

Letters to the editor*

Vocation and altruism vs business and profit

I read with interest the guest editorial by James Macri on fallacious concepts and their potential to influence unsuspecting practitioners who attend short-term courses of postgraduate education, which appeared in the February 2019 issue (Macri JV. Logically fallacious. *Am J Orthod Dentofacial Orthop* 2019;155:155-6).

Dr Macri surmises that the questionable opinions that charlatans espouse are being taken as fact by some practitioners who seem to lack critical thinking skills and that the popularity of such programs suggests that there is no shortage of practitioners who are looking for something they feel was missing from their dental education. He emphasizes the importance of applying critical thinking and scientific literacy in everyday life and that teaching these skills must become a major goal in education. However, he concludes that we still have a long way to go to meet the goal of instilling scientific skepticism in all members of the dental profession.

Sadly, I would have to agree with him and I would mention that this issue is not just confined to the North American continent. In the U.K., the problem of general dental practitioners being lured by fallacious treatment concepts that are based on no more than teleologic common sense has been prevalent and challenged for over a quarter of a century.¹⁻⁶

Dr Macri has suggested that the problem may be twofold: namely, that practitioners have not had the training to be scientifically discerning and that they are looking for something that was missing from their dental education, presumably more than the ability to recognize an incipient malocclusion that would require referral for specialist management, such being the cost of an everexpanding undergraduate curriculum that has perhaps marginalized orthodontics to the sidelines of predoctoral education. And into this void comes the self-proclaimed weekend orthodontic course educator who is only too willing to show how simple and easy it is,⁷ not to mention the potential profits that can be made.^{8,9}

But is it simply just a matter of an unfulfilled thirst for orthodontic acumen alongside a naivety of critical

appraisal skills that is driving this phenomenon, or is there something else at play? Perhaps another reason why so many dentists are enrolling in short weekend orthodontic courses is because of the interest that is being displayed by their own patients regarding certain branded cosmetic orthodontic procedures, which are being advertised directly to the public by both commercial companies and dentists.

Indeed, in the U.K. this freedom to advertise was initiated in 1988, when the U.K. Government's Office of Fair Trading Standards forced the General Dental Council (the U.K.'s Regulatory Authority for dentists) to relax its former stringent advertising restrictions,¹⁰ and while this genie is now definitely out of the bottle, the potential for aggressive marketing techniques to undermine the profession's integrity has been noted, as has the fact that this seems to have been lost on a growing number of dentists who simply regard dentistry as a business rather than a profession.¹¹

And herein may be another important driver to the increasing numbers of dentists who are attending short-term educational courses: their willingness to disregard their own inadequate critical faculties in favor of pursuing the dollar sign.

There is certainly a feeling that there has been a pendulum swing of the personal attributes that seem to prevail among some professionals, that is, a shift from those predominantly of vocation and altruism toward those of business and profit instead.¹² Therefore, perhaps the solution to the problem should not just be the teaching of critical appraisal skills to dental undergraduates, but also to expand the share that ethics and professionalism should have in the dental curriculum.

Dr Macri concludes that we should teach our students to ask questions, in a respectful manner, about everything and from everyone, and he illustrates this with both an 1897 Tolstoy quotation and its abbreviation, erroneously attributed to Mark Twain, the latter of which said "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so."

However, the importance that humility has in keeping an enquiring mind receptive to new learning is much older than that. For example, the Elizabethan philosopher Francis Bacon noted that "If a man will begin with certainties, he shall end in doubts, but if he will be content to begin with doubts, he shall end in certainties."¹³

*Robert Chate
Colchester, England*

*The viewpoints expressed are solely those of the author(s) and do not reflect those of the editor(s), publisher(s), or Association.

