by the provision of 'cosmetic' or 'aesthetic' dentistry, then it is understandable that they will feel disappointment, anger and possibly become litigious.

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Figure 1. Fixed-fixed extensive bridge failing after two years post placement.



Figure 2. When the patient opens her mouth the bridge falls down. The patient was not happy as she had been promised that she was getting a 'permanent bridge'.



Figure 3. The abutment teeth have been grossly destroyed as between 63% to 72% of their load-bearing structure has been removed by the preparations for the porcelain fused-to-metal retainers.

Ethical marketing in aesthetic dentistry

Ethical marketing is a complex area. Dentists are under a duty of care to protect a patient's dental health. They should respect their patients' autonomy to make informed decisions about what happens to them and to help them to do so fairly and without prejudice. Almost every clinical decision in aesthetic or 'cosmetic' dentistry has an ethical and/or a legal component. For instance, there are often cultural differences between different countries and races. In recent times there has been almost a cultural hegemony to have very white, very even teeth with no gaps and little defining individuality of teeth or even variations in surface anatomy. To many dentists extremely white and extremely even teeth look attractive, but to many other dentists they look awful



Figure 4. The preparations for the fixed-fixed bridgework has destroyed large amounts of sound tooth tissue and caused the failure of the abutment teeth.



Figure 5. Preparation for crowns destroys sound tooth tissue and crowns are not 'permanent'. These teeth were re-prepared 26 years after initial 'permanent' crowns – 26 years is not 'permanent!'.



Figure 6. New ceramic materials, while stronger, do not necessarily match old crowns. Re-preparing already crowned teeth with recession is likely to weaken the residual cores or kill the pulps.

and remind them of bad dentures that were particularly prevalent in the 1960s, 70s and early 80s. Older dentists may refer to this look as the 'little pearly white ones look' because that reflected the words used by patients requesting that their teeth be extracted (often unnecessarily) and replaced by 'little pearly white teeth' on their new complete dentures.

The social or cultural norm of extractions and dentures which existed in the UK and elsewhere in the 1960s, and probably the 1970s, is no longer the social norm. People do not see the loss of teeth as a natural part of growing old. Unfortunately, aggressive 'cosmetic' dentistry is now an enormous threat to otherwise healthy teeth because it removes the protective outer enamel and much of



Figure 7. Root fracture following the failure of an aggressive post crown has also destroyed the supporting bone.



Figure 8. Three dead teeth following full coverage preparations for ceramic bonded to metal bridge retainers.



Figure 9. Multiple veneer failures at eight years. These proved not to be 'permanent' veneers as the patient had been promised.



Figure 10. 'Bleeding' no preparation porcelain veneers with pregnancy gingivitis. Note that the other teeth are not affected.

the dentine from the teeth in return for what is promised, or perceived to be, a durable aesthetic outcome. However, this is almost certainly not provided at minimal long-term damage to their sound teeth.

The Hippocratic Oath

The Hippocratic Oath includes the exhortation of 'Primum est non Nocere'

which means 'Firstly, or most importantly, do no harm'. Dentists need to keep this concept uppermost in their minds when dealing with aesthetic problems.

The Hippocratic Oath also urges that 'extreme remedies' should be reserved for 'extreme diseases'. However, some of the treatments recently touted in many glossy dental magazines showing almost full mouth ceramic veneers for minimal problems are certainly an 'extreme remedy' approach. These case reports often show results that must have involved considerable damage being inflicted on the previously sound structure of the treated teeth in order to achieve the outcome of a changed dental appearance. It is no coincidence that pictures of the prepared teeth in their much reduced state rarely get shown in such articles, and it is doubtful if patients get shown the relevant pictures of the destruction involved in preparations for extended veneers or for all-ceramic full coverage restorations. Furthermore, it is not common for some 'cosmetic dentists' to show patients the consequences of the failure of aggressive ceramic reconstructions which can be disastrous in the longer term (Figures 1–10).

Marketing versus selling

The terms 'marketing' and 'selling' are often used as though they are interchangeable. In fact, they have a very different focus. The main focus in *selling* is on the *provider* (dentist) and the primary focus in *marketing* is on the patient or *consumer*. Ethical marketing is essentially about finding out what benefits, if any, a particular treatment might provide to an individual patient but, in attempting to do this, it also addresses, in advance, the potential problems that any proposed 'cosmetic' treatments might pose for the patient in the longer term.

Selling, on the other hand, involves emphasizing the benefits of the services or the products that the dentists can, or could, provide. In terms of aesthetic dentistry, 'selling' doesn't necessarily have as the main focus how those services, or products, would provide long-term, durable, safe, benefits to a patient. Conversely, marketing would involve finding out in detail if those were important issues for an individual patient and would keep those particular issues and concerns clearly in focus in the treatment planning consultations.

Until relatively recently, dental associations were generally distrustful and somewhat disdainful of the term 'marketing' because many dental associations, or at least some of their members, equated 'marketing' with 'advertising' or 'selling'. In their view, this was not and, for some, still is not, something that true dental professionals should undertake. In recent memory, anything other than a simple listing of a dentist's name, qualifications, telephone number and the name of the practice in, for example, the *Yellow Pages* would be enough to get one into trouble with the regulatory authorities. This is no longer true and now it is not uncommon to see dentists advertising in all sorts of ways to help promote themselves, their products, their services, or their practices' unique selling points or 'USP's.

Training courses, promising to help sell more complex 'cosmetic' or 'smile design' aggressive dentistry, as a method of increasing dentists' incomes, are now frequently advertised, with many appearing in un-refereed but widely read 'dental business focused' journals.

The history of the development of marketing

The history of marketing falls into four distinctive eras. The first of these was the 'scarcity era' where there was a shortage of goods and services. In this era, dentists were scarce and whatever they could provide, patients would have. A classic example of that era would be pain relief, often involving extractions and basic dentures. Subsequently, as happened with a lot of other service providers, the 'scarcity era' gave way to the 'production era'. In this era, there was an increase in the *efficiency* of the delivery of the services. One general example would be the introduction of the production line in a factory which made, for example, more cars but did this more efficiently.

