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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

Prepared/presented for the NN/LM PNR RML Rendezvous ("Scholarly Communications Update"), April 15, 2009. See <http://nnlm.gov/pnr/training/RMLrendezvous.html> for details.

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 pening up the Evidence:

Evidence-Based Practice and Open Access

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Evidence-based practice

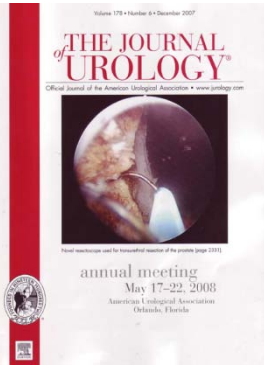
→ Applying “best evidence” to inform clinical decision making

→ Sackett’s EBM process:

- Ask
- **Access**
- Appraise
- Apply
- Assess

So where is the evidence?

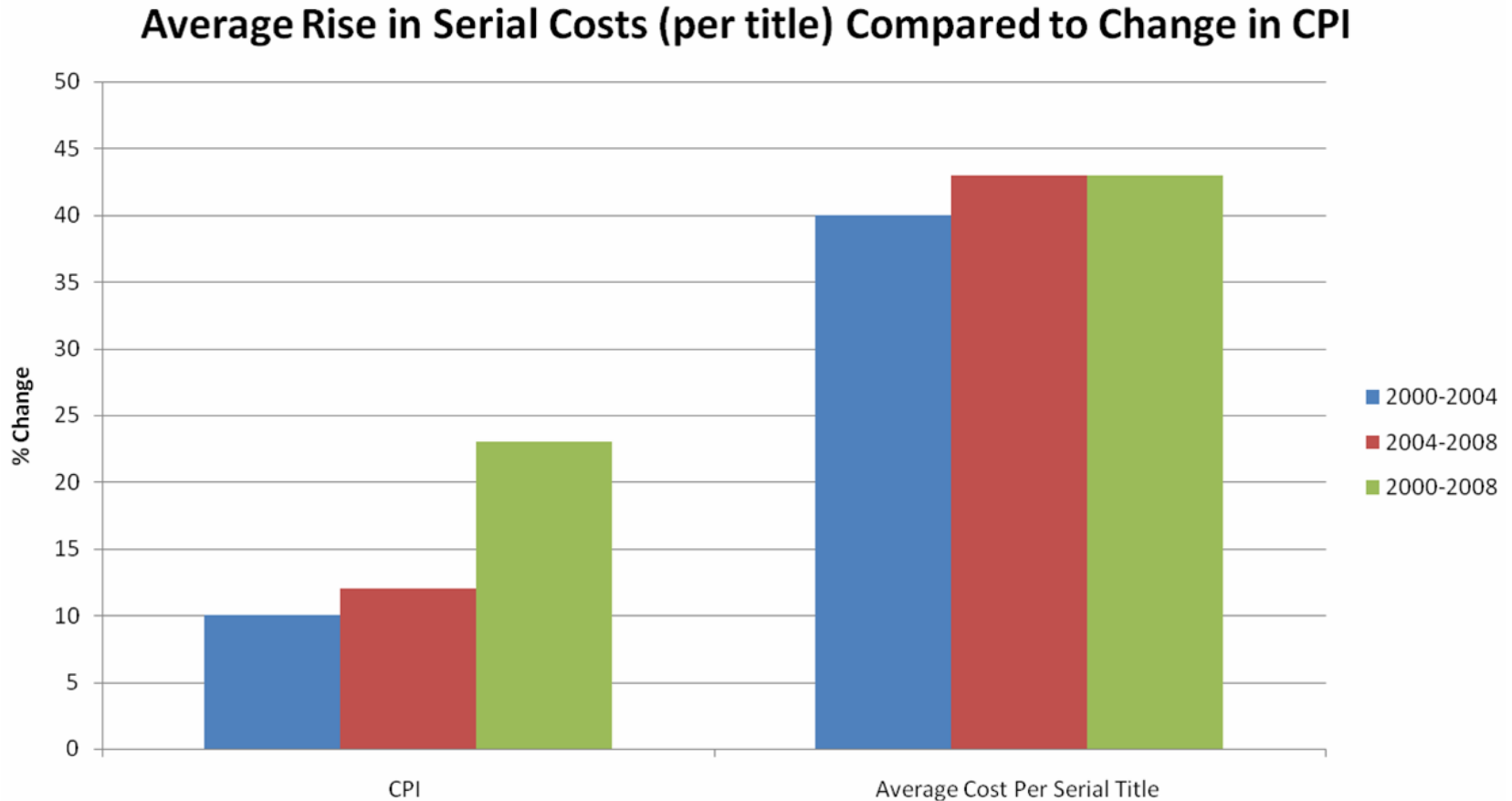
Commercial publishers



Societies/Associations



Priced out of evidence...



SERIALS PRICING SOURCE: *Library Journal* PERIODICALS PRICE SURVEY 2008; *Library Journal* PERIODICALS PRICE SURVEY 2004

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...

FUTON (Full-text on the net/online) Bias

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...

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

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”

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

$$\frac{\textit{(validity x reliability)}}{\textit{work}} = \textit{usefulness}$$

EQUATION: Grandage, K.K., Slawson, D.C., Shaughnessy, A.F. (2002).

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:

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