

EVIDENCE BASED NURSING

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Evidence

- Evidence: that which tends to prove or disprove something; ground for belief; proof.
- Evidence is essential to our work. Every day, we use evidence to inform our policies, decisions and practices. We know that almost everything has an impact. Globally there is a movement to build evidence to better understand what works and what works better.

Evidence Based Nursing (EBN)

Evidence-based nursing (EBN) is an approach to making quality decisions and providing nursing care based upon personal clinical expertise in combination with the most current, relevant research available on the topic.

EBN implements the most up to date methods of providing care, which have been proven through appraisal of high quality studies and statistically significant research findings.

Evidence based practice

It means integrating individual clinical expertise with the best available external clinical **evidence** from systematic research." (Sackett D, 1996)

EBP is the integration of clinical expertise, patient values, and the best research **evidence** into the decision making process for patient care.

Advantages of evidence-based practice

The **advantages of evidence-based practice** include-

- Better patient outcomes,
- Increased patient safety and improved quality of life.
- Evidence-based practice has even spread beyond medicine and **nursing** to psychology, education and other disciplines.
- Evidence-based practice allows nurses to direct patient care according to scientific research,

Advantages of evidence-based practice

- Patients and families receive more consistent nursing interventions and achieve better clinical outcomes.
- The health care industry's embrace of evidence-based practice as health care costs continue to rise is not coincidental.
- Evidence-based practice across the health care spectrum often results in better patient outcomes -- meaning fewer demands on health care resources -- and lowered health care costs.

Advantages of evidence-based practice

- Evidence-based practice allows nurses to contribute research to the science of nursing and apply the most recent research and practices while discarding unproven methods.

Three fundamental components of evidence based practice

- Individual Clinical Expertise
- Best external evidence
- Patient values and expectations

Three Pillars of EBP

- AAOMPT(American academy of orthopedic manual physical therapists) Conference Balances Evidence Based Practice (EBP), as proposed Sackett, involves the consideration of 3 equally weighted factors, the “pillars of EBP”, namely:
 - Patient Values,
 - Clinical Expertise and
 - Relevant Research.

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Steps for Evidence-Based Behavioral Practice

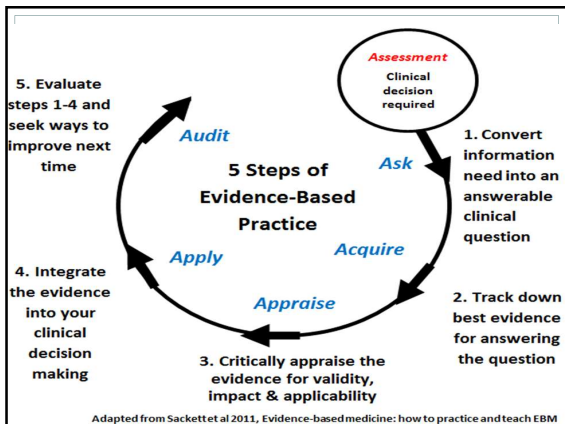
Evidence based practice process has five steps:

- Ask important questions about the care of individuals, communities, or populations.
- Acquire the best available evidence regarding the question.

Steps for Evidence-Based Behavioral Practice

- Critically appraise the evidence for validity and applicability to the problem at hand.
- Apply the evidence by engaging in collaborative health decision-making with the affected individual(s) and/or group(s). Appropriate decision-making integrates the context, values and preferences of the care recipient, as well as available resources, including professional expertise.
- Assess the outcome and disseminate the results.

Five steps of evidence-based practice.



sources of evidence

- There are four key sources of evidence within the Evidence Framework. Each source of evidence offers insights and contributes to our knowledge about how to build better evidence.

Definitions

- ❖ **Primary Source:** A first-hand account, record, or evidence about a person, place object, or an event. *Think: I was there*
- ❖ **Secondary Source:** An account, record, or evidence that comes from an original or primary source. *Think: I heard or learned about it from somebody who was there.*

Primary source

- A **primary source** is a kind of evidence. Primary sources are created by people who saw or were part of an event.

Examples:

- A. Letters
- B. diaries
- C. Tools
- D. Clothing

Historians use primary sources to learn what people were thinking at the time of the event.
Primary sources can help historians explain events that happened long ago.

Primary sources

Primary Sources

- Original articles
- Through databases: MEDLINE, EMBASE
- Using: PubMed, OVID
- You have to **retrieve** and **appraise** the articles
- Strength (pyramid) of evidence

Sources of Evidence (1)

1. **Primary Literature**
 - a. Primary literature is authored by the researchers,
 - i. contains original research data,
 - ii. and is usually published in a peer-reviewed journal.