However, it soon became clear that one could produce more of a product, such as a car, which society did not appear to want. In dentistry terms the 'production era' could be represented by a large group practice with teams of dentists, nurses, hygienists and technicians producing more dentistry such as fillings, extractions, crowns, bridges, etc. For instance, in the 1960s and 1970s, it was not uncommon for some people to refer to certain practices

as 'amalgam factories'. However, it became apparent that one difficulty of this approach in dentistry, particularly in relatively affluent areas, was that many people did not want extractions, as they had no pain, nor did they want crude looking, but durable, amalgam fillings. For many such patients and their dentists, crowns and bridges were often deemed to be preferable to having gaps or a removable denture.

In the history of marketing development, the 'production era' then led to the 'selling era' in which the benefits and features were extolled and products being sold were frequently positioned with other attractions to make them seem more desirable. At that time, the classic car-selling techniques involved 'positioning', which sometimes meant photographing the car being sold very close to heavily made up models, some of whom were provocatively dressed. The implication for the target audience (generally the male of the species) was that if they bought the car they would become so much more attractive that they would also 'get the girl'. Nothing could be further from the truth. What was being sold was 'attractiveness', 'virility' or other ephemeral aspirations. In any event, over time it became gradually clear that 'selling' reached a definite limit in effectiveness, particularly in the case of, for example, large gas guzzling cars which the would-be target consumers no longer appeared to want.

At that point, people began to question how much more effective 'selling' could be made as it became apparent that selling could not shift products that consumers really did not want. That realization led to the 'marketing era' when, rather than having a lot of products that one was then having to try to sell, sensible marketers asked questions such as 'what would the target consumers really want, value and/or desire?'. In the case of cars, it became clear that, at this time, this was often reliability, economy and a car that reflected their self image rather than larger, uneconomical or unreliable cars. This led to making smaller, more efficient or more luxurious, or aesthetically desirable, cars. These were often produced by foreign companies who had carried out serious and serial market research before developing products for different 'niches of the market' based on this detailed information. In other words, they had taken a lot of time and

trouble to get the reliable information on what the consumer *actually desired and valued*. The manufacturers could therefore make customized products that consumers would actually purchase because that was what *they* (the consumers) wanted.

When one makes some analogies with dentistry, the 'scarcity era' was characterized by the provision of pain relief, often by 'drillings and fillings' or extractions, followed by removable or fixed prostheses. In some countries, or parts of countries, that is still the case.

The 'production era' would be characterized by group practices with multiple dentists, hygienists, therapists, technicians and dental educators of different genders, ages, colour and sometimes religions or ethnicity. Such practices often had multiple surgeries, in various areas, working a variety of different opening hours in order to maximize their 'productivity'. Advertisements to provide, for example, sedation or different styles of dentistry, became more popular and were used to draw attention of would-be patients to the various available practice options.

More recently, many corporate practices seek to improve productivity in a variety of ways.

The 'selling era' would be characterized, for example, by bridges as an alternative to a removable prosthesis and the *benefit* that would be stressed in the selling process would usually be that it 'was fixed'. What often would not be equally stressed by the 'selling' dentist was that conventional bridgework would remove somewhere between 63% and 72% of the structure of the tooth in order to provide a porcelain fused-to-metal crown or retainer for a bridge.¹

This 'selling era' was characterized by the provision of multiple crowns, multiple bridges, 'full mouth rehabilitation' or multiple veneers, or all-ceramic crowns. These were often 'sold' under the guise of providing a fully comprehensive 'one size fits all' approach to appearance, or occlusion. In other words, the justification for many of these aggressive, if possibly well meaning, full mouth rehabilitations was that it would provide 'a perfect appearance' or 'a perfect occlusion'. This was in spite of the fact that there was scarcely any worthwhile evidence to suggest that the long-term structural and pulpal damage done to the teeth in providing such 'full mouth rehabilitations'



Figure 11. Mirror view of failed lower right second molar 'all-ceramic' crown with consequential death of the tooth.



Figure 12. Gross destruction of the crown of the tooth to create space for a ceramic crown has removed between 63% and 72% of the tooth and killed it. This was not a 'permanent' crown as the patient had been promised.

would be adequately compensated for by a predictable improvement in function, or appearance, particularly when one viewed this aggressive and destructive treatment 30 or 40 years later. Cynics about 'cosmetic dentistry' might argue that amalgam factories have been replaced by 'porcelain factories'.

About 25 years ago, 'marketing', as a concept, became more popular. Some dentists started to focus on what different patients said they *wanted*, or *desired*, or *valued*. This was often in contrast to what other dentists thought patients *should have* or what the 'State Funded System' thought patients *needed*. It needs to be recognized that these are emotionally charged concepts that are often difficult to quantify precisely for a particular patient at any given time.

Some dentists were (and some still are) dismayed when patients with more than adequate financial resources did



Figure 13. A lower second molar is virtually invisible in most people. Losing most of the load-bearing structure is usually not a price worth paying for an 'all-ceramic' crown.



Figure 14. Yellow gold has preserved the buccal wall of the patient's lower left first molar which had been root-filled. Gold may not be pretty but it is durable and a better biologic deal for a root-filled tooth. Patients need to know that before making their decision on which material is to be used for their problem.

not appear interested in having extensive and expensive dentistry which, from that particular dentist's values, education and point of view, would improve the patient's appearance and, possibly, his/her oral function. Much time and effort was sometimes spent in developing the 'ideal treatment plan', often involving extensive or complex expensive dentistry which was then carefully presented to the patient and often equally quickly rejected by him/her. Many discerning patients developed a cynicism about the dentist's real motivations in suggesting so much dentistry as 'being good for them'.

In marketing involving aesthetic dentistry, it is important that dentists find out early, and in great detail, precisely what changes, if any, the specific patient is really seeking to achieve in his/her dental or facial appearance. It is also essential that dentists understand that very many patients will not necessarily be as educated about the various negative aspects of having supposedly just 'cosmetic' dental treatment.

