

Update 30

Searching the Health Care Literature using PubMed: A brief tutorial

Why bother learning how to retrieve health-related information via the internet?

One good reason is because the amount of health-related information published in peer-reviewed biomedical journals is doubling every 5 years. A second good reason is that traditional biomedical libraries are changing. For example, as of last month, the biomedical library I have access to in Barcelona no longer receives hard copies of biomedical journals. What was the new journals section is now another dozen computer terminals with unrestricted access to the online versions of most biomedical journals.

The following is a brief description and overview related to the bare essentials for getting started with one of the cheapest, most up to date, comprehensive and, I think, easy to navigate source of health-related information on this planet.

PubMed, a resource developed by the National Centre for Biotechnology Information at the National Library of Medicine, provides free access to MEDLINE and other databases to any person who has internet access. MEDLINE, a database of all published biomedical literature relevant to clinical practice, is updated daily and contains more than 11 million references dating back to the 1960's from more than 4000 selected journals from 70 countries.

Start by going to the PubMed homepage (www.pubmed.gov)

You'll see a long narrow rectangular query box - this is where you type your key terms. To search PubMed, you can simply enter search terms in the query box. Any combination of search terms can be typed into the query box. However, you'll most readily find what it is you're looking for by using the appropriate terms that reflect a well-built clinical question. If you're too vague with your terms, or question, you'll end up retrieving a ton of irrelevant information. Alternatively should your terms/question be too narrow, your search will likely draw a blank.

To be a little more specific in constructing your search you can use one of 3 words (that need to be typed into the query box in capitals) that allow you to better combine your search terms. The 3 words are AND, OR and NOT.

Immediately underneath the query box is the Features Bar - the first word in the feature Bar is 'Limits' - If you click on the word 'Limits', you will be taken to another page that will allow you to set certain limits on your search - for example you can specifically limit your search by years, by author, by journal, by language, by age, by field, by gender and by study type. The other options in the feature bar (History, Clipboard, and Details), can be used after you have run your search.

Once you enter search terms and click **Go** or press the **Enter** key, PubMed will automatically:

- Run the search.
- Retrieve and display citations.
- Retain the search terms in the query box.

PubMed provides a number of advanced features but you may be better served by first becoming more comfortable with the basic features outlined above.

Good luck with your searching. Should you have any problems or want a more comprehensive overview of PubMed, I suggest you go to the tutorial they provide (see the below reference) or use the Help and Overview options that can be accessed from the blue sidebar on the left of the screen at the PubMed home page.

References:

PubMed tutorial - http://www.nlm.nih.gov/bsd/pubmed_tutorial/m3002.html

Ebbert JO, Dupras DM, Erwin PJ. Searching the medical literature using PubMed: a tutorial. *Mayo Clin Proc.* 2003;78:87-91.