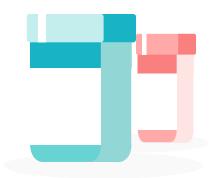
Preceptor Connection: Library Resources & Searching Refresher for Community Pharmacy



Janice Kung

Sperber Health Sciences Library, University of Alberta Sept 17, 2024





Library Resources Overview

U of A

Attention: Preceptors!

Apply for U of A Library Access!

Clinical Preceptors: 120 days

Clinical Academic Colleagues: 3-year

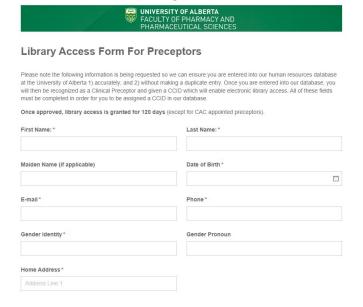
rolling term

Wealth of journals & Resources!

Increased access to journals, probably unavailable in your pharmacy.

E.g. DynaMed, Lexicomp, Embase, Scopus, and more!

Preceptor Library Access Form



U of A Pharmacy Guide

https://guides.library.ualberta.ca/pharmacy

♠ > Subject Guides > Health Sciences > Pharmacy and Pharmaceutical Sciences > Home

Pharmacy and Pharmaceutical Sciences

Search this Guide Search

Home

Ebooks (Textbooks)

Citation Help and Course-specific resources

Mobile Apps 2

Reference Management Software

Online Dictionaries

Pharmacy Resources & Patient Info

Key Journals

Librarian



Article Databases ie. Non-Preappraised Research

- PubMed (with links to UofA e-journals)
- MEDLINE (1946-present via Ovid)
- Scopus ⊕
- EMBASE ₩
- Web of Science All Databases
- SciFinder-n #
- CINAHL Plus with Full Text # G

Drug Information

- <u>UpToDate LexiDrug (formerly Lexicomp)</u>
 Comprehensive drug information tool for use at the point of care. Contains drug monographs, modules for drug interactions, identification, calculations, toxicology, patient education, and natural products. A mobile app is available for download.
- AHS Parenteral Manual
- <u>Drug Product Database (DPD)</u>
- Bugs & Drugs

Search Across the Hierarchy of Evidence

- Trip Pro 🚇
- · ACCESSSS Federated Search

Summaries & Guidelines

- <u>DynaMed</u>

 DynaMed is an evidence-based clinical point-of-care tool. <u>Click here for instructions</u> on how to download the mobile app to your phone.
- ClinicalKey
- Tools for Practice
- <u>CPG Infobase: Clinical Practice</u>
 Guidelines
- NICE Guidelines

Preappraised Resources

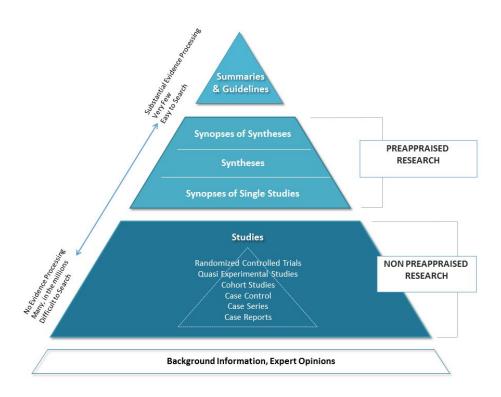
- Cochrane Library ☑ 圖
- ACP Journal Club
 Click on "Journal Club" in Annals of Internal Medicine



Searching

Basic vs. Advanced

Levels of Evidence



Adapted by L. Tjosvold from: Agoritsas T, Vandvik P, Neumann I, Rochwerg B, Jaeschke R, Hayward R, Guyatt G, McKibbon K. Finding Current Best Evidence. In: Guyatt G, Meade MO, Rennie D, Cook DJ. eds. JAMA evidence Using Evidence to Improve Care. New York, NY: McGraw-Hill; 2014.



Clinical Searching

Basic

Levels of Evidence & Clinical Searching

Evidence based summaries

& clinical guidance

• TRIP

• Lexicomp

• Dynamed

• CPS

Summaries

& Guidelines



Recent Alerts

Follow your specialty and individual topics to personalize alerts. Manage followed content.

