Evidence-Based Practice Workshop: Accessing the Literature with e-Searcher

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In this workshop you will learn how to:

- Access Evidence-Based literature using **e-Searcher**, a federated resource located on the Mount Carmel Health Sciences Library (MCHSL) website designed to simultaneously and comprehensively search the library’s database collections for optimum results.

- Formulate an Evidence-Based question based on a **P.I.C.O.** topic.

- Search a **P.I.C.O.** topic for evidence-based literature using **e-Searcher**.

- Access high level resources from **e-Searcher’s** results page using special display features and options.

- View detailed abstracts of articles and recognize where to find additional subjects and keywords for building new searches.

- Use **e-Searcher’s Advanced Search** page and **Visual Search** wheel to access specific collections, e.g., Evidence-Based Resources and high level research studies.

- Select articles in **e-Searcher** and send them to **RefWorks** to save in folders.
Introducing e-Searcher

This presentation illustrates how to effectively search and access Evidence-Based literature using **e-Searcher**, a federated resource that simultaneously searches across the entire suite of Mount Carmel Health Sciences Library databases for optimal search results: [http://library.mchs.com](http://library.mchs.com)

*e-Searcher* is centrally located at the top of all MCHSL web pages for quick accessibility. Search results are displayed in a single comprehensive format with links to full-text articles.
What is Evidence-Based Practice?

Evidence-Based Practice (EBP)

Definition:
Integration of the best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
Accessing Evidence-Based Literature

Evidence-Based Literature can be searched in many databases. Instead of searching one database at a time, use **e-Searcher**, which combines searches from many databases to access high-level resources including systematic reviews of the literature.

Search: **Keyword**: alcohol-based hand rubs  [Create an alert from this search]

1. Use of an alcohol-based hand rub and quality improvement interventions to improve hand
   Clinical Key
   Hand hygiene (H3acrm1) is critical to infection control, but compliance is low. Alcohol-based antiseptics are often inadequate. Four 6-bed units...
   Brown, Samuel M, Lubimova, Anna V, Kurbatskaya, Natalya M, Shulaeva, Svetlana V, Tekhova, Iya, Z...
   Infection control and hospital epidemiology: the official journal of the Society of Hospital Epidemiologists 2005-02-28

2. Use of an alcohol-based hand rub and quality improvement interventions to improve hand
   Proquest Nursing and Allied Health
   BACKGROUND: Hand hygiene (HH) is critical to infection control, but compliance is low. Alcohol-based hand rubs were provided for routine HH use...
   Brown, Samuel M, Lubimova, Anna V, Kurbatskaya, Natalya M, Shulaeva, Svetlana V
   Infection Control and Hospital Epidemiology 2003-03-01
Using the Evidence Pyramid

The ability to access Evidence-Based resources requires understanding what makes up the medical and nursing literature. As the illustration shows, the higher quality evidence-based literature (more rigorous) is closer to the top of the pyramid but is not as numerous as less rigorous literature such as cohort studies, case studies or expert opinion located closer to the bottom of the pyramid.
Formulating a P.I.C.O. Question

The P.I.C.O formula is designed to help you create a focused question and steer you toward finding evidence-based literature related to your topic.

Cultivating a spirit of inquiry:

If you are conducting an evidence-based project try choosing a topic that interests you. That way, you will be more motivated to search for the literature to answer your question!
The P.I.C.O. Formula

The P.I.C.O. formula helps clarify your search strategy:

<table>
<thead>
<tr>
<th>P - Patient population/problem</th>
<th>What patient population or problem are you trying to address?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Intervention or issue of interest</td>
<td>What will you do for the patient or problem?</td>
</tr>
<tr>
<td>C - Comparison with another intervention or issue</td>
<td>Alternative (or placebo) to your chosen intervention? (optional)</td>
</tr>
<tr>
<td>O - Outcome of interest</td>
<td>What will be improved for the patient or problem?</td>
</tr>
</tbody>
</table>
Asking the P.I.C.O. Question

An effective way to define your topic is to ask a P.I.C.O. question:

“For healthcare workers, what is the effect of alcohol-based hand rubs compared to soap and water in reducing infection rates?”

