

LETTERS

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PRACTICE-BASED RESEARCH

We were delighted to read in June *JADA* about the NIDCR's awarding of three grants totaling \$75 million (Drs. Bruce Pihlstrom and Lawrence Tabak, "The National Institute of Dental and Craniofacial Research: Research for the Practicing Dentist," *JADA* 2005;136:728-37).

This is a substantial award in anyone's terms, but when one learns that these grants are to support the establishment of "regional, 'practice-based research' research networks to investigate with greater scientific rigor 'everyday' issues in the delivery of oral health care,"¹ this places practice-based research firmly on the overall health care research map.

Three research networks are to be set up nationwide, with each network conducting "approximately 15 to 20 short-term clinical studies over the next seven years, comparing the benefits of different dental procedures, dental materials and preventive strategies."¹ The impetus behind these networks is the long-standing lack of high-quality research data to guide

treatment decisions in dental surgery. In other words, general practice dentistry in the United States is soon to have an evidence base to support treatment decisions. Further information on this NIDCR initiative may be found at "www.nidcr.nih.gov".

The benefits of practice-based research have not always been recognized, but have been championed by one of the coordinators of the U.S. initiative, Dr. Ivar Mjör, who considered that clinicians who took part in long-term clinical research projects thought this to be the best continuing education that they had ever had.² These clinicians also indicated that the recall of patients to review restorations for research purposes was an excellent practice builder. Our own experience, when having the privilege of being invited to a practice to assess restorations, confirms this, with patients invariably being enthusiastic about the fact that their dentist is involved in a research project.

Practice-based research has other advantages when compared with research conducted in dental schools. It uses real-world patients, and real-world dental health care workers, who are subjected to all the pressures of running a busy, but financially viable, practice.³ It also provides additional interest and mental stimulation for the clinician. A major challenge is the designing of studies that have a strong scientific basis, but may be carried out in the practice environment. Perhaps this is the difference between effectiveness, the performance of a material or technique in the real world, and efficacy, its performance in the ideal situation.

A principal difficulty of

practice-based research is that time spent on research takes away from time available for patient care and, therefore, has cost implications. Training in research also may be a problem, but many recent graduates will have undertaken an undergraduate research project that will have taught them the basics. Nevertheless, for the practitioner who has an idea for a research project and wishes to carry it out, it makes sense for the would-be researcher to seek the help of an experienced researcher, or to join a practitioner research group. Examples of these are Birmingham Research in Dental General Practice, or BRIDGE ("www.gdp-research.org.uk"), and the Product Research and Evaluation by Practitioners, or PREP Panel ("www.dentistry.bham.ac.uk/preppanel"), both of which have completed and published a number of successful research projects.⁴⁻⁷ In Scotland, the Dental Practice Based Research Network ("www.dundee.ac.uk/tuith/Static/Net.htm") has involved practitioners in research since 1999.

The U.S. initiative will produce a whole new generation of practice-based researchers and, hopefully, will produce answers about the success of the modern generation of treatments. Given that research has been considered "the silent partner in dental practice, the very scaffolding on which practice is built and sustained,"⁸ there can be little question that the way ahead for much clinical research is for it to be based in the real world of dental practice. We applaud the NIDCR for its vision in supporting such research in this substantial way, and hope that equivalent bodies on the other

side of the Atlantic will follow NIDCR's lead.

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