Where Are We Going? How Do We Get There?

The farmer awoke with a vague feeling that something was amiss. The light flickering outside his window caught his attention, and he quickly realized that his barn was on fire. He dialed the local volunteer fire department and reported the blaze. The dispatcher assured him that help would soon be on the way. "Tell me," asked the dispatcher, "How do we get there?" After a moment's hesitation, the farmer replied, "Well, what happened to all them red trucks you fellas used to drive?" Not the answer the dispatcher was look for. What he really meant to ask was, "Where are we going?"

The farmer was offering a solution to the question, "How do we get there?" When it comes to the pursuit of the scientific basis for the clinical management of our patients, we do well to ask ourselves, "Where are we going, and how do we get there?"

Research is variously defined as "a systematic investigation to establish facts," "an active, diligent, and systematic process of inquiry..." even "diligent and thorough inquiry and investigation into a topic." At its most basic, however, research is simply the search for scientific truth. A couple of these searches have appeared in recent issues of this journal. One of them has, not surprisingly, raised some comments from our readers (see Letters to the Editor in this issue). The other has, surprisingly, raised no comments to date.

In the "surprising" category is an article by Butani et al,[1] which reported on the body of available research and study designs to support some of our most commonly performed procedures. While the authors found a relatively large volume of studies, most of it was not considered sufficiently strong evidence to support what we believe to be appropriate clinical treatment in an outcomes-based practice. True, the most common type of outcome reported in the literature was clinical in nature, but even this parameter was reported in only a minority of all the publications reviewed. Clinical outcomes comprised the majority of outcomes reported in studies on ferric sulfate pulpotomies (100%) and alternative restorative technique (59%). But studies of more time-honored procedures—space maintenance and stainless steel crowns—fared much worse. Very few randomized controlled trials were found for procedures widely performed in everyday practice. It makes sense that the evidence base would be better for more recently developed procedures. Our level of awareness regarding the need for outcomes-based research has been only recently raised. Today we have a better sense about where we are going and how to get there. Much of what we have been doing for a longer time, however, has not received similar scrutiny. Unless and until we perceive a problem with these tried-and-true procedures, they probably will not be subjected to a more rigorous review. This state of affairs, while not alarming, should make us think about the scientific bases of some of our clinical procedures.

On the other hand, the study that evoked overt responses was the article by Kumar et al regarding the practice characteristics of board certified and not-yet-certified pediatric dentists.[2] They found that regardless of certification status, most pediatric dentists reported that they practice at a high level of quality. This should be good news, but the limitations inherent in designing this type of study have raised questions. I leave it to our readers to peruse the letters and draw their own conclusions. A bigger question to me is whether our colleagues who consider challenging the board process should forego all the preparation and expense, instead citing this study as evidence that noncertified practitioners provide quality of care similar to that of board certified pediatric dentists. Of course they should not. There are many reasons to become board certified, but the primary one is to prove to oneself and one's peers that the practitioner meets the highest standards of clinical practice. The American Board of Pediatric Dentistry has greatly streamlined the certification process in recent years. If, as the study indicates, most pediatric dentists practice at such a high level, successful completion of the board process should not be an onerous task.

Where are we going? Toward high quality, outcomes-focused, evidence-based practices. How do we get there? Through high quality research, critical review, and board certification.

References

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2. Kumar A, Amini H, McTigue DJ, Beck M, Casamassimo PS. Board certification status and pediatric dentists' practice characteristics. Pediatr Dent 2005;27:12-18.

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