Evidence-Based Veterinary Medicine

Needs and education at the University of Liège

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Bibliothèque des Sciences de la Vie
Users' education at the BSV

4 libraries / 4 Faculties

3. Human Medicine
4. Veterinary Medicine
5. Psychology and Education Sciences

To share experience in users' education
## EBM teaching at the BSV

### Curriculum in information sciences at the Faculty of Medicine

<table>
<thead>
<tr>
<th>Year</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>First cycle</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>Computer literacy</td>
</tr>
<tr>
<td>Year 2</td>
<td>Using the medical library</td>
</tr>
<tr>
<td></td>
<td>SearchingPubMed (basic mode)</td>
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<tr>
<td></td>
<td>Analysing the structure of a research article</td>
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<tr>
<td></td>
<td>Evaluating the biomedical Internet</td>
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<tr>
<td>Second cycle</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>Pyramid of evidence</td>
</tr>
<tr>
<td></td>
<td>Cochrane Library</td>
</tr>
<tr>
<td></td>
<td>Clinical Evidence &amp; EBM Reviews (Ovid)</td>
</tr>
<tr>
<td></td>
<td>Transforming need into question (PICO)</td>
</tr>
<tr>
<td></td>
<td>Advanced searching on Ovid platform</td>
</tr>
<tr>
<td></td>
<td>Clinical queries</td>
</tr>
<tr>
<td>Year 2</td>
<td>Evaluation grid for RCT (therapy)</td>
</tr>
</tbody>
</table>
From EBM to EBVM?

➢ To survey veterinary practitioners
  • Have they heard about EBVM?
  • Would they be interested in?

➢ To compare sources of information
  • Are they adapted to EB(V)M practice?

➢ To optimize users’ education
  • Is the EBM course content suited to EBVM?
  • What adaptations?
Our reference

Handbook of Evidence-Based Veterinary Medicine
Peter Cockcroft and Mark Holmes

Blackwell Publishing, 2003
Results of the e-mailed survey

- Sample: 800 private "vet." interested in CE / LLL
- Participation: 138 feedback (17%)
- Results: The surveyed veterinarians...
  - never heard about EBVM (93%)
  - frequently need foreground information (100%) and ...
    - seek evidence in textbooks, journals, Internet, ... (54%)
    - advise with respected colleagues (28%)
    - refer the patient (28%)
    - base the clinical decision on background knowledge (6%)
  - encounter problems during their search (60%)
  - have never been trained in information sciences (IS) (40%)
  - are satisfied with their IS education/skills (25%)
Information sources

Are they adapted to EB(V)M practice?

➢ To compare the available information
  • about therapeutic interventions
  • in human ⇔ small/large animals

➢ To search Medline (Ovid) and CAB (SPIRS)

➢ To compare the results
Pyramid of evidence

- Single case reports
- Control case studies
- Cohort studies
- Blinded RCTs
- Meta-analyses
- Systematic reviews

Integrative Literature

Individual Studies
## GNRH & ovarian cysts treatment

<table>
<thead>
<tr>
<th>Publication type</th>
<th>Medline / OVID</th>
<th></th>
<th>CAB/SPIRS</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Human</td>
<td>Cattle</td>
<td>Cattle</td>
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<tr>
<td>All types</td>
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<td>13</td>
<td>15</td>
<td></td>
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<tr>
<td>Review articles (non systematic)</td>
<td>11</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>

Retrieved citations classified according to hierarchy of evidence

<table>
<thead>
<tr>
<th>Classification</th>
<th>Medline / OVID</th>
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<th>CAB/SPIRS</th>
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</thead>
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<td>EBM reviews</td>
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<tr>
<td>Meta-analysis</td>
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<td>RCTs</td>
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<td>Clinical trials</td>
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<td>13</td>
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<tr>
<td>Clinical studies</td>
<td>nd</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Controlled searches (using subject headings) - Limit 1996-2004
Conclusion ➔ EBVM

- Public
- Tools
- Courses
The veterinarians...

- Seek evidence to support decision making
- Prefer scientific sources
- Are moderately satisfied with their searches
- Are rather poorly trained
- Are interested in improving their skills
- Never heard of EBVM
The tools in veterinary medicine ....

- Are not adapted to the EBVM practice
- The literature has ...
  - Smaller content
  - No Cochrane Library
  - No systematic reviews
  - Very few meta-analyses
  - Few RCTs
- The search engines need to be adapted with
  - integrated filters for clinical queries
  - limits according to the publication types
Teaching EBVM

- The transposition of the EBM course to Vet. Med. is not conceivable without modification
- New evaluation grids have to be developed
- Librarians have to be trained to evaluate sources of poorer evidence
- The collaboration with the clinical staff is needed