

RESEARCH SERIES PART II

HOW TO CONDUCT A LITERATURE REVIEW

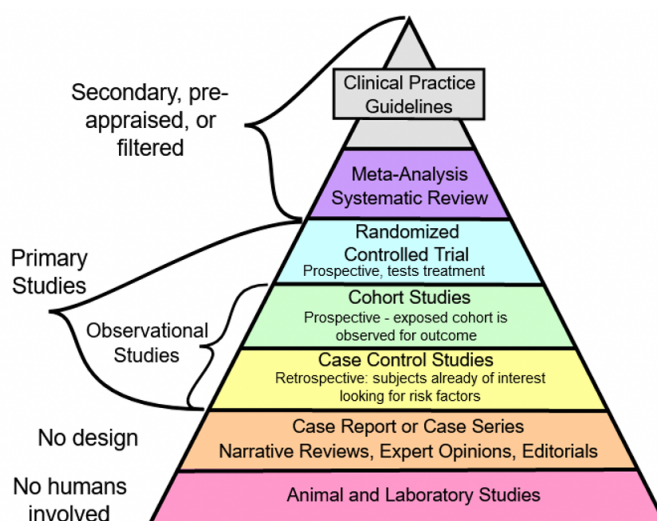
What is a literature review?

A literature review is a systematic process to find reputable science on a topic. You can conduct a review informally or formally. Informal reviews may occur when you need to gain more knowledge about a topic, such as to solve a clinical problem. Formal reviews may occur when you want to write a manuscript on the state of the science around a topic. Finding and reading published literature reviews is a great way to quickly learn about the current science on a topic. In the published literature, the most common types of literature reviews are narrative reviews, scoping reviews, systematic reviews, and meta-analyses. Narrative and scoping reviews provide an overview of a topic with a lower level of evidence, compared with systematic reviews and meta-analyses, which provide the highest level of evidence.¹ Systematic reviews summarize multiple studies, while meta-analyses combine results from multiple studies and calculate summary statistics to describe trends across studies.

What is the purpose of a literature review?

The purpose of a literature review is to distill the current knowledge of a topic and guide evidence-based practice and scientific research. Evidence-based practice relies on the meticulous selection and synthesis of high-quality research so that the most effective approaches for addressing clinical problems are available in clinical settings.¹ A high-quality literature review is also an important first step in conducting rigorous scientific research.

LEVELS OF SCIENTIFIC EVIDENCE



Adapted from Wikimedia Commons. Research design and evidence. https://commons.wikimedia.org/wiki/File:Research_design_and_evidence.svg

THE LITERATURE REVIEW PROCESS

High-quality literature reviews follow a written protocol and specific research question developed before the initiation of the study. Informal literature reviews are an important process for increasing one's knowledge base around a topic of interest and should follow the same process as formal literature reviews, but they may not be as extensive.

1. Define the topic or question

Start by identifying your topic of interest and developing a research question. Research questions typically follow a Population, Intervention, Comparison, and Outcome (PICO) format. For example: *Among hospitalized older adults with limited life expectancy (P), what is the effect of a palliative care communication strategy (I), compared to usual practice (asking about DNR/health care proxy) (C), on the completion of an advance care plan (O)?*

2. Decide on inclusion criteria and exclusion criteria

Your written protocol should clearly define the parameters that will guide your literature review in advance—that is, the criteria that will make an article eligible (inclusion criteria) or not eligible (exclusion criteria) for your study.

Using the example research question above, exclusion criteria may include a sample of patients older than 64 years of age with a terminal diagnosis who are currently hospitalized and receive palliative care communication programs outside usual practice. Exclusion criteria may include samples of children and communication programs that are not specific to palliative care. You may also choose to limit your review by language (e.g., studies published in English only) and by time frame (e.g., studies published after PSDA, the Patient Self-Determination Act).

3. Identify database(s) and terms of search

Now that you have a research question and your inclusion and exclusion criteria, you will want to use this information to guide the selection of scientific databases and keywords for your search. Each scientific database has its own unique language for searching. For hospice and palliative care topics, the best database to start with is usually PubMed using Medical Subject Headings (MeSH). Other commonly used databases for hospice and palliative care include the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and PsycINFO.