Primary literature may also include

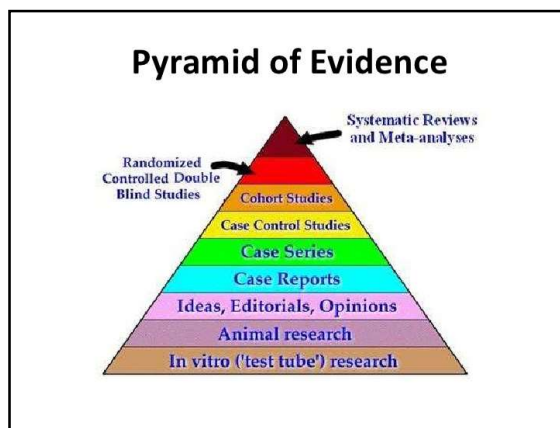
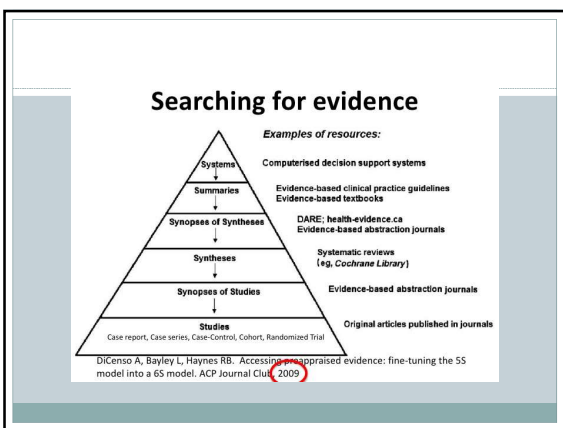
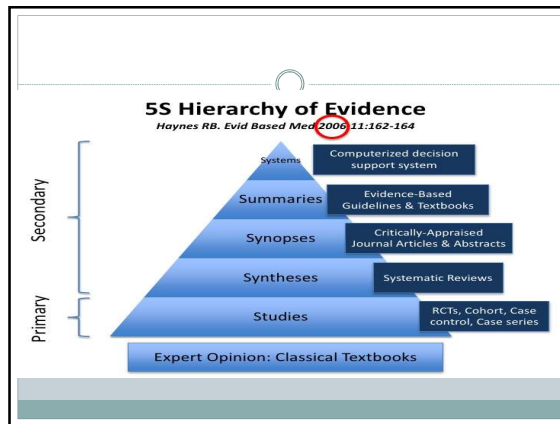
- conference papers,
- pre-prints, or preliminary reports.

The intended audience of primary literature includes researchers and specialists, but not the general public.

primary source of evidence

Some examples of primary source formats include:

- archives and manuscript material.
- photographs, audio recordings, video recordings, films.
- journals, letters and diaries.
- speeches.
- scrapbooks.
- published books, newspapers and magazine clippings published at the time.
- government publications.
- oral histories.



	Primary	Secondary
Title	Very specific and sometimes states a position	Very general title
Definition	Type of article where the authors have conducted a study to observe effects	An article that summarizes the work in primary sources on a particular topic
Includes	Methods, Results, Tables, Figures	Methods may be a literature review; tables list other articles
Example Words	Clinical Trial, Controlled Trial, Study	Review, Meta-Analysis, Systematic Review
Example Title	Prospective Study on Food Fortification with Vitamin D Among Adolescent Females in Finland: Minor Effects	Malnutrition: Supplements and Food Fortification in the Older Population

More Examples

<p>Primary sources: evidence of history & culture</p> <ul style="list-style-type: none"> Photographs Movies Plays Works of art Songs Recipes Letters Diaries Autobiographies Memoirs Oral histories Speeches Birth/death certificates Land deeds Government documents Live news footage Interviews (usually) 	<p>Secondary sources: interpretation of history & culture</p> <ul style="list-style-type: none"> Scholarly articles Political analyses Biographies Textbooks Reference books Literary criticism Reviews of art/movies/music (usually) News articles/broadcasts other than first-person accounts (usually)
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8/24/2012 E. Caroy Santa Barbara City College Lurria Library

Sources of Evidence

- **Primary**
 - Pubmed (MEDLINE)
 - EviDents (evidents.org)
- **Secondary**
 - ADS Center for Evidence-based Dentistry (Ebd.ada.org)
 - EBD journal (Nature.com/ebd)
 - Oral health evidence-based practice program, Univ. of Texas Health Sciences Center (cats.uthscsa.edu)
 - The Cochrane Library (thecochranelibrary.org)
 - TRIP database (tripdatabase.com)
 - The Dental Elf (thedentalelf.net)
 - Guidelines

Sources of Evidence for Nursing Practice

- Tradition
- Authority
- Clinical experience; trial and error; intuition
- Logical reasoning (inductive & deductive)
- Assembled information (e.g., quality improvement data)
- Disciplined research

A Framework for Thinking About Evidence



Evidence-Based Information Sources & Search Tools

- CINAHL Complete
- CINAHL's Advanced Search 'Evidence-Based Practice' option limits results to the following results types:
 - Articles from evidence-based practice journals
 - Articles about evidence-based practice
 - Research articles (including systematic reviews, clinical trials, meta analyses, etc.)
 - Commentaries on research studies (applying practice to research)

Evidence-Based Information Sources & Search Tools

- PubMed: Find articles and other document types covering an extremely broad range of biomedical/clinical research.
- UpToDate: Find physician-authored evidence-based information intended to support clinical decision-making at the point-of-care
- Cochrane Library: Find high quality, independent evidence-based health care information (protocols, methods, trials, evaluations and assessments) from six different Cochrane Library databases, including The Cochrane Database of Systematic Reviews (CDSR), a comprehensive collection of peer-reviewed systematic reviews produced by the Review Group of The Cochrane Collaboration.

Evidence-Based Information Sources & Search Tools

- National Guideline Clearinghouse (NGC): Find objective & detailed evidence-based clinical practice guidelines (from the Agency for Healthcare Research and Quality (AHRQ), and the U.S. Department of Health and Human Services)

PICO Search Strategy

- P is for the Patient or the Problem (e.g. a disease or condition) or the Population of interest
- I is for Intervention (e.g. therapy, procedure, drug, exposure, test, strategy)
- C is for Comparison (e.g. compared to an alternative intervention or control)
- O is for Outcome (i.e. the consequence, effect or improvement of interest and the measurement thereof)

To incorporate these latter considerations, "PICO" is sometimes extended to PICOTT.

- Type of question you're asking, and also the
- Type of research study most likely to provide your answer (e.g. would it be a systematic review; a meta-analysis; a clinical guideline; or a qualitative study)