

Conducting a review: How to find literature on a topic?



Why do a literature review?

- Make yourself familiar with a topic area
- Set your study in context
- Answer a specific question
- Map gaps and patterns

Search, select, evaluate, synthesise, report...

Search process

- What is your topic of interest?
- What research will help you address that issue?
- Where will you find that research?
- How will you search to find that research?
- How will you keep up-to-date with new research?
- How will you organize what you find?
- How will you write up the search process?

What's your topic?

- Background questions
 - What are electronic cigarettes?
 - How many adults in the UK use electronic cigarettes?
 - How are electronic cigarettes regulated in the UK?
- Foreground questions
 - Are electronic cigarettes effective in promoting smoking cessation?
 - Is vaping safe for pregnant women?

What type of publication?

- Background questions

- Books
- Reports
- Official publications
- Web-sites

- Foreground questions

- Journal articles
- Preprints
- Conference abstracts
- Study protocols
- Theses/dissertations
- Reports
- Official publications
- Web-sites

Where to search?

- Library catalogue
 - Books, online journals, theses, databases...
- Bibliographic databases
 - Articles
 - Books & chapters, conference abstracts, theses, reports – in some but not all databases
- Online repositories
 - Study protocols & preprints
- Web-sites
 - Anything & “everything” ...

Background question: How to search?

- Library catalogue
 - Searching [SOLO: Top tips](#)
- Web searching
 - Academic web – [Google Scholar](#), [LENS.org](#)
 - Search engines – [Google](#), [DuckDuckGo](#)
 - Individual web-sites – search or browse

Break

Foreground question: How to search?

Structured search

- Keywords for each search concept
- Combine with AND/OR
- Apply limits
- Search across multiple databases

Snowballing

- Citation tracking
 - Forward
 - Backward
- Related articles
- Sibling studies
- Grey literature searching

Structured search: search concepts

In long-term smokers, can electronic cigarettes be used as an effective smoking cessation technique?

Structured search: search concepts

In **long-term smokers**, can **electronic cigarettes** be used as an effective **smoking cessation** technique?

Structured search: PICO

- Population, Patient, Problem
- I(E) Intervention, Exposure
- Comparator, control
- Outcome
- Study design

In long-term smokers, can electronic cigarettes be used as an effective smoking cessation technique?

Structured search: PICO

- **P** Long-term smokers
- **I(E)** Electronic cigarettes
- **C** N/A
- **O** Cessation
- **S** Systematic reviews/RCTs

In long-term smokers, can electronic cigarettes be used as an effective smoking cessation technique?

Structured search: search terms

Concept 1 (Population)

- Smokers, smoking, tobacco use...

Concept 2 (Intervention)

- Electronic cigarettes, e-cigarettes, vaping, Juul...

Concept 3 (Outcome)

- Cessation, quit, stop, give up

Concept 4 (Study type)

- Systematic Review, RCT

Structured search: combining terms

(smoking **OR** smokers **OR** tobacco use)
AND (electronic cigarettes **OR** e-cigarettes
OR vaping **OR** juul) **AND** (cessation **OR** quit
OR stop **OR** give up)

AND = Combining different search concepts,
narrows search

OR = Combining synonyms for the same concept,
broadens search

Structured search: shortcuts

(smok* **OR** "tobacco use*") **AND**
("electronic cigarette*" **OR** e-cig* **OR**
vaping **OR** juul) **AND** (cessation **OR**
quit* **OR** stop* **OR** "give up")

* = truncation

"" = phrase searching

Structured search: applying limits

(smok* **OR** “tobacco use*”) **AND**
 (“electronic cigarette*” **OR** e-cig* **OR**
vaping **OR** juul) **AND** (cessation **OR**
quit* **OR** stop* **OR** “give up”)

Filter by date, language, publication type (e.g. systematic review, RCT), age groups...

Structured search: subject search

- On Medline, search using Medical Subject Headings(MeSH)
- Articles are tagged with keywords from a structured vocabulary
- A search for these keywords retrieves articles on the topic
- Equivalent subject / thesaurus searching available on many databases but not all

Structured search: databases

- Bibliographic databases
 - CINAHL
 - Embase
 - Global Health
 - Medline
 - Web of Science...
- Full list on [Databases A-Z](#) - Subject – Medical Sciences

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Snowballing: Why do it?

- Finding “missing” research
 - Limited scope of databases – discipline, research type...
- Best use of time
 - Broad topics can retrieve a large volume of results
 - Focused search, plus snowballing can be more efficient

Snowballing: techniques

- Citation tracking
 - Forward
 - Backward
- Related articles
- Sibling studies
- Grey literature searching



Beware of getting
trapped in a
bubble

Snowballing: techniques

- Citation tracking
 - [Google Scholar](#), [LENS.org](#), [Scopus](#), [Web of Science](#)
- Related articles
 - [Google Scholar](#), [LENS.org](#), [PubMed](#)
- Sibling studies
 - Author linking in databases
 - Searching for study IDs
 - Author/organizational web-sites

Snowballing: techniques

Grey literature searching

- Web searching
 - [Google](#), [DuckDuckGo](#)
- Specialist resources
 - Conference abstracts – conference web-sites
 - Guidelines – [TRIP](#), [NICE Evidence search](#)
 - Reports – organizational web-sites
 - Preprints – [medRxiv](#), [bioRxiv](#), [Europe PMC](#)
 - Theses – [Proquest Dissertations & Theses](#)
 - Trial protocols – [clinicaltrials.gov](#), [WHO ICTRP](#)

Managing & organizing references

- Reference management software
 - [Endnote](#) & [RefWorks](#) (OU subscription)
 - [Mendeley](#) & [Zotero](#) (Free)
- Review management software
 - [Covidence](#) & [EPPI-Reviewer](#) (Subscription)
 - [Rayyan](#) & [SR-Accelerator](#) (Free)
- [SR Toolbox](#)

Keeping up-to-date

Once you've run your searches you might want to be notified of new research on your topic

- E-mail alerts
- RSS feeds
- Journal TOCs
- Twitter

Search process: Note taking

At some point, you'll write up your review. To report the search accurately keep notes on:

- Search terms used – full search strategy for each database
- Limits applied
- Databases & web-sites searched
- Date of search
- Snowballing methods used

Search process: questions

- Contact us

hcl-enquiries@bodleian.ox.ac.uk

- LibGuides

- [Systematic Reviews](#)
- [Medical Researchers:
Research Resources](#)

- Resource list

