Letter to the Editor

Overcoming Barriers to Implementing Evidence-Based Dentistry

Dear Dr. Alvares:

Every dental educator recognizes that ideal dental care is evidence-based. As health professionals, dentists acknowledge an ethical obligation to provide the best health care for our patients. Frequently, practicing dentists and educators substitute subjective judgments and experience for evidence obtained from pivotal studies such as double-blind, placebo-controlled clinical trials. Why is it that dentists are among the very few health professionals who can ignore critical evaluation of the scientific literature and treat patients with personal experience as its equal? This ignoring of the literature is possible for several reasons, including that there is neither an incentive to use it nor a penalty for not using it.

Let’s look at some of the barriers to evidence-based practice: first, the practice perspective; second, the product perspective; and finally, the third-party payer perspective.

The Practice Perspective. Once students graduate, powerful forces conspire to shape the way some dentists practice. For reasons that include expediency, difficulty finding reliable evidence-based references, easy access to questionable information, and the desire for a quick profit, adherence to evidence-based practice frequently goes by the wayside. As a consequence, many dentists provide treatment without critically evaluating whether the care is consistent with the best evidence. One example is the persistence of the occlusal adjustment for TMJ dysfunction—a procedure still used in some dental schools and private practices in spite of strong evidence in the literature to the contrary. Alternate curriculum conveyed by some continuing education gurus often carries more influence than the conventional dental school teachings. Equally troubling for many dental schools is that some clinical instructors discount the official evidence-based curriculum and rely instead on personal experience. The student, placed in an awkward situation, accepts the authority of the faculty member without ever questioning the validity of experience vs. evidence. Questioning the recommendations of an instructor (in school or continuing education) would take effort, it would be confusing for a student, and it might even be interpreted as being disrespectful, rather than intellectually inquisitive.

The Product Perspective. Oral products may be introduced without rigorous clinical trials, frequently with only in vitro laboratory studies. Regulatory agencies such as the U.S. Food and Drug Administration (FDA) do not always mandate clinical research prior to product marketing. When mandated, the required clinical trials are extremely expensive, and many products are only mildly profitable or have extremely short clinical lifetimes, with only a few years prior to the next generation appearing on the market. In short, there may be little incentive to develop a body of evidence to support using the product.

The Third-Party Payer Perspective. The third-party payer perspective is important in this debate because it is on the “no incentive” side of the equation. Third-party payers, whether publicly funded like Medicaid or privately funded, face unique requirements. Third-party payers design programs that are based on a per-participant program enrollment value. After profit and administrative overhead expenses, the remaining funds are available to pay benefits. All programs face restraints on the per-participant enrollment values. If an insurer can offer lower-cost coverage that is similar to that provided by a higher-cost insurer, American businesses will elect to control their business costs by using the lower-cost insurance program. The fact that American businesses switch policies every three to five years to control costs maintains constant pressure on the insurance industry to produce low-cost products. This pressure to lower premium costs frequently prevents insurers from looking at the long-range health benefits for patients (the insured) since their actual financial relationship is with the business. This can be seen in the fact that few dental insurers, including Medicaid, see a reason to allow four cleanings per patient per year despite the evidence that this number has been
shown to reduce inflammation, which is implicated in an elevated risk of cardiovascular disease. Similarly, despite evidence that adult fluoride may be helpful in reducing decay in xerostomic patients, no insurer covers fluoride treatments for adults. The long-term general health and oral well-being of the insured are not the primary concern of these third-party payers, who operate not on a humanitarian but on a utilitarian basis.

What might alter attitudes, thereby encouraging evidence-based patient care? There must be both incentive and penalty for change to occur. Lower long-term costs would be an incentive for the insurance industry to change. This might be achieved by insuring patients for both general and oral health at the same time and by the same insurance provider. In a system with separate insurance programs for our teeth and toes, as if they are not part of the same body, the overall health of the patient will suffer. Strong evidence exists for an oral-systemic connection in health and disease. Large industries and institutions with a tradition of social consciousness, like universities, might benefit from finding a single company that insures general and oral health and designing a program aimed at the long-term health of the insured, thereby affecting the insurance company’s bottom line over the long term.

A further incentive, this time for the practitioner, would come from the insurance company or self-insured institution covering only evidence-based treatment. This would put pressure on companies that provide oral products to invest in more rigorous clinical trials that stand up to solid scrutiny. Furthermore, insurance companies should stop covering those treatment options that are no longer supported by evidence. This would change the practitioner’s attitude and ultimately change how and what we practice.

Finally, a penalty would have to be invoked for not using evidence and best practices. Dental schools would have to play a major role in educating future practitioners, the insurance industry, and the public about the importance and value of evidence-based practice. The penalty would come from public pressure on practitioners to ensure that patients receive that to which they are entitled. In the absence of a clear consensus about the importance of evidence-based dentistry and the creation of incentives and penalties for not using evidence-based dentistry, the one who suffers the most is the public, our raison d’être.

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