In PubMed, you will use the database language (MeSH) to decide on your search terms. To determine the correct terms, you will search the MeSH database for the MeSH terms that match your keywords.

By searching the MeSH database using your keywords, you will be directed by PubMed to other terms that are in the index under the same MeSH terms. You are also able to determine where your keyword is in the database hierarchy, which can help you decide which MeSH term is best for your search strategy. It is helpful to develop a table of keywords and MeSH terms as you write your protocol (**Table 1**). For example, the MeSH terms for end-of-life care is “terminal care” and includes six other terms, such as “life care ends” (see the example below). Sometimes, there is no optimal heading fit for your keyword and you may decide to search with this item as a keyword in quotations.

Terminal Care

Medical and nursing care of patients in the terminal stage of an illness.

Year introduced: 1968(1964)

PubMed search builder options

[Subheadings:](#)

- | | | |
|---|--|--|
| <input type="checkbox"/> classification | <input type="checkbox"/> history | <input type="checkbox"/> psychology |
| <input type="checkbox"/> economics | <input type="checkbox"/> legislation and jurisprudence | <input type="checkbox"/> standards |
| <input type="checkbox"/> education | <input type="checkbox"/> methods | <input type="checkbox"/> statistics and numerical data |
| <input type="checkbox"/> epidemiology | <input type="checkbox"/> nursing | <input type="checkbox"/> therapy |
| <input type="checkbox"/> ethics | <input type="checkbox"/> organization and administration | <input type="checkbox"/> trends |
| <input type="checkbox"/> ethnology | <input type="checkbox"/> prevention and control | <input type="checkbox"/> veterinary |

☐ Restrict to MeSH Major Topic.

☐ Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): E02.760.905, N02.421.585.905

MeSH Unique ID: D013727

Entry Terms:



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Search

Advanced

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Table. 1 Keywords and Examples of Corresponding MeSH Terms

Population Keywords	Corresponding MeSH Terms
End-of-life	Terminal Care
Older adult	Aged
Hospitalization	Hospitalization
Intervention Keywords	
Communication	Communication
Palliative care team	Palliative care
Family meeting	N/A (you may choose to use this term in quotes)
Comparison Keywords	
DNR	N/A (you may choose to use this term in quotes)
Healthcare Proxy	N/A (you may choose to use this term in quotes)
Outcome Keywords	
Power of attorney	Advance directive
Living will	N/A (you may choose to use this term in quotes)
Advance care plan	N/A (you may choose to use this term in quotes)

4. Screen and select articles

Once your search terms are defined, the easiest way to review the articles is to decide which articles are relevant by looking at the titles first, abstracts second, and full text third. At each level, eliminate the irrelevant articles and keep articles that may be relevant. Once you are at the full text phase, literature tables are helpful to organize and summarize articles.

Author/Year	Design	Sample Description	Study Design/Methods	Measures/Instruments	Key Findings

ADDITIONAL RESOURCES

- To visualize the search and article decision making process, refer to PRISMA Diagram, accessible at <http://www.prisma-statement.org/>
- Appraisal of evidence quality, refer to JBI, accessible at <https://joannabriggs.org/critical-appraisal-tools>
- Example of systematic literature review from the Journal of Hospice & Palliative Nursing: Sullivan SS, da Rosa Silva CF, Meeker MA. Family meetings at end of life: a systematic review. J Hosp Palliat Nurs. 2015;17(3):196-205.
- Ferrell, B. & Coyle, N. Textbook of Palliative Nursing. (5th ed.). Oxford University Press. DOI:0.1093/med/9780190862374.001.0001.

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1. Polit DF, Beck CT. Nursing Research: Generating and Assessing Evidence for Nursing Practice. 9th ed. Lippincott, Williams & Wilkins, 2012.
2. Bettany-Saltikov J, McSherry J. How to Do a Systematic Literature Review in Nursing: A Step-By-Step Guide. 2nd ed. McGraw Hill; 2016.
3. Garrard J. Health Sciences Literature Review Made Easy. 5th ed. Jones and Bartlett Learning; 2016.
4. Akard TF, Hyden K, Gilmer, MJ. Nursing Research. In Ferrell B and Paice J. eds. Oxford Textbook of Palliative Nursing. 5th ed. New York, NY: Oxford University Press; 2019: 855-860.