

The Research Corner

By Harise Stein, MD

Research is one of the cornerstones of allopathic medicine. In order for there to be greater acceptance of the use of imagery in the clinical setting, not only does there need to be more imagery research performed, but greater knowledge disseminated of the research that is already available. Having to "prove" that something works, when we already see everyday that it does, can be frustrating; but ultimately this information can increase interest by consumers, hospital administrators, health care professionals, and insurers.

The purpose of this column will be to help imagery practitioners access, understand and utilize research in an easy and painless fashion. Each column will focus on one aspect of this process, as well as one article of interest. Let's start, though, with an overview.

Luckily, we have an exceptional resource available at our fingertips. The National Library of Medicine (NLM), a branch of the National Institute of Health, is one area where our tax dollars are being put to good use. This is the largest medical library in the world, which has been collecting medical information since 1879. Presently it indexes over 4500 journals, some of them weekly, contains almost 15 million references, and is searched online over 50 million times a year. Since 1997 the library has had a free, public, searchable website with articles going back to the 1960s, known as PubMed, found at pubmed.gov.

Journals are chosen to be indexed by a committee using a variety of criteria. For the past several years a whole section on "complementary and alternative medicine" has been added to the database.

Every information part of each journal is entered, including letters to the editor, editorials, and news updates. Each of these items is given a unique identifying number, known as a "PubMed ID" (PMID). These PMID numbers are also searchable.

About 3/4 of the articles contain abstracts, which are summaries of the content of the article, and 86% are in English. After you do your search, some of the entries will have links to the full articles. PubMed contains a

small site for free full text from certain journals. Other journals have their own websites and provide free full text, such as the British Medical Journal (www.bmj.com), which is a real class act at providing access, cross referencing, etc. Other links go to publishers' websites, which will only provide the article for a fee, often very hefty. You can also sign up for "Loansome Doc," in which you establish a relationship with a medical library to supply you with copies of articles, also for a hefty fee. In addition to full articles, PubMed links some references to free full textbook chapters.

Each journal item is added by human hand, which may lead to human error, and thus necessitates using a variety of strategies when you do a search. As we will see when we learn about searching, each article is categorized by a trained librarian as to different features, such as what kind of study it is (randomized, review, etc.), whether it deals with animals or humans, male or female, age, language, etc. Most importantly, it is assessed as to a "controlled vocabulary" of terms which put the article in certain categories, known as MeSH terms. MeSH stands for "Medical Subject Headings", and there are 15 different branches—for instance category A is anatomy, C is diseases, etc. Therefore, each article may have a wide variety of MeSH terms attached to it. And if one little item was inadvertently left out, which may happen to be that one word for which you are searching, you won't retrieve that article with that search strategy. And if the wrong word was erroneously keyed in, you may get back an article that has nothing whatsoever to do with what you want!

Searching can be conducted through various avenues, depending on how much information you already know about your topic. You can search by author, journal, keywords, MeSH terms, PMID numbers, etc. For instance, perhaps you hear an interview on the radio with a researcher who interests you—you can check and see what articles that person has published. In upcoming columns we will discuss these methods, and more specifically how you can utilize each for imagery article retrieval, both in general and specifically for a certain medical condition.

Once you have conducted your search, there are a variety of "outputs" for the references you receive. You can choose to just see the title, author

and journal, or you can decide to look at the abstract also, or even the entire medline citation, which includes all the coding information. You can put the results in a "clipboard", which can hold up to 500 references for 12 hours, place it in a text format for printing, send it via email, or save to a file. In addition, you can sign up for your own password protected "cubby" where you can maintain search strategies you use on a regular basis, and just click to update your articles. For the most part, the system works well, and is amazingly fast.

Utilizing research as you present yourself and your ideas for care can help establish your professionalism and serve as a link in communication, enabling you to speak the same language as the person to whom you are presenting. And the more interaction that follows, the more exposure you will obtain for easing the use of imagery into the mainstream.

Harise Stein, MD is board certified in Ob/Gyn and is an Academy for Guided Imagery grad. For the past several years, her consultation practice has focused on a holistic approach to utilizing mind-body medicine for women's health. She also is involved with teaching and patient care projects at Stanford, where she is on the adjunct clinical faculty of the Ob/Gyn department.

<http://www.womensmindbodyhealth.info>