All Potentially Practice-Changing Only

Evidence • Updated 29 Aug 2023

addition of outpatient gabapentin to standard multimodal pain management may not reduce time to opioid cessation in patients with severe acute pain after cesarean birth (Anesth Analg 2023 Jun 1)

View in Cesarean Birth

Evidence • Updated 29 Aug 2023

addition of liraglutide to lifestyle intervention may improve weight loss at 24 weeks in adults with poor weight loss and suboptimal glucagon-like peptide-1 (GLP-1) response ≥ 1 year after metabolic surgery (JAMA Surg 2023 Jul 26)

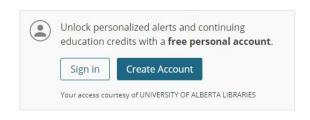
View in Bariatric Surgery in Adults

Subscribe to personalize your alerts. Already subscribed? Sign in.

Health Equity Evidence • Updated 29 Aug 2023

persons with self-reported history of cardiovascular disease from upper-middle- or high-income countries reported to have higher aspirin use for secondary prevention compared with low-income countries (JAMA 2023 Aug 22)

View in Antiplatelet and Anticoagulant Drugs for Coronary Artery Disease



Announcements

DynaMed Content Eligible for DEA Training Requirements

AMA PRA Category 1 Credit™ activity, designated by Baylor College of Medicine, is eligible for 0.5 credits of education in pain management and the prescription of opioids. See eligible course list or browse the Substance Use and Addiction Medicine specialty

DynaMed Approved by the Federation of the Royal Colleges of Physicians

DynaMed is now approved as source of CPD credit for members of the three Royal Colleges of Physicians in the UK. Read the press release.

Management of Dyslipidemias

Topic Updates Images Tables About





SECTIONS:

Overview

Related Topics

Diagnostic Considerations

Risk Stratification

Lifestyle Modifications

Treatment Guideline Recommendations

Medications

Quality Improvement

Guidelines and Resources

Patient Information

References

< Previous Section Next Section >

Overview

- · dyslipidemias cover a range of lipid abnormalities which may include any combination of
 - increased
 - total cholesterol (generally ≥ 240 mg/dL [6.2 mmol/L])
 - low-density lipoprotein (LDL) cholesterol (generally > 160 mg/dL [4.14 mmol/L])
 - triglyceride levels (generally > 200 mg/dL [2.3 mmol/L])
 - decreased high-density lipoprotein (HDL) cholesterol levels (generally < 40 mg/dL [1.03 mmol/L])
- · lipid screening recommendations for adults differ by professional organization, but screening adults every 4-6 years between the ages of 20 and 79 years is reasonable, with strongest evidence for screening in patients ≥ 40 years old and with certain comorbid conditions
- · for patients requiring screening as listed above or in patients with established cardiovascular disease or with certain risk factors
 - recommended tests include total cholesterol, LDL cholesterol, HDL cholesterol, triglycerides, and non-HDL cholesterol
 - · tests that may be considered in specific patients or under specific circumstances include lipoprotein a [Lp (a)] and apolipoprotein B
 - obtain blood sample under fasting conditions if possible (ideally after 12 hours of fasting), but assessment of cardiovascular risk appears to be similar in fasting and nonfasting patients as long as triglyceride level is < 500 mg/dL
- hypercholesterolemia
 - lifestyle changes recommended by American College of Cardiology/American Heart Association (ACC/AHA), European Society of Cardiology/European Atherosclerosis Society (ESC/EAS), and National Institute for Care Excellence (NICE) include

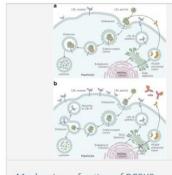
TOPIC EDITOR

Fatima Cody Stanford MD, MPH, MPA, FAA FACP, FTOS

DEPUTY EDITOR

Peter Oettgen MD

Images



Mechanism of action of PCSK9 inhibition

Tables



Dietary Recommendations to Lower Total Cholesterol & Low-density Lipoprotein Cholesterol



Searching for Research Purposes

Advanced

Steps in a Systematic Search

- Clearly describe research question
- 2. Identify concepts in the research question
 - (PICO, highlight concepts on paper)
- 3. Write concepts into circles
- 4. Identify synonyms for each concept
- 5. Combine search concepts using appropriate operators (AND, OR)

Sample Research Question



You're tasked with creating guidelines for the management of dyslipidemia and the prevention of cardiovascular disease in adults by pharmacists.

