Evidence-Based Dentistry

Quiz: What’s your EBD IQ?

Sequence generation is:
1. A new Star Trek series based in a petri dish
2. The app you can’t delete off your phone
3. The generation after Millennials
4. A method of assigning participants to their study groups

Allocation concealment is:
1. Accounting
2. Visiting your hair stylist regularly for a touch-up
3. Spanx
4. A process that keeps practitioners and patients unaware of assignments

If you chose answers one, two or three to either question, the Evidence Dentistry (EBD) Workshop at the AAPD Annual Session is an excellent choice for your next continuing education opportunity. If you picked answer four, you are correct and obviously have a solid knowledge of evidence-based dentistry. But there’s more. Here’s additional information on two vital concepts to help you assess the strength of research as it applies to the clinical practice of pediatric dentistry.

Sequence generation, as you no doubt guessed, is a method of assigning clinical study participants to their groups. It is a key part of a randomized controlled trial (RCT), a type of study that is often analyzed by systematic reviews. It is not enough that a RCT state that it randomized patients; a gold-standard RCT states the method of randomization, such as a computer-generated list.¹

Allocation concealment, or keeping study participants unaware of their assigned group, is vexing to researchers because it is often done incorrectly or not at all. The Cochrane Collaboration states, “Allocation concealment is distinct from blinding, and is aimed at preventing selection bias. Some attempts at concealing allocation are more prone to manipulation than others, and the method of allocation concealment is used as an assessment of the quality of a trial.”²

An example of allocation concealment is a study organizer phoning a central registry for a patient’s group assignment and thereby being completely removed from the allocation of treatments.³ Allocation concealment does indeed make a difference in findings by reducing bias. If a study does allocation concealment well, it is more likely to provide valid conclusions and therefore is more worthy of consideration.

The ability to vet research for validity, quickly and correctly, is essential in a world where publication rates outpace anyone’s ability to stay current. You can learn how to identify the best evidence by registering for the Evidence Dentistry Workshop at AAPD’s Annual Session in San Antonio.

In this real-world, interactive session, you will learn how to develop clinical questions using PICO (Population, Intervention, Comparator and Outcomes), a method to refine clinical questions and facilitate computer searches. PubMed, a free online index of health science literature, will be explained, and attendees will find out how to efficiently perform literature searches based on specific clinical questions.

Finally, practical information about research design will be discussed and you will critically evaluate published research studies and rank them according to the strength of evidence they provide.

Look for registration information in January!

Instructors:
Dr. N. Sue Seale, Professor at Baylor College of Dentistry, Dallas, Texas, and Editor-in-Chief of Pediatric Dentistry
Dr. Peter Buschang, Professor at Baylor College of Dentistry, Dallas, Texas

² Assessing allocation concealment and blinding in randomised controlled trials: why bother? Evid Based Nurs 2001;4:4-6