



Interdisciplinary Evidence Based Practice: How to Accomplish It

Bonnie Spring, PhD
Director, Center for Behavior & Health
Northwestern University Feinberg
School of Medicine



5 Steps of EBP



5 Step EBP Process



Table 7.2 Steps in the evidence-based practice process

Step 1	Ask client-oriented, relevant, answerable questions about the health status and context of individuals or communities.
Step 2	Acquire the best available evidence to answer the question.
Step 3	Appraise the evidence critically for validity and applicability to the problem at hand.
Step 4	Apply the evidence by engaging in collaborative health decision-making with the affected individual(s). Appropriate decision-making integrates the context, values, and preferences of the recipient of the health intervention, as well as consideration of available resources, including professional expertise. Implement the health practice.
Step 5	Analyze the effects of the health practice and Adjust practice. Evaluate implications for future decision-making, disseminate the results, and identify new informational needs.

From Satterfield, J.M., B. Spring, R.C. Brownson, E.J. Mullen, R.P. Newhouse, B.B. Walker, and E.P. Whitlock. 2009. Toward a Transdisciplinary Model of Evidence-Based Practice. *The Milbank Quarterly*, 87(2), 368–390. © Milbank Memorial Fund. Reprinted with permission.

Exercise 1A:

The EBP Challenge

- For the following common behavioral issue, list one evidence-based intervention.



Case: Lei Liu

The mother of Lei Liu, a 14 year old Hong Kong native, brings him for biofeedback treatment for headaches. Lei's grades dropped this year. He quit football and stopped socializing to spend more time studying, but fatigue and headaches trouble him. He doesn't have much appetite and lost 10 pounds in the last 3 months. He awakens at 4:00 AM daily and can't fall back to sleep.

What do you think is wrong?

What evidence-based practice would you recommend?



Debrief Exercise 1

- What did you think is wrong?
- Did you know an EBP for this scenario?
- How?

Step 1: Ask Questions. Type of?

- **Assessment** - ways of measuring, describing or diagnosing the problem
- **Treatment** - interventions to prevent, contain or improve a health problem
- **Etiology** – influences that cause or contribute to the onset of a health problem
- **Prognosis** - probable course and outcome of a health condition
- **Harm** – addresses potential adverse effects of interventions
- **Cost-Effectiveness** –the consequences of a health procedure in common units (e.g. cost per quality-adjusted life year)
- **Contextual Fit** – match of treatment to values and resources

Step 1: Ask – Foreground Questions

- Ask **specific** choices among action options that fit the context, available resources, and client characteristics

PICO (/PICOT):

- Patient/Population
- Intervention
- Comparison
- Outcome
- Time

EBP Exercise 1B:

- How would you phrase your question about Lei Liu using PICOT format ?

Case: Lei Liu

The mother of Lei Liu, a 14 year old Hong Kong native, brings him for biofeedback treatment for headaches. Lei's grades dropped this year. He quit football and stopped socializing to spend more time studying, but fatigue and headaches trouble him. He doesn't have much appetite and lost 10 pounds in the last 3 months. He awakens at 4:00 AM daily and can't fall back to sleep.

What evidence-based practice would you recommend?

Ask a practical, answerable question

Patient/ Population	Intervention	Comparison	Outcome	Time
Main features Balance precision with brevity	Which main intervention am I considering?	Which main alternative am I considering?	What main outcome is wanted?	Over how long a time span?
In youth with major depression	Is cognitive behavioral therapy or antidepressant medication	Compared to no treatment	Safe? Effective at reducing depression?	At one year?

