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Evidence-based nursing

Raija Kokko

Some researchers have stated that history of evidence -based nursing started in the 1800s when Nightingale (Florence Nightingale 1820–1910) worked in military hospitals in Turkey (Nightingale 1970; Selanders 2012). She observed patients' care and noticed that many deficiencies in care were due to poor hygiene practices. Furthermore, she used evidence obtained through investigation and even statistics to improve patients' outcomes of care (Nightingale,1970). The concept of evidence based was not used during Nightingale's time, it only came into use in the 1970s. However, Nightingale is said to be the pioneer of evidence-based nursing practice (EBP) (Mackay & Bassendovski, 2017).

In this chapter is described the first steps of evidence-based practice in health care from the development of the concept to evidence-based practice of today. Also, nursing education is viewed because its responsibil-

ity is to produce future nurses equipped with the ability to perform evidence-based nursing (EBN) (Selanders & Crane, 2012).

In the 1970s evidence-based practice was called evidence-based medicine. A physician Cochrane (Cochrane Collection, 2013) used randomized trials to receive the most reliable results in his medical studies. Later Sackett et al. (2004) added high level of critical thinking to the concept of evidence-based medicine and in addition, he emphasized the exploitation of patients' values in order to obtain valid research evidence. According to Sackett et al. (1996), a diagnosis should include evidence, research and individual patient's values, beliefs and will. Furthermore, Sackett et al. 1996 claimed that evidence-based practice is "the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patient". However, over time the concept evidence-based medicine changed again, and in early 1990s, healthcare professionals started using the concept of evidence-based practice (Sackett et al., 2004). This concept was adopted to other professions, for instance to healthcare, and to nursing it came in the late 1990s. The development of the concept continues but they stem from Sackett's definition. (Yates, 2013.)

Nowadays, evidence-based practice (EBP) has become a fundamental basis of professional nursing (Weaver, Warren & Delaney, 2005). There are several definitions, for instance, Scott & McSherry (2009) claim that EBP provides nurses with a method of using critically appraised and scientifically proven evidence when taking care of their patients. Stievano & Tsudin (2012) have stated that evidence-based practice is a way for the

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nursing discipline to minimize the theory to practice gap. Furthermore, they defined that “evidence-based practice in nursing is “a problem-solving approach to clinical decision making that incorporates a search for the best and latest evidence, clinical expertise and assessment, and patient preference values within a context of caring” (Stievano & Tsudin, 2012).

According to Melnyk et al. (2012) EBP is a problem-solving approach to clinical decision-making in healthcare. It integrates “the best evidence from well-designed studies with the clinicians’ expertise, including internal evidence from patient assessments and practice data, and patients’ preferences and values”. According to Melnyk et al. (2012) using EBN results in high-quality care, and in addition, it improves patient outcomes, and reduces healthcare costs. Sometimes concepts of EBN and EBP are used as parallel concepts. However, it is claimed that EBN is using EBP as a foundation. According to Scott and McSherry (2009), the concept of EBN should be defined as an independent concept.

< There are three traditional components of EBP (Figure 11). Best scientific evidence means that nurses use current research literature results in their decision making. Some researchers claim that the best evidence is found in systematic reviews and meta-analyses (Sackett et al., 2012). The nurse must take into account the patient’s preferences and values in their decision making. The nurse uses her knowledge and skills for the best interests of the patient and ensures that they are updated (International Council of Nurses, 2012; Melnyk et al., 2012). Clinical expertise includes skills acquired during basic nursing education and clinical skills developed at work. In addition, so-called tacit knowledge is often connected to health professions. Tacit knowledge develops through work experience and for instance nurses utilize this experience in their decision-making. (Kothari et al., 2012.) Terms like skills, intuition, know-how, procedural knowledge, implicit knowledge, unarticulated knowledge, and practical or experiential knowledge have all been used to describe tacit knowledge (Ambrosini & Bowman, 2001). However, Nightingale has stated more than one hundred years ago that nurse can work up to fifty years without ever getting wiser (Nightingale, 1970). Therefore, it is often argued that the concept of tacit knowledge is contradictory (Yates, 2013). >