How would you develop a comprehensive literature review?

Identify Concepts in Research Question

- P Population or Problem
- I Intervention
- **C** Comparison
- O Outcomes
 - S Study design
 - T Time
 - S Setting

Another Way to Break Down Research Questions

What are the experiences of pharmacists working in disaster settings (e.g. wildfire emergencies)?

P	Population or Problem	Pharmacists
С	Concept	Experiences
С	Context	Disaster settings

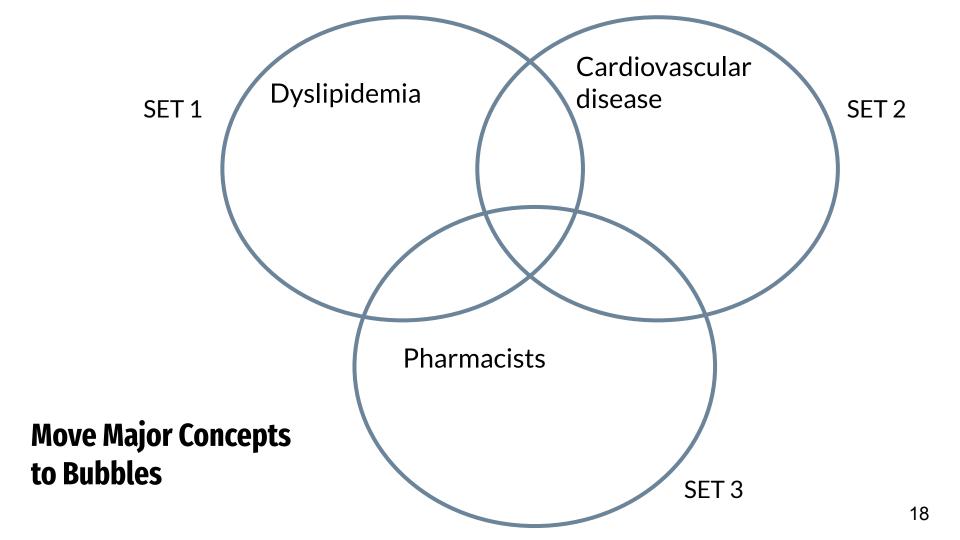
PICOS	Ask yourself:	Example:
Population (patient)	How would I describe a group of patients similar to mine? What main problem am I studying?	
Intervention (drug, procedure, etc.)	Which main intervention, am I considering?	
Comparison (optional)	What is the main alternative to compare with the intervention?	
Outcome	What can I hope to accomplish, measure, improve or affect?	
Study design	What study design would provide the best level of evidence for this question?	

