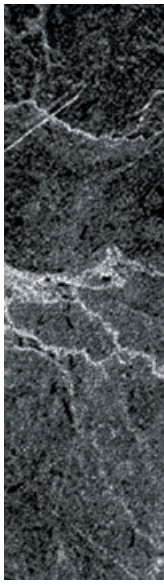

# Perspectives

## WHO AM I SUPPOSED TO BELIEVE?

Recently, I gave an all-day presentation at a major meeting in Eastern Canada. It was a multiday meeting, and a few days after I returned home I received a rather irate e-mail from a dentist who had attended my presentation. He began the e-mail by complimenting me on my lecture, saying how much he enjoyed it and how much he appreciated my "evidence-based" approach. However, he was quite upset because he attended another presentation the next day, and that lecturer disagreed with many of the things that I had said. He described some of the disagreements and ended with the very legitimate question, "Who am I supposed to believe"?

Editors, lecturers, and authors are all exhorting their audiences to practice "evidence-based" dentistry. Although this is a laudable goal, the reality is that there is a relatively small legitimate evidence base in restorative dentistry. The well-accepted hierarchy of evidence places randomized, controlled clinical trials (RCTs) at the top of the hierarchy, and there are very few RCTs that have been conducted related to restorative dentistry and dental materials.[1] The few systematic reviews that have been conducted to answer questions all invariably state that insufficient scientific evidence exists to validly answer the posed question.

However, there is evidence available to guide clinicians into making intelligent decisions regarding treatment planning, materials selection, and optimum delivery of the planned treatment. The evidence is usually not black and white, and it also comes from multiple sources. This necessitates that the evidence be synthesized and presented in a logical manner so that clinicians can utilize it.

It is also essential that clinicians possess a sound underlying philosophy of practice so that the synthesized evidence can be used in context of the overall goal for the patient. Two basic philosophic precepts that I have held over the years are that first, the patients should be better off when they leave the office than when they came in, and second, that the best dentistry is no dentistry. Some of the treatment that has been presented recently in "extreme makeover" shows and in the trade literature clearly violates these principles, and many of these patients would have been better off had they never seen the treating dentist.

It is quite clear that a majority of practicing dentists rely heavily on "experts" and their presentations to keep up to date on new materials and techniques in order to provide their patients with the best possible contemporary clinical dentistry. "Experts," as noted earlier, often present somewhat conflicting information to their audiences, and in order to answer the question "Who am I supposed to believe?" I will submit that both presenters and the dentists in the audience have significant responsibilities. I also propose that local, state, and national dental societies, universities, institutes, and other sponsors of continuing dental education programs need to make responsible decisions regarding who they hire to present their programs. This does not mean that they


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cannot bring in a speaker who may be controversial. It does mean that they should not bring in a clinician who is little more than a paid shill who will present basically an infomercial for a product or manufacturer.

The primary responsibility of an "expert" lecturer is to provide the best available "evidence-based" information on the topic. Clearly, not all lecturers are not equal in this respect, and presenters run the gamut ranging from those who simply spout manufacturer's dogma to erudite scientists whose entire presentations discuss complex statistical evaluations of almost incomprehensible data. Speakers are also expected to be articulate, entertaining, and able to keep the attention of the audience for long periods of time. Some lecturers are long on entertainment but short on information, and others the exact opposite.

It is also a primary responsibility of the lecturer to inform the audience on the relative strength of the evidence supporting the use of a new material. Most new products come to the market with almost no clinical testing. Many of these products have excellent physical properties and handling characteristics, but their clinical efficacy has yet to be established, and it may take some time to establish that efficacy. The audience must be informed of this and should be advised to watch for studies on the product to confirm this efficacy before using the product in their practices. The practice of recommending new products in the absence of clinical data is to be condemned. The audience relies on the expert to do the background investigation on the level of evidence for a product, and failure to do this is irresponsible.

It is the responsibility of the recipients of the lecture to carefully evaluate the material being presented. This requires that they have a certain level of knowledge to be able to determine the relative validity of the presented information. In order to acquire this essential base of knowledge, regular attendance at continuing education (CE) events is required, as is the regular reading of peer-reviewed journals as opposed to throw-away trade magazines. Expert lecturers are required to disclose any relevant relations with manufacturers or other sources that could potentially bias their presentation. This is done more frequently today than in the past, but some clearly avoid this disclosure on a regular basis. Thus, members of the audience need to be alert and able to detect a presenter who has essentially been bought by a manufacturer.

