Advanced Search Techniques

Overview

For more advanced searching you will usually get better results by searching individual databases rather than Summon which does not fully support the standard search techniques described below.

Defining your topic or research question

- Summarise your topic into a phrase or short sentence to help you identify the key ideas and concepts.
- Start by searching for concepts which are well defined – usually these relate to your intervention or comparison. However, not all questions actually include these elements.
- Unless your outcomes are well-defined (e.g. mortality survival) consider leaving these out of the search to begin with. Less well-defined outcomes (e.g. the affect or impact of something) can be difficult to describe in terms of a search string with too many variables.
- It can be useful to limit a search to look for words in title if the concept is easy to define e.g. heart failure, diabetes, obesity etc.
- Words and phrases such as role of, impact on, led to, discuss, analyse, describe, implications for etc. are not key concepts and are not usually helpful in searching.

Developing your search terms

Using the right search terms is the key to effective searching. To search effectively you should use various types of search terms outlined below. Use an online thesaurus to help you with this.
- Acronyms and abbreviations e.g. use QOL for quality of life
- Alternative spellings e.g. use anemia for anaemia
- Broader terms e.g. use body weight for obesity
- Narrower terms e.g. use melanoma for cancer

Using different terminology can also be very helpful:
- Differences in terminology across national boundaries e.g. for accident and emergency use emergency room
- Differences in spellings e.g. for anaemia use anemia
- Old and new terminology e.g. for mongolism use downs syndrome
- Brand and generic names e.g. for coumadin use warfarin
- Lay and medical terminology e.g. for stroke use cerebrovascular accident

Broadening and narrowing searches using AND, OR, NOT operators

Boolean operators are very useful for broadening or narrowing your search results:

AND narrows (finds articles with all words) and is used for combining different concepts e.g. diet AND cancer
OR broadens (finds articles with any word) and is used for finding similar words e.g. diet OR nutrition

NOT narrows (finds articles that exclude a word) e.g. nursing NOT children. TIP! (Use AND NOT when using Science Direct).

Truncation and wildcard searching

Use * to find alternative word endings to increase your search results:
- Nurs* finds Nurse, nurses, nursing
- Child* finds Child, children, childhood, childbirth
- Midwi* finds Midwife, midwives, midwifery
- Manag* finds Manager, management, managing
- Radiograph* finds Radiography, Radiographer, radiographers

TIP! Count* would find country as well as count, counts, counting etc.

Searching for phrases and using proximity operators

There are several ways to search for phrases:

**Pain management – no operators used**
- Words in phrases may not necessarily sit together as a fixed string. Words might become dissociated and appear in different parts of the citation with the result that some results may not be relevant.

**Pain N1 management – proximity operators used**
- Finds pain within one words of management. As word order is disregarded, this might also find management of severe pain.
- Proximity operators vary between the databases e.g. use N1 for Cinahl, N/1 for Proquest databases and NEAR/1 for Medline.

“Pain management” – double quotation marks used
- Using quotation marks searches for the phrase as a fixed string which may limit the number of results you find.

Conducting your search

- Use the advanced search option for the most flexible search option. This allows you to enter each different concept on a separate search row.
- Search within the article citation - words in the title, abstract and subject headings fields. Citation search is the default search setting for Cinahl; however when using any Proquest database (e.g. British Nursing Index) you should switch from searching Anywhere to Anywhere except full-text to avoid returning too many irrelevant results.
- Avoid limiting search results to full-text as your search results may not include recent articles on which there are embargos on full-text. Full-text can often be easily found by using DOI or other links or by pasting the article title into Summon of Google.