Critically Appraised Topics

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15 November, 2002
Outline

● Introduction

● What is CAT

● Features & Limitations

● Current CAT database
Introduction

- Clinical encounters generate questions about etiology, diagnosis, prognosis, or therapy.

<table>
<thead>
<tr>
<th></th>
<th>Per In-patient</th>
<th>3 Out-patients</th>
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</thead>
<tbody>
<tr>
<td>Questions</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Answerable Q</td>
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<td>30% *2</td>
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Introduction

- Physicians reported being dissatisfied with:
  - Outdated texts
  - Poorly organized journals
  - Their lack of knowledge about searching, and critical appraisal
  - Lack of time to spend on tracking the best evidence needed to solve patient-problems.
How to Practice Evidence-Based Medicine

1. Critically appraised
2. Most relevant articles
3. Key study result summary
4. Evaluate our performance
5. Integrate and apply it in practice
What is a CAT?

- Definition: One-page summary of the evidence to a focused clinical question.

- Developed by *internal medicine fellows at McMaster University* (Sauve S. MD, Lee H.N.et al.) in 1995.
CAT elements

- **Title:**
  - Gives a declarative answer to your question.

- **Clinical bottom line**
  - On how this evidence is used in clinical care.

- **Clinical scenario**
  - Summary of the patient

- **The three- or four-part clinical *question*, and the *search terms* used to located the paper (for later updating)**

- **The study**
  - A summary of the study methods

- **The evidence**
  - A table summarizing the key results.

- **Comments and References**

- **Others**
  - Author, expiry date
Features

- Broad Scope
  - Etiology
  - Diagnosis
  - Therapy
  - Prognosis

- Patient based

- Evidence based
  - Literature-searching skills
  - Critical appraisal skills
  - Practice EBM

- Concise, portable

- Educational value
  - Ward rounds
  - Journal clubs
Features

● Broad scope
  - CATs address clinical questions about diagnosis, therapy, prognosis, harm.

● Patient based
  - CATs have appeal to clinical learners at all levels from medical students to faculty members.

● Evidence based, they promote
  - The acquisition and polishing of literature-searching
  - Critical appraisal skills
  - The translation of evidence into patient-care decisions.

● Concise and portable
  - Quick reference for you, especially at the bedside.

● Educational value
  - As an interactive educational tool, CATs can enrich the quality of ward rounds or journal clubs
Limitations

● First is the limited applicability of individual CAT.
  – Created in busy practice
  – It is a single piece of evidence summarized
  – Incomplete, non-representative of the entire body of evidence

● Individual CATs can be wrong
  – First appear as drafts, without peer review.
  – May contain inferior evidence, or errors of fact, calculation, or interpretation.

● They have a short “half life”
  – be obsolete as new evidence becomes available.
CAT databases

- Centre for Evidence-Based Medicine (CATbank-Oxford, UK)
  64 CATs.

- Critically Appraised Topics
  University of Rochester Medical Center. 109 CATs

  - Evidence-Based Pediatrics Web Site
    University of Michigan. <141 CATs (duplicated)

  - UNC Critically Appraised Topics
    University of North Carolina at Chapel Hill, School of Medicine. (69 CATs).

- BETs (Best Evidence Topics) in Emergency Medicine
  - Manchester Royal Infirmary, UK (487 CATs)
What we can do

CATbank-Oxford, UK
64 CATs

CATs
Univ. of Rochester Medical Center
109

evidence-based pediatrics web site
Univ. of Michigan
141 (duplication included)

UNC CATs
Univ. of North Carolina at Chapel Hill
69

Integrated database

Download
Search