Evidenced-Based Consensus Conference – The Process

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April 26, 2016
What is Evidence-Based Dentistry?

• Evidence-based dentistry (EBD) is the application of a formal and repeatable review process to existing knowledge pertaining to a focused question of clinical importance.

• The EBD process consists of 4 steps.
Four steps in the EBD process

1. Development of a clinically relevant and focused question in the interest of finding the best available evidence to promote the oral health of patients.

2. Systematically conducting literature searches for all studies and databases that may help answer the clinically relevant question. The procedures used for conducting the systematic literature search need to be clearly specified.
Four steps in the EBD process

3. Translation of the findings from the systematic reviews so that the information can be understood by practitioners.

4. Make conclusions or recommendations concerning oral health care outcomes based on the best available evidence.

Modified from: *J Am Dent Assoc* 2003;134:690

NOTE: Application of the evidence-based approach is not unique to dentistry. The method is being used by all health care professionals.
Why is the EBD approach needed?

• The shear volume of information concerning the diagnosis, prevention, and treatment of oral diseases and conditions has become overwhelming.

• A working knowledge of the EBD approach facilitates the life-long learning process that is necessary to be a well-informed and competent clinician.
A few of the other journals that I must read to keep up...


The Scream or The Cry (1893) by Edvard Munch (1863-1944) is considered by many as an icon of profound anguish.

Why is the evidence-based approach than other assessment methods?

The evidence-based approach:

• Is objective,
• Is scientifically sound,
• Is patient-focused,
• Incorporates clinical experience,
• Stresses good judgment,
• Is thorough & comprehensive,
• Uses transparent methodology.

The evidence-based approach is NOT...

✓ Is not the only source of information upon which to make clinical decisions.

✓ Is not a substitute for clinical experience.

✓ Is not a replacement for clinical judgment.

✓ Does not replace the need to stay current (i.e., health care professionals need to routinely read the literature in an attempt to stay abreast of new developments).

“Parachutes reduce the risk of injury after gravitational challenge, but their effectiveness has not been proved with randomised controlled trials.”

“...those who advocate evidence-based medicine and criticise use of inter-ventions that lack an evidence base will not hesitate to demonstrate their commitment by volunteering for a double-blind, randomised, placebo-controlled, crossover trial.”
Strength of inference for clinical decision making depends on assessment methods.

<table>
<thead>
<tr>
<th>METHOD</th>
<th>PURPOSE</th>
<th>Inference Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys</td>
<td>Determines patterns of practice &amp; attitudes</td>
<td>WEAK</td>
</tr>
<tr>
<td>Expert Opinions</td>
<td>Provides guidance in areas in which data may be inadequate</td>
<td>WEAK</td>
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<tr>
<td>Narrative Literature Review</td>
<td>Overview of reviewer’s interpretation of subject.</td>
<td>MODERATE</td>
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<td></td>
<td>Collection of evidence is determined by reviewer’s personal experience.</td>
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<tr>
<td>Systematic Evidence-Based (EB) Review</td>
<td>Comprehensive, objective search and analysis of all evidence including unpublished data. More reliable &amp; accurate conclusions and inferences.</td>
<td>STRONG</td>
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<td>Consensus</td>
<td>Combines expertise of multiple stakeholders with results of systematic reviews. Highest level of evaluation and most useful.</td>
<td>STRONGEST</td>
</tr>
<tr>
<td>Based on EB</td>
<td></td>
<td></td>
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<tr>
<td>Systematic Reviews</td>
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In the discipline of Periodontology, the two organizations that have led the way in the planning and production of evidence-based consensus conferences are:

- European Federation of Periodontology (EFP)
- American Academy of Periodontology (AAP)
Examples of Consensus Conferences Developed by the American Academy of Periodontology:


Examples of Consensus Conferences Developed by the American Academy of Periodontology:


Examples of Consensus Conferences Developed by the European Federation of Periodontology:


*Proceedings of the European Workshop on Mechanical Plaque Control* (Castle of Münchenwiler, Berne, Switzerland) May 9-12, 1998. Published by Quintessence Books (314 pages).
Examples of Consensus Conferences Developed by the European Federation of Periodontology:


Examples of Consensus Conferences Co-developed by the American Academy of Periodontology and the European Federation of Periodontology:


Workshop on Classification of Periodontal and Peri-implant Diseases (Chicago, IL). Will be held on November 9-11, 2017 and the consensus statements and evidence-based reviews will be simultaneously published in the *Journal of Periodontology* (AAP) and the *Journal of Clinical Periodontology* (EFP).
What it takes to organize and successfully complete an evidence-based consensus conference:

- Recognize that a need exists (i.e., ideas, questions),
- Recruit sponsor(s) – funds ( $$$ ) often from industry,
- Form organizing committee,
- Select writers of evidence-based systematic reviews; select workshop participants,
- Working groups critically evaluate the reviews and draft **consensus statements** based on the evidence,
- Consensus statements are voted on (i.e., approve or reject) in plenary sessions by all participants.,
- Proceedings are peer-reviewed and published.
For complicated issues, it is not easy to reach a consensus!