LIBRARY RESEARCH SKILLS: LEARNING OUTCOMES

- Use CINAHL and PubMed effectively in order to find peer reviewed, relevant articles
- Successfully use the Journals A-Z tool in order to find full text articles
- Export articles into RefWorks in order to create bibliographies for future papers

INTERLIBRARY LOAN (ILL)

When the library does not own material we borrow books and request copies of journal articles from other libraries. This service is called interlibrary loan or ILL. The ILL department will also scan and post online items from the print journal collection. Use the ILL form found on the Library home page to request copies of articles and loans of books. Items can be ordered from within library databases using either the Check Library for Full Text or Request an Interlibrary Loan links. The notification that an item is ready for you for retrieval will be sent to a UAA address.

INVISIBLE WEB

80% or more of the information that exists cannot be found using Google. It is part of the invisible web. This material lives behind firewalls in corporate intranets and in proprietary databases that must be purchased or licensed. Most of the library databases are proprietary and many permit limiting to scholarly or peer-reviewed articles—perfect for your research projects.

DATABASE SEARCHING STRATEGY

Before opening a database, plan the best strategy for using these rich resources. NB: The content found in library databases is part of the “hidden” or “invisible web”. Neither Google nor Google Scholar can access this proprietary content.

1. Formulate your question / Break question into components.
2. Choose the best database.
3. Check for subject terms.
4. Select Boolean operators (and; or; not).
5. Apply limits.
6. View results.

One technique used in medicine is to break your topic into important elements using the (PICOS) model. Here is a short YouTube on using PICOS.

- Patient population or problem
- Intervention (treatment, test) being considered
- Comparison (if any)
- Desired outcome
- Setting (or study type)
Step 1: Break the question into its components.

1. **What are the adverse effects, risk factors, and ethical issues surrounding childhood immunizations?**
   - The topics here are: *immunizations*, adverse effects, risk factors, ethical issues. The patient population is children.

2. **Are there studies linking vaccines with autism?**
   - The second question has just three topics: immunizations, autism, children.

Step 2: Choose the best database. PubMed and CINAHL will be described next.

### DATABASE SEARCHING – CINAHL

The *Cumulative Index to Nursing and Allied Health Literature (CINAHL)* provides indexing for over 2,000 journals and full text articles from over 600 journals for nursing, consumer health and 17 allied health disciplines. Coverage dates back to 1981. Evidence-based care sheets, quick lessons, and research instrument tools are also part of this database. [Interactive CINAHL tutorial](#).

### TIPS FOR SEARCHING CINAHL

- Review this [guide on CINAHL searching](#). It includes using Boolean AND / OR and the Tree / Explode / Subheadings features.
- Enter one subject/concept in the search box at a time. Each subject is listed as a search statement. This guide explains how to use AND / OR / NOT to combine concepts.
- OR is used to combine synonyms or when you want either this concept OR that concept. It can be used to combine more than two subjects, as in the example above. OR always broadens a search.
- Check the box to the left of the subject to bring up the available subheadings. Choosing too many subheadings can limit your results too much. *Use only when appropriate.*
- Clicking on the subject will bring up the tree view and show related terms. Exploding a term will search for that term and any terms indented beneath that item. When beginning to look through the literature, I often use the Explode feature.
- Balance using explode along with using the most specific subject heading to describe your search concept.
- Apply limits at the END of the process. Limits are not the critical pieces when searching, they are the refining touch. Add limits individually, or with caution. Too many limits can result in zero articles.
- Adding limits to a result of zero will return a result of zero.
- Use Major Concept to reduce the number of articles found.
- Click Add to Folder as the first step in printing, emailing, or exporting citations.

### DATABASE SEARCHING – PUBMED / MEDLINE

PubMed is a free resource developed by the National Center for Biotechnology Information (NCBI) and contains over 20 million citations for biomedical literature from MEDLINE, life science journals, and online books. MEDLINE, developed by the National Library of Medicine, includes indexed article citations from 5,245 medical, nursing, dental, veterinary medicine, the healthcare system, preclinical sciences, and research journals back to the 1940s. General science journals, such as Scientific American and Science send all the citations for each issue to PubMed. Only the biomedical articles are indexed and moved to MEDLINE. All nonindexed articles can be searched using author names, words in the title, and words in the abstract. [Interactive PubMed tutorial](#).