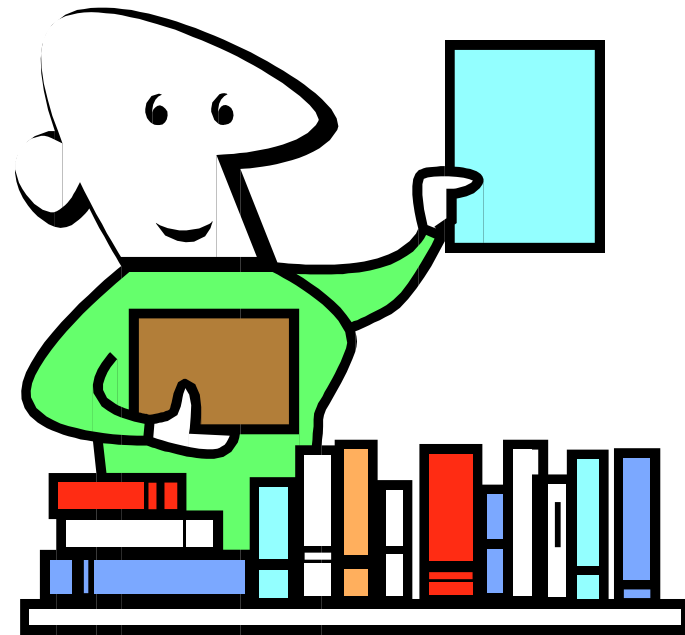
Exercise 2 – Acquire and Appraise

- How will you find an answer?
- How will you evaluate the information you gather?

Debrief Exercise 2

- How did you find information?
- How did you evaluate its merits?

Acquire



Depression Treatment AND Children



• 195,000,000 results



• 17,105 articles



• 73 reviews

- psych therapy, antidepressants, both for depression in children/adolescents
- newer antidepressants for child depression
- exercise for child depression/anxiety



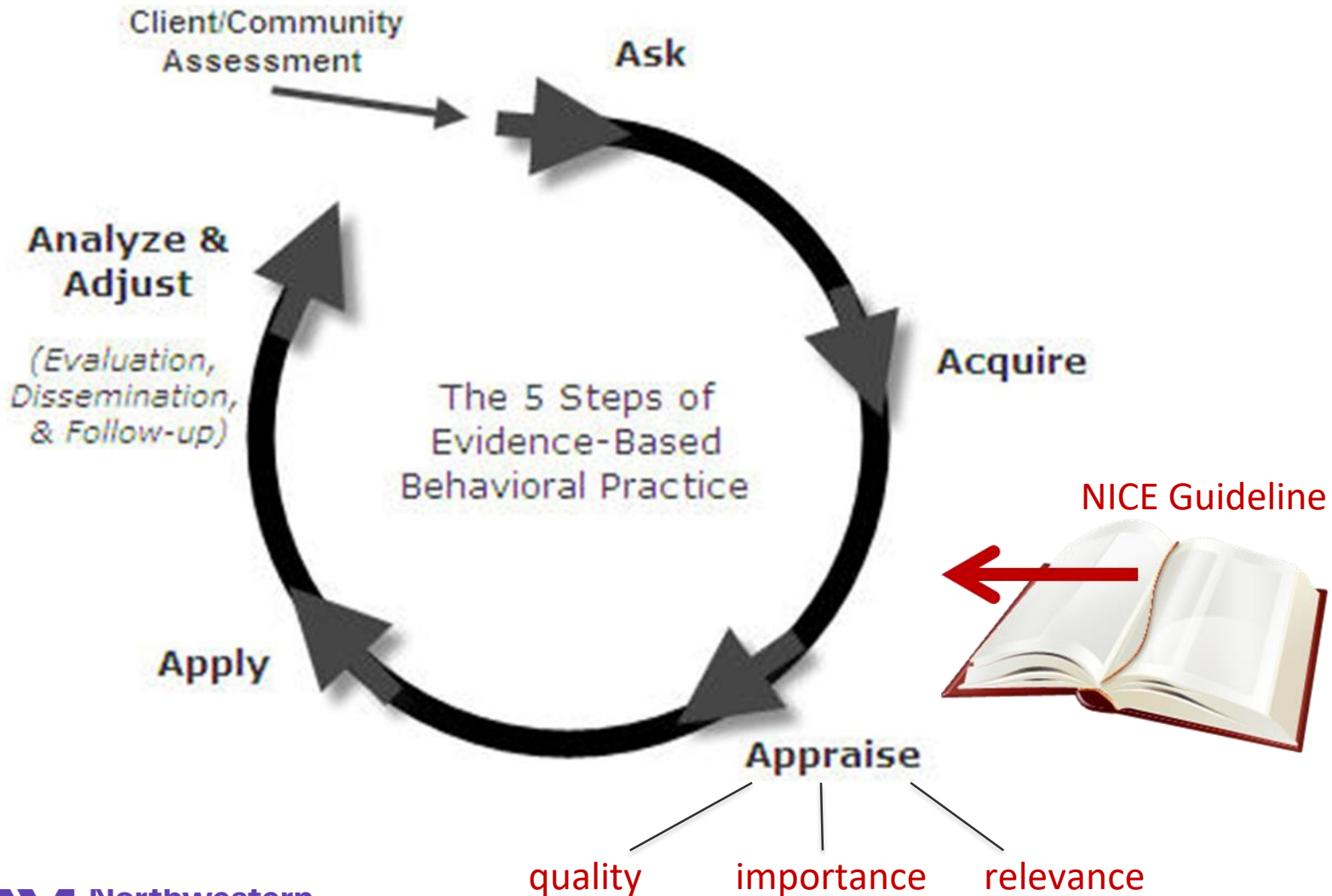
- PCP depression screening ages 12+ if treatment option; fluoxetine FDA approved for 8+ years; escitalopron 12-17



