## What is EBP?

When practitioners apply evidence-based practice (EBP), patient outcomes will ultimately improve because it "integrates best research evidence with best available scientific research, clinical expertise, and patient values."

In determining the most suitable physical therapy treatment plan for a specific situation, a foundation is established on three distinct types of evidence: scientific research, clinical expertise, and the values and circumstances of the patient. If you practice evidence-based therapy, your choices will be guided by these three categories of evidence. The primary objective of evidence-based therapists is to ensure that patient care is guided by the most comprehensive and up-to-date research available, with the aim of optimizing the benefits derived from therapy. Evidence-based practice (EBP) furnishes a structured approach for evaluating and gathering the diverse forms of evidence essential for informed clinical decision-making.

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There are three essential elements of evidence-based practice in the original concept.

* The best evidence, which is typically obtained in studies with strong methodology and clinical relevance
* A clinician's total education, experience, and clinical skills are referred to as their clinical expertise.

• Patient values are the unique preferences, concerns, and expectations that each patient brings to a medical appointment.

A clinical choice is considered evidence-based when all three of these elements are integrated. Implementing evidence-based practice in the five steps that follow will help achieve this integration.

Evidence can be thought of as coming from three different sources:

**1.Scientific research**

**2.Clinical expertise**

**3.Patient values and circumstances**

***Scientific research****-* Scientific research evidence is grounded in empirical data obtained by rigorously testing a hypothesis. When conveying this research evidence to a patient, it's essential to use plain and straightforward language, while also engaging in a dialogue to confirm the patient's understanding. Therapists carry the principal duty of identifying, assessing, and summarizing research evidence relevant to a patient's treatment.

***Clinical expertise*** *-* This encompasses the combination of implicit and explicit knowledge that is gained through years of practical experience in the realm of physical therapy. This knowledge spans the domains of diagnosis, treatment, prevention, and prognosis. It is the result of extensive experience in delivering care to individuals with diverse medical conditions and injuries, while concurrently striving to improve and refine the quality of healthcare offered.

***Patient Values and Circumstances-*** The patient and their caregivers are the main players in the evidence-based decision-making process. There are two main types of evidence that come from the patient: values and circumstances. The views, desires, expectations, and cultural affiliations that patients bring to the therapeutic context are all included in their patient values. Essentially, values serve as the fundamental principles that shape an individual's life and decision-making. When all three elements of EBP are collectively taken into account, healthcare providers are empowered to make informed, evidence-driven choices, and deliver top-quality services that align with the preferences, values, requirements, and decisions of individuals with communication disorders.

**The EBP Process**

**Evidence-based practice (EBP)** Evidence-based practice (EBP) involves utilizing the most up-to-date, high-quality external and internal scientific evidence, along with considering the patient's perspective and relying on clinical expertise to guide decisions regarding the treatment of individuals under your care. This resource is designed to impart the principles of this adaptable approach, ensuring that you can deliver the highest standard of care, regardless of the specific clinical inquiries that may emerge.



Follow these steps to initiate and implement EBP into your clinical practice.

* Step 1: Frame Your Clinical Question
* Step 2: Gather Evidence
* Step 3: Assess the Evidence
* Step 4: Make Your Clinical Decision

# **Step 1: Frame Your Clinical questions**

The initial stage in the evidence-based practice (EBP) procedure is to pinpoint the clinical issue or query for which you require evidence. Formulating a precise and pertinent question concerning your patient's condition will guide your investigation. A commonly employed method for structuring a clinical question is the PICO framework, representing:

**P**opulation **I**ntervention **C**omparison **O**utcome

The PICO elements are as follows:

* **Population**: What characteristics or situations best describe the group? This could apply to specific ages, conditions, or levels of severity. (e.g., autism spectrum disorder, mild hearing loss).
* **Intervention**: Which screening, evaluation, treatment, or service delivery paradigm are you considering employing?(e.g., instrumental swallowing assessment, high-intensity treatment, hearing aids)?
* **Comparison**: Which method is the main alternative, screening, assessment, or intervention? (e.g., placebo, different technique, different amount of treatment)?
* **Outcome**:  What do you hope to achieve, quantify, or enhance? (e.g., upgraded diet level, more intelligible speech, better hearing in background noise)?

# **Step 2: Gather Evidence**

Having developed your PICO question, the subsequent phase involves collecting evidence that pertains to your inquiry. Internal and external evidence are the two types of evidence that need to be considered.

***Internal evidence***  refers to the information you routinely get straight from your clients in order to make sure they're moving forward. Both objective performance data gathered over time and your client's subjective assessments may be included in this data. Utilize your professional knowledge to ascertain which data, given your client's particular circumstances and needs, are most crucial to monitor. Equipped with client-specific internal evidence, you can more effectively locate relevant external data to support your clinical judgment.

