

NAHLA AGM: Searching for Grey Literature

Liza Chan
Alberta Innovates

Lisa Tjosvold
University of Alberta Library

October 24, 2023

What is Grey Literature?

...manifold document types produced on all levels of government, academics, business and industry in print and electronic formats, that are protected by intellectual property rights, of sufficient quality to be collected and preserved by library holdings or institutional repositories, but which is not controlled by commercial publishers, ie., where publishing is not the primary activity of the producing body.

- [1997 Luxembourg, 3rd International Conference on Grey Literature](#)
- [2004 New York, 6th International Conference on Grey literature in New York City](#)
- [2010 Prague 12th International Conference on Grey literature](#) (proposed but not universally adopted)

Grey Literature Synonyms

- Gray literature
- Fugitive literature
- Unpublished
- Non-conventional literature
- Non-traditional publications
- Ephemeral publications

Types of Grey Literature

- Conference proceedings, Abstracts, Posters
- Preprints, Netprints, E-Archives
- Newsletters
- Research & Technical reports
- Theses and Dissertations
- Translations
- Census, economic and other statistical/ information sources
- Web 2.0: blogs, Tweets, Facebook, etc.
- Annual or activity reports
- Working papers
- Technical standards
- Clinical practice guidelines
- Patents
- Data and statistics
- Presentations
- Field notes
- Laboratory research books
- Academic courseware
- Lecture notes,
- ...and many more.

Producers of Grey Literature

- Government departments and agencies (e.g. municipal, provincial, national)
- International agencies, NGOs
- Non-profit organizations
- Academic and research institutes
- Professional associations
- Special interest groups / societies/ foundations
- Libraries, museums, archives
- Businesses and corporations
- Think tanks

Why Search Grey Literature?

- Access to global literature
- Often free (but sometimes very expensive)
- Currency
- Great coverage of niche/ non-mainstream topics
- More detailed reporting
- Mitigate publication bias

“... published trials tend to be larger and show an overall greater treatment effect than grey trials. This has important implications for reviewers who need to ensure they identify grey trials, in order to minimise the risk of introducing bias into their review.” (*Hopewell S, et al, 2007*)

Getting Started

1. Identify Your Audience/Stakeholders

- Decision-makers
- Academic
- Patients
- Industry

2. Identify the health domain:

- biomedical/laboratory medicine
- clinical medicine
- health systems
- public health
- health economics
- health policy
- healthcare workforce

3. Identify Your Target Literature Type

- Reports
- Practice guidelines
- Hospital policies
- Clinical Trials
- Conference proceedings
- Theses and dissertations
- Statistics
- Patents

4. Determine who produces this type of information

- Associations
- Government
- Industry
- NGOs

5. Do your inclusion criteria have limits?

- Dates
- Jurisdictions, Geographic regions
- Languages

Preliminary Searches

Do a quick search in Google

- add to your topic site: .org .ca .gov filetype: pdf
- limit to last year
- see other options in Advanced Search
- Example: ["urban green space" "mental health" site:.ca filetype:pdf](#)

Google Scholar

- [urban green space AND mental health site:.ac.uk OR site:.edu OR site:.ca](#)

“Our findings show that GS results contain moderate amounts of grey literature, with the majority found on average at page 80...We recommend that searches of article titles focus on the first 200 to 300 results.”

Grey Lit Tools

- GreyNet - Grey Literature Guides

<http://www.greylitguides.com/>

a directory of grey lit guides

- CADTH. Grey Matters Tool

<https://greymatters.cadth.ca/>

list of 208 sites in 13 different categories ie. trials registers, databases, HTAs, etc.

- OPHLA Public Health Grey Literature Sources

<https://drive.google.com/file/d/1OC2EDaEq9l8ctlVaEy7YAcDkum6tKKwt/view?pli=1>

Grey Lit Portals

- BASE (Bielefeld Academic Search Engine)
<https://www.base-search.net/>
- OAlster
<https://oaister.on.worldcat.org/discovery>
- The Lens
<https://www.lens.org/>

Google Custom Search Engines (CSE)

- [Canadian Public Health Information](#) (OPHLA)
- [Canadian Provincial and Municipal Government Documents Search](#) (Carleton University, MacOdrum Library)
- [US States Government](#) (OPHLA)

