

Literature
Review
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Research Skills Series



Learning objectives

At the end of this lesson the student should be able to:-

- Define a literature review
- List and explain the different sources of literature
- Select sources for academic medical literature
- Differentiate between different types of literature reviews
- Justify the purpose of a literature review
- Write a literature review for a research project of interest





WHAT IS LITERATURE ???



Literature, a body of written works.

The name has traditionally been applied to those imaginative works of poetry and prose”

Review, to think or talk about something again, in order to make changes to it or decide about it .



□ There are two kinds of literature reviews you might write at college or university

1. Students are asked to write as a stand-alone assignment in a course, often as part of their training in the research processes in their field.

2. Other that is written as part of an introduction to, or preparation for, a longer work, usually a thesis or research project.



LITERATURE REVIEW/BACKGROUND

This could be the
foundation/Introduction
to your :

- Research Project /thesis
- Paper



LITERATURE REVIEW/REVIEW ARTICLE

Standalone assignment

Develops literature in a field

Does not analyze primary
data



Definition.

- A **literature review** is both a summary and explanation of the complete and current state of knowledge, on a limited topic as found in academic books and journal articles.



What is Medical literature???

Medical literature

- **Published**

- 22 000 biomedical journals
 - ≈ 5 000 journals indexed in Medline
 - 17 000 biomedical books annually

- **Gray literature**

- Conference proceedings
 - Reports
 - Theses
 - Unpublished studies



Narrative Reviews

Descriptive Reviews

Scoping Reviews

Critical Reviews

**Typology
of
Reviews**

Meta-Analyses

Systematic Reviews

Theoretical Reviews

Umbrella Reviews



Why to do a literature review?



What's the purpose???



Purpose of literature review

- **To understand** a topic in terms of what is already known.
- **To identify** data sources that other researchers have used.
- **To learn** how others have defined and measured key concepts.
- **To develop** alternative research projects.
- **To contribute** to the field by moving research forward.
- **To provide** evidence that may be used to support your own findings.



Literature Review Contd.

□ Task

Apply all the following points to a topic of interest like :-

Corona Virus Disease

1. What is already known and what is unknown
2. What are the sources of data would you use for this information and why ?
- 3 What could you learn from previous literature ?



How and where do you begin ?



Where to **Begin?** At the **Beginning!**

Let's say you need some research resources for a paper you're writing for a class. You have a general topic – **diabetes** – and you know you need resources, but you aren't sure how to get started.





WHERE DO YOU FIND LITERATURE ?



Your impulse would be to start with the **Internet**

Google



but first consider what you need to find:

*quality, credible resources
about or related to diabetes*





(Original) Research Article
e.g. empirical study

Review Article
e.g. literature review, systematic review

Theoretical Article

Academic/Scholarly Sources

Book Review

Editorial

Popular Sources

General Interest

Trade Professional

Sensational

BIG range



Sources of Literature

Primary

- Reports
- Theses
- E-mail, Memos, minutes
- Conference proceedings
- Company reports
- Unpublished manuscript sources
- Some government publications such as white paper etc.

Secondary

- Books
- Journals
- Newspapers
- Some government Publications








Tertiary

- Indexes
- Abstracts
- Catalogues
- Encyclopedia
- Dictionaries
- Bibliographies
- Citation Indexes



Where to start when you need information

- A quick review of a topic
 - UpToDate
 - Emedicine
- Drugs
 - Micromedex MDConsult
 - UpToDate Drugs@FDA.gov
- Extensive review
 - Cochrane Library
- **Everything else**
 - **Start with PubMed/Embase**

	National Library of Medicine Index of all Medical Literature FREE
	Intranet Access Only
	Full Text Journals Online Password
	Password required
	Full Text books and journals Register for access Drug Database
	Intranet Access Only
	



NEXT STEP: *NOT* Searching YET

- ❑ **There's something you need to know.**
- ❑ Many professors and teachers cringe when you use **Google** and other search engines and rely too heavily on websites for your research; do you know **why**?



- The reason for this is that the Internet is NOT moderated or quality-controlled, and there's a lot of **GARBAGE** and **RUMOR** and outright **MISINFORMATION** floating around.



