# **Need to Know**

## **Utilizing Information in Practice**

#### Is this the TRUTH?

On April 28, 2008, the website <a href="www.naturalnews.com">www.naturalnews.com</a> reported that chronic cough in women may be caused by iron deficiency.

#### The truth.

A study conducted by Dr. Caterina Bucca at the University of Turin was presented at the American College of Chest Physicians in Chicago in April, 2008.

Dr. Bucca evaluated 16 healthy, non-smoking women between the ages of 35 and 41. They had chronic coughs but no history of respiratory disease or gastroesophageal reflux. All had mild anemia (serum ferritin  $9.4 \pm 0.9$  ng/ml). All displayed signs and symptoms of pharyngolaryngitis. After 2 months of iron supplementation, the oral signs and symptoms and the cough were improved or resolved.

It is thought that the iron deficiency impairs the immunologic defenses and causes the release of inflammatory cytokines that damage the oral mucosa. These tissues are then more susceptible to noxious stimuli, thus triggering the cough.

Remember that this study was only conducted on 16 people. However, it is worth noting and watching for further studies, especially since iron deficiency is a common condition among many patients in school and public health settings.

### **Searching Tips**

What's wrong with using Google and Wikipedia when doing research? After all, they're easy to use and free. Besides, they often provide an answer.

Google and Wikipedia actually can be useful aids when researching. The trick is to know their limits. Here are some pros and cons on when and when not to use them.

#### **Pros**

Both resources are good for getting started. If you are unfamiliar with your topic, it can be helpful to Google it. Also, looking up a topic in Wikipedia can give you a quick overview and additional references.

If you need to know the population of a state or the address of an association, Google is the place to look. If you're looking for the history of an association, you might consider starting with Wikipedia. Utilizing Information In Practice
Internet Training for Missouri's
Healthcare Professionals
A National Library of Medicine Grant
(https://www.phn.missouriedu/)

A program of the University of Missouri Sinclair School of Nursing in partnership with the MU Health Sciences Library. Funded by the National Library of Medicine

## **Historical Spotlight**



**Ado Mayo Stewart (center)** 

Although there was little care of work place injuries in her case load, Ada Mayo Stewart is considered to be the first industrial nurse in the United States. She was hired by Fletcher Proctor (owner of the Vermont Marble Company), who was very interested in the health of his employees.

Ada Stewart graduated from the Waltham Massachusetts Training School in 1894. Her work consisted of home visiting and referral from physicians. The majority of her patients were obstetrical, but she also cared for medical and surgical patients. Services to employees, and townspeople who could not afford any other care, were free.

Kalisch, P., & Kalisch, B. (2004). American nursing: A history. Philadelphia, PA: Lippincott, Williams & Wilkins, 176.

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### **Searching Tips (cont.)**

#### Pros (cont.)

You may have had this scenario happen to you. Someone gives you a citation to a journal article or a book — and it's incomplete. You just can't find it on Amazon or in the library databases. Google can be useful here in tracking down the correct citation.

#### **Cons**

Google and Wikipedia, especially, have been criticized for not being professional grade for research.

Google, unlike specialized databases such as PubMed or Cochrane, includes all types of materials. These can range from professional journal articles to personal blogs and sponsored ads. Be alert and evaluate the documents that you find using Google. You'll need to ask, who are the authors? What are their qualifications? What's the purpose or bias of the site? If you are looking for journal articles, avoid the clutter of Google and go straight to PubMed.

Also, Google gives you less power when searching; using Google alone is not recommended for systematic or comprehensive searches. There is a trade-off between the ease of Google and the ability to limit or build searches in the specialized databases. For example, when you use PubMed, you're able to use the power of subject headings (MeSH) and limits (age groups, research types, etc.) You're also able to build on your previous searches giving you more power in how you structure your search.

When using Wikipedia, consider how much experience and knowledge the contributors have. Are they experts? Amateurs? What are their credentials?

