Information Missing from Databases and Access Problems

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Influences on dental clinical decision making

**Evidence**

- The last patient
- Litigation society
- Audit prospect
- Payment & systems
- Experience level
- Education level
- Resources available
- Patient preferences
Influences on dental clinical decision making – initiatives

The Cochrane Collaboration
Established 1992

The “7 RCT forrest-plot” logo

Reflecting a 1989 SR of 7 interventional trials that, if implemented, could have averted the suffering and death of K baby lives
The new graduate

Director/teacher - filtered:
“Curriculum”
&
“Classic literature”
&
“Select textbooks”

Promotion a.k.a.
“Pizza-evenings”

Truths
Relative truths
Damn lies
The scientific basis for the practice of oral medicine and dentistry changes constantly.

How can these changes effectively be implemented into education and into clinical practice?
A current Information Overload

Meetings/courses

Colleagues

Advertising
- producers
- colleagues

Dental literature

Dental ‘science’
~25 000 articles/year

Truths
Relative truths
Damn lies

WWW

Patients & (-groups)

Popular magazines & Media

Information Missing from Databases and Access Problems
A 66 year old woman contacts your clinic due to oral lichen planus. She has read about a new treatment intervention described in her morning newspaper. Can you advise her?
Evidence-Based decision-making

1. Identify & synthesize EB from primary and secondary literature

2. EB summaries generated by:
   - Journals that critically appraise primary studies
   - Systematic reviews

3. Clinical Practice Guidelines, Protocols and Policies based on EB principles
Information need to answer a complex clinical question, e.g.,
What is the optimal technical solution in prostodontic therapy for a given condition?

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<th>Bivariate odds ratios</th>
<th>Bivariate significance</th>
<th>95% Confidence intervals</th>
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Longevity
Risk factors
Outcomes probabilities
QOL-dimension
Incremental Cost
Worst Case Scenario
Databases with information for Evidence-Based decision making

IADR
A role to play?

Databases
Primary / Secondary research

PubMed
Google scholar
OvidSP
ISI Web of KNOWLEDGE

Systematic Reviews

Interventions (RCTs) only

Clinical Guidelines

NHS
National Institute for Health Research

AHRQ
SIGN
Scotch Intercol

fda
NHS
National Institute for Health and Clinical Excellence

Information Missing from Databases and Access Problems
Resume - current problems

- Students should not be trained to memorize select information but instead how to critically appraise new information as a prerequisite for life-long learning.
- A main problem is not only lack of information – it’s at times too much, and sometimes conflicting.
- Many clinical questions are relatively straight-forward and hence EB for a treatment decision can – and should – be easy to find. However, other are complex and requires access to multi-dimensional information.
- Current information sources have different scopes and formats, which are not directly applicable to many facets of clinical dental decision-making.