Best Evidence = Best Practice

Harm

Understanding outcomes and the potential **benefits** of a therapy you are considering for your patient is an important component of Evidence-Based Medicine. The flip side of the coin, however, is equally important. Will the therapy **harm** my patient? Often, the Evidence-Based literature you find will discuss both and you will need to discuss with your patient the *benefits* of the therapy weighed against the *risk* of adverse effects. At other times, the information on harm is not that clear and the risk of a therapeutic intervention will not appear until the therapy is underway.

MeSH Subheadings:

MeSH is the **controlled vocabulary** that is used in MEDLINE (PubMed). By using *MeSH terms* as opposed to *keywords* in a search, you can increase the relevance of your findings. While articles on **benefit,** as you have learned, can be easily found using the PubMed "Clinical Queries" and "mapping" features, it's a bit more tricky with harm. Within most MeSH terms are "subheadings". These subheadings can be used to focus on a particular aspect of a subject and are a rich source for harm/risk-related terminology. Samples include:

- Adverse Effects
- Contraindications
- Poisoning
- Toxicity

The following case demonstrates how you can apply subheadings when looking for evidence on risk and harm.

A case:

S. is a 5-year old girl who was diagnosed with Selective Mutism and prescribed Prozac, 30 mg/day. Two weeks later, S. returns to your clinic after experiencing confusion, nausea and excessive tiredness. Her mother asks you if the newly-prescribed Prozac might be contributing to her new symptoms, especially since a search of your drug database indicates that the initial dosage was on the high end of the scale for pediatric dosing. You want to search the literature to see if there are any indications that Prozac might be the culprit and if it is indeed the best treatment for her.

P=5 year-old girl with selective mutism
I=Prozac (fluoxetine)
C=X
O=reduction/elimination of negative symptoms

When looking for good evidence surrounding issues of **harm**, many of the standard EBM search tools do not work as they otherwise would. The best way to approach this search would to:

1. Go to PubMed **but not clinical queries right away!**
2. Go to the **MeSH database** on the left navigation bar, just above Clinical Queries
3. Search for **Prozac** (fluoxetine WILL appear on your list – PubMed mapping at work!)
4. Open **Fluoxetine** and under **subheadings**, choose **adverse effects** and **toxicity**
5. In the gray area near the top of the page, find the **Send To** drop-down box. Choose **Send to Search box with AND**
6. **Don't search yet!** Next, **select** and **copy** what you see in the box (it should read ("Fluoxetine/adverse effects"[Mesh] OR "Fluoxetine/toxicity"[Mesh]))
7. Open **Clinical Queries** and **paste** the data into Clinical Study Category search box, choose therapy and THEN search
8. From here, you MAY want to use the **Limits** tab to limit for current date range and age group. THIS will give you a *focused, harm-based* search with good evidence.

Wow! Not the easiest search on record but by learning how to use the MeSH database in conjunction with Clinical Queries, you will have an easier time finding solid Evidence-Based information on therapy's evil twins *harm* and *risk*.