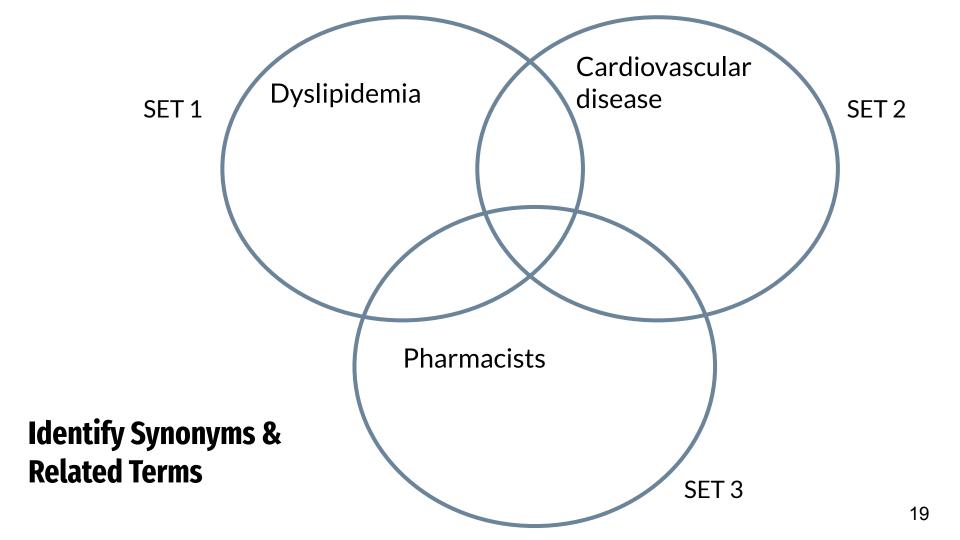
Sample Research Question

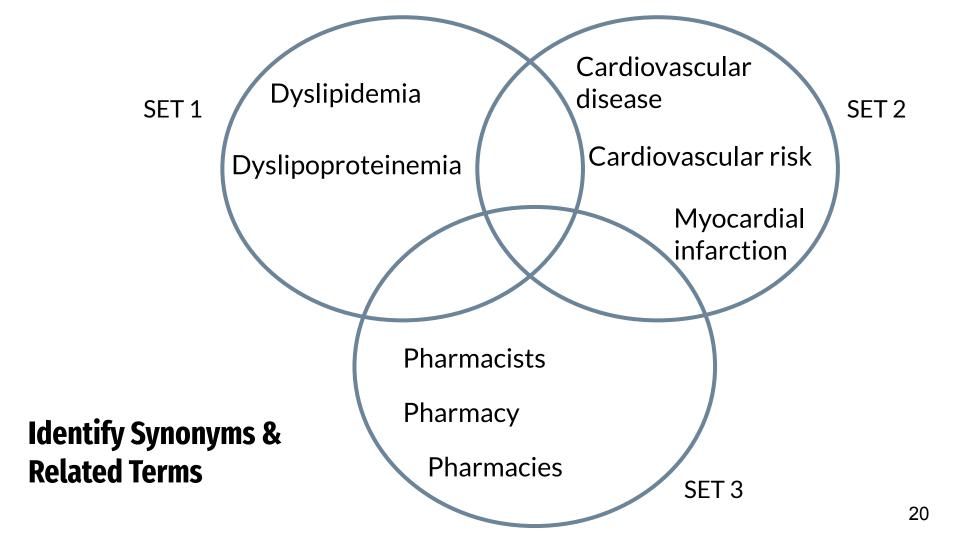


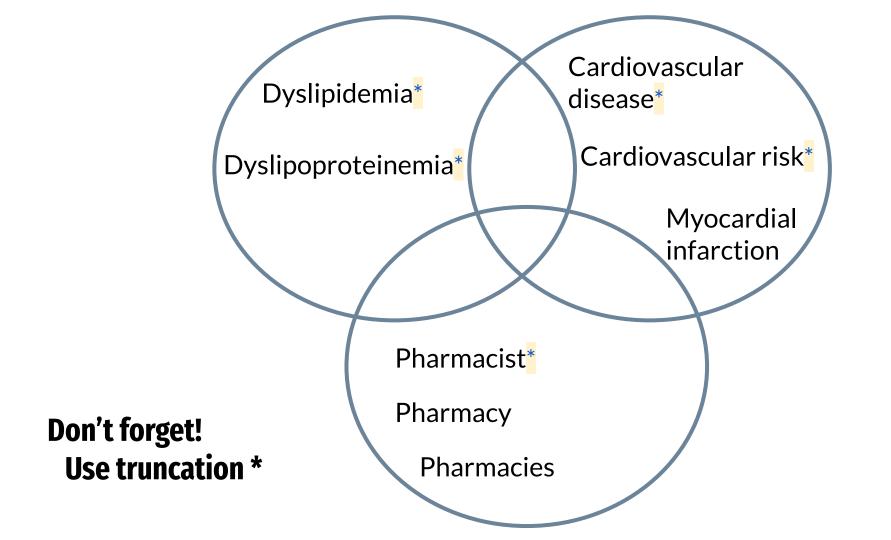
You're tasked with creating guidelines for the management of dyslipidemia and the prevention of cardiovascular disease in adults by pharmacists.

How would you develop a comprehensive literature review?









How to Develop a Better Search?

