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Opening up the Evidence: Evidence-Based Practice and Open Access

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Opening up the Evidence: Evidence-Based Practice and Open Access

Description
Evidence-based practice in health care is dependent on access to the best evidence. Open access publications promise to "unlock" a greater amount of evidence for practitioners' use, and provide a welcome alternative to expensive serial subscriptions.

Keywords
EBP, evidence-based practice, open access

Disciplines
Library and Information Science | Medicine and Health Sciences

Comments

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Opening up the Evidence:
Evidence-Based Practice and Open Access

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Evidence-based practice

→ Applying “best evidence” to inform clinical decision making

→ Sackett’s EBM process:

  • Ask
  • **Access**
  • Appraise
  • Apply
  • Assess

So where is the evidence?
Commercial publishers

Societies/Associations
Priced out of evidence...

**Average Rise in Serial Costs (per title) Compared to Change in CPI**

Options for practitioners/researchers

→ Pay for individual subscriptions
→ Pay on per article basis
→ Library ILL service:
  → May be free from own institution
  → No institutional service? May have to pay (e.g. Loansome Doc)
  → ILL may be too inconvenient (time, cost, etc.)

→ Depend only on freely available full-text articles...
### Mayo Clinic study (2004)**

- Compared 324 journals with available online full text (FUTON), with only abstracts available online and with not abstracts available online (NAA).
- Found statistically significant difference between impact factors (ISI) of FUTON, abstract only and NAA journals.
- Cited anecdotal evidence from an informal survey of physicians and residents; “uniformly admitted” using FUTON articles to find information/answer questions.

### OA CAVEATS

- Only small fraction of the journals examined were available “free FUTON”
- Impact factor is not a reliable measure of the actual use of an article

However...
Common sense implications?

→ Articles available FUTON (free or not) are more likely to be accessed/used than those which are not

→ People are more likely to use what is most easily available to them; especially if time is an issue...

→ “Best evidence” becomes “best available evidence”

BMJ study (2008) confirms “free FUTON” edge...

• RCT of 1,619 articles/reviews from 11 American Physiological Society journals
• Open access articles had 89% more full-text downloads and 23% more unique visitors
Further implications for EBP...

→ Open access not only helps individual practitioners, but also researchers conducting systematic reviews, creating “distilled” clinical content, etc.

→ Most valuable evidence is that which is “pre-appraised” (systematic reviews, CAPs, CATs, etc.) – and that is easy to access

\[
\frac{\text{validity} \times \text{reliability}}{\text{work}} = \text{usefulness}
\]

CLINICAL BOTTOM LINE:

Evidence-based practice is going to be less robust than it should be if the evidence is not available to inform the practice.
{There IS hope...}

- BMJ Journals
- PubMed Central
- PLoS Medicine
- BioMed Central
- Journal of Clinical Investigation
- Directory of Open Access Journals (Health Sciences Journals)
- NIH Public Access Policy

Future directions...

Need not only free/OA sources of original research, but also pre-appraised evidence
Pacific University: Realities//Possibilities

• SPP, PA, PT dissertations and capstone projects
• OT case projects and CATs
• OA undergrad research journal
• OA interdisciplinary healthcare journal
• Pilot project for data sharing
• Educating students/faculty about open access issues and implications for their clinical practice
Resources:


