**Frequently Asked Questions about Evidence Reviews**

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**Question:** What is a literature review?
**Answer:** A literature review is an account of published materials on a topic of interest to set a research problem into context (Armola et al., 2009). The purpose of the review is to convey the current state of knowledge and ideas on a topic and examine their strengths and weaknesses. A literature review serves as a general background discussion of a particular issue, rather than answering a clinical question (Armola et al., 2009; Whittemore & Knafl, 2005).

**Question:** What is a systematic review?
**Answer:** A systematic review is a literature compilation of like studies to address a specific clinical question using a detailed, comprehensive search strategy and rigorous appraisal methods. This synthesizing approach identifies the relevant research evidence needed to summarize, appraise, and communicate contradictory results or unmanageable amounts of research through narrative or statistical analysis (Armola et al., 2009; Melnyk & Fineout-Overholt, 2005; Whittemore & Knafl, 2005). Systematic reviews typically pool and analyze randomized controlled trials (RCTs) and other higher levels of evidence and use summary statistics to answer the clinical question. A systematic review is considered the most rigorous method for the minimization of bias (Jones, 2010; Melnyk & Fineout-Overholt, 2005).

**Question:** What is an integrative review?
**Answer:** Midway between a simple literature review and a complex systematic review, an integrative review uses a detailed search strategy to find relevant evidence to answer a clinical question (Beyea & Nicoli, 1998; Melnyk & Fineout-Overholt, 2005). The strength of an integrative review is its distinctive and rigorous methodology that draws conclusions about the current state of knowledge amongst diverse studies (Whittemore & Knafl, 2005; Torracco, 2005). Integrative reviews do not employ summary statistics, as sample sizes cannot be pooled due to the heterogeneity of studies and samples (Melnyk & Fineout-Overholt, 2005). Integrative reviews focus on (a) problem formulation, (b) data collection or literature search, (c) evaluation of data, (d) data analysis and interpretation, and (e) presentation of results by the identification and evaluation of (Whittemore & Knafl, 2005; Torracco, 2005):

- Strength of scientific evidence
- Links between related areas of work
- Theoretical or conceptual frameworks
- Central issues related to a specific clinical topic
- Successful research methods and interventions
- Gaps in current research and the need for future research

Integrative reviews are therefore capable of presenting varied perspectives and a depth and breadth of evidence without over-emphasizing randomized control trials (RCTs) and other studies within empirically based research hierarchies (Jones, 2010; Rawlins, 2008). By combining diverse methodologies, integrative reviews create a more well rounded evidence review (Beyea & Nicoli, 1998; Whittemore & Knafl, 2005).
**Question:** Is one type of evidence review “better” than another type of evidence review?  
**Answer:** The type of evidence review one uses depends upon the intents and purposes of the review one wishes to conduct. Literature reviews and evidence summaries attempt to explore the background and significance of a clinical problem. In other words, the completed review presents a “snapshot” of the literature and can offer several possible clinical questions to be considered.

In contrast to the literature/evidence review, integrative reviews and systematic reviews answer a specific clinical question. However, the methodology of gathering, evaluating, and synthesizing the evidence differs greatly and must be evaluated before one conducts either type of review (Armola et al., 2009; Beyea & Nicoli, 1998; Melnyk & Fineout-Overholt, 2005; Torraco, 2005; Whittemore & Knafli, 2005).

**Question:** On the integrative review presentation, there is a slide titled “The Clinical Question” and a slide titled “The Searchable Question.” What is the difference?  
**Answer:** A clinical question is formatted using the Patient Problem/Population, Intervention, Comparison, and Outcome (PICO) format (Melnyk & Fineout-Overholt, 2005). A tightly focused and specific clinical question drives the integrative review towards its answer, as seen by this PICO example: “For adult and pediatric patients receiving vaccines and immunization in the outpatient setting, does aspiration of blood during medication administration prevent injection of medications into blood vessels, as compared to nonaspiration of blood?”

- **Population:** Adult and pediatric patients in the outpatient setting
- **Patient Problem:** Injection of vaccines and immunizations into blood vessels during medication administration
- **Intervention:** Aspiration of blood during injection
- **Comparison:** Nonaspiration of blood during injection
- **Outcome:** Complications arising from injection of these medications into blood vessels

Clinical questions can be difficult to translate into structured database searches. That is where the searchable question comes in handy. However, a searchable question is not really a formal question; it only involves key phrases or words from the clinical question. These key search terms form the basis of a searchable question more amenable to digital database searches, such as CINAHL, MEDLine, PubMed, Cochrane Library, Joanna Briggs Institute, Proquest, and OVID.

For the aspiration PICO question, the searchable question could use key search terms of “aspiration”, “subcutaneous”, “intramuscular”, and “injections”, either singularly or in combination. Inclusion and exclusion criteria are also part of the searchable question. Inclusion criteria for this question could be blood aspiration during subcutaneous (SC) and intramuscular (IM) injections of vaccines and immunizations in the outpatient setting. Exclusion criteria could be needle-based injection techniques not involving blood aspiration, the acute care or long-term care setting, and healthcare providers other than nurses administering injectable medications. Inclusion and exclusion criteria, coupled with key search terms, allow one to search the databases and locate relevant literature in an efficient manner and answer the specific clinical question that started it all!
References


