Searching the medical literature & Library resources

Rachel Lane Walden, MLIS
Eskind Biomedical Library
Eskind Biomedical Library
How to Find Full Text

- Library website – Advanced Search, search by article title
- Copy and Paste the title into Google Scholar
- Document Delivery Service (DDS)
Searching Tutorials and Guides

Can be found in Biomedical Library Training Research Guide

Get Started With ...

- DOCUMENT DELIVERY
- STUDY ROOMS
- TECHNOLOGY
- TRAINING

http://researchguides.library.vanderbilt.edu/biomedtraining/tutorials
### Online Resources

- PubMed
- EMBASE
- OVID Medline
- CINAHL
- Cochrane Library
- ECRI Guidelines Trust
- TRIP database
- Psychiatry Online
- UpToDate
- Epocrates
- Web of Knowledge
- Lexicomp
- PsycINFO
- AccessMed/Pharmacy
- STAT!Ref
- Clinical Key Medicine & Nursing
- MicroMedex
- Google Scholar
Freely Accessible Online Resources

- ClinicalTrials.gov
- Cochrane Collaboration
- DailyMed
- ECRI Guidelines Trust
- Genetics Home Reference
- Google Scholar
- Government/Associations
- Household Products Database
- Lab Tests Online
- Medline Plus
- National Institute for Clinical Excellence (UK)
- OMIM
- PharmGKB
- Public Health Partners
- PubMed
- PubMed Central
- TOXNET
- TRIP database
- United States Preventive Services Task Force
What is a Literature Search?
What are we Searching for?

- Systematic Reviews
- Guidelines
- Summaries
- Journal Articles
  - Primary research
    - Interventional or Observational
Searching - Basics

Who
What
When
Where
Why
How

Strategy
- Patient/Population
- Intervention/Exposure
- Comparison
- Outcome(s)
Question Formation
PICO(T)

(P) Patient, Population, or Problem
☆ What are the most important clinical characteristics of this patient

(I) Intervention or Exposure
☆ What do you want to do for this patient? (treat, diagnose, observe, etc.)

(C) Comparison
☆ What is the alternative needed to compare to the intervention?

(O) Outcome
☆ What can be accomplished, measured, or improved?

(T) Time
PICO Example

(P) Patient, Population, or Problem
☆ Adult pregnant female with hypertension

(I) Intervention or Exposure
☆ Hypertension medication

(C) Comparison
☆ Alternate medication / diet & exercise

(O) Outcome
☆ Death/injury to mother and/or fetus
Searching the Literature

Step one determining question and breaking it down into concepts
In surgical patients, does listening to music in the perioperative setting impact anxiety and postoperative pain?
In surgical patients, does listening to music in the perioperative setting impact anxiety and postoperative pain?

- **Patient/Problem**: patients undergoing surgery (perioperative setting)
- **Intervention**: music
- **Comparison**: none
- **Outcome**: reduced anxiety and postoperative pain
**Boolean Logic**

**AND**
- Both terms included in any result
- 
  - music therapy
  - pain

**OR**
- Will retrieve articles if either term is included
- 
  - sedatives
  - anesthesia

**NOT**
- Excludes any result containing the term
- 
  - pain management
  - opiates

“Music therapy” **AND** pain

sedatives **OR** anesthesia

“pain management” **NOT** “opiates”
List Keywords for Major Concepts

**Perioperative**: preoperative, intraoperative, preoperative, pre-anesthesia, postoperative, post-anesthesia, recovery room, PACU,

**Music**: music therapy, music

**Anxiety**: stress, distress

**Pain**: pain, pains, ache, aches, suffering
Find MeSH terms for essential concepts

- MeSH stands for Medical Subject Heading
- MeSH Database located on the PubMed homepage
- Why use Mesh? And not just keywords?
Examples of how Mesh Works

“Down Syndrome”[Mesh]
= Trisomy 21, Down’s Syndrome & Down Syndrome

“Lung Neoplasm”[Mesh]
= Lung Cancer, Lung Tumor, Lung Neoplasm & Pulmonary Cancer
Possible MeSH terms for the concept of perioperative include:

- "Perioperative Period"[Mesh] (which encompasses preoperative, intraoperative, postoperative and anesthesia recovery periods)
- "Perioperative Care"[Mesh]
- "Operating Rooms"[Mesh]
- "Recovery Room"[Mesh]
("Perioperative Period"[Mesh] OR "Perioperative Care"[Mesh] OR preoperative OR intraoperative OR preoperative OR “pre-anesthesia” OR postoperative OR “post-anesthesia” OR “recovery room” OR “PACU”)

AND

("Music"[Mesh] OR "Music Therapy"[Mesh] OR “music therapy” OR music)

AND

("Anxiety"[Mesh] OR anxiety OR stress OR distress OR "Pain, Postoperative"[Mesh] OR pain OR pains OR ache OR aches OR suffering)
Levels of Evidence

- Evidence hierarchies provide a short-cut to help you filter your searches.
- A poorly conducted or reported randomized trial does not provide stronger evidence than the results of a well conducted cohort study.
Critical Appraisal!

Centre for Evidence-Based Medicine Critical Appraisal Worksheets
Guide to critical appraisal of articles about diagnosis, harm, prognosis, systematic reviews (of therapy), and therapy.

Critical Appraisal Skills Programme (CASP) Checklists
Set of eight critical appraisal tools are designed to be used when reading research, these include tools for Systematic Reviews, Randomized Controlled Trials, Cohort Studies, Case Control Studies, Economic Evaluations, Diagnostic Studies, Qualitative studies and Clinical Prediction Rule.
Mobile Apps
Apps for Mobile Devices
Research Guide has all the
download instructions for the apps

http://researchguides.library.vanderbilt.edu/mobileapps
How to do you manage your citations?
Citation Management

http://researchguides.library.vanderbilt.edu/biomedtraining/citation_managers
Contact Us

Ask a Librarian Portal
※ Accessible from the homepage

Call Us
※ 615-936-1410

Email
※ rachel.l.walden@vanderbilt.edu