Truncation: kidney* = kidney, kidneys

→ Be careful that the root word is not too short! e.g. rat*

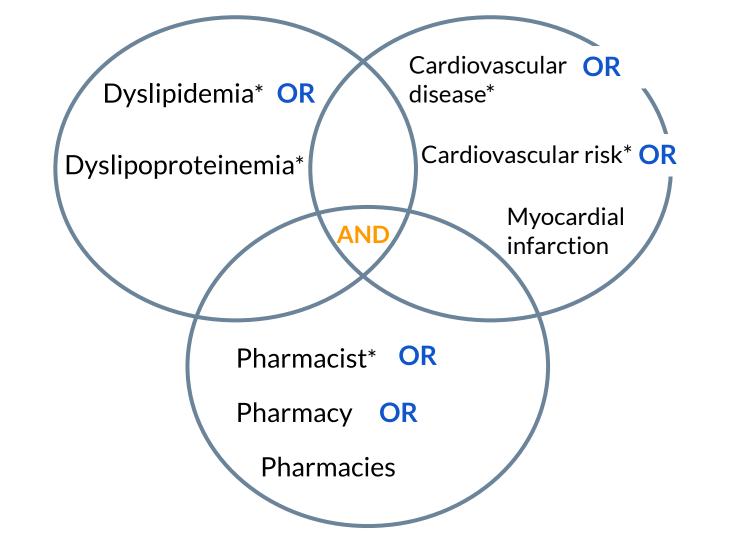
Synonyms: cancer, neoplasms, tumor, malignancy

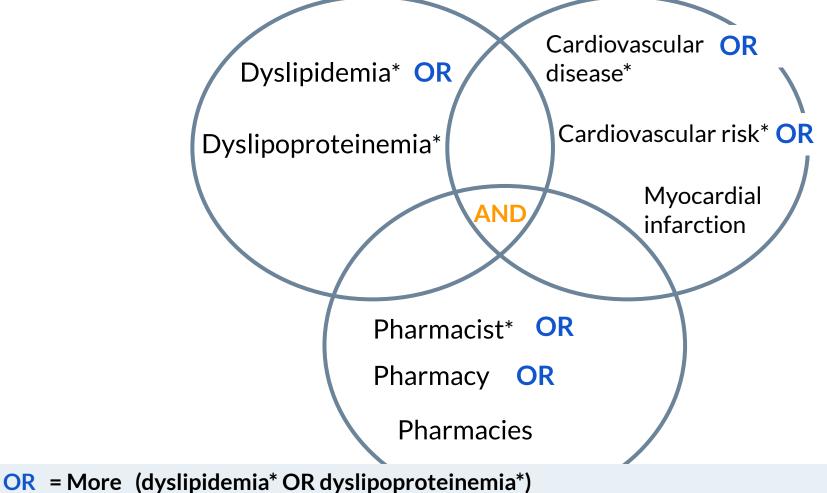
→ Can be true synonyms, subtypes/examples, methods

Antonyms: barriers/facilitators, success/failure

Alternate spellings: optimise, optimize

Trade names/Generic names: Tylenol vs. acetaminophen





AND = Less (dyslipidemia* AND cardiovascular disease* AND pharmacist*)

Combine Terms: Boolean Operators

Operators tell the database exactly how to combine terms:

- Synonyms are combined with OR
- Different Concepts/Sets are combined with AND

(dyslipidemia* OR dyslipoproteinemia*) AND (cardiovascular disease* OR cardiovascular risk* OR myocardial infarction) AND (pharmacist* OR pharmacy OR pharmacies)

Before Going to MEDLINE...

Subject Headings!