<table>
<thead>
<tr>
<th>Patient or population</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare workers</td>
<td>Alcohol hand rubs</td>
<td>Soap and water</td>
<td>Reduced infection</td>
</tr>
</tbody>
</table>
After creating an Evidence-Based question using the P.I.C.O. formula enter your concepts in e-Searcher

<table>
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e-Searcher’s results page has many effective selections and features. The next set of slides illustrate the use of the circled options for accessing evidence-based literature.
The results page in e-Searcher provides many features for accessing evidence-based literature including practice guidelines and quick access to high level research studies.

- Select results by specialty such as **Nurses** to access hundreds of nursing specific resources.
- Sort resources by Date to display and access the most current literature.
- Link directly to PDF full-text articles from evidence-based databases such as **Nursing Reference Center**.
- Access best practices literature using the Topics menu.
e-Searcher Sidebar Menu

After viewing your search results use the left side-bar menu to build upon your P.I.C.O. topic.

e-Searcher’s left side-bar has many helpful links to categories such as Topics, Publications and Publishers. Under each menu are accessible collections of full-text evidence-based resources.
Refine Your Search (Be Selective)

e-Searcher indexes Evidence-Based literature just like the ones illustrated in the pyramid.

An effective way to find Evidence-Based Resources is to use the Topics menu and refine to specific high level publication types including **Clinical Practice Guidelines** and **Systematic Reviews**.
**Limiting to Evidence-Based Collections**

*e-Searcher* includes an option to limit to specific full-text Evidence-Based resources. Use the pull-down menu and Limit articles to specific databases with access to high level studies and standards such as *Joanna Briggs Institute EBP Database.*
More Evidence-Based Collections

Select additional Evidence-Based Collections using the drop down menu

Refine your searches to access other evidence-based high level collections including: 
Cochrane Library, National Guideline Clearinghouse and Nursing Reference Center.
Descriptions of articles are found in abstracts. The results in e-Searcher include detailed information to help you decide if articles are relevant to your topic.

Click on the title of an article in the result list to view a detailed abstract.

Abstracts have very helpful information including detailed summaries of articles.
Read abstracts before accessing full-text articles. Many databases include abstracts to save you valuable time before selecting articles relevant to your topic.

**Abstract (summary)**

Hand hygiene is acknowledged as the single most important measure to prevent nosocomial infections in the healthcare setting. Similarly, in non-clinical settings, hand hygiene is recognized as a key element in helping prevent the spread of infectious diseases. The aim of this study was to evaluate the efficacy of three different disinfectant hand sanitizers in reducing the burden of bacterial hand contamination in 60 healthy volunteers in a community setting, both before and after education about the correct use of hand sanitizers. The study is the first to evaluate the efficacy and ease of use of different formulations of hand rubs used by the general population. The products tested were: Sterillium (perfumed, liquid), deserman pure gel (odorless, gel) and Lavit (perfumed, spray). Sterillium and deserman are EN 1500 (hygienic hand rub) certified products (available in pharmacy) and Lavit is non-EN1500 certified and available in supermarkets. The two EN1500 certified products were found to be significantly superior in terms of reducing bacterial load; deserman pure gel, Sterillium and Lavit reduced the bacterial count to 6.4%, 8.2% and 28.0% respectively. After education in the correct use of each hand rub, the bacterial load was reduced even further, demonstrating the value of education in improving hand hygiene. Information about the testers’ perceptions of the three sanitizers, together with their expectations of a hand sanitizer was obtained through a questionnaire. Efficacy, followed by skin compatibility were found to be the two most important attributes of a hand disinfectant in our target group.

**Indexing (details)**

Indexed words in databases use standard medical and nursing terminology

- Hygiene
- Disinfection & disinfectants
- Education
- Skin care products
- Infectious diseases
- Studies
- Population
- Bacteria
- Influenza
- Supermarkets
- Disease prevention
- Glycerol

Abstracts often include indexing terms that are linked to other articles related to your evidence-based topic.
Use the **Advanced Search** in e-Searcher to find specific Evidence-Based collections.

