Searching for methods studies

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steps in developing a search strategy

1. Formulate a question
2. Choose the appropriate database
3. Define your search strategy
4. Select the best Subject Headings
5. Select Textwords (if needed)
6. Combine search terms
7. Limit your search (if needed)
8. View and save results

choose an appropriate database

- Majority of health intervention trials are in MEDLINE
- Where are methods papers?
  - In the database of their discipline
  - But some will be in MEDLINE only if they are methods particular to health research

database selection

Mathematics

- **MathSciNet** Access to the world's mathematical litarature in journals, conference proceeding and books since 1940.
- **Zentralblatt MATH** This database contains about 2.7 million entries drawn from about 5,000 periodicals from 1868 to the present.
- **Current Index to Statistics** All articles from over 100 core statistical journals and selected articles from 1200 more journals. Also indexes approximately 11 000 proceedings and edited books
- **Web of Science** 8,500 key research journals in Science, Engineering, Medicine, Social Sciences, and Humanities.
- **JSTOR** Multidisciplinary database giving archival access to scholarly journals

database selection

- Education : ERIC, Proquest Education Complete
- Psychology : PsycInfo, PsycBite
- Economics : Econlit, HEED: Health Economic Evaluations Database
- Computer Science : INSPEC, ACM Digital Library, IEEE Xplore, Computer & Information Systems Abstracts
- Library Science: LISA, LISTA, Library Literature, ARIST, Emerald Library

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what's my question?

PICO

- *P*atient group
- *I*nterventions
- Comparisons
- *O*utcomes

The **content** part of the search contains information about the subject area of the search, such as disease names, drug names, authors etc.

Population
Intervention

The **method filter** is used to screen through the content part of the search, leaving specific types of articles.

Filters may be used to limit articles to publication types such as meta-analysis or randomized controlled clinical trials.

Method

bibliographic record

Unique Identifier

99065721

Authors

Johannsen F. Gam AN. Karlsmark T.

Institution

Rehabilitation Unit, National Society of Polio and Accident Victims. Copenhagen, Denmark.

Title

Ultrasound therapy in chronic leg ulceration: a meta-analysis.

Source

Wound Repair Regeneration. 6(2):121-6, 1998 Mar-Apr.

MeSH subject headings

Aged
Animal
Chronic Disease
Confidence Intervals
Controlled Clinical Trials
Female
Human
Leg Ulcer/pp [Physiopathology]
*Leg Ulcer/th [Therapy]
Male
Middle Age
Prognosis
Time Factors
Treatment Outcome
*Ultrasonic Therapy
Wound Healing/ph [Physiology]

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Abstract

We reviewed all articles on ultrasound therapy published since 1950 to assess the evidence for an effect of this therapy in the treatment of chronic leg ulcers. Fourteen studies concerning ultrasound therapy, chronic leg ulcers, and wound healing were found. The six studies that ...

ISSN

1067-1927

Publication Type

Journal Article. Meta-Analysis.

Entry Month

199903. Entry Week: 1999033.

term as subject

- Be careful to understand the differences between fields and their usage.

- For example “meta-analysis” is used in MEDLINE as a MeSH term and a publication type. If you use it as a MeSH term, you will find articles about meta-analysis (subject). However, used as a publication type, you will find studies that are meta-analyses.

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do you need text words?

In addition to using controlled vocabularies like MeSH, you may also want to search text words - word(s) that appear in the title and abstract fields.

Double-blind method/

blind*.tw.

= blinding, blinded, blindly

randomization = randomisation

do you need text words?

- Test, in each database, with known relevant articles
- MEDLINE indexing may not be as complete with methods papers as with clinical papers
- Precision will suffer badly with text searches
- Use text searches for full text collections

information retrieval methods

Sampson M, Daniel R, Cogo E, Dingwall O. Sources of evidence to support systematic reviews in librarianship. J Med Libr Assoc 2008; 96(1):66-69.

coverage and retrieval from major sources

Database Combination	N	Potential: % of indexed articles (n=131)	Potential: % of included articles (n=142)	Actual: Recall with actual searches	
MEDLINE, LISA, CMR	127	96.9	89.4	95/131	72.5
MEDLINE, LISTA, CMR	120	91.6	84.5	-	-
MEDLINE, LISA	114	87.0	80.3	70/131	53.4
MEDLINE, LISTA	106	80.9	74.6	-	-
MEDLINE, CMR	85	64.9	59.9	57/131	43.5

LISA is Library and Information Science Abstracts
LISTA is Library, Information Science and Technology Abstracts
CMR is Cochrane Methodology Register

tips

- Indexing is variable across databases
- Some databases are easier to retrieve from than others
- Tap into other databases and conference sources
- Use multiple overlapping sources
- Study the indexing of relevant articles in each database
- Distinguish subject and publication type In MEDLINE
- CMR is a valuable resource
- Track your work and publish your results

questions