

MODULE 3
BEYOND GOOGLE – SEARCH
ENGINES, DATABASES & GREY
LITERATURE

Department of Pediatrics & Preventive Dentistry

College of Dental Sciences & Research Centre,

Gujarat University, Ahmedabad



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SOURCES OF EVIDENCE

Sources of evidence can be obtained in many ways during the course of literature search for a given research topic. There are two types of sources of evidence: Primary and Secondary.

Primary Sources

Primary Sources in the field of health sciences refer to original research articles published in reputed journals. The type of research articles that are included as primary sources include:

- Pilot studies
- Cohort studies
- Retrospective studies
- Case studies and Case Reports
- Qualitative Studies (Participant Observation, Interviews, Surveys)
- Experimental Research (Randomized clinical trials/Randomized Controlled Trials)
- Systematic Reviews of the above studies
- Meta Analysis (Qualitative or Quantitative) of the above studies



Secondary Sources of Evidence are at large descriptions of primary sources. These can be found in magazines and newspapers. The highest level of secondary sources includes review articles in journals that give a summary of experiment/research topic and provide a context or perspective of a research topic. The main difference between primary and secondary sources of evidence is that the language used in secondary sources is more accessible to a broader audience, not limited to experts or scholars of a specific field.

WHAT ARE SEARCH ENGINES?

A search engine is a program that searches the web for information based on the keywords entered by the user. The search engine will return a list of web pages that match the user's search terms.

WHAT ARE DATABASES?

A database is a structured collection of information that is organized and stored in a specific way to make it easy to search and retrieve. Databases can contain a wide variety of information, such as customer records, inventory data, and scientific research findings.

WHAT IS GREY LITERATURE?

Grey literature refers to information that is not commercially published or widely distributed, such as reports, working papers, and theses. Grey literature is often produced by government agencies, academic institutions, and research organizations, and may not be available through traditional commercial channels.

The afore-mentioned description of search engines, databases and grey literature are answered by an Artificial Intelligence Chatbot (ChatGPT Mar 23 version) which is gradually emerging as one of the sources for searching relevant literature. However, it is not considered as a credible source as of now as it often answers questions based on trends and patterns with a dataset whose updates are inconsistent. It is however a credible source for understanding basic terminologies.



LIST OF SEARCH ENGINES, DATABASES & GREY LITERATURE

SEARCH ENGINES	DATABASES	GREY LITERATURE
Google	PubMed	Market research reports
Bing	Scopus	OpenGrey
Baidu	Web of Science	Government reports
Boardreader	BioMed Central	Medical Dictionaries
Ask Jeeves	CINAHL	WHO
DuckDuckGo	Cochrane Library	Clinical Trial Registries
Yahoo	DOAJ	OpenDOAR
Peekier	EBSCO	WorldCat
Swisscows	Embase	White papers
MetaGer	ERIC	NGO reports
AOL Search	CORE	Preprints
Search Encrypt	IEEE Xplore	Industry reports
Gibiru	JSTOR	Wikis
Yandex	LILACS	Policy briefs
Dogpile	ProQuest	Technical reports
Gigablast	PsycINFO	Blogs
WolframAlpha	Public Library of Science (PLoS)	Conference papers
Qwant	Academic Search Premier	Standards & specifications
Yippy	ScienceDirect	Working papers
	Google Scholar	Patents
	TRIP Database	Brochures/Pamphlets
	UpToDate	Theses and dissertations
	LexisNexis	