Dentists providing such 'cosmetic' dental services ought to be well aware of the negative aspects of any such treatment. For instance, full coverage crowns have been reported to be associated with pulpal death in up to 18% of cases,^{2,3} and sensible ethical dentists should share that sort of relevant information, in an understandable way, with patients as part of the informed consent process. For instance, modern full coverage preparations for tooth-coloured, all-ceramic type restorations are at least as destructive of sound dental tissues as porcelain fused to metal full crowns. In many cases, preparation is even more destructive of sound tooth structure, eg for CAD CAM zirconia-based ceramic, as well as the restoration or residual tooth structure possibly being less durable or, at the very least, unproven, in proper long-term unbiased clinical trials (Figures 11–14).

What problems are there with marketing aesthetic services?

Why marketing? Why now?

Fluoride in toothpaste resulted in an up to 50% decline in tooth decay and, with improved cleaning, it became apparent to many dentists that they could not rely on their previous market of routine conservation, extractions and pain relief, even with cheap and often 'suboptimal endodontics'. It was at that stage that developing a number of other products, or service lines, became more attractive. For instance, by that stage, acid-etching had been proven to improve the retention of composite to enamel. The re-introduction of porcelain veneers by Calamia⁴ and Horn,⁵ in 1983, following an idea of Pincus,⁶ in 1937, appeared to offer a technique which rapidly improved the appearance of teeth. This technique was reliable *provided the preparations were kept within enamel*. However, there is a limited market for veneers that can be placed wholly within enamel, and it became apparent, with the advent of supposedly more reliable dentine-bonding agents, that more aggressive preparations for porcelain veneers or dentine-bonded ceramic crowns might offer a possible solution for a larger number of patients, some of whom had more difficult, or more extensive, aesthetic problems.

Ethical and technical problems with claims of efficacy

Some of the claims for dentine-bonding agents, in their early stages of development, were based on laboratory tests on human dentine, or worse, dead cows' dentine, at 24 hours, and were frankly outrageous and largely irrelevant. There is, for instance, no fluid movement in the dentine of dead cows' teeth and most clinical dentists do not treat dead cows' teeth. Dentinal fluid movement in dead human teeth is equally rare but this obvious flaw in the laboratory model for testing 'dentine bonding' materials was, somewhat conveniently, forgotten.

In real life clinical practice, which involved trying to bond to wet dentine in humans, often with gingival crevicular fluid flow or salivary contamination in close attendance, the clinical results proved to be very disappointing. Adhesion to enamel was very predictable but, in the early stages of dentine-bonding agents, this was *very* much less so. This did not stop manufacturers continuing to make claims based on laboratory studies of adhesion to bovine teeth or dead human teeth specimens.

These bond strengths were often reported *after 24 hours* on dead cows' teeth where there never was *any* possibility of fluid movement in the dentinal tubules. Many gullible dentists believed the claims of these manufacturers based on these largely irrelevant laboratory studies and consequently removed vast amounts of healthy enamel and dentine from their patients in order to deliver composite-retained porcelain veneers, or other even more destructive ceramic restorations, to their trusting patients.

In clinical practice it transpired that some pulps died or sometimes part, or all, of the restorations failed, to a greater or lesser extent, probably because of technical problems and because live human dentine is very different from the laboratory model of dead bovine or human dentine. Real human beings have an inconvenient and irritating propensity not to act like they should according to some laboratory experiment, or based on some fashionable, but idiotic, computer model.

This is not limited to dentistry. For instance, many countries in the world have been nearly bankrupted because some economists and idiotic, greedy or crooked

bankers believed some financial computer modelling without ruthless analysis. While dentine-bonding agents have, indeed, improved recently, the ethical dilemma still facing most sensible and caring dentists in providing aesthetic dentistry for their patients is 'just how much sound tooth structure can I sensibly, or reasonably, remove here in order to place an extensive veneer or a dentine-bonded ceramic veneered crown?'

Porcelain is brittle and the 'preparation' (a euphemism for 'destruction') of the sound tooth often has to be quite extensive to compensate for this brittleness. Enamel is only about 0.7 mm thick in the cervical region and exposure of dentine high up near the necks of the teeth brings the preparations perilously close to pulp there. If that area is not temporized adequately between the time of preparation and the time of placement of the veneer, it is likely that there will be at least two problems. One is that, if the temporary restorations are not bonded adequately in the cervical region, then bacterial contamination will damage the vulnerable pulps by micro-leakage in that region going straight through to pulp. Alternatively, if the restorations *are* bonded there to stop contamination and the temporary restorations are over contoured, there will be difficulties in gaining a predictable bond for the porcelain restoration in the most critical area near the cervical margin. This is usually because of increased crevicular fluid or frank gingival blood contamination at the time of cementation. Furthermore, the material that is used for cementation of these brittle ceramic restorations is a poorly filled resin and the dentine bond, even if adequate initially, may well degrade over time, possibly due to ongoing activity by pulpal metallo-proteinases.

In such a scenario the veneer is still, thereafter, likely to be held in position by the greater bond strength of the composite to the enamel, which would still be available further down towards the body and incisal part of the tooth, but the restoration may well leak in the cervical area at *any* point (Figure 15). In ethical marketing of any such restorations, patients who are, in effect, making a decision to trade their precious and non-renewable resource of enamel and dentine for ceramic-based restorations, need to be made very aware that they are



Figure 15. Incomplete failure of the porcelain veneer has allowed leakage in the cervical area. Note recession above UR1 and UR2 but not at UR3, which is unrestored.

essentially in the market for some 'self destruction'. In other words, they need to know, in advance, and preferably in writing, that they are going to lose some or much of the sound *structure* of their teeth in a critical area in order to achieve the appearance change that they desire (Box 1). They also need to know that, in many cases, there are alternatives to this approach. Bleaching, on its own or in combination with composite bonding, can satisfy the aesthetic desires of many patients at much lower biological risk and financial cost to them.

The important questions in aesthetic or 'cosmetic' dentistry

The questions that need to be addressed by patients and dentists in aesthetic treatment planning are:

- How much sound tooth tissue is going to be removed by the processes?
- How long will the restoration last?
- What will the fallback position be when it fails?
- What will happen to the tooth in the long term as a consequence of the proposed treatment?

