Guest Editorial Patient Care Based on the Best Available Evidence

Dentistry is changing rapidly, and the rate of change is predicted to accelerate as we move into the next millennium. This evolution is likely to make our clinical decision-making process even more difficult because many of the new technologies and volumes of information are conflicting. As busy clinicians, how will we find the time to sort through the tremendous amount of information, discard the hype, and alter our patient care by applying important advances? Clearly the way we have attempted to keep our practices on the leading edge in the past will not be sufficient in the future. Traditional decision-making is also being challenged by insurance companies, governmental agencies, and other third parties who ask us to produce the evidence upon which decisions are made, as well as demonstrate that treatment results in predictable and cost-effective outcomes.

Fortunately, a new paradigm is emerging that should help us manage these pressures: the Evidence-Based approach (EB). EB empowers the clinician. It provides a way of thinking that fosters less reliance on potentially biased information. EB de-emphasizes clinical intuition as a sufficient basis for treatment decision-making and stresses the evaluation of unbiased data. EB provides guidelines that allow us to critically evaluate the literature and make treatment recommendations based on the strength of the evidence.

Totally objective, hard data are not always available or needed for certain procedures and prescriptions. When data are uncertain or insufficient, the decision-maker must ask: Is there current and relevant information about a therapy, drug, disease, drug interaction, diagnostic method, surgical technique, dental material, adverse reaction or the like that will help me provide the best available treatment to meet the individual patient's needs? The answer to this question is a resounding "yes and no!" "Yes" because there is always new information, and "no" because a match between patient preferences and proven techniques can often be made from the existing repertoire of therapeutic modalities. This answer inevitably leads to another question: Am I giving this particular patient treatment options that represent the state of the art, at a quality level commensurate with the highest standard available, and at a cost that is reasonable and fair for the patient and myself? The answer to this should be "yes," and it is incumbent upon you, the practitioner, to continuously refine and update skills and knowledge.

The problem is that it is difficult to keep abreast of changes and sort out quality information from distortions. What do you believe? Anecdotal information based on experience of well-intentioned leaders and role models who present data without proper controls? Or do you set standards so stringent that they don't allow movement from your position on a subject, giving an excuse not to change? Obviously, neither option gives you flexibility and independence. We have discovered that EB is a way to manage most of these issues. The EB philosophy is simple: *(1)* use the highest quality of evidence to make clinical decisions, and *(2)* always use evidence when it is available.

Most conscientious practitioners already use a decision-making process similar to EB. They read journals, go to CE, buy audiovisual adjuncts, and network with other practitioners. The perpetuation and refinement of that process has reached a higher level in EB. For those of you who can't find time or desire, EB is a way to expedite the process.

How does this work? Does this approach provide me and my patients with better information? And where can I find examples that are appropriate for my practice? Fortunately, "the EB train has left the station." This issue of IJPRD contains the results of over 2 years of preparation, meetings, task forces, and symposia on the evidence that supports regenerative treatment for periodontal defects and regeneration associated with implants. The clinicians, researchers, staff, and consultants who have worked on this project represent the best international viewpoints, experience, and knowledge on the subject. We were also fortunate and extremely appreciative to receive guidance and invaluable resource documentation from Dr Gordon H. Guyatt at McMasters University Health Sciences Center, Hamilton, Ontario, Canada and Chairman of The Evidence-Based Medicine Working Group.

We hope you will find these papers interesting and helpful as you build your library of EB information. We suggest that you view this work as the first step in a series of contributions that will use the EB concepts. It will then be up to you to apply them to the many areas that affect your professional life.

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