Pursuit of excellence: A forgotten quest?

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Abstract

The article explores the current orthodontic landscape with respect to the challenges that affect the pursuit of excellence in the specialty. These challenges include marketing by manufacturing companies, financial pressures, marketplace competition, attaining practice efficiency, new product introduction with limited supporting evidence, attributing greater importance to patient experience than the best approach to treatment, and lack of public education regarding their best interests. Home or DIY treatment, bypassing office visits and the practitioner, have also emerged as a concerning trend with the public not clearly understanding the detrimental consequences that may ensue. An over reliance on technology may override individualized treatment and further compromise treatment results.

Key words: Aligner therapy, direct to consumer appliances, evidence-based practice, excellence, malocclusion, orthodontics, public education, technology.

Introduction

My career in dentistry started in the early 1980's at the University of the Witwatersrand in Johannesburg, South Africa. Early on, my interest in orthodontics was stimulated by not only the discipline itself, but also the rich heritage of the orthodontic department at the university, which had made some notable contributions to the specialty through the work of some practitioners who became well known on the international stage. With awe, I looked up to these specialists and the specialty, with the hope of one day contributing to the legacy that was pervasive in it.

Of course, this legacy was not unique to that institute, but rather one that was endemic in orthodontics around the world. The quest to be accepted onto a program leading to a specialist qualification in orthodontics was one aspired to by many, and the competition for such a position, always fierce. Residents in orthodontics have generally been known to be the crème de la crème of their undergraduate classes. The expectation of excellence in this discipline has contributed to its prestige. However, is that still the case? Unfortunately, the landscape is cluttered with many obstacles which seemingly detract from this pursuit.

The pursuit of excellence requires great commitment on many levels, including lifelong

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learning, self-evaluation, scrutiny of treatment results and objectives, and the ability to discern between what is reasonable practice, and what companies and individuals in the orthodontic arena have presented, often for the financial gain. Indeed, one of the fathers of dentistry, GV Black stated, "The professional man has no right other than to be a continuous student."[1] Many will relate to the words of an unknown author who stated, "When you know how to think, it empowers you far beyond those who know only what to think." However, I am not convinced of that being prevalent nowadays as many seek an approach which requires less thinking, and a technology-driven cookbook approach which can be delegated to as great an extent as possible.

Much has been mentioned over the last decade at least, concerning evidence-based practice and the hierarchy of evidence. Many are disinterested in the evidence and practice unsubstantiated techniques, the virtues of which have been expounded upon by influential opinion leaders. It is also known that not all products and protocols have enjoyed rigorous scrutiny. This is advantageous for some and disadvantageous for others. Ultimately, financial interests tend to dictate the process. Due to the nature of orthodontics, it often takes years for the reality to be realized, if at all. Harmful procedures can often be attenuated, and in many cases, the effects reversed. Many products are released onto the market without needing any approval or research before being used, but nevertheless marketed with great promise regarding their effectiveness. It would appear that the principle outlined in Occam's razor is prevalent, that is, "among competing hypotheses, the one with the fewest assumptions should be selected," thus presenting evidence which is convincing enough to put the protocol into practice. While this may work in some instances, it is by no means acceptable in all circumstances. I would suggest that a degree of cynicism is healthy. One anonymous author stated that, "the power of accurate observation is commonly called cynicism by those who have not got it." In the best interests of our patients, should things not be scrutinized more thoroughly first or is the promise of financial reward more important?

Karl Popper (1902–1994) stated that "If we are uncritical we shall always find what we want: We shall look for, and find, confirmations, and we shall look away from, and not see, whatever might be dangerous to our pet theories. In this way, it is only too easy to obtain what appears to be overwhelming evidence in favor of a theory which, if approached critically, would have been refuted." I cannot help but believe that a laissez-faire approach displayed by many which negates excellence will lead to loss of differentiation from less-qualified practitioners with an ultimate fading into obscurity of desirable orthodontic excellence.

It is well known that orthodontic supply companies with huge marketing budgets have introduced treatment modalities, which despite them being usable, have been promoted way beyond their ability for sustaining a level of excellence in line with the heritage of the specialty. The orthodontic evidence base is replete with information regarding the boundaries which should be respected during treatment. However, some of the popular treatment modalities do not respect these and are presented with the promise that for some reason, if one is using these, then the boundaries may be transgressed with the expectation of success. Products promising faster, easier, and more efficient treatment and with less discomfort are a well-known example.