Results of veneers and ethical dilemmas

There are some limited studies showing that careful, well trained operators using ceramic veneering techniques on highly selected patients who know they are being watched (a Heisenberg effect) will get good results.⁷ Even in such studies, any re-intervention is still classified as 'success' of the restoration when 'survival' of the restoration would be a much more accurate description. These good results do

The patient needs to understand what is proposed together with the reasons and any significant risks, side effects associated with it in the longer term as well as understanding the various alternative treatment options

Box 1.

Ethical Marketing and Porcelain Veneers?

- Are they really conservative?
- When done well they are beautiful and last
- Porcelain is brittle and breaks if deformed by 0.1%
- One path of insertion-unlike composite
- Evidence of compliance with guidelines not good in UK (Brunton 1997)
- Grossly over prescribed in extreme makeover programmes and in UK & USA

Box 2.

not necessarily apply to a wider population of patients, nor to a less closely observed, or less highly trained group of dentists. For instance, the report on porcelain veneers from Burke and Lucarotti,⁸ in 2009, showed disappointing results. When one examines the results of placement of veneers in the National Health Service in the UK at 10 years, only 53% of the porcelain veneers were still present without re-intervention. Under these circumstances, it is highly doubtful if one

can realistically, or honestly, refer to such porcelain veneers as 'permanent' restorations. It is a dentist's ethical duty to give patients the most relevant information available prior to them having any such elective supposedly 'cosmetic' treatment (Box 2). To promote potentially destructive ceramic veneer treatment as being 'permanent' in a dentist's discussions with patients or in a dentist's letters, advertising or promotional literature is dangerous.

Dentists vary in their ethics, approaches and skills

- Many are technically adept but philosophically bonkers and some have dubious ethics.
- Aggressive, destructive, fundamentalist wrong treatments, even done beautifully are still...the wrong treatments .
- Glossy surfaces or beautiful margins do not confer any immunity on teeth from further problems.

Box 3.

Tooth structure removal associated with various preparation designs for anterior teeth

- 63% to 72% of the coronal tooth tissue lost with All Ceramic or PFM preparations
- Ethical marketing issues?
- CONSENT ISSUES?
- Edelhoff D and Sorensen JA
- J.Prosth. Dent 2002 87(5) 503-509

Box 4.

Worryingly, the application of guidelines on preparations for the placement of veneers in the UK is poor.⁹ The guidelines for the provision of treatment with porcelain veneers involves following a strict clinical protocol involving special depth bur cuts, a high degree of precision in the preparations, a meticulous impression technique, a faultless temporization of the prepared teeth and considerable isolation and cementation

skills. If some, or many, of these elements are missing in a particular case, it is likely that some harm to the patient will ensue in the longer term.

As previously noted, the first part of the Hippocratic Oath is 'do no harm'. Elective removal of enamel and dentine *is* doing harm and can only be justified if there is a long-term, sustained benefit to the patient, preferably with good fallback

positions. Ideally, patients should be no worse off at the end of treatment (if treatment does go wrong) because the treatment undertaken was *elective*. Further on in the Hippocratic Oath there is the statement that 'extreme remedies should be reserved for extreme diseases'. From an ethical perspective it is highly questionable whether some mildly discoloured or slightly irregular teeth could be regarded as an extreme disease, but some 'remedies' involved can certainly be considered to be verging on the extreme (Box 3).

Porcelain veneers do certainly have a role, but only in the hands of highly trained, skilled, meticulous operators with flawless techniques and excellent technical support.

Ethical considerations in extensive or 'full mouth' rehabilitation

There are fashion changes and cultural differences in dentistry, particularly between the United States and Europe. Some high profile dentists in the United States in particular appear to have managed to convince their patients that what nature has provided for them in terms of the appearance, or function, of their teeth is a good starting point, but that 'American Dentistry' can improve on this. A brief review of the history of dentistry from that region will show that patients have often had extensive 'equilibrations' or full mouth rehabilitations, for example, TMJ problems or wear of teeth, and that this was based on nothing more dangerous than 'an anterior slide' or some 'non-working side interferences'. Sadly, such apparently dangerous occlusal interferences are often still used by some, probably well meaning but unscientific dentists, as a justification for extensive interventions for patients with, for example, temporomandibular joint dysfunction or mild toothwear. At one end of the market in managing wear there are relatively simple devices, such as soft guards, Michigan splints or Tanner devices. Full coverage occlusal 'splints' are unlikely to do great harm, although the actual, or scientifically provable, relationships between occlusion and toothwear or temporomandibular joint dysfunction continue to remain controversial.

Variations on occlusal splint



Figure 16. This bridge started life replacing two missing teeth. Twenty-five years later six teeth had to be root-filled and the dentist kept replacing the bridge with increasing numbers of posts until all the teeth ended up with root fractures, which then destroyed the bone.



Figure 17. It was probably the misguided extensive preparations for one path of insertion and in order to splint the teeth together that damaged the pulps, destroyed the load-bearing structure of the teeth and thereby caused the longer term problems.



Figure 18. This bulimic patient had an osteotomy and a full mouth PFM rehabilitation for tooth surface loss problems.

therapy, or at least detailed occlusal analysis and laboratory wax-up of models, are often included as part of the 'aesthetic work-up' when considering doing extensive veneers or all-ceramic restorations for supposedly 'cosmetic' reasons. This is, of course, a recognized view of a responsible body of dentists in treating aesthetic problems caused by wear but it is now a somewhat old fashioned approach, especially when one considers the amount of unnecessary destruction that it will involve for many of the relatively intact, innocent adjacent or



Figure 19. Many of these crowned teeth had to be root-filled after the crown placement. Removing residual tooth structure from other teeth in order to treat patients with bulimia is ethically and clinically dubious as the treatment probably destroys more tooth tissue than the bulimia did.

unaffected teeth.

It is doubtful if patients would consent to such extensive all-ceramic or zirconia-based, or CAD CAM type crowns or porcelain fused-to-metal crowns if they knew that somewhere between 63% and 72% of the structure of their teeth was on the line and would be destroyed by the high speed drill in the preparation process for such multiple crowns (Box 4) (Figures 18 and 19).¹ Many patients would probably be even less enthused about extensive tooth destruction for full coverage ceramic restorations if they knew that one in five of the teeth would be likely to die as a result of such intervention (Figures 16–19).³

Ethically, dentists have to warn patients what is really involved with the full mouth rehabilitation approach involving full, or nearly full, coverage ceramic veneered restorations undertaken for aesthetic reasons.