Select "**Advanced Search**" to open a new window with additional search options.

<table>
<thead>
<tr>
<th>Search: Keyword: healthcare workers soap water alcohol hand rubs</th>
<th>Create an alert from this search</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results: 1 - 10 of 229</td>
<td>sort by: Date</td>
</tr>
</tbody>
</table>

1. **Prevention of endemic healthcare-associated Clostridium difficile infection: reviewing the evidence.**

2. **Knowledge, perceptions, and practices of methicillin-resistant Staphylococcus aureus transmission prevention among healthcare workers.**
   - Mosby's Nursing Consult
   - Seibert D
   - Am J Infect Control 2014-03-01

3. **Epidemiology: infectious diarrhea germs stick to healthcare worker hands.**
   - Proquest Nursing and Allied Health
   - "Because C. difficile spores are so resistant and persistent to disinfection, glove use is not an absolute barrier against the contaminant."
   - Medical Letter on the CDC & FDA 2014-01-12
Advanced Search: Evidence-Based Resources

The databases with arrows are examples of evidence-based resources. Full-text articles are accessible from all of them in e-Searcher.
**e-Searcher-Visual Search**

*e-Searcher* includes a search wheel that clusters information into a visually effective result list. Discover how your keyword searches compare to the ones in the Visual search wheel.

Visual search is designed to find as many related terms to the ones you enter in the search box.

Visual search includes access to full-text evidence-based standards and guidelines.
After finding articles on your topic use e-Searcher to save them to your collections in RefWorks. Check the box next to each article you want to save. You can then create personalized folders to save and manage your article collections in RefWorks.

After checking your articles go to “My Selections” to save your articles in RefWorks.
Citation Management options include RefWorks, a tool for managing your articles using a personal account through the Mount Carmel Health Sciences Library website. RefWorks is also useful for citing references in APA format!
Summary of e-Searcher Functionality

e-Searcher’s results page is designed to display additional search options in a visually effective format. For optimal results use a combination of search features found in the summary illustration.

1. **Topics**: Use additional topics to improve search results with related terms and subjects.

2. **Visual search wheel**: Creates a visually stunning cluster wheel of related terminology and subject matter including practice guidelines and systematic reviews.

3. **Publications**: Use additional publication links to access full-text articles from premiere nursing and medical journals.

4. **Nurses Tab**: Select the Nurses tab to sort and access articles specific to nursing practice.

5. **Sort by Date**: Access the most current professional literature in nursing and medicine using the date option.

6. **Limit to**: Search a single or multiple database collections depending on your needs. Includes Evidence-Based Collections!

7. **Check articles** to save/organize to folders in RefWorks.
Workshop Summary

- Effective searches begin systematically with a clearly focused question or topic. Use the P.I.C.O. formula to define your question. (Choose a topic that interests you or is relevant to your clinical area)

- After creating your P.I.C.O. enter concepts into e-Searcher located at the top of the MCHSL website to conduct a comprehensive search on your topic.

- Use e-Searcher’s special features and options display to locate the most relevant articles, e.g., Nurses Tab, the Left Sidebar menu for additional Topics, Publications and Publishers and limiting to high level collections with Evidence-Based resources, i.e., Joanna Briggs, Cochrane Review, National Guideline Clearinghouse and Nursing Reference Center.

- View detailed abstracts to determine if articles are relevant to your topic as well as viewing indexed terms for accessing other articles using standard terminology.

- Use e-Searcher’s Advanced Search and Visual Search Wheel for customizing your search to specific collections, e.g., Evidence-Based, Standards and Guidelines and Systematic Reviews of the Literature.

- Save articles in e-Searcher and create an account in RefWorks to manage your collections.
Thank you for attending Evidence-Based Practice Workshop: Accessing the Literature with e-Searcher

If you need any further assistance please contact Your Library at: 234-5214 or visit us at http://library.mchs.com