Table 1 The stepped-care model

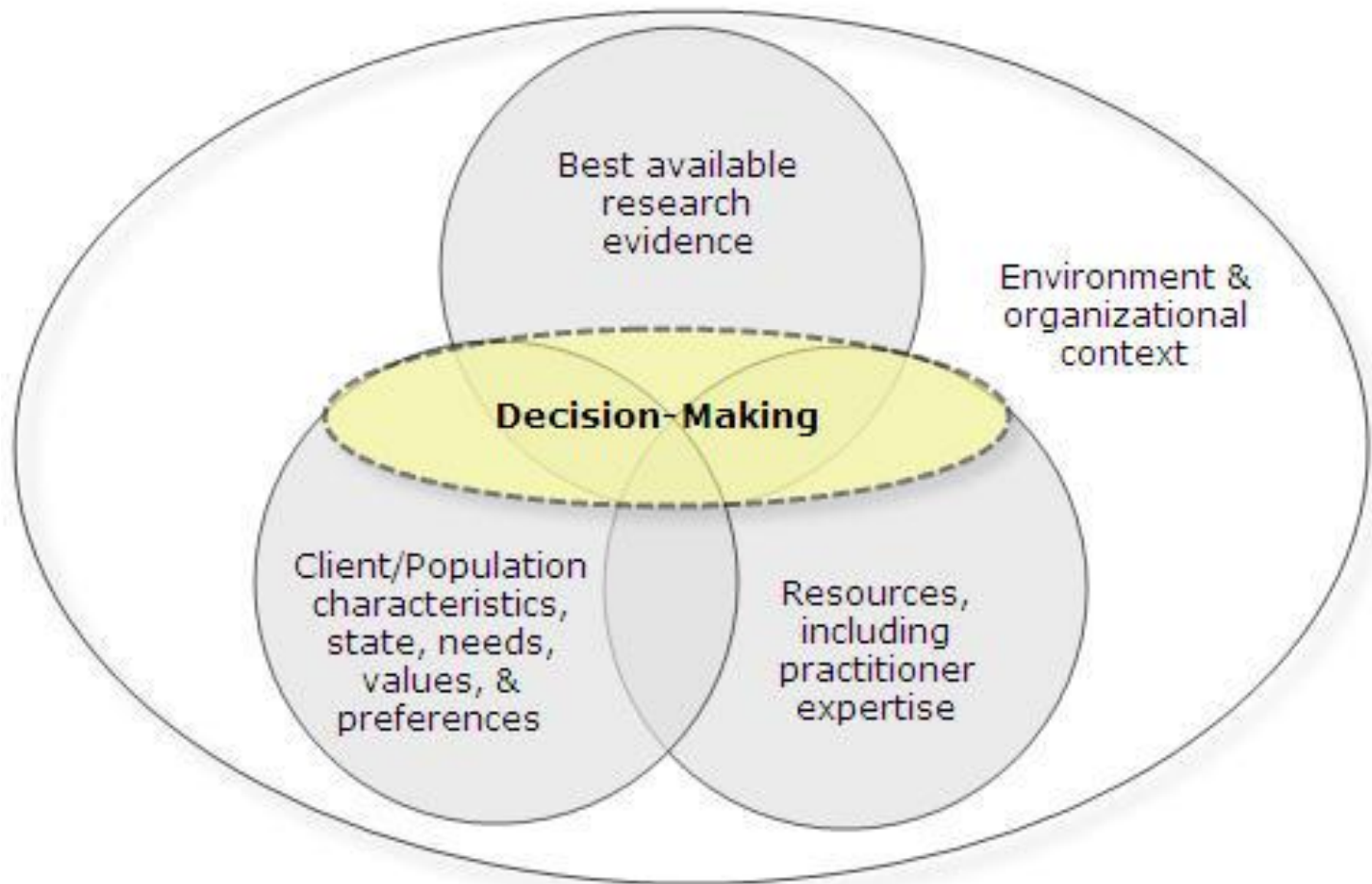
Focus	Action	Responsibility
Detection	Risk profiling	Tier 1
Recognition	Identification in presenting children or young people	Tiers 2–4
Mild depression (including dysthymia)	Watchful waiting Non-directive supportive therapy/group cognitive behavioural therapy/guided self-help	Tier 1 Tier 1 or 2
Moderate to severe depression	Brief psychological therapy +/- fluoxetine	Tier 2 or 3
Depression unresponsive to treatment/recurrent depression/psychotic depression	Intensive psychological therapy +/- fluoxetine, sertraline, citalopram, augmentation with an antipsychotic	Tier 3 or 4

Appraise



Exercise 3 - Apply

- Apply your knowledge to help Lei Liu. What would you do?



Debrief exercise 3

- How did you decide to help Lei Liu?
- How strong did you find the evidence? How relevant?
- How did the stakeholders share decision making? How did they influence the decision?
- Did you make a diagnosis for Lei Liu? Did you share that information? Were you concerned about suicidality?
- Did the black box warning for SSRIs influence your decision-making?
- How did cultural context influence your decision-making?

Lei Liu: Analyze and Adjust

You recommended 3 months of individual CBT, interpersonal therapy, or family therapy for Lei Liu, but his mother only agreed to weekly biofeedback. After a month of biofeedback, Lei Liu expresses hopelessness and admits to loss of pleasure and suicidal ideation.



Analyze and Adjust

How would you adapt the treatment approach (if you would do so)?

Recap

- The 5 Discrete Steps in EBBP
 - 1. *Assess* the health status and context of individuals, communities, or populations and *Ask* client-oriented, relevant, answerable questions.
 - 2. *Acquire* the best available evidence to answer the question
 - 3. *Appraise* the evidence critically for validity and applicability to the problem at hand
 - 4. *Apply* the evidence by engaging in shared decision-making and implement the health practice
 - 5. *Analyze* results of the new health practice and *Adjust* practice

Call to Action

- What have you learned about EBP that seems relevant to your practice?
- What 2 changes will you make in response?
- What about the way EBP is carried out does not seem to fit your context?
- What actions will you take to:
 - Develop evidence that better fits your context?
 - Share your learning with others?