NUR4101
SYSTEMATIC LITERATURE SEARCHING

15th Aug 2019

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NUS Medical Library
-08- STEPS FOR THE EASY SEARCH

- Step 1: Figure out the main keywords
- Step 2: Decide on databases to search
- Step 3: Make use of Boolean Operators
- Step 4: Find Synonyms
- Step 5: Do as much research as possible
- Step 6: Combine both index terms (if any) and keywords with Boolean
- Step 7: Refine your results if too many
- Step 8: Export to EndNote!
-01- FIGURE OUT THE MAIN KEYWORDS

- Questions during scoping
- Decide/understand your research topic

Video- How to Improve Your Search Terms
https://youtu.be/U8aK3Z2PA5A
QUESTIONS DURING SCOPING

1. Is there a recent review in your research area?
2. Can you explore different angles on your topic?
3. Can you update an outdated systematic review?
4. Are there any similar/alternative search terms you can use?
   - Check out Cochrane
   - Check out PubMed (e.g. Clinical Queries)
   - Check out Google Scholar (Optional)
RESEARCH TOPIC

My elderly grandmother was impressed by the recent newspaper report on how drinking tea, e.g. green tea daily can help to delay the onset of dementia and cognitive decline. As you are now doing evidence-based nursing modules, it spurs you to find out if there is any evidence on this compared to non-tea drinkers.
SCOPING IN COCHRANE

Advanced Search

Please note that the Advanced Search is optimised for English search terms. Certain features, such as search operators and MeSH terms, are only available in English.

Search manager Medical terms (MeSH)

Title Abstract Keyword: [green tea]

(Word variations have been searched)

Search limits Send to search manager Run search

Filter your results

Date
Publication date
The last 3 months: 0
The last 6 months: 0
The last 9 months: 0
The last year: 0
The last 2 years: 1
Custom Ranges: from [dd/mm/yyyy] to [dd/mm/yyyy]

4 Cochrane Reviews matching on green tea in Title Abstract Keyword - (Word variations have been searched)

Cochrane Database of Systematic Reviews
Issue 4 of 12, April 2019

Select all (4) Export selected citation(s) Show all previews

Order by Relevancy

Results per page: 25

1. Green tea (Camellia sinensis) for the prevention of cancer
Katja Boehm, Francesca Borrelli, Edzard Ernst, Gabi Habacher, Shao Kang Huang, Stefania Milazzo, Markus Homeier
Show Preview Intervention Review 8 July 2009

2. Green tea for weight loss and weight maintenance in overweight or obese adults
Tannis H Jurgens, Anne Marie Whelan, Lara Killian, Steve Doucette, Sara Kirk, Elizabeth Foy
SCOPING IN PUBMED

Learn how to use PubMed Clinical Queries to retrieve Systematic Reviews:
SCOPING IN GOOGLE SCHOLAR

- Optional
  - To supplement your scoping search in Cochrane and PubMed
  - For very niche or obscure topics
  - Where few or insufficient results are found

- Search for existing SRs on the topic of interest AND “systematic review” in search box
-02- Decide on Databases to Search
DATABASE (CONTENT COVERAGE)

**PubMed**  
Clinical & medical topics

**Embase**  
Pharmacology & Toxicology

**PsycINFO**  
Psychiatry & Psychology

**Cochrane Library**  
Specialised (Trials, Systematic reviews)

**CINAHL**  
Nursing, Alternative Medicine & Allied Health
DATABASE (TIME COVERAGE)

- PubMed: 1946 - present
- Embase: 1974 - present
- PsycINFO: 1887 - present
- Cochrane Library: 1992 - present
- CINAHL: 1937 - present
A LIST OF RESOURCES

Please refer to more information on LibGuide

- Database syntax guide for PubMed, Embase and Cochrane
- Cochrane
  - Searching the Cochrane Library
- Pubmed
  - Tutorials on PubMed
- EMBASE
  - Systematic searching in EMBASE
- CINAHL
  - Basic searching tutorial
  - Advanced searching tutorial
- PsycINFO
  - Searching in PsycINFO
- Scopus
  - Scopus Tutorials
EXPORTING SEARCH RESULTS DIFFERENT DATABASES

