3. When using keywords be aware of the following:

- Synonyms (heart or cardiac or cardiovascular)
- Alternative spelling (anaesthesia or anesthesia)
- Local usage (operating room or operating theatre)
- Brand or generic name (panado or paracetamol)
- Abbreviations (TB or tuberculosis)
- Opposites (long needle or short needle)

APPRAISE This step involves the selection of references for inclusion in the review. It involves evaluating a source in terms of its significance in relation to your question and in relation to other research. The reputation of the author, his methodology and the validity of his findings must be assessed. Opposing views should be identified for debate as well as any gaps or areas for further research.

APPLY The format of the literature review usually consists of an **introduction** to your question against the background of existing research. Indicate the criteria used in analysing and comparing the literature and indicate the scope of the review. This is then followed by a discussion of the most significant or seminal literature sources. This **body** of the review can be organised into sections that have common themes or trends, or chronologically to illustrate the development of research around an issue or even divided into sections representing controversial or opposing opinions. The **conclusion** should be an attempt at synthesis of various sources of research and evidence which acts as a point of departure or platform for your own research question.

Reference
Aveyard, H. Doing a literature review in health and social care: a practical guide. 2nd ed. Maidenhead: McGraw-Hill Open University Press, 2010. (shelf no. M 808.06661 AVEY)

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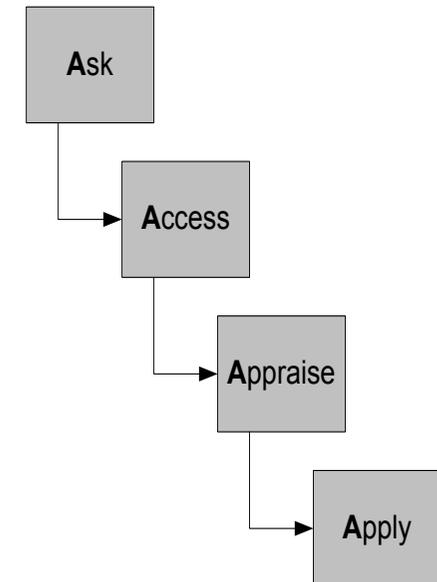
LITERATURE REVIEWS IN THE HEALTH SCIENCES

The literature review is an overview of significant literature on a particular topic. It can take the form of an introduction to an essay or thesis, or it can be a self-contained review of writings on a subject. The purpose of the literature review is to place your own particular question or topic into the context of current and previous research.

When doing a literature review in a health or clinical setting, it is useful to bear in mind the four As of researching the literature in the context of evidence-based practice (EBP).

$$\text{Ask} \longrightarrow \text{Access} \longrightarrow \text{Appraise} \longrightarrow \text{Apply}$$

ASK The first step in a literature review is to formulate your question, problem or topic for research. The PICO method can be useful when formulating the question and assists in breaking the question up into search-able terms or keywords, e.g.,

Question: *Is the training of caregivers effective in improving the health outcomes of stroke patients?*

P	**population**	=	*stroke patients*
I	**intervention**	=	*training of caregivers*
C	**comparison**	=	*no training*
O	**outcome**	=	*health improvement of patients*

ACCESS In the area of literature searching, the **library** has an important role in providing material in print and online and facilitating access to this information via its databases, web sites and journal portal. You are encouraged to consult a reference librarian to assist you in your literature search.

Once the question has been formulated, the next step is to identify appro-priate databases (which contain indexes to journals) and other sources of print and online information. In researching a topic in the context of EBP, the most important literature sources are systematic reviews and meta-analyses of primary studies, such as clinical trials. These are followed in importance by research articles, proceedings, theses, books, unpublished studies and other grey literature.

Within this hierarchy of evidence the most important databases are:

1. PubMed (Medline): for systematic reviews, clinical studies and research articles in the field of medicine and the life sciences.

2. Cochrane Database of Systematic Reviews: full reviews of randomised controlled trials.

3. ISI Web of Science (Science Citation Index): enables one to broaden one's search by tracking who is citing whom. The list of references at the end of an article often points to previous research. Cited references indicate who is citing the article in hand, pointing to possible later research.

Depending on the nature of the topic or question in hand, it may be advisable to include databases such as:

Academic Search Premier; **Africa-Wide Information** (for studies published in and about Africa); **African Index Medicus; Eric** (Education database); **Global Index Medicus; CINAHL** (Cumulative Index of Nursing and Allied Health); **PsycArticles** and **PsycInfo.** A full list of databases available at UCT can be found on the library's home page under Electronic Resources.

Google Scholar: This is a good academic search engine and particularly useful if preferences are set to link to UCT's online journal collection. This is also a good source of cited references. **Google** is also good for locating **authors,** their bibliographies, CVs and addresses for communicating directly with them.

Tips when searching

1. Always keep track of what you have done! Note which strategy/set of terms gives the best result so that it can be replicated in different databases. This enables a clear and coherent rationale for inclusion in the review. A citation manager like Refworks (available at UCT) can be useful in organising your references.

2. Broaden or narrow your search. If results from a search are too few or not exhaustive enough, broaden the search by: using synonyms, combining index terms (like MeSH in PubMed) with keywords, truncating terms, exploding index terms and omitting subheadings. To narrow a search: use the most specific terms, use MeSH as a major topic, use subheadings and filters provided by the different databases.