

Introduction to Evidence-Based Practice

Introduction to Evidence-Based Practice (EBP)

1. What Is Evidence-Based Practice?

Aspect	Description
Definition	A systematic approach to decision-making that integrates the best available research evidence, clinical expertise, and patient values/preferences.
Goal	Improve outcomes, enhance quality of care, and use resources efficiently.
Origins	Developed in medicine in the early 1990s (Sackett et al.) and now applied across health, education, social work, and management.

2. Core Components of EBP

Component	Role in the Process
Best Research Evidence	High-quality, peer-reviewed studies (e.g., randomized controlled trials, systematic reviews, meta-analyses).
Clinical/Professional Expertise	Practitioner's knowledge, skills, and experience to interpret evidence and apply it to the specific situation.
Patient/Client Values & Preferences	Individual goals, cultural context, risk tolerance, and personal circumstances that shape the final decision.

3. The EBP Process (5-Step Model)

1. Ask a Clear Clinical Question

- Use the **PICO** format:
 - Patient/Problem
 - Intervention
 - Comparison (optional)
 - Outcome

2. Acquire the Best Evidence

- Search databases (PubMed, CINAHL, Cochrane Library, etc.).

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- Filter for study design, level of evidence, and relevance.

3. Appraise the Evidence

- Evaluate validity, reliability, and applicability.
- Tools: CASP checklists, GRADE system, Critical Appraisal Skills Programme.

4. Apply the Evidence

- Combine appraisal results with clinical expertise and patient preferences.
- Develop or modify a care plan, protocol, or policy.

5. Assess the Outcome & Reflect

- Monitor patient response, track performance indicators, and document results.
 - Identify gaps for future inquiry or quality improvement.
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4. Levels of Evidence (Hierarchy)

Level	Study Design	Typical Strength
I	Systematic review/meta-analysis of RCTs	Highest
II	One or more high-quality RCTs	Very strong
III	Controlled trials without randomization	Moderate
IV	Case-control or cohort studies	Limited
V	Systematic reviews of qualitative studies	Contextual insight
VI	Single descriptive or qualitative study	Low
VII	Expert opinion, case reports, bench research	Lowest

(Note: Some models use the GRADE approach, which grades evidence as High, Moderate, Low, or Very Low.)

5. Benefits of EBP

- **Improved Patient Outcomes** – Interventions are more likely to be effective.
- **Enhanced Safety** – Reduces use of ineffective or harmful practices.
- **Cost-Effectiveness** – Focuses resources on proven therapies.

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- **Professional Credibility** – Aligns practice with current scientific standards.
 - **Patient Empowerment** – Involves patients in informed decision-making.
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6. Common Barriers & Strategies

Barrier	Example	Mitigation Strategy
Time constraints	Limited hours for literature search	Use pre-appraised evidence summaries (e.g., UpToDate, ClinicalKey).