It is not sensible, not reasonable, not ethical and not professional to conceal from a patient the relevant and material negative aspects that are involved in his/her potentially dangerous treatment. In discussion about their options, the elective destruction of sound teeth, that is needed in order to provide the appearance change that the patient undoubtedly desires, should be emphasized. Potential patients need to be warned that such cosmetic treatment would often be less good for them, or their teeth, when viewed from a structural or long-term biologic point of view. No dentist should advertise in any form of communication in a false, misleading, deceptive or fraudulent manner that conveniently or deliberately

omits the relevant negative aspects of elective 'cosmetic' treatment.

A lot of this advice in relationship to aesthetic dentistry sounds and perhaps looks negative, but it is stated in order for it to provide the balancing information that patients need. It is emphasized here because some of the highest claims against dentists are in relationship to elective, supposedly 'cosmetic' dentistry (Kevin Lewis, Dental Protection Ltd, 2011 – Personal communication acknowledged with thanks). The numbers of such claims, as well as their size, have increased dramatically in the last 5 years. Over 50 cases have been settled for in excess of £30,000 and two cases are currently reserved (expected to cost) £250,000 each.

Reading the market

Patients have different hopes and aspirations in the care they seek for their aesthetic dental problems. It is well known for instance that women spend approximately three times more on cosmetics than males, although that ratio may be changing, with 'metro-sexuals' becoming more interested in cosmetic and grooming products, and there is also increased awareness of appearance and 'the fashion' in younger people.¹⁰

What have you to market?

There are a number of characteristics which normally affect the marketing of consumer services. These are:

- Tangibility;



Figure 20. Recession around these crowns which were done to change canines into lateral incisors means that the crowns now have a poor appearance. A better result could have been achieved by just 'bleaching and bonding' them without destroying any tooth tissue.

- Durability;
- Essentiality;
- Testability.

'Tangibility' refers to something of real substance. A tangible product such as a bridge, an implant-retained denture or an implant-retained crown, is usually easier to 'sell' than a more intangible service, such as a routine dental examination or sound, but boring, preventive advice which, although doing much more good for patients, does not sound quite so exciting to many dentists.

'Durability' of a service or dental product refers to how long it will last without replacement or re-intervention. Care needs to be exercised in glibly quoting some success figures from some studies. Many of the supposed successes in veneers, crowns or bridges have had either repair or re-cements or endodontic treatment carried out through the retainer or crown. However, to put the best spin on the results, the criterion often quoted for success in such flawed studies is 'Is the restoration still there?' rather than, perhaps, in ethical and honesty terms, the more relevant 'What happened to the tooth as a consequence of the restoration?'

Another important question is 'Did the restoration fail partially in one of its aesthetic aspects?', eg was there now significantly visible, aesthetically poor, gingival recession around the reported to be 'successful' restoration (Figure 20).

'Essentiality' refers to how necessary the treatment or intervention is, as judged by the patient's 'desires or wants'. In many cases of cosmetic dentistry, the 'essentiality' is somewhat questionable, is often very subjective and, in some cases, somewhat fickle ('I love it' – 'but not so sure' – 'maybe'). However, it is probably true to

say that patients purchase things they want or desire rather than things that 'they need'. This can prove very frustrating to many old fashioned dentists who often have a different view of what the patient 'needs' as opposed to what the patient 'wants'. Many such dentists feel that they have a real duty to protect patients from thinking of their teeth as a frivolous fashion accessory which some airhead patients seem to think should be available in spring or autumn versions!

The potential for ethical conflict in 'cosmetic' dentistry is considerable. Most of this sort of dentistry is best paid for out of discretionary, post tax, income rather than it being provided by third parties such as the National Health Service or other private dental schemes. Aesthetic or 'cosmetic' dentistry is often an optional service that can be postponed indefinitely. Such aesthetic services include elective veneers, bleaching and/or bonding, crown and bridgework, or adult orthodontics of various types, visibility and stability.

Market research – finding out what the patient wants, desires, or is in the market to receive

The De Bono Six Thinking Hats model¹¹

Successful marketing is based on gaining good quality information about the patient's desires, feelings and wants, as well as his/her possible needs. Once reliable information has been obtained, it is possible to start identifying ways to help fulfil the patient's aspirations, and satisfy those wants, desires or 'perceived needs', hopefully in a 'win-win' fashion. Market research in aesthetic dentistry involves systematically gathering, recording and analysing appropriate information about the patient and identifying possible solutions, while also being aware, ahead of time, of the potential problems with most of those possible solutions.

A useful model is the *Six Thinking Hats* one which has been proposed by Edward De Bono.¹¹ In this model, six different-coloured hats are used. To think about the overall problem one mentally puts on a **Blue** hat first, in order to think about the sequence in which one is going to address the patient's aesthetic and other possible problems and solutions.

A **White** is then mentally placed on one's head to think about the

Facts. Relevant facts might include: 'What is known about this particular patient?' and importantly 'What is not known about this patient?'. Thinking while wearing a **White** hat also focuses on what information is missing and how could one get that information. Is it testable? Is it provable? Is it reproducible? Is it a belief or a fact? Is it conjecture? At this stage, no emotion or judgement is involved. In applying this approach to aesthetic or 'cosmetic' dentistry, one would probably take a very detailed history of all aspects of the patient's opinions and views, as well as taking the normal clinical histories and, where relevant, take accurate study models, photographs and appropriate radiographs.

Other useful relevant information would include the usual periodontal indices, a detailed history of any previous dental problems or interventions, and especially information about *any other aesthetic treatments that have been received to any part of the body*. These could include having a nose operation for appearance reasons, breast augmentation, tummy tuck, botox injections, or the use of various fillers around the face. These patients are sometimes referred to as 'frequent flyers'. In other words, they are seeking to improve every physical aspect of the body that they can afford to, or wish to, change. The patient's satisfaction with such interventions needs to be evaluated carefully. Any history of them being dissatisfied with any of the previous aesthetic interventions should start to ring loud alarm bells in any sensible dentist's head.

