Systematic Literature Searching

Provincial Addiction & Mental Health

Knowledge Exchange

May 2019



Outline

1) Planning your search

2) Searching for academic literature

3) Searching for grey literature



Search request

"Hi, my name is Abigail Williams, I'm an Edmonton Zone manager in Public Health with Alberta Health Services. My team is in the process of developing an Inner-City Homeless Health Project for teenagers. We're interested in finding current, evidence-based interventions for homeless teenagers. Our team conducted a search on this topic several years ago and was unable to find much relevant literature; we're hoping you can help!"







Search planning

Understand the topic

Formulate a research question

Break down the research question

identify concepts



Frameworks

Model	Description	Suitability
PICO	 Patient, population, problem Intervention (e.g., form of treatment, type of service delivery) Comparison (e.g., placebo) Outcome (e.g., side effects, morbidity) 	Clinical questions
ECLIPSE	 Expectation – what is the information intended for? Client Group – for whom is the service intended? Location – where is the service physically sited? Impact – what is the service change being evaluated? What would represent success? How is this measured? Professionals – who provides or improves the service? Service – what type of service is under consideration? 	Health policy and management questions

Davies, K. S. (2011). Formulating the evidence-based practice question: A review of the frameworks. *Evidence Based Library and Information Practice*, 6(2), 75-80.



Developing a research question

"Hi, my name is Abigail Williams, I'm an Edmonton Zone manager in Public Health with Alberta Health Services. My team is in the process of developing an Inner-City Homeless Health Project for teenagers. We're interested in finding current, evidence-based <u>interventions</u> for <u>homeless</u> <u>teenagers</u>. Our team conducted a search on this topic several years ago and was unable to find much relevant literature; we're hoping you can help!"

Research question:

What are some evidence-based interventions for homeless teenagers?



Concept map

Α	В	С
Teenagers	Homeless	Interventions
Adolescents	Street living	Therapies
Youth	Runaway	Health services



Combining concepts

Boolean operators

- AND combine concepts (e.g., teenagers AND homeless AND interventions)
- OR search for similar concepts (e.g., teenagers OR adolescents OR youth)
- NOT exclude concepts (e.g., teenagers NOT adults)





Searching for Academic Literature



Key biomedical databases

MEDLINE – life sciences and biomedicine

PubMed – similar to MEDLINE but with more content and different interface

PsycINFO – behavioural science and mental health

CINAHL – nursing and allied health professionals

Embase – Pharmacology and biomedicine



Searching databases

Subject headings

- descriptors, headings, index terms
- controlled vocabulary
- focused search
 - MEDLINE Medical Subject Headings (MeSH)

Keywords

- natural language, free text words
- jargon or distinctive words
- risk of irrelevant results



Searching databases

Truncation

- broaden search (*, \$)
- behavior* = behaviors, behavioral, etc.

Wildcards

- variant spellings (?, !)
- behavio?r = behavior, behaviour



Document your searches

Record search methodology

Use database personal account features

Reference management software

- Mendeley
- Zotero
- Refworks
- Endnote



Search time!

https://krs.libguides.com/home



Searching for Grey Literature



What is grey literature?

Grey literature refers to materials not commercially published like scholarly articles, and are mostly inaccessible via bibliographic databases.

Grey literature includes: government and agency reports, guidelines, conference proceedings, publications from national and international organizations, and evaluations.



Why is grey literature important?

Background and history

Useful for searches on best practices

Current information

Fills the gaps



Grey lit vs. academic lit

Issues	Grey Literature	Academic Literature
# of documents being published	Increasing at exponential rate	Increasing, but at a more measured pace
Speed of production	Instant, due to self-publishing on the web	Slower, due to costs and editing process
Cost	Free (in most cases), or low	High, increasing all the time
Access	Free, open, immediate in most cases	Locked, gated access, \$\$\$ (some OA)
Quality	Highly variable	Excellent, edited, peer-reviewed
Findability	Improving but 'hit and miss'	Generally stable

Giustini, D. (2012). Finding the hard to finds: Searching for grey literature. Vancouver, BC: University of British Columbia.



Finding grey literature

Internet search engines (e.g., Google, Bing, Yahoo!)

Relevant organizations (e.g., CAMH, CCSA, MHCC)

Government publications

Hand-searching relevant journals

Ask the experts



Remember...

Document searches

Impossible to achieve absolute comprehensiveness

Assess quality



Google search

https://www.google.ca/



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