Cochrane
http://canterbury.libguides.com/endnote/database-cochrane

PubMed
https://youtu.be/mdwpSSNyGOk

Embase
https://youtu.be/VcJpb0YztkA

Scopus
https://youtu.be/alwH-ENkHIQ

CINAHL
https://youtu.be/R4mYFDO-qAU

PsycINFO
https://youtu.be/4qEh0HsBQGs

Library Subject Guide

AND is used to indicate that both terms must be present
e.g. caries AND sweets
articles containing both caries and sweets

OR is used to indicate that either terms may be present
 e.g. toothpaste OR dentrifrices
articles containing either toothpaste or dentrifrices

Video - How Library Stuff Works: Boolean Operators (AND OR NOT)
https://youtu.be/bCAULDuMcso
Question: Is A related to B and C?

- Concept A AND Term ‘A1’ OR Term ‘A2’ OR Term ‘A3’
- Concept B AND Term ‘B1’ OR Term ‘B2’
- Concept C AND Term ‘C1’ OR Term ‘C2’ OR Term ‘C3’

(A1 OR A2 OR A3) AND (B1 OR B2) AND (C1 OR C2 OR C3)
-04- FIND SYNONYMS

STEP 4 ➔ FIND SYNONYMS

PRO
Drinking tea can help to delay the onset of dementia?

**Search Statement**

(\textit{tea* OR “Camellia sinensis” OR “Thea sinensis”}) \textbf{AND} (dementia* \textbf{OR} Alzheimer* \textbf{OR} senile)
-05- DO AS MUCH RESEARCH AS POSSIBLE

- Use Index terms to find synonyms
- Use one source to lead you to more
Index Term: Medical Subject Heading (MeSH)

Video on PubMed Searching using MeSH:
https://youtu.be/uyF8uQY9wys?list=PLBD13A2628C7A9965
"Cardiovascular Diseases/prevention and control"[MAJR] AND Telemedicine[Mesh]

EXAMPLE: FIND SYNONYMS
EXAMPLE: FIND MORE MESH

MeSH terms
Aged
Blood Pressure
Cholesterol, LDL/blood
Female
Follow-Up Studies
Humans
Ischemic Attack, Transient/prevention & control*
Male
Middle Aged
Patient Compliance*
Risk Factors
Secondary Prevention/methods*
Stroke/prevention & control*
Telemedicine/methods*

Substance
Cholesterol, LDL

Grant support
20140541/Hjärt-Lungfonden (SE)/JLL-376981, JLL-377161/Research development and Education unit region Jämtland and Härjedalen/
-06- Combine both index terms (if any) and keywords with Boolean operators.
Search Strategy -- Systematic Review

Cochrane Standard: each concept must be searched using keywords and Index terms.
EXAMPLE

Preventing childhood obesity in Asia: an overview of intervention programmes.

(child[MeSH Terms] OR child*[Title/Abstract] OR adolescent[MeSH Terms]
OR youth*[Title/Abstract] OR adolescen*[Title/Abstract])

AND

(asia[MeSH Terms] OR asia*[Title/Abstract] OR japan*[Title/Abstract] OR china[Title/Abstract] OR hong kong[Title/Abstract] OR
singapore*[Title/Abstract] OR india*[Title/Abstract] OR
malaysia*[Title/Abstract] OR korea*[Title/Abstract] OR
indonesia*[Title/Abstract] OR thai*[Title/Abstract] OR
vietnam*[Title/Abstract] OR lao*[Title/Abstract] OR
cambodia*[Title/Abstract] OR myanmar[Title/Abstract] OR
burm*[Title/Abstract] OR sri lanka*[Title/Abstract] OR
bangladesh*[Title/Abstract] OR philippines[Title/Abstract] OR
filipino[Title/Abstract])
-07- **REFINE YOUR RESULTS IF TOO MANY**
REFINE A SEARCH USING FILTERS

• Located at the left side of the search results

• Choose suitable filters depending on what you are looking for

• Select additional filters if necessary

• Most commonly used: Article Types, Language
-08-EXPORT TO ENDNOTE!