Am J Orthod Dentofacial Orthop 2019;156:1-2
0889-5406/\$36.00

© 2019 by the American Association of Orthodontists. All rights reserved.
<http://dx.doi.org/10.1016/j.ajodo.2019.04.006>

REFERENCES

1. Chate RAC. The burden of proof: a critical review of orthodontic claims made by some general practitioners. *Am J Orthod Dentofac Orthop* 1994;106:96-105.
2. Chate RAC. Do we really want a quick fix? *Br Dent J* 2000;188:177-86.
3. O'Brien K, Sandler J. In the land of no evidence, is the salesman king? *Am J Orthod Dentofac Orthop* 2010;138:247-9.
4. Chate RAC. Truth or consequences: the potential implications of short-term cosmetic orthodontics for general dental practitioners. *Br Dent J* 2013;215:551-3.
5. Fleming PS, Springate SD, Chate RAC. Myths and realities in orthodontics. *Br Dent J* 2015;218:105-10.
6. Kelleher M. The "Uberization of orthodontics"—or how low can you go? *Dental Update* 2016;43:606-7.
7. Maini A, Chate RAC. Short-term orthodontics debate. *Br Dent J* 2014;216:386-9.
8. Chate RAC. Short term orthodontics: high profitability and low risk. *Br Dent J* 2014;217:107.
9. Burke FJT. (Almost) "instant orthodontics". *Dental Update* 2014;41:289.
10. Lawton F. President's address to the General Dental Council. *Br Dent J* 1988;164:305-7.
11. Newsome PRH, Langley PP. Professionalism, then and now. *Br Dent J* 2014;216:497-502.
12. Chate RAC. Nothing personal, it's just business. *Dental Update* 2016;43:891.
13. Bacon F. *Of the proficience of advancement of learning divine and humane*. London: Henri Tomes; 1605. Book 1, Chapter 5, Section 8.

Author's response

Thank you for your comments concerning my editorial, "Logically fallacious" (Macri JV. *Am J Orthod Dentofacial Orthop* 2019;155:155-6). You and I agree that there is a problem, not only in our profession but with society as well. Although I pointed out some thoughts that might change the tendency for the dental profession to think critically rather than react emotionally to the incredible amount of information we are exposed to, we both know this is never going to happen. As you pointed out, the philosopher Francis Bacon said that if a man begins his argument with a conclusion he will find all things he reads and sees as proof of his conclusion. Scientific method stresses the importance of starting with the argument or question, doing everything possible to disprove the question, and the result is not a certainty but a probability that the argument is correct. The intellectual roots of critical thinking are as ancient as its etymology, traceable in the literary record to the teachings of Socrates, 2,500 years ago. I agree that

the quotes do not reflect the origins of critical thinking and the fallacious reasoning that exists in society, but my intention was to present relatively contemporary comments as to relate to those not familiar with the teachings of the early philosophers.

I suggest that your "feeling" that there has been "a pendulum swing of the personal attributes that seem to prevail among some professionals," a shift from altruism to business, is an observation. You are making this statement based on preconceived biases that you have acquired because the people you are speaking of are not behaving as you think they should. That is not to say I disagree with you, but whether it is an accurate statement is a matter of opinion. The reality is that there are no truths, there are no absolutes, and what is true to a person is what the person believes to be true. What is considered to be true, what is considered to be ethical, may be different in the U.K. or the U.S. or the Middle East.

I am realistic enough to know that there really is no answer to the problem. I have taught at the high school and university levels for many years. Very little of what is taught is retained. What is ethical to one person may be unethical to another person. My editorial was an expression of my frustration of what I see happening in the profession and society over the 43 years that I have been practicing. I am sure that my comments will quietly fall to the wayside as the millions of other articles written on this subject have. I know I cannot change the world, I know I cannot convince someone to change their views that they believe. I do know that it is not true that seeing is believing, but rather that believing is seeing.

In an interesting TED Talk (www.youtube.com/watch?v=jobYTQTgeUE), "Why do we believe things that aren't true?" Philip Fernbach discussed a tweet by a rapper who goes by the stage name of B.o.B. His tweet went viral on the Internet when he tweeted out reasons why the Earth is flat. The astrophysicist Neil de Grasse Tyson tried to explain why what he believed just was not true. But B.o.B. was having none of that, he continued to argue that the Earth is flat. Believe it or not, B.o.B. is not the only one, there is a Flat Earth Society with roots going back to the early 1800s. Their motto is amazing: "We man the guns against oppression of thought and the Globularist lies of a new age." The word Globularist refers to "those nutty folks that think the earth is a sphere" and is not to be confused with Globalists.

*James Macri
Granger, Ind*

Am J Orthod Dentofacial Orthop 2019;156:2
0889-5406/\$36.00

© 2019 by the American Association of Orthodontists. All rights reserved.
<http://dx.doi.org/10.1016/j.ajodo.2019.04.005>