If a practitioner suggests that a protocol or product does not work in their hands, then they are told that they must have done it incorrectly. However, where does the burden of proof lie with regard to such claims? Hitchens's razor suggests that "the burden of proof regarding the truthfulness of a claim lies with the one who makes the claim and if this burden is not met, the claim is unfounded and its opponents need not argue further to dismiss it." However, on many occasions, things are presented to the practitioner with the opposite approach. That is, if they cannot be proven ineffective, then they are appropriate and beneficial. It is also no surprise as to who benefits from such an approach. The longer a protocol or product can be used before being found wanting, the more the developers of such an approach stand to gain before they disappear into obscurity. Many practitioners have been carried along by the wave and the huge promise of financial success that these approaches provide. In this era of economic opportunism, we would be wise to heed the warning of George Bernard Shaw who stated, "beware of false knowledge; it is more dangerous than ignorance."

Does it sound logical that expansion beyond certain limits will suddenly be stable because a different appliance is used? Is aggressive interproximal reduction possibly detrimental in the long term? Can we expect extraordinary mandibular growth with certain appliances? What is the influence and power of the occlusion? How does occlusion impact on stability, the muscles and joints, as well as growth and development? What is the role of the dental and orthodontic practitioner in the diagnosis and treatment of sleep apnea? Some of these questions have been answered

in the literature, while others enjoy only moderate degrees of support. However, cognitive dissonance reigns supreme since the inconvenient truths contained in evidence are just too awkward to contemplate and do not necessarily contribute to the practice model that a practitioner aspires to, or the one that offers the best financial reward.

Presentations at congresses nowadays are often focused on marketing, practice efficiency, staff-related issues, increasing income, and patient numbers, as well as concepts like "same day starts." While these topics may be relevant, how do some of these concepts impact on excellence? Some practitioners adapt their favorite appliance to the patient rather than use the best appliance for the treatment. Sometimes, this decision is biased in terms of contributing to positive patient experience and promoting one's brand at the expense of accurate diagnosis and subsequent choice of treatment appliance. This may compromise the treatment result. For instance, why would you use headgear at the expense of enhancing your practice image? Some claim that "same day starts" are an important service to offer to those that want it and also to get the patient into the practice as quickly as possible in case they go elsewhere. This is done irrespective of the impact on appropriate diagnosis and treatment planning, as well as a thorough explanation and presentation of the proposed treatment plan to the patient or parent. It is questionable whether these approaches contribute to the accomplishment of excellence. This leads me to enquire whether the pursuit of excellence has been relegated in its importance and is secondary to the ultimate effect on the practice of the treating orthodontist.

The orthodontic landscape is influenced by other factors too. Residents graduating nowadays have significant debt and are under pressure to service this. Those in practice are competing in a very aggressive marketplace which is plagued by many issues that impact on the pursuit of excellence. Many patients are seeking treatment for the lowest price they can find, and are also pursuing dubious low-cost options aimed at limited treatment. The public are often unaware of the associated shortcomings which may include the practitioner taking shortcuts, using treatment options which do not necessarily contribute to the attainment of a comprehensive functional result, and direct-to-the-public aligner therapy which circumvents seeing a practitioner. Practitioners are spending less time with their patients, and delegation to auxiliaries and the use of customized treatment options are the norm. Cookbook type treatment with limited attention to detail lends itself best to this practice model.

Many nonspecialists are providing treatment, for which they are not adequately trained, and at a lower cost which is attractive to patients, again at the expense of excellence. Many practitioners have been seduced by powerful advertising, and are afraid they will miss the boat, sometimes without even knowing in which direction it is sailing. Customized systems offering minimal efforts from the specialist and being the epitome of an almost 'lazy approach' to traditional orthodontics have become attractive. Some see it as a sales tool in the clinic to "wow" their patients, who have possibly seen the professional advertising on mainstream media. Many are of the opinion that the "wow" factors introduced by technology are enough to coerce the patient or parent into starting treatment. Some doctors are aiming to reduce "doctor time" to a minimum in the quest to service increased patient numbers through delegation to staff and the use of technology. Indeed, practice management gurus have this as one of their premier topics when they lecture to practitioners.

Patients are demanding treatment that addresses only cosmetic concerns rather than comprehensive treatment to address their functional needs. The threat here is that if a practitioner is unwilling to undertake such limited treatment, then the patient will move on to the next practitioner who will accede to their wishes. Thus, orthodontists are undertaking such treatment in order not to lose patients, and after a while, this approach becomes their normal modus operandi that they believe in. "The fact that a believer is happier than a skeptic is no more to the point than the fact that a drunken man is happier than a sober one" (anonymous). It appears that we are becoming drunk at the expense of delivering on our specialist training and are slaves to the primary objective of efficient financial practice.

The public has shown a burgeoning interest in the low-cost mail-order aligner products which they can utilize without seeing an orthodontist. This presents possible shortcomings with regard to comprehensive examination, diagnosis, and treatment planning which are the hallmark of appropriate oral health-care treatment and carries the possibility of causing damage. The public need to be educated to do what is right rather than what is cheap or easy. "There is hardly anything in the world that some man cannot make a little worse and sell a little cheaper and the people who consider price only are this man's lawful prey." –John Ruskin.