STEP 8

DON'T STRESS!
Export to EndNote!
Installing EndNote X9 on PC

Contact NUS IT Care (6516 2080, itcare@nus.edu.sg) for installation issues

http://libguides.nus.edu.sg/endnote

EndNote: Installation

EndNote (EN) is a software for managing references. It can automate the many tedious steps involved in organizing and formatting the references and bibliographies in your academic writing. EndNote Web (ENW) is the web version of EN, with fewer features.

EndNote for NUS Students

EndNote software is available to NUS staff and students free of charge for both Windows and Mac users. Endnote should be removed (un-installed) when the user is no longer a staff or student of NUS. Instructions are as follows:

Before you begin:

- Ensure that your computer is connected to NUS computer network and you have administrator rights to the pc or laptop.
- Un-install any previous versions of EndNote from your computer.
Welcome to EndNote

Get started by setting up your EndNote account

An EndNote account lets you access your research from anywhere, anytime – from your desktop, online or on your iPad.

Set up your account
CREATE A NEW LIBRARY

1. Search Windows > EndNote
2. Click on File > New
3. Enter a filename: My Sample EndNote Library (.enl)
4. Select location to save the library (e.g. Desktop)
5. Click Save
CREATE GROUP TO ORGANIZE RECORDS:
SYSTEMATIC REVIEW FLOW CHART

Identification

433 records identified
Cochrane (n=56), CINAHL (n=20), EMBASE (n=208), PubMed (n=35), PsycINFO (n=1), Scopus (n=35) and ProQuest Dissertations and Theses (n=78)

5 additional records identified from reference lists

37 records were curated using ENDNOTE program to remove duplicates

Screening

401 articles found for screening

Reasons for 331 records exclusion:
- Irrelevant based on title (n=149)
- Irrelevant based on abstract (n=182)

Eligibility

70 of full-text articles assessed for eligibility

Reasons for 56 full-text articles exclusion:
- Non-experimental studies (n=8)
- Protocols (n=5)
- Non-diabetic perinatal women (n=8)
- No application of technology (n=8)
- No self-monitoring component (n=8)
- Qualitative outcomes (n=1)
- Outcomes are not clear or insufficient (n=2)
- No outcomes (n=8)
- Technology on diabetes screening reminder (n=3)

Included

n=14 publications (12 studies) included for meta-analyses (9 Randomized Control Trials and 3 Control Clinical Trials)

Formulate the review question
Develop review protocol
Develop search strategy
Download citations to EndNote
Apply inclusion and exclusion criteria
Obtain full-text articles and re-apply inclusion and exclusion criteria
Quality appraisal & data abstraction
Synthesis of studies
Interpret findings
Full report

FIGURE 1 PRISMA Flow chart of selection procedure.
LOOKING FOR FULL-TEXT?

• Search in Google Scholar

• Library proxy bookmarklet

• FindMore@NUSL
  • Other resources
  • Alternatively

• Only if proxy failed
• Only if FindMore@NUSL failed

LINC

http://libguides.nus.edu.sg/findfulltext/proxybookmark
DEMO + HANDS-ON: PUBMED
How to begin PubMed search (the 3S)

- **Sign in**, **Seek help**, Go to Advanced **Search Builder**
Three ways to locate MeSH database

1. PubMed Homepage
2. MeSH Database
3. PubMed Advanced Search
MEDICAL SUBJECT HEADING (MESH)

- Medicine's controlled vocabulary used for indexing articles for MEDLINE/PubMed
- Provides a consistent way to retrieve information

Search results
Items: 1 to 20 of 41

1. **Dementia**
   - An acquired organic mental disorder with loss of intellectual abilities, attention, spatial relations, language, abstract thought, and other executive functions, usually progressive, and initially spares the level of consciousness.
   - Year Introduced: 1981(1963)

2. **Frontotemporal Dementia**
   - The most common clinical form of FRONTAL TEMPORAL LOBAR DEGENERATION, characterized by personality and behavioral changes often associated with disinhibition.
   - Year Introduced: 2010
KEYWORD SEARCH

Senile OR Dementia OR Dementias OR Alzheimer OR Alzheimer’s
Combine the similar searches together with ‘OR’

(("Dementia"[Mesh]) OR ((Senile[Title/Abstract] OR Dementia[Title/Abstract] OR Dementias[Title/Abstract] OR Alzheimer[Title/Abstract] OR Alzheimer's[Title/Abstract])))