dyslipoproteinemia*.mp. 1 or 2	# 🛦	Searches	Results
117918 4 exp Cardiovascular Diseases/ or cardiovascular disease*.mp. 5 cardiovascular risk*.mp. 90078 6 myocardial infarction.mp. or exp Myocardial Infarction/ 7 4 or 5 or 6 2976198 8 exp Community Pharmacy Services/ or exp Pharmacists/ or pharmacist*.mp. 9 pharmacy.mp. or exp Pharmacy/ 7 79603	1	exp Dyslipidemias/ or dyslipidemia*.mp.	117565
4 exp Cardiovascular Diseases/ or cardiovascular disease*.mp. 5 cardiovascular risk*.mp. 6 myocardial infarction.mp. or exp Myocardial Infarction/ 7 4 or 5 or 6 8 exp Community Pharmacy Services/ or exp Pharmacists/ or pharmacist*.mp. 9 pharmacy.mp. or exp Pharmacy/ 7 7960:	2	dyslipoproteinemia*.mp.	872
5 cardiovascular risk*.mp. 90079 6 myocardial infarction.mp. or exp Myocardial Infarction/ 294200 7 4 or 5 or 6 2976190 8 exp Community Pharmacy Services/ or exp Pharmacists/ or pharmacist*.mp. 52800 9 pharmacy.mp. or exp Pharmacy/ 79600	3	1 or 2	117918
6 myocardial infarction.mp. or exp Myocardial Infarction/ 294200 7 4 or 5 or 6 2976190 8 exp Community Pharmacy Services/ or exp Pharmacists/ or pharmacist*.mp. 52800 9 pharmacy.mp. or exp Pharmacy/ 79600	4	exp Cardiovascular Diseases/ or cardiovascular disease*.mp.	2921152
7 4 or 5 or 6 2976190 8 exp Community Pharmacy Services/ or exp Pharmacists/ or pharmacist*.mp. 52800 9 pharmacy.mp. or exp Pharmacy/ 79600	5	cardiovascular risk*.mp.	90075
8 exp Community Pharmacy Services / or exp Pharmacists / or pharmacist*.mp. 5280 9 pharmacy.mp. or exp Pharmacy / 7960	6	myocardial infarction.mp. or exp Myocardial Infarction/	294206
9 pharmacy.mp. or exp Pharmacy/ 79602	7	4 or 5 or 6	2976196
	8	exp Community Pharmacy Services/ or exp Pharmacists/ or pharmacist*.mp.	52805
10 pharmacies.mp. or exp Pharmacies/ 21674	9	pharmacy.mp. or exp Pharmacy/	79602
	10	pharmacies.mp. or exp Pharmacies/	21674
	12	3 and 7 and 11	347

MEDLINE Search Tips

- Search keywords one at a time, line by line
- Include subject headings where relevant, "tags"
 - Use Scope Notes to find more keywords
- .mp. = Keyword search, machine reading "many places" of the record
- .ti. = Search only in the **title** of the article
- Save your search!

MEDLINE

Pubmed

CINAHL

Embase

Web of Science

Scopus

Interdisciplinary database.

Strength in the biomedical literature.

And others... (grey literature)

Q Search

cardiovascular disease* OR cardiovascular risk* OR myocardial infarction

Lists

Sources

SciVal



Start exploring

Discover the most reliable, relevant, up-to-date research. All in one place.

Authors & Researcher Discovery Affiliations Scopus Al Alpha Documents

V

V

V

Search within

Article title, Abstract, Keywords

AND

Search within

Article title, Abstract, Keywords

AND

Search within

Article title, Abstract, Keywords

Search documents

Search documents

Search documents *

pharmacist* OR pharmacy OR pharmacies

dyslipidemia* OR dyslipoproteinemia*

+ Add search field Add date range Advanced document search > Preprints

Patents Secondary documents

Research data 7

66 documents found ✓ Analyze results Sort by Date (newest) H Export V Download Citation overview · · · More Show all abstracts E Date (newest) Document title Authors Source Citations Date (oldest) Cited by (highest) Article international Cited by (lowest) Impact of statin adherence and interruption within 6 months Giacobbe, F., Giannino, G., after ST-segment elevation myocardial infarction (STEMI): Results Cardiology Annone, U., Relevance , 405, 131933 First Author (A-Z) from the real-world regional registry FAST-STEMI ... Giammaria, M., De Ferrari, G.M. First Author (Z-A) Show abstract V Get It @ UAlberta 7 Related documents Source Title (A-Z) Source Title (Z-A) Article . Open access KDIGO 2024 Clinical Practice Guideline for the Evaluation and Stevens, P.E., Ahmed, S.B., Kidney International, 2024 199 Management of Chronic Kidney Disease Carrero, J.J., ... Zhang, L., 105(4), pp. S117-S314 Levin, A. Get It @ UAlberta 7 Related documents Article . Open access Are exercise prescriptions for patients with cardiovascular Marinus, N., Cornelissen, V., European Journal of 2024 2 disease, made by physiotherapists, in agreement with European Meesen, R., Coninx, K., Cardiovascular Nursing recommendations? , 23(3), pp. 230-240 Hansen, D. Show abstract V Related documents Get It @ UAlberta 7

Grey Literature

• Literature *not* published by an established publisher (e.g. not books, journals, magazines)

Includes:

- Government reports or research institutes
- Conference abstracts
- Theses/dissertations
- Websites
- Clinical trials registers → Cochrane Library
- Why Grey Literature?
 - Minimise publication bias

Grey Literature Searching Guide

Health Technology Assessments - Searching the Literature

Home

What Kind of Review Should I Do?