NOT Searching YET

- ❑ You don't want to write a paper/review or conduct research with **GARBAGE, RUMOR, or MISINFORMATION**, do you?

OF COURSE NOT!

- ❑ You would write your paper/review/research project which **healthy, safe, clean** right? **RIGHT!**



NOT Searching YET

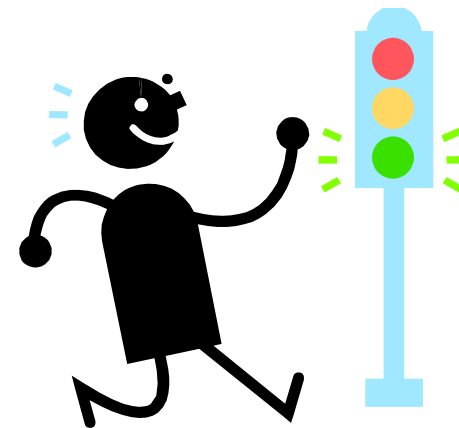
- “healthy, safe, clean things” = **scholarly, peer-reviewed, research-oriented resources**
- There ARE scholarly, peer-reviewed, research-oriented resources on the Internet – but it usually **takes extra effort** and **time** to find them



So...what are scholarly resources?

- ❑ Written by **experts**
- ❑ Focus on a **particular field, topic, or discipline**
- ❑ **“Proper” language**, technical vocabulary
- ❑ No ads
- ❑ **RESEARCH ORIENTED**

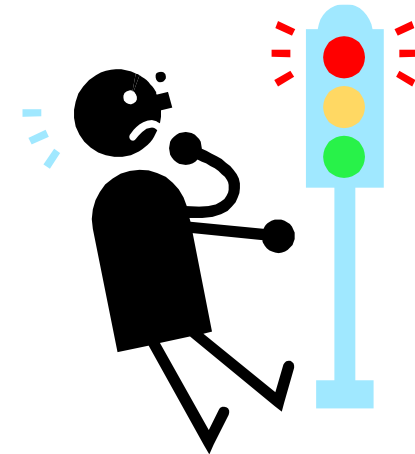
* *Journals are scholarly*



POPULAR resources are the opposite

- ◉ Written by **journalists**
- ◉ Usually cover **broad topics**, fields, issues, or disciplines
- ◉ Usually appeal to **a wide audience**
- ◉ **Everyday language**, slang.
- ◉ LOTS of ads
- ◉ **NOT RESEARCH ORIENTED**

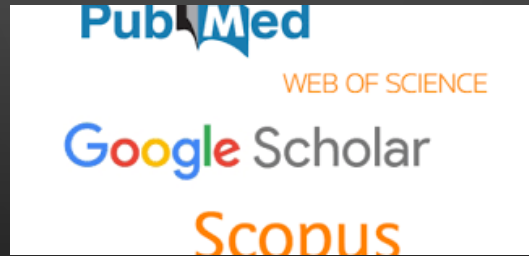
* *Magazines and newspapers are popular*







SEARCH ENGINES AND DATA BASES





NLM, the World's
Largest Medical
Library produces
MEDLINE



MEDLINE

MEDLINE is a
bibliographic
database with over
24 million citations



These vendors *lease*
MEDLINE from NLM so it
can be searched through
their own interfaces

Free!



PubMED (**Public
MEDLINE**) is NLM's
search engine interface
for MEDLINE



Medline.....Medical Literature Analysis and Retrieval System Online

- Medline is the electronic database of indexed citations and abstracts of the US National Library of Medicine (NLM)
- It includes bibliographic information for articles and abstracts covering medicine, nursing, pharmacy, dentistry, veterinary medicine, and health care, and preclinical sciences journal articles.
- It contains >21 million records from approximately 5,000 selected publications from 1950 to the present



QUICK Review

- What is a literature review
- Why do we need to conduct a literature review
- What are the two main types of literature reviews
- How are you going to start your literature review



ANY QUESTIONS ?



Thank
you!!



Reading list and references

- Research Methodology and Basic Biostatistics; Saira Afzal and Mustehsan Bashir ;Chapter 1 and 2 (1-15)
- Introduction to Health Research Methods A practical Guide ; Kathryn H. Jacobsen Chapters 1(1-5)& 3(15-18)