### TIPS FOR SEARCHING PUBMED

- Always limit to English and Human. This database includes a large amount of animal research and foreign language material.
- Additional limits include: age group / gender / language; specific types of articles, e.g., review, or randomized control trial; and journal subsets, e.g., core biomedical, history of medicine, aids.
- All limits will PERSIST UNTIL REMOVED
- The Boolean logic is processed from left-to-right. However, concepts inside parentheses will be searched first. Author searching
- More tips for searching PubMed is available in this [How To Guide](#).
FEATURES OF PUBMED

• Use **Summary line** to increase the number of items per page, change to Abstract view, etc.

• **Similar articles** is located below each citation and also in the right column when an individual article is displayed. Citations are displayed in rank order, from most to least relevant. Limits do not work to refine a similar articles search.

• **Clinical Queries / Systematic Reviews** is an option on the PubMed home page. This option may be useful when looking for systematic reviews.

• **Print** using the browser print button.

• The **Abstract** view shows the link(s) to **full text articles**, when full text is available.

• **Loansome Doc** is an online article ordering module. Items sent using Loansome Doc to the medical library at UAA are supplied for a fee. This will be a useful tool once you are out-of-school. For now, click the **Check Library for Full Text** icon (from the Abstract view) and if unavailable online, or available just in the print collection, click **Request an Interlibrary Loan**.

• The **Clipboard** stores up to 500 marked articles to print, save, or order. Mark items using the box to the left of each article, click on **Send to link**, choose **Clipboard**, then click **Add to Clipboard**. The Clipboard list and your search history will disappear after 8 hours of inactivity. Click on the Clipboard link to view the list of articles.

JOURNAL TITLES

The next image shows that the search found 1 record with three options. The first option is a print journal shelved alphabetically by the journal name in Health Journals on the 2nd floor of the library.

The next two entries show online content. Clicking the links to the online content leads to the publisher’s website. Each publisher displays their content differently. You will have to drill down by year and issue to find the article you need and its link to full text.

The library currently has access to over 430 nursing titles.

CITING REFERENCES

The library faculty has created a page listing various **style guides**.

In addition, the Library links to an online citation management software package called **RefWorks**. This software manages your references by exporting citations from most **library databases**, and adding them to your personal reference list(s) within RefWorks. **Register for this service**. When your research is completed and you are ready to write your paper, you can create a bibliography choosing the required style guide.
CONSUMER HEALTH vs. PATIENT EDUCATION

When asked for information about a disease or procedure, librarians and nurses may often use the same online resources. An excellent choice is MedlinePlus. This website, produced by the National Library of Medicine, is for patients and their families and friends. It provides information about diseases, conditions, and wellness issues, often in many languages, and written at a level the public can understand. MedlinePlus offers reliable, up-to-date health information. The site also includes information on drugs and supplements, a medical dictionary, and surgical videos or illustrations. You will also find links to the latest medical research on your topic or find out about clinical trials on a disease or condition.

When librarians provide answers to questions, they are working in the realm of consumer health. They provide information to help the requestor make informed healthcare decisions. When a nurse uses the same information, their goal is to change the patient’s behavior. Patient education informs patients on how to modify their diet, take care of a wound, inject insulin, etc. The hoped for outcome is a change in how the patient behaves.

CAPTURING THE SEARCH HISTORY

Before leaving your computer, save your search history as a reminder of what you tried that session. A copy of this search history can be sent as part of emailing articles to yourself OR you can click the Print Search History link, choose the Edit feature, then Select All, then Copy, and then paste that table into Word. This image shows the location of the Print Search History ink above the search results.

Word may not accept the table well – often the right portion disappears off the page. To fix this, click in the table, then look in the upper left hand corner for the icon that looks like the highlighted symbol as highlighted in the image to the left. Right click on the icon, then choose Autofit > Autofit to Window.

REVIEW LIBRARY JARGON

The Nursing 204 Course Guide includes the list of terms and jargon used in this lecture. The guide also gives additional detailed information about various databases and library services beyond what has been covered in this handout. A copy of this handout is on the Library Jargon & Handouts tab/page of the NS 204 Course Guide – as seen in the image to the right.

Final Thoughts

• Database searching is a skill that must be developed -- it becomes easier with practice.
• Remember that there are two medical librarians in the Consortium Library ready to help you with your research. Use the Ask-A-Librarian option within the CINAHL database, email, or call us for assistance.
• Please complete the two-question feedback form – found on the Library Jargon & Handouts tab/page.