



# Evidence-based Dental Hygiene Practice – Where is the Evidence?

by Trisha E. O'Hehir, RDH, MS, Hygienetown Editorial Director

There's a lot of talk about evidence-based health care these days and we have Dr. Archie Cochrane (1909-1988), a Scottish medical researcher to thank for that (hence the Cochrane Collaboration). He believed in the importance of using sound judgment together with evidence to make the best possible clinical decisions.

Dr. Cochrane's experience as a prisoner of war in German hands gave him reason to question the value of medicine. He was assigned to provide medical care to 20,000 prisoners living on 600 calories a day and suffering from diarrhea, typhoid, diphtheria, infections, jaundice and sand-fly fever. From a ramshackle hospital, all he had to offer was aspirin, antacid and skin antiseptic. Without medical tests and medications, he expected hundreds to die of diphtheria alone. Instead, three of the four deaths experienced during his stay were from gunshot wounds, not disease. He understood that the excellent results had nothing to do with his clinical skills as a doctor, but clearly demonstrated the recuperative power of the human body.

Returning to Britain, Dr. Cochrane found the lack of evidence supporting treatments of his day frustrating. He spoke and wrote of the importance of systematically reviewing randomized controlled trials (RCTs). His words were recognized and valued by lay people, as well as health professionals as medical care at that time was often a matter of life and death. While some interventions appeared to treat the problem, they actually resulted in increased patient death. Doctors needed to know which treatments were both effective and free from serious side effects like death.

The first Cochrane Center opened in Oxford, UK in 1992 and now oral health-care reviews are part of the Cochrane Collaboration. There are many reviews directly related to oral health. Looking for research to support dental hygiene care found two reviews. The first review included one study on recall intervals since no other studies were found that fit inclusion cri-

teria for evaluation. The conclusion: "There is insufficient evidence to support or refute the practice of encouraging patients to attend for dental check-ups at six monthly intervals."

The review of routine scale and polish for periodontal health included nine studies and came to this conclusion: "The research

evidence is of insufficient quality to reach any conclusions regarding the beneficial and adverse effects of routine scaling and polishing for periodontal health and regarding the effects of providing this intervention at different time intervals." Since the studies evaluated were performed by periodontists or periodontal graduate students, this comment was included in the review: "There were no studies comparing the effects of scaling and polishing provided by dentists or professionals complementary to dentistry."

The scientific evidence for dental hygiene care is currently based on tradition and research performed by peri-

odontists, not dental hygienists. This lack of evidence holds true for dentistry as well as dental hygiene. Performing research to prove that what is currently being done works is not always interesting to researchers who want to "discover" something new and exciting. However, as a profession we do need to identify scientific evidence for the care we provide. It's not enough to say "But I know it works."

Scientific evidence is only one part of the equation. Clinicians must bear the responsibility of considering the nature of the condition, one's experience in treating a particular condition, and the preferences of individual patients. ■

## Trisha Live

Here's where you can catch Trisha live! To schedule Trisha to speak at your next national, state or local dental hygiene meeting, e-mail [trisha@hygienetown.com](mailto:trisha@hygienetown.com).

### March 4, 2011

Dentistry Show ■ Birmingham, UK

### March 10, 2011

Pacific Dental Conference ■ Vancouver, Canada

### March 12, 2011

Make Yourself Indispensable ■ Portland, Oregon

### March 24-26, 2011

Thomas P. Hinman Dental Meeting ■ Atlanta, Georgia

## In This Section

- 2 Perio Reports
- 6 Profile in Oral Health: Oral Probiotics
- 10 Message Board: Aesthetic Crown Lengthening of the Maxillary Anterior Teeth Due to a "Gummy Smile"
- 12 Message Board: Establishing a Perio Program/Hygiene Dept.
- 14 Book Review: "No More Allergies, Asthma or Sinus Infections"