Search | Add to builder | Query | Items found | Time
---|---|---|---|---
#20 | Add | Search (Senile[Title/Abstract] OR Dementia[Title/Abstract] OR Dementias[Title/Abstract] OR Alzheimer[Title/Abstract] OR Alzheimer's[Title/Abstract]) | 210628 | 03:13:50
#19 | Add | Search "Dementia"[Mesh] | 156180 | 03:19:46
COMBINE DIFFERENT CONCEPTS WITH ‘AND’
# FINAL SEARCH STRATEGY

<table>
<thead>
<tr>
<th>No</th>
<th>Search strategy</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;Dementia&quot;[Mesh]</td>
<td>156180</td>
</tr>
<tr>
<td>2</td>
<td>(Senile&gt;Title/Abstract) OR Dementia&gt;Title/Abstract) OR Dementias&gt;Title/Abstract) OR Alzheimer&gt;Title/Abstract) OR Alzheimer’s&gt;Title/Abstract))</td>
<td>2210628</td>
</tr>
<tr>
<td>3</td>
<td>(&quot;Dementia&quot;[Mesh]) OR ((Senile&gt;Title/Abstract) OR Dementia&gt;Title/Abstract) OR Dementias&gt;Title/Abstract) OR Alzheimer&gt;Title/Abstract) OR Alzheimer’s&gt;Title/Abstract))</td>
<td>247526</td>
</tr>
<tr>
<td>5</td>
<td>(((&quot;Dementia&quot;[Mesh]) OR ((Senile&gt;Title/Abstract) OR Dementia&gt;Title/Abstract) OR Dementias&gt;Title/Abstract) OR Alzheimer&gt;Title/Abstract) OR Alzheimer’s&gt;Title/Abstract)))) AND (&quot;Tea&quot;[Mesh] OR tea[tiab] OR teas[tiab] OR Camellia sinenses[tiab] OR Camellia sinensis[tiab] OR Thea sinensis[tiab] OR Thea sinenses[tiab])</td>
<td>377</td>
</tr>
</tbody>
</table>
REFINE A SEARCH USING FILTERS

• Located at the left side of the search results

• Choose suitable filters depending on what you are looking for

• Select additional filters if necessary

• Most commonly used: Article Types, Language
DIRECT EXPORT: PUBMED

Export from PubMed to EN: > 200 items

In PubMed

1. Send to - Filters:

2. Choose Destination

3. MEDLINE

4. Importing into EndNote

In Endnote

Go to File>Import to import the text file which you have exported
Select ‘PubMed(NLM)’ as import option
Click Import (see below)

5. Import File:

6. Import

pubmed_result.txt
SELECT GROUP TO ORGANIZE RECORDS:

- Select group: PubMed and drag all the imported records into this group and provide the name of databases if you wish:
ANNOTATING THE RECORDS

1. Select the group to rename the “Name of Database”
2. Tools -> Change/Move/Copy Fields...

The display fields...
DEMO + HANDS-ON: COCHRANE
(the 3S)
- Sign in, Seek help, Go to Search Manager
Two ways to input MeSH terms in Cochrane

1) Click on “m” in Search Manager

2) Click on “Medical Terms (MeSH) tab
How to input keywords in Cochrane

Type keywords in Search (By default, search is executed in “Title, Abstract, Keywords” fields)
How to review & download Cochrane search strategy

Click on "print" to download search history as text file

Click on number to view results
How to filter Cochrane search results

26 Trials matching on "#5 - (#1 OR #2) AND (#3 OR #4)"

Cochrane Central Register of Controlled Trials
Issue 4 of 12, April 2019

1. Effectiveness of A Nutritional Brain Metabolic Enhancer for Alzheimer Disease
   NCT00013923

2. Influence of aromatherapy on medication administration to residential-care residents with dementia and behavioral challenges
   SG Gray, AA Clair

3. Foot care using green tea paste for behavioral and psychological symptoms in dementia patients
   H. Kishihara, T. Komatsu, O. Takahashi, H. Kiyomi, S. Shintani, M. H. I. Scagli

Order by: Relevancy
Results per page: 25

Filter your results

Year
Year first published
2019 .................................................. 0
2018 .................................................. 3
2017 .................................................. 3
2016 .................................................. 5
2015 .................................................. 3

