

## Chapter 4

# Challenges in Evidence-Based Practice Education: From Teaching Concepts Towards Decision-Making Learning

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### ABSTRACT

*Evidence-based practice is a key element and indicator of high-quality patient care. Healthcare professionals must effectively acquire the necessary knowledge, skills, and attitudes to gather, assess, and interpret the best available evidence in order to ground their clinical decisions. Both achieving competency and delivering instruction in evidence-based practice are complex processes requiring a multimodal approach that may include traditional lectures, interactive teaching strategies, clinically-integrated teaching strategies, active learning. This chapter will provide a brief overview of the concepts of evidence-based practice, interpretation of systematic reviews and meta-analyses, grading evidence, and recommendations' strength. For each topic, teaching strategies or methods will be discussed.*

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## **INTRODUCTION**

### **Evidence-Based Practice Concepts and Barriers to Its Application in Clinical Practice**

Evidence-based practice (EBP) is defined as the thorough use of the best available clinical evidence, aligned with the individual clinical expertise and patients' values and choices, to guide decision-making in the healthcare field (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996).

Critical thinking is a key element for EBP, whose practice can be summarized into five crucial steps:

- Step 1:** Formulate an answerable research question-based on the healthcare professional needs
- Step 2:** Detect the best evidence for answering the research question
- Step 3:** Critically assess the retrieved evidence and its value
- Step 4:** Apply the findings into clinical practice / decision-making
- Step 5:** Assess the performance

The development of these competences is crucial for practicing healthcare professionals to provide high-quality healthcare. Hence, it is necessary to effectively implement EBP in healthcare professionals' curricula (Hung et al., 2019; Larsen, Terkelsen, Carlsen, & Kristensen, 2019; Young, Rohwer, Volmink, & Clarke, 2014).

Despite the positive attitude of healthcare professionals towards EBP for improving patient outcomes, several studies pointed to the little use of the evidence to guide their practice. For instance, literature shows that 66% of nurses only read health literature when needed, while around 27% of these professionals often use research findings in practice. Additionally, it is estimated that only one in four healthcare professionals incorporates EBP to guide decision-making in health settings (Andiwatir & Betan, 2019; Patelarou et al., 2017).

Once the number of EBP practitioners is increasing, it is assumed that evidence-based practice is a learnable competence. Nevertheless, significant barriers have been reported by healthcare professionals, specifically nurses, for not engaging in EBP. These barriers include lack of time, resources, and knowledge, difficulties in assessing research, and lack of perception of the benefits of applying EBP into clinical practice.

Moreover, most of the health students are taught only the first three steps of EBP, lacking the knowledge to perform the last two steps in clinical practice, which is, integrating evidence into clinical decision-making and evaluating changes in patients' outcomes. In this sense, the most appropriate methods for teaching EBP in

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