Information Missing from Databases and Access Problems
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

Information Missing from Databases and Access Problems
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?
Periodicals within dentistry in circulation

1.6.2012:
- Magazine (250)
- Newsletter (114)
- Bulletin (43)
- Monography (33)
- Newspaper (26)
- Directory (21)
- Report (13)
- Proceedings (11)
- Handbook (9)
- Yearbook (9)
- Abstract/Index (5)
- Database (3)
- Catalog (2)

Journal (1135)

Source: Ulrich's International Periodicals Directory
An EB-information overload too?

Enter a Title, ISSN, or search term to find journals or other periodicals:

- evidence based
  - Retain my Advanced Search options

1 - 25 of 130 results for: +(evidence based ) +(title:(evidence based))

<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
<th>ISSN</th>
<th>Country</th>
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<tbody>
<tr>
<td>Evidence - Based Nursing</td>
<td>B M J Group</td>
<td>1468-9618</td>
<td>United Kingdom</td>
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<td>Nature Publishing Group</td>
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<td>B M J Group</td>
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<td>Worldviews on Evidence-Based Nursing</td>
<td>Wiley-Blackwell Publishing, Inc.</td>
<td>1741-6787</td>
<td>United States</td>
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A current Information Overload

- Advertising
  - producers
  - colleagues
- Meetings/courses
- Colleagues
- Dental literature
- Dental ‘science’
  ~25 000 articles/year
- Truths
- Relative truths
- Damn lies
- 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

Evidence-Based decision-making - alternative strategies

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 prosthodontic therapy for a given condition?

<table>
<thead>
<tr>
<th>QOL-dimension</th>
<th>Incremental Cost</th>
<th>Outcomes probabilities</th>
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<tbody>
<tr>
<td>Longevity</td>
<td>Risk factors</td>
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### Independent variables

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<th>Age group</th>
<th>Bivariate odds ratios</th>
<th>Bivariate significance</th>
<th>95% Confidence intervals</th>
<th>Multi-variate odds ratios</th>
<th>Multi-variate significance</th>
<th>95% Confidence intervals for multivariate odds ratios</th>
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<td>1.35 - 2.01</td>
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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.