***External evidence***  refers to proof found in scientific literature, including study findings, data, statistical analysis, and results. This data aids in your assessment of the potential efficacy of a strategy or service delivery model for bringing about change in people such as your client.

# **Step 3: Assess the Evidence**

After you've identified the evidence to address your client's problem, the next step in the EBP process is to assess the evidence, both internal and external. It's critical to keep in mind that every sort of evidence has a specific function in your clinical decision-making process when assessing the evidence..

***Internal evidence***, Client-specific data and observations are collected to ensure session accountability and monitor client progress. When evaluating the internal evidence, the goal is to assess the impact of an intervention on the client. The analysis of your data may address the following questions (modified from Higginbotham & Satchidanand, 2019):

Is your client demonstrating a response to the intervention?

• Is the client particularly affected by that response?

• For what length of time is the intervention should be continued?

• Should the intervention strategy, therapeutic target, or service delivery model be modified?

***External evidence***, Obtained from scientific research literature, external evidence addresses clinical inquiries, such as the effectiveness of an assessment in measuring its intended outcome or the impact of a treatment approach on individual change. Given the variable quality of external evidence, this evaluation step plays a critical role and involves assessing the reliability, significance, and relevance of pertinent scientific research to your client's specific condition and requirements.

Critically appraising the external evidence can help you determine if the conclusions from one or more studies can help guide your clinical decision. To assess the external evidence, you should

* Determine the relevance to your question,
* Appraise the validity and trustworthiness, and
* Review the results and conclusions.

# **Step 4: Make Your Clinical Decision**

Evidence-based practice (EBP) is the integration of

* **Clinical expertise/expert opinion**
* o The wisdom, discernment, and analytical thinking you've gained from your education and work experiences
* **Evidence (external and internal)**
* o The most up-to-date data gleaned from observations and data on each specific customer as well as from the scientific literature (external evidence) (internal evidence)
* **Client/patient/caregiver perspectives**

o The particular beliefs, priorities, expectations, and personal and cultural situations that your client and their caregivers have identified



### Clinical professionals may make well-informed, evidence-based decisions and provide excellent treatments that are customized to the needs, preferences, values, and interests of individuals with communication disorders when they consider the three pillars of evidence-based practice (EBP) as a whole.

### **Inclusion and exclusion criteria**

### Two researchers separately went through the titles and abstracts to find CNs, using the authors' descriptions and the WHO criteria as a guide.studies addressing CNs' perceived barriers or facilitators of EBP, as well as studies pertaining to CNs' EBP knowledge, competence, attitude, and implementations, must all be original scientific research written in either English or Chinese in order to be included. Studies with mixed populations (hospital and care organization nurses, other health professionals), reports on private nursing homes and rural hospitals, systematic reviews, non-research literature (conference notices, for example), studies without a clearly defined population and sub-analysis of CNs are among the exclusion criteria. Reports on EBP theory/framework are also included in the list.

### **Facilitators and barriers of EBP**

### The application of EBP by CNs encountered 21 barriers and 14 facilitators, which were categorized into three themes: the evidence's characters (e.g., the quantity, quality, and presentation of the studies); the environment's characters (i.e., the facilitators and barriers observed in the work settings); and the nurses' characters (i.e., the nurses' values, abilities, and knowledge of EBP).

### **Limitation**

One of the drawbacks is that, even with the systematic reduction in electronic database searches, certain pertinent literatures could still be overlooked, much like in reviews.

To prevent this, two researchers separately searched the articles, saving all suitable articles to the highest possible degree.

#### We extended the review to include the entire world, but there was still a chance of publishing and language bias.

#### **Implication to nursing policy**

## This review suggests that getting the right training is necessary to understand EBP. Nursing policy reform must include both reasonably priced continuing education for nurses and a thorough EBP curriculum for nursing students. Consequently, in order to bridge the knowledge gap between CNs' EBP implementation and knowledge, authorities should give priority to reducing obstacles. To support EBP among CNs, more policies for protecting research time, providing resources for community health centers, and coordinating EBP responsibly are expected to be put into place.

## Conclusions

The data indicates that most CNs' EBP are not happy. They didn't have the requisite skills, such knowing where to look for pertinent research, even though they had the best of intentions and thought that EBP would improve patient outcomes and nursing practice. Moreover, there is a lack of better application of EBP, and although certain interventions do assist CNs learn more, it is still unclear how to ensure that the skills they acquire will be useful in the job.

The majority of CNs' EBP facilitators are "nurses," and they are concerned with enhancing EBP's values and abilities for both individuals and organizations. The majority of hurdles are related to the environment, and they are all caused by the following: a lack of resources and time; a lack of knowledge and training; and a lack of support and encouragement. It is imperative for organizations to guarantee that CNs have access to the necessary resources and assistance. To appropriately evaluate the long-term capability for EBP training methodologies, robust experimental designs are necessary, and more study ought to be focused on addressing objective impediments in EBP implementations.