

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
- Poisoning
- Contraindications
- 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 right under **More Resources**
3. Search for **Prozac** (fluoxetine WILL appear) – PubMed mapping at work!)
4. Under **Fluoxetine** are listed checkboxes with **subheadings**. Choose **adverse effects** and **toxicity**
5. Under the **PubMed search builder** at the top right of the page, click the button **Add to search builder** and leave the selection at **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. Return to **PubMed** by clicking that choice at the bottom of the page under **POPULAR**.
8. Now choose **Clinical Queries** (under **PubMed Tools** on the PubMed home page) and **paste** the copied data into the search box and click **Search**. After the search is run, choose the **Category: Therapy**. You may also want to try **Scope: Narrow**.
9. From here, you MAY want to use **Limits** 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*.