In the *De Bono Six Thinking Hats* model, a **Red** hat is then exchanged for the **White** hat and this refers to the *emotional* aspects of the problems. The **Red** hat is all about how the patient feels about the problems and what his/her hopes, fears, aspiration, desires and wants really are. Considerate, gentle, but focused probing in this area is essential, as is ensuring that one is 'fully present' and utilizing careful listening skills. The old adage that 'God gave us two eyes, two ears and one mouth to be used in that proportion' is an apt one at this point. One has to listen very carefully to the words, phrases, emphasis and nuances, as well as watching for body language clues. It is probably sensible if the nurse writes down the precise words that the patient uses, as well as the way and the tone in which the patient uses them. Repeating back words

or phrases that have been used when addressing the patient in an 'interested' way shows that the dentist is 'actively listening' but, importantly, it often gets a patient to elaborate on what he/she really has on his/her agenda. It is important not to intervene with any challenges at this point but rather to let the patient express very openly and in detail how he/she *feels* about the whole problem. Acknowledgement and feedback that one is listening very carefully may help the patient to elaborate more fully, provided he/she is made to feel comfortable about disclosing this very personal information. The visual analogue scale described in the first of these articles can be very valuable to determine how the patient *feels* about 'self preservation' with 'self improvement' as opposed to 'self destruction'.

A patient's self-esteem and proportionality are important parts of this exercise. Undue concern about a minor aesthetic problem should also put a dentist on notice that they may be dealing with somebody who may have body image 'issues', or at the extreme end, body dysmorphic disorder. Another important question is: 'Why do they want the treatment?' and, more importantly, 'Why do they want it now?' Gentle probing as to whose idea it is that they should seek treatment, and why now, is also important. Discreet enquires about his/her personal and social life can often be gained by allowing the patient enough time to talk and by using open questions ('Why? When? What? How? Where? Who?').

If dentists are not good at this aspect of the history-taking, they are often wise to get a chatty, intelligent, capable nurse or other person in the practice to spend significant time on this information-gathering exercise. However, the dentist cannot really delegate this process completely in case certain subtle aspects 'get lost in translation'.

A finding at the beginning of aesthetic treatment is called 'a diagnosis' and a finding at the end of aesthetic treatment is called 'an excuse'.

A **Green** hat is the next hat to be used in order to think about possible solutions that might be considered – not necessarily at the first visit but perhaps at a subsequent visit, when the study models, photographs, radiographs and history can

be reviewed together with the patient to ensure that both sides have a clear understanding of the patient's perceptions of *his/her* various aesthetic issues.

A **Yellow** hat is then used to refine and consider further any other, possibly better, solutions or ideas, or variations on these than those thrown up by the initial **Green** hat thinking. The real question is usually 'Is there an even better way of doing this?' Ideally, these further developments of ideas would be an improvement, a better variation, or a closer fit with the patient's desires or aspirations.

A **Black** hat is then mentally donned in order to think about the negatives and dangers of each possible treatment, such as the ethical, legal, regulatory, reputational, financial, or other consequences that might be involved with the various different possible aesthetic treatments, especially if things happened to go wrong or the patient did not like the outcome at the end of treatment. 'What would they be left with if it goes wrong later on?', or 'Is this possible situation going to be retrievable?' are just two of the obvious questions that need to be addressed under '**Black** hat thinking'.

These hats can be used in various combinations, as appropriate, to help develop a sensible treatment plan with the patient's full knowledge and consent in relationship to any proposed treatment.

Test questions are an important part of this such as: 'Even if it goes very well, do you realize and accept that any cosmetic dentistry is *not* permanent and will need maintenance, attention and remakes from time to time?' Far from putting patients off treatment, most sensible (not airhead) patients are pleased by this honesty, particularly if the dentist also draws attention to the 'lack of permanence' of top of the range cars, expensive clothes or expensive holidays, which are often the real competition for their discretionary spending power.

Promotion and marketing

In many patients presenting with what they perceive to be a cosmetic dental problem there is usually quite a wide range of possible treatments available to them. At one end of the spectrum of choices is 'to do very little' because there is

very little sensible reason to interfere, or the prognosis for doing anything is so guarded that it is probably prudent not to make a bad situation worse. At the other end of the market are major interventions, such as multiple extractions, orthodontics, dentures, implant-retained crowns or bridges, implant-retained dentures, or orthognathic surgery.

Bleaching is at the conservative end of the range of possibilities and various ceramic full coverage crowns are at the more radical end. In the middle ground lies bleaching prior to composite bonding, orthodontic alignment of varying types and varying stability and, progressively (and more destructively), various preparations for porcelain veneers and dentine-bonded restorations made of varying materials, eg pressed ceramic, zirconia-based restorations or ProCera.

Patients need to be aware of this treatment range and be helped to understand where they will most likely be able to gain a sensible solution to their dental appearance problems. When dentists are describing these products or services, or promoting them to the general public, or to individual patients, they need to be very aware that they are in the middle of a legislative, legal and regulatory minefield. Because cosmetic dentistry doesn't have to be undertaken, patients seeking possible treatments are perhaps best considered as consumers of the 'cosmetic products'. Consumers are very aware of what their rights are under various bits of consumer protection regulation.

Consumer (Patient) Protection – Legal issues in the marketing of aesthetic products or services

Consumer protection regulation is covered by the Unfair Trading Regulations which came into force in May 2008. This implemented the European Commission's Unfair Commercial Practices Directive (UCPD). These regulations apply to dentists and other dental healthcare professionals. They have replaced most parts of the Trade Descriptions Act 1968 and the Consumer Protection Act of 1987.

The European Commercial Practices Directive bans any practice that is misleading, whether by an act of omission or an act of commission and which might cause, or would be likely to cause, the 'average

consumer' to take a different decision.

There is a separate definition of a 'vulnerable consumer' which describes vulnerability in terms of mental or physical infirmity, age (very young or elderly) and fragility.