It is essential that recipients of continuing dental education evaluate the credentials of the presenters. Do they have specialty training in their area of expertise? Are they on the faculty of prestigious universities? Do they publish regularly in peer-reviewed journals, or are their publications limited to manufacturer-sponsored articles in some of the trade magazines? This can readily be done with available search engines on the Internet and is worth doing if you have elected to spend an entire day with an expert. This is not to say that specialty training or faculty appointments are essential for someone to provide a quality lecture, nor does specialty training or a faculty appointment guarantee that a lecture will provide quality information. In general, it does tip the odds in favor of the audience.

The issue of faculty appointments can be a tricky one. As someone who has spent most of his career as a full-time faculty member involved in teaching and research, it is distressing to see individuals with essentially "courtesy" appointments list these appointments as though they were their primary responsibility in their professional activities. Someone who is primarily in private practice, but gives a CE course once a year at a university should first list private practice and secondarily list the faculty appointment in their resumés.

Thus, lecturers have the responsibility to be knowledgeable, ethical, and honest with their audience. Recipients need to be knowledgeable and analytical about the

material that is presented. They need to determine that the material is current and that the speaker is a reliable purveyor of information. Does the speaker appear to be biased toward a specific product or manufacturer? Is there scientific evidence for what the speaker is saying? What is the relative weight of that evidence? Does it pass muster with the common sense test and does it make sense in context of what is commonly known and your experiences in clinical practice? Information that questions commonly held concepts or that is counter-intuitive is not necessarily wrong but should be analyzed carefully before changing well-accepted clinical practices. All of these questions need to be asked after viewing a presentation, but more importantly, clinicians are urged to do some research prior to attending a presentation in order to make intelligent decisions regarding which lectures to attend.

Finally, the sponsors of dental CE have major responsibilities. Often, members of dental societies, study clubs, and other organizations attend meetings simply because they are members of the organization and often do not even know who the speaker(s) will be at a given meeting. It is the responsibility of the meeting organizers to obtain the services of reliable, ethical, reputable speakers. This is not a simple task, especially if the group is composed of a wide spectrum of individuals. In general, I think most organizers seriously attempt to make good decisions but are often hindered by one major factor. Money!!!

Local dental societies often attempt to offset the costs of a meeting by asking a manufacturer or manufacturers to make a donation to the society, or to pay the honorarium of the speaker, or worse yet, provide a speaker for the meeting. Manufacturers have been exceedingly generous in this regard, but in these situations the potential for bias in the presentation is enormous. When manufacturers and laboratories sponsor a program, it is for the expressed purpose of selling more product or obtaining more clients. There is nothing wrong with this, but it can compromise the quality of the information that is presented. In my opinion, it is false economy for dental societies to rely on others to fund their meetings. Such practices reduce the cost of specific meetings, but dentists pay the price eventually as the costs of materials and laboratory services escalate.

Many universities are using CE programs as revenue centers to generate income for the school. There is nothing inherently wrong with this, but again, many institutions have their hands out to the manufacturers and are requesting donations or payments to offset the costs of speakers. As described earlier, this practice obviously raises the potential for bias and can seriously compromise the quality of the program.

In my opinion, universities have a greater level of responsibility when designing and offering CE programs. Although, clearly, universities cannot be responsible for every bit of course content, speakers should be previewed to ensure that the level of content is adequate. Again, that does not mean that controversial topics cannot be addressed or that controversial speakers should not be hired. In these situations, the promotional material for the presentation should be clear and informative, and the audience should know what type of program they are attending. Symposia to discuss controversial topics can be extremely valuable, and both sides of a controversy can be presented in a fair and balanced manner. Universities are in an excellent position to organize and present such symposia.

In summary, practicing dentists need to be continuous learners in order to provide their patients with quality, contemporary care. There are many sources for dentists to turn to in order to receive such information, and they can often receive conflicting information. Experts have the responsibility to ensure that their material is up to date and as evidence-based as possible. Dentists in the audience cannot be automatons, and must play an active role in their postdoctoral

education. They cannot be expected to have the knowledge and expertise of the experts, but they should investigate potential speakers before investing a complete day with them, and they also should critically analyze what has been presented. Organizers of CE programs also have responsibilities, and should reduce or eliminate their financial reliance on manufacturers and outside influences. He who pays the piper calls the tune.

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REFERENCE

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