Another question to ask yourself is, "Would a professional even use an encyclopedia?" Even assuming that Wikipedia is reliable, is it at the level of scholarship and research that you need? Would you have used Encyclopedia Britannica or Worldbook Encyclopedia in your research? If not, then you won't be citing Wikipedia either.

#### Website

#### Disaster Recovery and Environmental Health

The National Library of Medicine Specialized Information Services Division has released an Enviro-Health Links page on Disaster Recovery and Environmental Health:

<a href="http://sis.nlm.nih.gov/enviro/disasterrecovery.html">http://sis.nlm.nih.gov/enviro/disasterrecovery.html</a>

This link provides information about recovering from natural and manmade disasters. It includes guides for state and local officials, links to state emergency management offices, information for emergency responders, guidelines for workers involved in environmental cleanup, and handling hazardous chemicals. It also includes searches of PubMed, Tox Town, and other NLM resources.

NLM also offers other Enviro-Health Links (<a href="http://sis.nlm.nih.gov/enviro/envirohealthlinks.html">http://sis.nlm.nih.gov/enviro/envirohealthlinks.html</a>) on disaster topics including:

Hurricanes
Wildfires
Tornadoes
Biological Warfare Agents
Chemical Warfare Agents
Health Effects from the World Trade
Center
Special Populations: Emergency and
Disaster Preparedness

Additional NLM resources with information on disasters can be found at:

http://disasterinfo.nlm.nih.gov/dimrc/resourcesnlmdimrc.html

# Need to Know Utilizing Information in Practice

#### **TEACH IT**

Past issues have been devoted to methods of teaching colleagues and clients. In this issue, we will discuss health literacy.

Healthy People 2010

(http://www.healthypeople.gov/Document/pdf/uih/2010uih.pdf), included improved consumer health literacy as an objective, and identified health literacy as an important component of health communication, medical product safety, and oral health. Health literacy is defined in *Health People 2010* as: "The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions".

Health literacy may be affected by educational levels, race, ethnicity, comprehension of language, age, socioeconomic level, and presence of disease, to name a few factors.

How does the health literacy of your clients, and your staff, affect the outcomes of your work?

Schillinger, Grumbach, et al. conducted a study in 2002 titled Association of Health Literacy with Diabetes Outcomes. They defined health literacy as the patient's ability to read, understand and apply health information and instructions. The study included 408 English and Spanish speaking patients over age 30 who had Type 2 Diabetes. Participants were in the San Francisco area. Measuring tools included a health literacy exam, vision test, demographic data, self-reported complications of diabetes and hemoglobin A1C levels. This retrospective study looked at a twelve month period.

Results indicated that poor health literacy was a predictor of higher glycemic control, higher incidence of retinopathy. Further findings indicate that 80% of patients in the US with type 2 diabetes have a high school education or less, as compared to 40% of the general population.

As with any research study, there are other indications and limitations. The reference for this article is: Schillinger, D., Grumbach, K., et. al. (2002). Association of health literacy with diabetes outcomes. *JAMA*, *288*(4), 475-482.

Think about the implications for you practice the next time you are working with a client population.

#### **Alert Notice!**

If you are interested in a new or refresher course on finding and using websites and/or using professional databases, e.g. PubMed, be sure to contact us to set these up. We will offer classes through November, 2008. Contact Michelle Custer at <a href="mailto:custerm@missouri.edu">custerm@missouri.edu</a> if you are interested in setting something up in the next six months.

#### Announcement!

If you have not completed the NLM surveys, please give us your feedback. Visit our website at <a href="https://www.phn.missouri.edu/survey.aspx">https://www.phn.missouri.edu/survey.aspx</a> and click on the workshop you attended: Consumer Websites workshop or Professional Databases workshop, If you attended both workshops, please complete both surveys.

Please evaluate our Need to Know newsletter by visiting our website at https://www.phn.missouri.edu/news letter.aspx and clicking on Evaluate Newsletter.

This information is very valuable to us. It helps us report back to our funders and helps us lay the groundwork for additional grants.