Sample Search Strings for Grey Literature Types

Grey Lit Type	Search Strings
Clinical Practice Guideline	(your topic) AND (guideline* OR statement* OR standard* OR consensus)
Conference Proceedings	(your topic) AND (meeting OR abstract* OR poster* OR conference* OR proceeding* OR poster* OR congress* OR symposi* OR workshop* OR seminar*)

Mainstream Databases

- PubMed - bibliography [pt], free full text [sb], congress [pt] and booksdocs[Filter] (which include HTAs) through NCBI Bookshelf
- CINAHL (\$) -abstract, bibliography, dissertation
- Cochrane Library – TRIALS registers, protocols
- EMBASE (\$) - conference paper, proceedings
- PsycINFO (\$) - dissertations
- Web of Science (\$) – bibliography, meeting abstract, Preprint citation index
- Scopus (\$) - conference papers, patents

Specialized Databases

- Clinical Trial Registries – e.g. [ClinicalTrials.gov](https://clinicaltrials.gov)
- Practice Guideline Sources– e.g. [Guideline Central](https://www.guidelinecentral.com), [TRIP](https://www.tripdb.com)
- Conference Proceedings – e.g. [Conference Proceedings Citation Index – Science](https://www.cpci-s.com) (CPCI-S) (\$)
- Research Registries – e.g. [PROSPERO](https://www.prospero.com) and [OSF](https://www.osf.io)
- Theses – e.g. ProQuest Dissertations and Theses

Library Catalogues and Institutional Repositories

- Government of Canada - Collection Search
<https://library-archives.canada.ca/eng/collection/Pages/collection.aspx>
- WorldCat
<https://www.worldcat.org/>
- WHO Data Collections
<https://www.who.int/data/collections>
- Open DOAR - full listing of all repositories
<https://v2.sherpa.ac.uk/opensoar/> -

Practice Guidelines and Standards

- TRIP Database <https://www.tripdatabase.com/>
- Guidelines Central
<https://www.guidelinecentral.com/guidelines/>
- [CPG Infobase](#) - Recently, the CMA [announced changes](#) to the CMA Joule offerings including the retirement of clinical tools and services this year. [Please be aware](#) that access will be available until Dec. 1, 2023.
- NICE Guidance <https://www.nice.org.uk/guidance>
- Leading Practices Library
<https://accreditation.ca/leading-practices>

Health Policy

- PAIS International (\$)
- Canada Commons (\$) <https://canadacommons.ca/>
- Policy Commons(\$) <https://policycommons.net/>
- Gallop Portal <https://beta.galloportal.ca/home>
- Health Systems Evidence - <https://www.healthsystemsevidence.org>
- [Dimensions.ai](#) (Free/Paid versions) - Links to Datasets, and Altmetric points to citing policy documents

Think Tanks

LibGuides with lists of Canadian think tanks

- <https://guides.library.utoronto.ca/c.php?g=714472&p=5093480>
- <https://libguides.uvic.ca/publicadmin/associations>

Other think tanks (US and Non US) Google custom search:

- <https://guides.library.harvard.edu/c.php?g=310680&p=2072552>

Preprint servers

- **bioRxiv** <https://www.biorxiv.org/>
- **medRxiv** <https://www.medrxiv.org/>
- **OSF Preprints** <https://osf.io/preprints/>
- [List of all preprint servers](#)

Grey Literature: Challenges

- Information overload
- Time and budget constraints
- No standard methodology
- Unstable producers and sources
- Archiving
- Quality: Peer review?
- Poor search engines
- No controlled vocabulary
- Locating full-text
- Documenting and reporting the search
- Citation (date? author?)

On the Horizon: AI

- ChatGPT
- Language processing/ Machine Learning

Documenting Your Grey Literature Searches

[How to Find & Document Grey Literature - Template](#)

(University of Toronto)

- Do keep track & keep it simple
- Cut-&-paste URL
- Useful (& non-useful) search terms, websites, databases
- Do save the full-text files - they can disappear!!
- Record number of results viewed or used

Grey Literature Search Log

Custom Google Search Engine for Government Documents

Note: filter was applied to limit search to Canadian documents.

