How to conduct a systematic or evidence-based literature review

Systematic or evidence-based literature reviews use explicit and transparent methods.

As the title says, it can be Evidence based – especially popular in medicine, to find the best form of intervention.

Or it can be described as a Systematic review – model for summaries and critiques leading to better future practice.

Related to this: Scoping – a summary of a topic as a prelude to further research.

Defining search terms – what is the question?

Consider your question, starting with keywords: the words and phrases for use in search engines and databases.

Use all databases relevant to your subject area. Also bear in mind the need to access journals and websites, including hand searches, personal contacts, citations and references followed.

Evaluation

You are now drowning in abstracts!

How do you create a pool in which you can swim comfortably through abstracts towards those that are relevant?

Establish filters which can be:

- Global – metadata based. This means that material will be in or out depending on author, year of publication, etc. Also in the sense of geography – omitting or only including certain parts of the world.
- Evidence-grading – based on quality, as determined by researchers e.g., non-peer reviewed material, opinion-based, rhetorical, and material with unclear conclusions might be sifted out.
- Semantic – removes same terms which have a different meaning.
- Accessibility – is the article available as a full text, rather than some truncated form?

You have your set of articles.

Rather than listing individual findings, how do you draw together common strands and show up apparent contradictions?

A table could be used with study references listed together with a brief overview of findings.

Example

In a systematic review:

- Everything starts with keywords and search strings for relevant databases
- This results in a series of abstracts, which must be filtered to produce an objective and scientific selection
- Articles are then read and summarized.

They...

Follow a standard protocol, or a set of stages

What is the overall aim?

- Reduction of bias
- Provision of comprehensive body of knowledge

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Synthesis

How to record the data?

This could be coded according to:

- General description
- Results
- Methods

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