'Fragility' means how gullible patients are likely to be and how easy it would be to take them in, or to deceive them. 'Fragility' in a vulnerable group is easy to exploit and some unethical dentists are proficient in taking advantage of this weakness. Gullible patients may readily believe anything a dentist tells them (eg 'The Perfect Smile'), or be taken in by specific claims, or susceptible to be influenced by claims of a certain type. It is unethical to exploit such patients for commercial gain, or to play on their vanities, frailties, or personal emotional insecurities.

It is also wrong to make them fearful as to the supposed potential problems in the future if they do not have a particular treatment ('if you don't have the treatment you'll struggle to get a job or lover, etc').

In law a 'misleading action' occurs when a practice, or practitioner, misleads by virtue of the information he/she sends, explains, or provides in such a way that it causes the *average* consumer to make, in this context, a different cosmetic decision. Claims for some dentistry could be deemed to be misleading, particularly if the dentist making the statement to the patient has no reasonable results available that the material, or technique, being proposed or used has been well proven in relevant long-term, well-designed clinical trials, or that the dentist has other good experience, or scientific grounds, on which to base any such claims. This information needs to be much more robust than anything an enthusiastic representative for the cosmetic material company or a 'hired gun' lecturer may well proclaim to be 'the evidence' for that material or technique.

The Consumer Protection Act established the concept of 'undue influence'. This is defined as: 'Exploiting a position of power in relation to the consumer (patient) so as to apply pressure, even without using, or threatening to use, force, in a way which significantly limits the consumer's ability to make an informed decision'. Many dentists would be considered to be in a 'position of power' and they ought to use that position of power ethically and wisely for

the benefit of the patient, even if, in doing so, it doesn't generate a financial profit to the dentist. In other words, if a patient in seeking an aesthetic dental improvement requests a dangerous, or inappropriate, treatment from a dentist, who ought to be in a position to advise the patient of the benefits and potential problems of that treatment/intervention, or any other practical treatments, and if the dentist then omits to tell the patient about these potentially negative aspects of the treatment, or the practical (but perhaps less lucrative for the dentist) options, they could be said to be abusing that 'position of power'.

Regulation 6 refers to 'misleading omissions'. In essence, this means causing a patient to make a different decision by failing to give him/her the relevant, appropriate, timely information that he/she needs to make an informed choice.

There is no ethical or legal excuse for omitting or hiding relevant information or providing it in an unclear, unintelligible, ambiguous or other inappropriate way. There is no such thing as a minor lapse in integrity.

Recent legislation (2008) about business protection from misleading marketing regulations has significant implications for aesthetic dentistry. This covers marketing and promotional activities, some of which are, or could be, designed to have patients referred to, or from, another health provider.

Content of marketing or promotional material

This is a multi-faceted and multi-layered problem. The conduct overall has to be considered when trying to determine whether the marketing has been deceptive, or misleading, by accident, or design. Dentists vary enormously in how they portray themselves and their practices. It is not infrequent now to see such words as 'Perfect', 'Perfection', 'Outstanding', 'Excellent', or 'A1' being used in a somewhat, or very, egotistical way by some dental practices, or practitioners. Such terms are sometimes used regardless of any *proven* justification for any such claims. Indeed, many dentists will look at other dentists' promotional material, or their practice images as advertised, and their eyebrows will sometimes shoot up underneath their hairline as they realize that there is a fairly significant discrepancy

between what is being portrayed to the patients (consumers) at large and what individual dental colleagues know about that particular dentist, his/her current practice ethos, his/her skills, training, education, or ethics.

In any event, it is dangerous to seek, or to follow slavishly, the advice from supposed 'experts' in the field of marketing and advertising, who may very well not be fully aware of the professional restrictions that apply to dentistry and may not be particularly aware of the tight regulatory framework in which dentists practice in an individual country.

Marketing or business 'experts' may have little practical understanding of the subtle differences between success and failure in 'cosmetic dentistry'. They may not even be aware that it is the individual patient who is the sole judge as to the acceptability of an aesthetic outcome and that this will depend on his/her individual or idiosyncratic expectations, regardless of how realistic or ridiculous these may be.

Apart from bleaching, possibly coupled with minor direct composite bonding, many of the other areas of 'cosmetic' or aesthetic dentistry are irreversible in nature, especially those involving the placement of large ceramic restorations. In seeking to improve the appearance of a patient's teeth with such procedures it is wise to remember the adage that 'dentists are not selling knickers and bras to temporarily improve somebody's attractiveness'.

What dentists do has a tendency to be irreversible or, at the very least, not readily reversible. Dentists who rely on marketing or advertising 'experts' to help them with the promotion of their products need to be fully cognisant of the variations in the regulatory framework of the country in which they practice. For instance, in Australia, recently introduced restrictions on advertising by dentists could only be described as 'draconian'.

Dentists need to be aware of the fact that it is they, themselves, who carry all the responsibilities for any problems rather than these being the responsibility of the marketing or advertising 'guru' who led them into trouble with the regulator, or with the patient, or with the patient's lawyers.

Any dentist seeking to expand by advertising in this potentially dangerous

market would be wise to consider getting the appropriate protection society or indemnifying organization to review the contents of any website or, as a sensible precaution, to get them to look at draft promotional or marketing literature well before they are finalized in order to save embarrassment. It is certainly wise to do this in advance of spending large sums of money in trying to promote aesthetic or 'cosmetic' services or products of any practice.

Duty of care in 'cosmetic' dentistry

It is often quite difficult to be absolutely precise about a dentist's duties in providing 'cosmetic dentistry' because there is no absolute agreement among dentists, or probably among patients, as to what constitutes 'ideal' or 'dental duty' in relationship to 'cosmetic' dentistry. Damaging teeth to produce a supposedly 'cosmetic improvement' is still damage regardless of how many books or articles one reads on the subject, or how many lectures one attends on the 'golden proportion' or other tenets of the 'cosmetic' dentist's faith.

Devotees of dental cosmetic 'gurus' often seem to believe glib statements from them as though they are provable facts rather than mere beliefs.

It is wise to remember the adage of Peter Drucker, a well known American management consultant, that 'Americans prefer the word "guru" because they cannot spell the word "charlatan"'. In the 'cosmetic dentistry' field, opinions and beliefs are common but (provable) facts are rare.

