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Searching Medline Effectively

Dawn Carlisle & Helena Westwick

Research services advisers

Te Tumu Herenga | Libraries & Learning Services

Waipapa Taumata Rau | The University of Auckland

Session Outline

- What is Medline?
- Develop a concept map
- Create an effective search strategy
- Live Demo

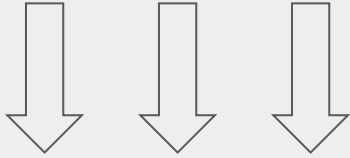
What is Medline?

1. A core source of information for most medical research.
2. Uses a combination of [keyword searching](#) and [Subject Headings](#) (MeSH).
3. The Ovid search interface is more useful for systematic searching compared to PubMed.
4. Best for systematic reviews, scoping reviews, etc.

1. Define your research question

Research topic:

Our research group will be examining the benefits of cancer patients undergoing regular exercise while being treated with chemotherapy.



Research question:

What are the effects of exercise on cancer patients undergoing chemotherapy?

2. Isolate the concepts

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The diagram shows four orange ovals highlighting the words 'effects', 'exercise', 'cancer', and 'chemotherapy' in the research question. Four orange arrows point from these ovals to the corresponding columns in the table below.

Concept 1	Concept 2	Concept 3	Concept 4
Effects	Exercise	Cancer	Chemotherapy

3. Start a concept map

	Concept 1	Concept 2	Concept 3	Concept 4
Main Concept	Effects	Exercise	Cancer	Chemotherapy
Keywords/ synonyms	benefits results outcomes	physical activity aerobics walking running fitness	neoplasms tumours tumors malignancies neoplasia	drug therapy antineoplastics antitumor drugs cancer therapies

4. Add searching operators

Truncation (*) is a shortcut that searches for variants of a word.

cancer* = cancer, cancers, cancerous

chemotherap* = chemotherapy,
chemotherapies

Wildcards (?) are symbols that can replace 1 or 0 characters.

tumo?r = tumour, tumor

Quotation marks keep phrases together so the words aren't search individually.

“physical activity”

“cancer therapy”

Brackets keep your topics separate and nicely grouped together.

(effect* OR benefit* OR result* OR outcome*)

5. Update your concept map

	Concept 1	Concept 2	Concept 3	Concept 4
Main Concept	Effect*	Exercis*	Cancer*	Chemotherap*
Keywords/ synonyms	(benefit* result* outcome*)	“physical activity” aerobic* walking running fitness	neoplasm* tumo?r* malignanc* neoplasia*	“drug therap*” antineoplastic* “antitumor?r drug*” “cancer therap*”

Brackets will eventually surround a topic.

4. Add searching operators

	Concept 1	Concept 2	Concept 3	Concept 4
Main Concept	Effect*	Exercis*	Cancer*	Chemotherap*
Keywords/ synonyms	benefit* result* outcome*	“physical activity” aerobic* walking running fitness	neoplasm* tumo?r* malignanc* neoplasia*	“drug therap*” antineoplastic* “antitumor?r drug*” “cancer therap*”

OR

Using the Boolean Operator **OR** makes your search **BIGGER** and combines your synonyms and alternate terms. Use **WITHIN** a concept.

4. Add searching operators

	Concept 1	Concept 2	Concept 3	Concept 4
Main Concept	Effect*	Exercis*	Cancer*	Chemotherap*
Keywords/ synonyms	benefit* result* outcome*	“physical activity” aerobic* walking running fitness	neoplasm* tumo?r* malignanc* neoplasia*	“drug therap*” antineoplastic* “antitumor?r drug*” “cancer therap*”

Using the Boolean Operator **AND** makes your search **SMALLER** and combines your different topics. Use **ACROSS** different concepts.

4. Adding MeSH subject headings

	Concept 1	Concept 2	Concept 3	Concept 4
Main Concept	Effect*	Exercis*	Cancer*	Chemotherap*
Keywords/ synonyms	benefit* result* outcome*	“physical activity” aerobic* walking running fitness	neoplasm* tumo?r* malignanc* neoplasia*	“drug therap*” antineoplastic* “antitumor?r drug*” “cancer therap*”
MeSH subject headings	Treatment Effect Heterogeneity/ Treatment Outcome/	Exercise/ Exercise Therapy/ Walking/ Running/ Physical Fitness/	Neoplasms/	Drug Therapy/

6. Put it all together

Final search string:

(cancer* OR neoplasm* OR tumo?r OR malignanc* OR neoplasia* OR Neoplasms/)

AND

(chemotherap* OR “drug therap*” OR antineoplastic* OR “antitumo?r drug*” OR “cancer therap*” OR Drug Therapy/)

AND

(exercise OR exercising OR “physical activity” OR aerobic* OR walking OR running OR fitness OR Exercise/ OR Exercise Therapy/ OR Walking/ OR Running/ Or Physical Fitness/)

AND

(effect* OR benefit* OR result* OR outcome* OR Treatment Effect Heterogeneity/ OR Treatment outcome/)

Live demo

- Searching for MeSH
- Adding keywords to a search
- Combining a search with OR/AND
- Adding filters
- Exporting results
- Sharing/saving your search

Questions?



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