Custom Range:
YYYY to YYYY

Date
Date added to CENTRAL trials database
The last 3 months .................................... 10

The last 6 months .................................... 10
DIRECT EXPORT: COCHRANE

1. Select records to be exported and click on Export selected or Export all.
2. Choose your export options and click on Export Citation.
SELECT GROUP TO ORGANIZE RECORDS:

- Select group: Cochrane and drag all the imported records into this group and provide the name of databases if you wish:
ANNOTATING THE RECORDS

1. Select the group to rename the “Name of Database”
2. Tools -> Change/Move/Copy Fields...

The display fields...

<table>
<thead>
<tr>
<th>Name of Database</th>
<th>Reference Type</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubMed 11-5-16</td>
<td>Journal Article</td>
<td>2013</td>
<td>Youth work se</td>
</tr>
<tr>
<td>CINAHL 12-5-16</td>
<td>Journal Article</td>
<td>2009</td>
<td>Worth a look</td>
</tr>
<tr>
<td>Scopus</td>
<td>Journal Article</td>
<td>2008</td>
<td>World Federat</td>
</tr>
<tr>
<td>PubMed 11-5-16</td>
<td>Journal Article</td>
<td>2013</td>
<td>Work-site heal</td>
</tr>
<tr>
<td>Web of Science</td>
<td>Journal Article</td>
<td>2013</td>
<td>Working Mem</td>
</tr>
<tr>
<td>PubMed 11-5-16</td>
<td>Journal Article</td>
<td>2009</td>
<td>Work, recover</td>
</tr>
<tr>
<td>Scopus</td>
<td>Journal Article</td>
<td>2015</td>
<td>Women's exp</td>
</tr>
<tr>
<td>ABI/INFORM Co...</td>
<td>Journal Article</td>
<td>2012</td>
<td>Why do some</td>
</tr>
<tr>
<td>Scopus</td>
<td>Journal Article</td>
<td>2010</td>
<td>When should</td>
</tr>
</tbody>
</table>
DEMO + HANDS-ON: EMBASE
How to begin EMBASE search (the 3S)
- Sign in, Seek help, go to PICO / Advanced Search
Emtree (index terms used in EMBASE)

Advanced Search

Type word or phrase (without quotes)

dementia

find dementia

AIDS dementia
use preferred term: HIV associated dementia

AIDS dementia complex
use preferred term: HIV associated dementia

AIDS related dementia
use preferred term: HIV associated dementia

als dementia

Emtree dictionary

dementia - a general loss of cognitive abilities, including impairment of memory as well as one or more of the following: aphasia, apraxia, agnosia, or disturbed planning, and abstract thinking skills. It does not involve loss of intellectual functioning caused by slowing of consciousness in dementias, expression, or other functional mental disorder pseudodementia. Causes include a large number of conditions, some irrevocable and some progressive, that result in widespread cerebral damage or dysfunction. The most common reason is Alzheimer disease, others include cerebrovascular disease, other neurological system infections, brain tumor or tumors, vitamin deficiencies, stroke, metabolic conditions, endocrine conditions, immune disorders, AIDS-related diseases, and Parkinson dementia.

Find Term
SEARCH HISTORY / COMBINE SEARCH

ADVANCED SEARCH

Embase®

Results

#1 OR #3

Search Filters

Results Filters

Expand Collapse all

Sources

Drugs

Diseases

Devices

Search History

Combine Using And Or

Search History

Combining Search Terms

1. "tea" AND "dementia"
2. "tea" OR "dementia"
3. "tea" OR "dementia"
4. "tea" OR "dementia"
How to filter search results in Embase
1. Select records, then *Export*
2. Select export format and click **Export**
DIRECT EXPORT - EMBASE

3. **Download** the **.ris** file

4. Double click the downloaded file or click “Open with” to transfer records to your EndNote library
**SELECT GROUP TO ORGANIZE RECORDS:**

- Select group: Embase and drag all the imported records into this group and provide the name of databases if you wish:
ANNOTATING THE RECORDS

1. Select the group to rename the “Name of Database”
2. Tools -> Change/Move/Copy Fields...

The display fields...
THANK YOU!

Enjoy your search journey!