The advice of protection societies or indemnifying organizations

Dental Protection Ltd (www.dentalprotection.org) has published practical tips (Riskwise37)¹² in which dentists are strongly advised to review the content of the websites or any advertisements they wish to place. They are advised to review their practice information sheets and any other promotional literature that they routinely, or occasionally, make available to patients. General information in such practice leaflets may not apply at all, or only partially, to a particular patient. Care

needs to be used when writing to an individual patient to outline possible, or agreed, treatment options. Extreme care needs to be taken in describing *fairly* the relative benefits of one type of treatment as compared to another. The information needs to be presented in a balanced, neutral way rather than giving the patient just the information about the treatment the dentist would like to provide, either because they like doing it, believe, feel or think that they are very talented or trained at doing it, or might, possibly, be financially influenced to do it.

Marketing and competition amongst dentists

It is not smart to 'knock the opposition'. A dentist's view about another dentist's 'cosmetic talent or skills' should probably be best kept to him/herself. It is the patient's view that is most important and ought to be sought and considered as 'judge and jury' on the matter. It is unwise to make comparisons between charges that one would make oneself for any 'cosmetic' treatment rather than charges a competing dentist might make. Any statements that can't be substantiated in a court of law ought to be avoided.

Promises about aesthetic improvement

It is both sensible and prudent to be modest in the description of one's aesthetic skills or talents before starting treatment and to 'leave something in the margin for later'. By that it is meant that dentists should 'under promise and over deliver'. If aesthetic treatment exceeds a patient's expectations then both the patient and the dentist emerge as winners. If such treatment barely matches the patient's expectations, that may be acceptable. However, if the aesthetic outcome falls below the patient's expectations, even if that expectation is ridiculous or unrealistic, then the treatment will be considered to be a failure by the patient.

The patient may merely express disappointment to his/her spouse, partner, friends or relations, or the 'bad mouthing' may travel beyond that. This is known as the 3/11ths rule. This means that, if a

patient has a really good experience with the dental team and is happy with the aesthetic outcome he/she will tell three friends. If unhappy with the aesthetic outcome he/she will tell 11 friends. Such negative advertising by word of mouth about dentistry generally, but about cosmetic or aesthetic dentistry specifically, is a potential practice killer.

Conversely, if a patient is delighted with the dentist and his/her team because expectations have been exceeded, he/she will often become enthusiastic ambassadors for that practice, or just that dentist, who provided his/her perceived aesthetic benefits. Such satisfied patients are probably the best people to influence their friends or relations to seek care from that dentist, or practice, which has provided the treatment which they judge to be better, or maybe much better, than they were expecting.

In practical terms, dentists should set the aesthetic/cosmetic bar lower than they believe, or think, is achievable and get written agreement on this being the agreed standard well before starting any irreversible treatments.

A direct diagnostic build-up in composite on un-etched enamel in order to simulate what might be achieved allows the patient and/or any significant other person in his/her life enough time to assess the proposed changes. Much more importantly, it allows the treating dentist to evaluate the patient's reaction to those proposed changes. Any negative 'vibes' at that stage of the 'walking diagnostic composite bond-up' should set alarm bells ringing in the dentist's mind. It is sometimes sensible to get the patient to leave the surgery with this 'walking diagnostic bond up' in position for a number of hours in order to give the patient and others enough time to evaluate this appearance change before the temporary (ie not bonded) composite falls off and returns them to their usual appearance (Figures 21–24).

Dos and don'ts in the marketing of cosmetic dentistry

It is prudent to avoid the use of 'perfect' or 'excellent'. Other good words to avoid like the plague are 'world class', 'centre of excellence', 'fantastic', 'brilliant', 'permanent', 'long-lasting', 'durable' or



Figure 21. Patient with a five-year history of bulimia and very eroded teeth. These teeth do not need anything more taken off them as they are already short of tooth tissue.



Figure 22. A 'walking diagnostic bond-up' with direct composite on unetched enamel enables the dentist to evaluate a patient's reaction to the proposed changes. This can be left in position for some hours before it falls off to allow others to evaluate it.



Figure 23. A significant median diastema can be closed with direct composite without making the teeth look too wide.



Figure 24. Proposed changes 'mocked-up' with composite allows patient and dentist to evaluate the proposed aesthetic changes. This can be done without destroying any sound tooth tissue.

'problem-free'. These are populist but subjective terms and very few, if any, of these words apply to dentistry and certainly not to 'cosmetic' dentistry.

Don't claim to have any experience, expertise or qualification that you don't really possess or cannot prove in

a court of law.

Don't allow a patient's unrealistic expectations go unchallenged. By this it is meant that, if a patient says 'I hear you are brilliant at doing veneers' a quiet nod or a modest shrug of the shoulders or, worse, a reply such as 'Yes I am' or 'So you have heard', allows the patient to get tacit agreement that they are going to get an excellent result. This is sometimes expected by a patient even when his/her problem is significantly more difficult to manage than the case of a friend or relation, on which he/she is basing that flattering, but very dangerous, statement.

Don't make promises your hands can't keep.

Do be very careful about not offering promises or guarantees of any form.

Don't make the mistake of raising the bar of what the law reasonably expects of a competent dentist by giving further or additional undertakings that are likely to leave you exposed to a claim of breach of contract.¹³

Summary

Tempting as it might be to promote the practice, product, or dentist with self-indulgent phrases or praise in order to attract extra patients, this is a very dangerous game to play. Using words or images in order to persuade patients to accept treatment, or extra restorations, that may not be strictly necessary in order to improve the profitability of the practice is, in many cases, capable of being deemed as being unethical behaviour.

Any extra income gained in such circumstances has to be measured against the consequential loss of professional status and/or other, potentially more serious, risks. It is probably fair to say that aesthetic or 'cosmetic' dentistry provides more tests about ethical professional standards than many other forms of dentistry, especially when dentists are seeking to promote or expand their dental business, in particular in the current tough economic times.

Author's note and acknowledgement

This article is largely based on

Dental Protection Ltd modules 1 and 25 but applied to aesthetic dentistry with the author's own perspectives. For fuller details go to www.dentalprotection.org

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