

1-1-2009

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

Isaac Gilman
Pacific University,

Recommended Citation

Gilman, Isaac, "Opening up the Evidence: Evidence-Based Practice and Open Access" (2009). *Faculty Scholarship (PUL)*. Paper 4.
<http://commons.pacificu.edu/libfac/4>

This Presentation is brought to you for free and open access by the Pacific University Libraries at CommonKnowledge. It has been accepted for inclusion in Faculty Scholarship (PUL) by an authorized administrator of CommonKnowledge. For more information, please contact gilmani@pacificu.edu.

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.

Rights



This work is licensed under a [Creative Commons Attribution 3.0 License](https://creativecommons.org/licenses/by/3.0/).

 pening up the Evidence:

Evidence-Based Practice and Open Access

Isaac Gilman, MLIS
Pacific University Libraries



Evidence-based practice

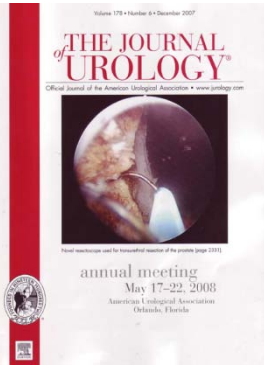
→ Applying “best evidence” to inform clinical decision making

→ Sackett’s EBM process:

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

So where is the evidence?

Commercial publishers

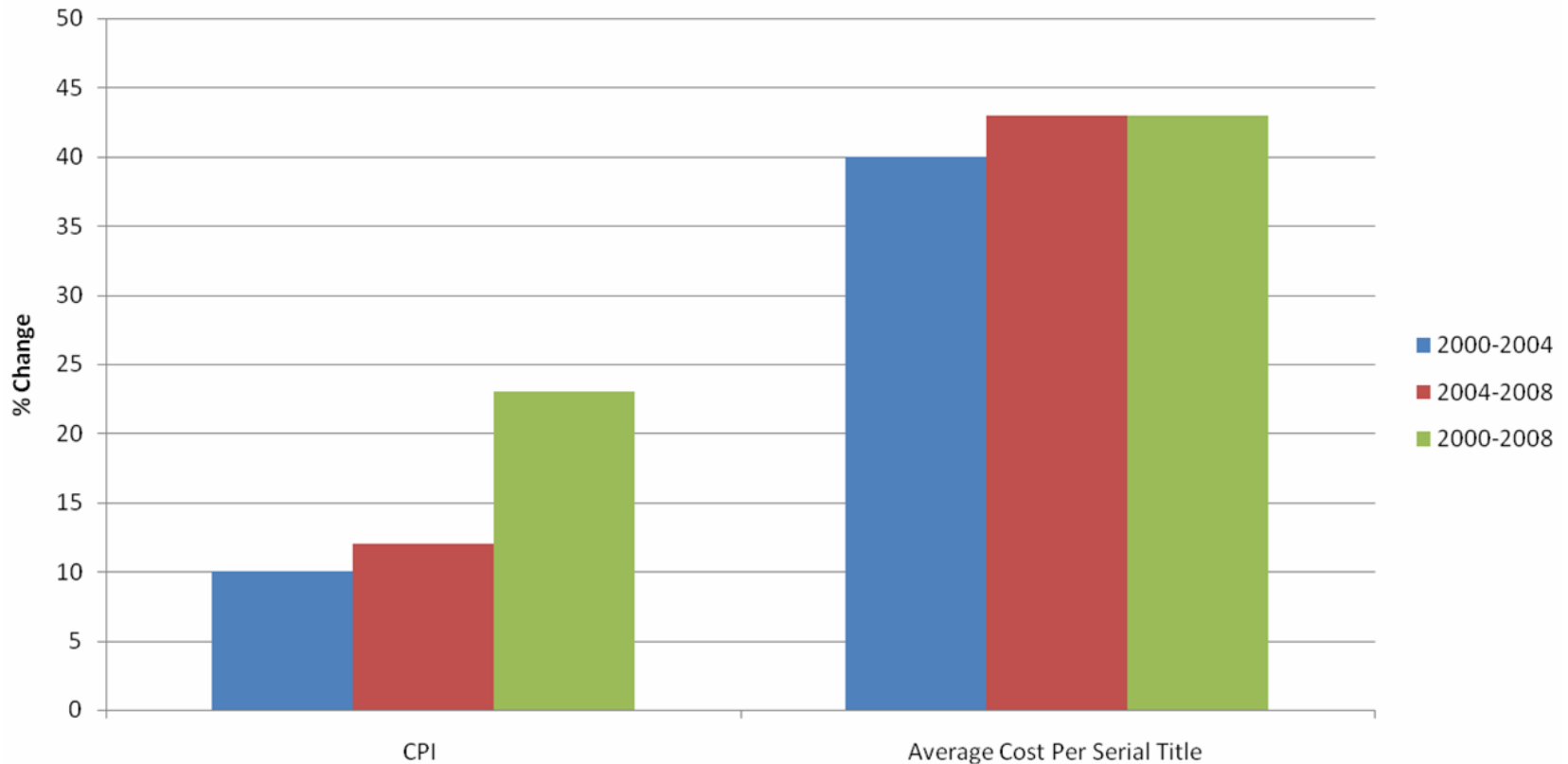


Societies/Associations



Priced out of evidence...

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



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:

Davis, P.M., Lewenstein, B.V., Simon, D.H., Booth, J.G., Connolly, M.J.L. (2008). Open access publishing, article downloads, and citations: randomised controlled trial. *British Medical Journal* 337(311): a568. Available http://www.bmj.com/cgi/reprint/337/jul31_1/a568.

Epstein, B. (2008). Open access: implications for evidence-based practice. *Journal of Emergency Nursing* 34(6): 561-563.

Grandage, K.K., Slawson, D.C., Shaughnessy, A.F. (2002). When less is more: a practical approach to searching for evidence-based answers. *Journal of the Medical Library Association* 90(3): 298-304.

McVeigh, M.E., Pringle, J.K. (2005). Open access to the medical literature: how much content is available in published journals? *Serials* 18(1): 45-50.

Murali, N.S. (2005). Dissemination of science, FUTON bias and open access: implications for evidence-based medicine. *Evidence-Based Healthcare & Public Health* 9:374-375.

Murali, N.S., Murali, H.R., Auethavekiat, P., Erwin, P.J., Mendrekar, J.N., Manek, N.J., Ghosh, A.K. (2004). Impact of FUTON and NAA bias on visibility of research. *Mayo Clinic Proceedings* 79(8): 1001-1006.