Evidence-Based Practice in Women's Health: Making Evidence Come to You!

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"Evidence-based practice" has now moved beyond buzzword and become a feature of physiotherapy practice. Physiotherapists are now required to possess the necessary skills to adhere to the many facets of evidence-based practice, including but not limited to

1. formulating appropriate research questions,
2. employing efficient methods to seek clinically relevant evidence,
3. critically appraising high quality peer-reviewed studies, and
4. translating these concepts into clinical practice.

Conscientious practitioners are also aware that other, often forgotten, facets of evidence-based practice must integrate patient values, expert opinion, and the best available research.¹ Therefore, the skills of both physiotherapy graduates and practising clinicians can help incorporate evidence into daily clinical practice. Women's health physiotherapy is no exception. As specialized clinicians, we are vested in making accurate diagnoses and in selecting appropriate, efficient, and effective interventions for our patients.

However, there have been many identified barriers to keeping up to date as a busy clinician. The first and most commonly cited is lack of time.² Another impediment is lack of access to research databases and (free) full-text research articles.² In the winter 2008 issue of *Physiotherapy Canada*, Editor-In-Chief Susan R. Harris eloquently detailed some strategies for general clinicians

(not associated with a university) to employ to better find evidence in support of their practice.² These strategies include using free, online search engines, which often contain links to full-text articles.² For a summary of a basic process of identifying evidence, please refer to Table 1.

This type of search strategy requires the clinician to continually search for new and updated information. Precious time and energy are required to search for answers to clinical questions. This process can be termed *pulling* information. Fortunately, information availability is growing, and access to the internet and Web-based resources is plentiful. However, for a busy clinician, this can also be seen as a costly, inefficient, and daunting environment. Thankfully, technology now gives us the ability to have customized information sent to us directly (at time intervals we determine). This can be termed *pushing* information. There are two easy methods for doing this.

Table 1 Summary of Evidence-Based Practice in Clinical Practice^{1,2}

1. Define a research question using the PICO format:
 - a. Who is the Patient/Population?
 - b. What is the Intervention/Examination technique?
 - c. What can I Compare outcomes to?
 - d. What is the Outcome I want to achieve?

Example: In postpartum women with stress urinary incontinence, is pelvic floor exercise combined with biofeedback more effective than pelvic floor exercise alone in decreasing the frequency of incontinent episodes?
2. Access a database or online resource (See Table 2 for list)
3. Use detailed search keywords in combinations to narrow the results
Example: "stress urinary incontinence AND biofeedback"
4. Review full text articles that are available
5. Critically appraise articles for validity
6. Incorporate the research findings into clinical practice

Table 2 Examples of Online Resources

1. *Free* (not likely to be peer-reviewed):
 - Google (<http://www.google.ca>)
 - Google Scholar (<http://www.scholar.google.com>)
 - Google Health Co-op (<http://www.google.com/coop/topics/Health>)
 - Evidence in Motion (<http://www.evidenceinmotion.com>)
 - UBC Physio Blog (<http://weblogs.elearning.ubc.ca/physio>)
2. *Free* (may be peer-reviewed):
 - Canadian Physiotherapy Association's (CPA) CISTI source (http://cisti-icist.nrc-cnrc.gc.ca/cisti_e.html)
 - PEDro (<http://www.pedro.fhs.usyd.edu.au/index.html>)
 - PubMed (<http://www.ncbi.nlm.nih.gov>)
 - Clinical Practice Guidelines (<http://www.guidelines.gov>)
 - Turning Research into Practice Database (<http://www.tripdatabase.com/index.html>)
 - ReleMed Search (<http://www.relemed.com>)
3. *Subscription Required* (definitely peer-reviewed):
 - Cochrane Collaboration (<http://www.cochrane.org/index.htm>)
 - CINAHL (<http://www.cinahl.com/library/library.htm>)
 - OVID (<http://www.ovid.com>)
4. *Women's Health Specific Web Resources*:
 - IOPTWH (<http://www.ioptwh.org>)
 - Women's College Research Institute (<http://www.womensresearch.ca>)
 - Canadian Women's Health Network (<http://www.cwhn.ca/indexeng.html>)
 - Society for Women's Health Research (<http://www.womenshealthresearch.org>)
 - Women's Health Matters (<http://womenshealthmatters.ca>)

NEWS AGGREGATORS

News aggregators are simply Web sites that the individual can customize to receive new information from all the Web sites that he or she regularly visits. The site is constantly updating itself with new information that is being “pushed” to that site. This process is called “real simple syndication,” and you may see the abbreviation RSS on multiple Web sites. Aggregators centralize one location to be visited and reviewed. This increases the efficiency of the search and decreases the time spent looking for (or “pulling”) information.

To set up a news aggregator, you first need to subscribe to a free reader (listed in Table 3). Next you can link all your blogs, news sites, and common physiotherapy evidence sites by clicking on the RSS icon or the subscription page and following the prompts. Google Reader has excellent tutorials on how to set up the reader. Most physiotherapy journals will e-mail or “feed” the news aggregator with their current tables of contents. For example, the University of Toronto Press offers CPA members free archived issues of *Physiotherapy Canada*, which can easily be pushed to any news aggregator. There are no limits to what you can put on your news aggregator: local weather, sports scores, and updated, clinically relevant physiotherapy journals and blogs.

PUSHED CONTENT FROM “MY NCBI” (NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION)

PubMed offers a unique and useful way to get updates of database searches that you have completed. To do this, you need to first go to the NCBI Web site (<http://www.ncbi.nlm.nih.gov>). Then click on the “My NCBI” icon and complete the registration for a free login. Next you will need to complete a PubMed search on any desired topic. Once the search is completed, you simply need to save your search strategy. The Web site will then prompt you to create an “e-mail alert.” By doing this, you will receive updates

Table 3 Examples of Free News Aggregators

Google Reader	(http://www.google.com/reader)
Bloglines	(http://www.bloglines.com)
NewsGator	(http://www.newsgator.com)
My Yahoo	(http://cm.my.yahoo.com)

on your search as frequently as you specify. Therefore, when new research is published, you will instantly be made aware of it by having the abstract sent to your e-mail inbox. On the NCBI Web site, there are very informative video tutorials on the exact steps to set this up.

Women’s health physiotherapy is an emerging and exciting field. New research is being published at such a rate that busy clinicians struggle to stay informed. This process provides us with an automatic mechanism to stay abreast of emerging content that is of importance to clinical practice. Technology is meant to streamline our ability to receive accurate and pertinent information without clogging up our e-mail! Be selective with a method that works for you and best suits your clinical practice. Above all else, evidence-based practice and technology should help clinicians to achieve improved patient outcomes!

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