The public would do well to heed the words of Martin Kelleher, a British prosthodontist, who stated, "If you deal with the lowest bidder, it is well to add on something for the risk you run, and if you do that, you will have enough to pay for something better."[2]

The protagonists of home treatment and remote monitored treatment, sometimes entitled "teledentistry," are of the opinion that all members of the public have the right to orthodontic treatment that they can afford, and believe that this option provides "access to care." It is debatable whether the concept of "access to care" can be used with regard to treatment that is of an elective nature. It is imperative that the public have access to treatment for conditions that threaten their health. However, a malocclusion is certainly not a threat to an individual's health. The advocates of such treatment have made the assertion that there is a massive untapped market which is not having treatment, sometimes claiming this to be in excess of 90% of the population. Is this not the main reason that they have become involved in this treatment modality, that is, the promise of massive financial reward? Is this in the best interests of the public? Does it contribute to excellence? Does it not relegate treatment to the level of remote-controlled tooth movement with limited diagnosis and planning and the possibility of unmonitored damage? It would appear that practitioners are becoming nothing more than tooth moving technicians, and now through remote control.

Practitioners and dental organizations have laid complaints with regard to some of these issues, and this has led to legal challenges and the threat of litigation. Some of the companies involved have significant financial resources which far exceed those of the dental and orthodontic organizations. This threatens to distort the balance in the litigious environment and result in compromises which may not be in the best interests of the public.

During my residency, the head of the orthodontic department suggested that we should be physicians of the head and neck. My belief that we should be striving to be "Physicians of the Craniomandibular system" and "Doctors of occlusal medicine," while at the same time, satisfying the esthetic desires of our patients, appears to be an unrealistic dream. It seems that many practitioners are becoming enslaved to merely being "tooth moving technicians" while giving scant cognizance to anything else other than cosmetic approval. They have forgotten having spent significant time, financial resources, and energy studying for many years. Is this excellence disappearing in the quest for mass treatment at low cost with scant respect for the individuals attached to the teeth and smiles in order that significant financial gains can be made? Companies are slaves to their shareholders and have little concern for the patients with whom they never have any contact. What happened to the dictum "primum non nocere" and the Hippocratic Oath? It would seem that treatment is becoming a commodity rather than a health-related discipline. In delivering the prestigious Salzmann lecture at the Annual Session of the American Association of Orthodontists in San Diego (2017), Greco suggested that it was necessary to "Combine the new economy with the old morality."

Mediocrity attempts to drag excellence down to its level. We should not trade our quest for superior treatment results for the inferior ones promoted by the avaricious and influential because they are "good enough" or because "straighter is better than nothing." Why train to be an orthodontic specialist with the intention of going in this direction? There are simply shorter and easier paths to get to the same place. As orthodontists, we need to establish ourselves as the trusted experts by immersing ourselves in continuing education and understanding the inherent complexities of the discipline. We need to offer our patients all the relevant options thus giving them the opportunity to make an informed decision as to what treatment option is best for their individual case. We cannot just give them what they demand without them understanding the advantages and disadvantages of the various treatment options.

If we are to accept that any treatment modality, for example, "aligner therapy," is the future, does it not follow that the standard of the results achieved with it should at least be as good, if not better than conventional fixed appliances? If the standard of results achieved is lower, then how can it be regarded as "the future"? Exaggerated claims of various movements with aligners and other gizmos have been proven by analysis such as superimpositions to be fallacious. Yet, many buy into it because it's just so convenient and satisfies other agendas. Does it make sense that some of the methods used to achieve results with aligners have been shown over many years of research to be unstable and problematic? Are we to believe that just because a different appliance is being used that the parameters have changed and that the side effects and lack of stability will be addressed? Do we perhaps believe that the plastic speaks a special language to the biological environment in which we work? Having said that, I am in favor of the use of plastic in appropriate cases, but where do the boundaries lie? If there are no boundaries, then a new standard of result has to become acceptable. A lower standard does little to differentiate the specialist from the "orthodontic dabbler." That is the precursor of the demise of the specialty for which many of us sacrificed so much to gain proficiency, education, and a degree to practice. Who are the architects of these circumstances and who are their allies?

As I sit and contemplate the current orthodontic landscape

and the direction it appears to be taking into the future, I feel a twinge of sadness. This does not seem to resemble the image I had built up when I so dearly wanted to be part of this specialty. I know from many discussions that I am not alone in these thoughts as many colleagues have debated this ad nauseam. It appears to some of us to be a repetitive and interminable discussion reaching the same conclusion each time. In the words of TS Eliot, "the recurrent end of the unending."

I have this Gatsby-esque vision of the proud fathers of our specialty looking over the orthodontic wasteland, akin to the eyes of Dr TJ Eckleburg, pondering the inexorable march of the discipline with great sadness.[3]

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