Date searched: 30-Mar-15

#	Search	# results	# results screened	# new potentially relevant records	Total # records
1	school AND breakfast meal snack milk AND guidelines OR policies	~ 476,000	100	18	18
2	meals OR nutrition OR feeding AND school AND programs	~ 42,200,000	100	3	21
3	school nutrition AND policies or guidelines	~ 4,210,000	100	4	25
4	school meals AND best practices	~ 4,000,000	100	0	25
5	nutrition guidelines	~ 3,700,000	100	0	25

Source: Godin, K., Stapleton, J., Kirkpatrick, S. I., Hanning, R. M., & Leatherdale, S. T. (2015). Applying systematic review search methods to the grey literature: a case study examining guidelines for school-based breakfast programs in Canada. *Systematic reviews*, 4(1), 138. [DOI: 10.1186/s13643-015-0125-0](https://doi.org/10.1186/s13643-015-0125-0)

An Example of Writeup in Methods

A grey literature search plan was developed to incorporate four different searching strategies: (1) grey literature databases, (2) customized Google search engines, (3) targeted websites, and (4) consultation with contact experts. These complementary strategies were used to minimize the risk of omitting relevant sources.

In this case study, a search was conducted on March 20, 2015 and included three databases: Canadian Research Index (ProQuest, Micromedia), the Canadian Electronic Library—Canadian Public Policy Collection, and the Canadian Electronic Library—Canadian Health Research Collection. The search strategy included the following three groups of terms: (1) school; (2) breakfast (e.g. meal, nutrition, breakfast, snack, milk, feeding, lunch); and (3) guidelines (e.g. guidelines, standards, frameworks, recommendations, best practices). The terms were used as keyword fields in all database searches...

Specifically, for the second search strategy, custom Google search engines for Canadian public health information and government documents were utilized. ... [24].

The third search strategy involved browsing targeted websites of relevant health organizations and agencies, similar to the hand-searching methods used in screening a journal's table of contents in systematic review search methods. The identification and selection of relevant organizations for a grey ..., includes 'Grey Matters – A Practical Deep Web Search Tool for Evidence based Medicine', by the Canadian Agency for Drugs and Technologies in Health [26].

The fourth search technique used to identify documents for screening involved contacting content experts to identify other items for possible inclusion in the review.

Evaluating Grey Literature

CRAPP Test

(California State U)

<https://library.csuchico.edu/sites/default/files/craap-test.pdf>

DARTS

([Anna Karjalainen](#) 2008)

<https://guides.library.ubc.ca/c.php?g=307400&p=5209672>

ACCODS Checklist

(Flinders University)

QUality Evaluation Scoring Tool (QUEST)

(Robillard et al 2018)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6194721/>

Notable Grey Literature LibGuides

University of Toronto

<https://guides.library.utoronto.ca/c.php?g=577919&p=4123572>

University of British Columbia

<https://guides.library.ubc.ca/greylitforhealth>

Grey Lit List of guides from around the world:

<http://www.greylitguides.com/searching-for-grey-lit/>

Online Module for additional learning/practice

- University of Waterloo
https://lib.uwaterloo.ca/online_learning/sites/default/files/learnings/GreyLit/#/

GreyNet International

- ... *“to facilitate dialog, research, and communication between persons and organisations in the field of grey literature.”*
 - 25th GL conference: Confronting Climate Change with Trusted Grey Resources'
 - Amsterdam, Netherlands

<https://textrelease.com/gl25conference.html>
- **Grey Guide:** common ground for good practices and resources in grey literature

<http://greyguide.isti.cnr.it/>

Pearls of Wisdom

- Retrieval Limitations
 - Don't stress about trying to find everything
- Leverage references and experts
 - Utilize existing references within source documents and talk to experts in the field
- Balance your time with your resources
 - Don't spend large amounts of time to find the one piece of information
- Be strategic and adapt when necessary
 - Be prepared to not find much or too much, and adjust your approach. Consider using multiple techniques

Quiz #1

Which of these materials are generally accepted to be grey literature? (select all that apply)

- 1) Standards
- 2) Government Reports
- 3) Scholarly Journals
- 4) Policy Statements
- 5) Conference Papers
- 6) Published books
- 7) All of the above

Quiz #2

All types of grey literature are peer reviewed (i.e. subject to quality assessment processes) before they are released to the public. True or False?

False?

Thank You

Any Questions?

Contact:

lisa.tjosvold@ualberta.ca

liza.info.2023@gmail.com