An EBP tool for teaching and assessment

Nina Rydland Olsen

Physiotherapist, MSc, PhD student
Centre for Evidence-Based Practice
Bergen University College, Norway

Olsen, N.R., Vandvik, P. , Larun, L., Kirkehei, I.

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Aim

- To develop a generic evidence-based practice (EBP) tool for learning and assessment purposes.

Background

- Integrated teaching in clinical practice
- Focus on real clinical questions
- Encourage students to enact the EBP steps

- Need instruments
  - to help organise the learning process
  - to document the competence of individuals
  - to evaluate the study programs

(Coomarasamy & Khan 2004, Shaneyfelt et al. 2006)

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EBP domains	Characteristics
Knowledge	About EBP
Skills	Applying knowledge by **performing EBP steps** in some type of clinical scenario
Attitude	Attitude to EBP
Behaviour	**Enacting EBP steps** in practice

(Coomarasamy & Khan 2004, Shaneyfelt et al. 2006)

Behaviour (EBP domain)	Objective (non-self-reported) measurements
Enacting EBP steps in practice	**Learning portfolio**

Cycle diagram: Identify information need → Ask → Acquire → Appraise → Apply → Evaluate → (back to Identify information need)

Evaluate, Apply, Appraise, Acquire, Ask, Identify information need	Record audits
	Audiotapes
	Electronically capturing searching behaviour
	Test of awareness and recall of recently published articles

(Dawes et al. 2005, Shaneyfelt et al. 2006)

Method:
Characteristics of the EBP tool

- Designed for all healthcare professions
- Requires participants to document **all** EBP steps in a template
- Based on real clinical questions
- Assess the process of enacting the EBP steps
- Opportunities for feedback during, and at the end of the process
- Can be used for portfolio learning
- Not yet web or internet based

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Method:
Piloting

- Medical students in their 5th year (n=90)
- Clinical instructors/physiotherapists attending a post-graduate course (n=14)
- Physiotherapists (n=8) attending continuous medical education (CME)

EBP tool

Please write the answers in a concise and precise manner.

1 Information need

Describe your clinical scenario: (e.g. What do you need more information about?)

What is usual practice today?

2 Question formulation

Fill in relevant PICO elements:

(P)	Population	
(I)	Intervention	
(C)	Control	
(O)	Outcome	

Formulate your PICO question: (e.g. In patients with...does ...?)

What kind of clinical question is this?

Which study design is most appropriate for answering this question?

3 Literature search

Please tick off the source(s) you used in your search:

	Preappraised evidence (e.g. summaries, synopses, syntheses)			Primary studies	
	Clinical Evidence	Cochrane Library	Others (specify)	Pubmed/Medline Clinical Queries	Others (specify)

Explain your choice of source(s):

Explain the reasons for your choice of article. Attach the article (and/or summary), and please copy and paste the internet link: (so the article can easily be identified.)

Which search terms did you use? Describe the search terms and how you combined them? (You may include or copy and paste the search strategy.)

4 Critical appraisal (You may use a checklist.)

What question did the study ask?

What kind of clinical question is this?

What type of study design is used?

Are the results valid? (Please state at least 4 keywords about validity.)

What were the results? (If relevant: How large was the treatment effect and how precise was the estimate of the treatment effect?)

Can you apply the results to your clinical practice? (Please state relevant points related to applicability.)

5 Implementation

What conclusions can you draw, and what suggestions do you have for integrating the evidence with your clinical experience, patient preferences, and values in making a clinical decision?

If you changed your practice, please describe the changes that you made:

6 Evaluation

If you changed your practice, how will you evaluate this?

Supervision

Did you need supervision? Please describe the supervision you received: (e.g. What kind of problems did you experience, who did you contact, how often did you contact a supervisor/librarian, how did you experience the supervision, how long did it take for the supervisor to respond?)

Time

How long did it take you to work through the steps?

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Results: Feedback

- "…the EBP-tool; I believe that it helped me structuring.."

- "…I spent some time working with the EBP tool, but this was good repetition; I am ready for a new session on this."

- "…using the tool encouraged me to try out searching and critical appraisal related to clinically relevant question from my own practice."

- "…working with this tool ensured that I remembered knowledge from the course, and that I used the knowledge in clinical practice."

Results: Scoring grid

- Used the Adapted Fresno Test as point of reference

- Developed a scoring grid based on:
  - number of PICO terms identified
  - search strategy
    - type of source; relevant; related to clinical question
    - search terms/Mesh/Thesaurus; related to PICO terms
    - use of Boolean operators; AND/OR/NOT
    - use of other methods to limit the search; age tags, etc.
  - critical appraisal

- Lack a good strategy for evaluating enacting of the implementation and evaluation step

(McCluskey & Meryl 2005)

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Limitations and conclusion

- A promising tool for
  - assessing EBP behaviour among all health care professionals
  - enhancing learning process

- Further testing for feasibility, reliability and validity is necessary

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