Databases for Finding Primary Studies

Searching Tutorials / Workshops

Search Filters

Grev Literature

Clinical Trials Registers

Clinical Practice Guidelines

Conference Abstracts

Licensing / Safety / Regulatory

Systematic Reviews / Health Technology Assessments / Health Economics

Theses and Dissertations

Covidence for Screening

Managing Your References

Beyond Searching: How do I do the rest of my review?

Who is an Author?

Introduction to Grey Literature

Grey literature is any material published outside of book and journal publishing. This includes most webpages, government documents, theses, corporate documents, reports, conference proceedings, online handbooks and manuals, and much more. Systematic and scoping reviews often include information from clinical trial registers, theses, and conference abstracts. Health technology assessments often include information from other HTA's or systematic reviews, economic reports, government regulatory information, clinical practice guidelines, etc.

Guide to searching the grey literature

Lists of health-related grey literature sources

- Grey Matters CADTH
 CADTH's online resource for grey literature searching
- HTA on the Net
 An extensitve list of resources to search when conducting a Health Technology
 Assessment
- Public Health Grey Literature Sources
 Produced by the Ontario Public Health Libraries Association

Databases containing grey literature

- Trip Pro
- NHS Evidence
 A list of sources of information included in NHS Evidence is available here

Search the Grey Literature

Search the Health Sciences Grey Literature Collection (ARCHIVE-IT) of government documents, research reports, web sites and other material.



Grey Literature Courses/Tutorials

- Searching the Grey Literature
 Northern Alberta Health Libraries
 Association (NAHLA) October 24
 2023
- Introduction to Grey Literature
 University of Waterloo

Perplexity.ai

- What is it?
 - Performs real-time web search, uses third party large language models to analyze & synthesize information
- Data sources:
 - Microsoft Bing
 - Academic journals
 - Research papers
 - Social media platforms
 - News articles
 - Forums including YouTube and Reddit

Perplexity.ai

Pros:

- Links to cited sources in text to verify the credibility of info
- Good for grey literature searching
- No login required!

Cons:

- Only 5 questions a day in the free version
- May provide surface info rather than in-depth analysis
- May provide inaccurate and biased info
- Can't export citations or sources

Perplexity Sample Response

What is the role of pharmacists for the management of dyslipidemia and the prevention of cardiovascular disease in adults?









Pharmacists can play several important roles in managing dyslipidemia and preventing cardiovascular disease in adults:

Medication Management

- Review and optimize lipid-lowering medication regimens
- · Monitor for drug interactions and side effects 1
- Adjust medication doses as needed (under collaborative practice agreements) 4
- Provide medication counseling and education to improve adherence 1 3

Risk Assessment and Screening

- Conduct cardiovascular risk assessments 2 4
- Perform point-of-care lipid testing
- Screen for other cardiovascular risk factors like hypertension and diabetes 4

Patient Education and Counseling

- Educate patients on lifestyle modifications (diet, exercise, smoking cessation) 1 3
- · Counsel on proper use of medications 1







Citation Managers

Keeping Track of your Literature

<u>Citation &</u> <u>Reference Management</u>

Summary of Best Features and Drawbacks

	EndNote 20	EndNote Basic	Mendeley	Zotero
Best features	Can store 10,000+ references and PDFs Deduplicates large numbers of references Many reference types (helpful for accurate citation) Highly customizable Ability to work offline	Free Cloud-based Many reference types (helpful for accurate citation)	Free (up to 2GB of online storage) User-friendly interface Ability to work offline	Free (up to 300 MB online storage) Open source User-friendly interface Imports accurate metadata for a wide variety of source types Ability to work offline Integration with multiple word processors
Drawbacks	Price (~\$140) License tied to one device Steeper learning curve than other options No Google Docs integration (only MS Word and LibreOffice)	Limited storage capacity Limited citation styles and no custom style editing No PDF annotation No Google Docs integration (only MS Word and LibreOffice)	Small number of reference types Limited group sharing for free accounts No Google Docs integration (only MS Word)	Limited free cloud- based storage Works best with one primary workstation

Further Questions?



Janice Kung, MLIS

University of Alberta Library janice.kung@ualberta.ca

Help us improve this session.

Slides credit: Slidesgo