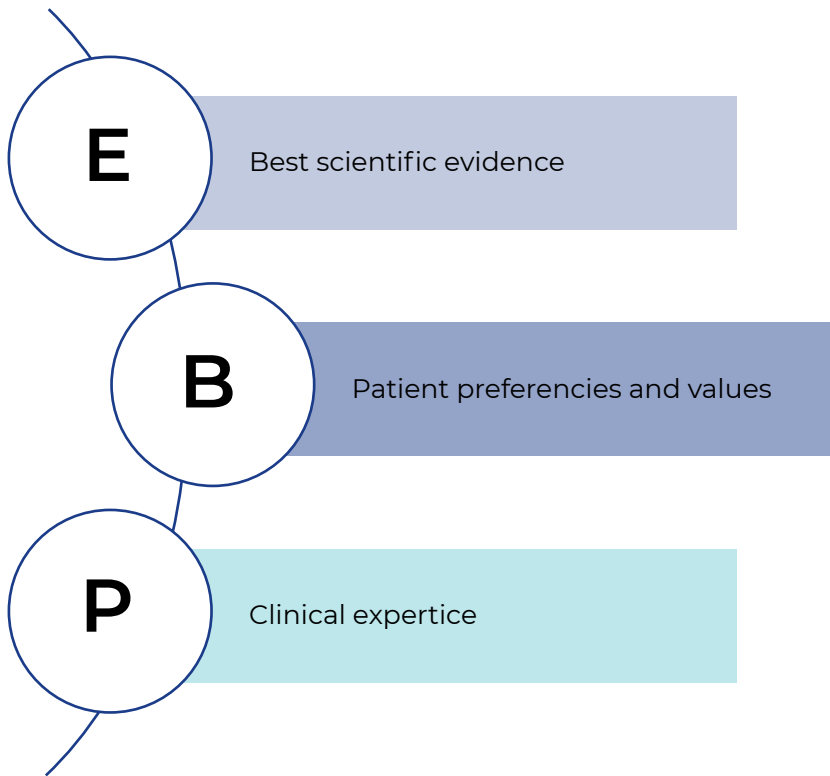


FIGURE 11. Evidence-based practice (EBP) (Sackett, 1996; Melnyk et al., 2012, modified)

EBP is largely used as a foundational element in teaching in nursing education. Education aims at students' learning EBP skills which they can apply to practice during their clinical training periods. May-Elin et al. (2018) studied teaching strategies for EBP knowledge and skills currently used in undergraduate nursing education. Their literature review results (consisting of 7 studies), showed that teaching strategies to enhance EBP knowledge and skills are recommended. However, recent research indicates that nurses may not be well prepared to apply EBP. May-Elin et al. (2018) identified four teaching strategy themes which were interactive teaching strategies, interactive and clinical integrated teaching strategies, learning outcomes, and barriers. The barriers included challenging collaboration at work, limited awareness of EBP principles and poor information literacy skills. Doran et al. (2010) claims, based on their study results, that barriers to conduct evidence-based practice are the same with nursing students and clinical nurses.

Lack of current research knowledge and wireless access cause problems in many places. Utilization of technological development is crucial in today's health care institutions and clinical settings to implement high-quality care for patients (Yates, 2014). Mthiyane and Habedi (2018) examined nursing educators in implementing EBP in teaching and learning. In addition, the purpose was to describe the importance and benefits of EBP in teaching and learning in the nursing profession, especially for nurse educators and student nurses. Findings revealed that, although most of the nurse educators are supportive and displayed a positive attitude towards implementing EBP in teaching and learning, the level of knowledge and skills was questionable. This was coupled with a lack of motivation and commitment towards research. The authors suggest that nurse educators should be supported through in-service training, workshops and affiliation to journal clubs to improve their knowledge and skills regarding EBP competencies. Also, relevant adequate resources should be made available and accessible to nurse educators and nursing students (Mithiyane & Habedi, 2018).

Conclusion

Nurse educators should be supported through in-service training, workshops and affiliation to journal clubs to improve their knowledge and skills regarding EBP competencies (Mithiyane & Habedi, 2018). The exploration of the concept of evidence-based practice showed that it is used in nursing education. However, implementation of EBP needs enhancement because nurses in clinical practice would like to have more time, support and knowledge for its application (Shifaza, Evans & Bradley, 2014; May-Elin et al., 2018). Collaboration between nursing and healthcare institutions could be more intensive. Also, exploitation of digital opportunities in communication could open new chances in classrooms and clinical practice to further develop evidence-based practice (Weaver et al. 2005; Doran et al. 2010). The authors claim that information technology (IT) is presented as the underlying tool that makes this rapid translation of nursing knowledge into practice and education feasible.

Recommended reading:

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