



European Nursing Virtual Centre
for Learning Evidence-Based Practice

GUIDELINES

FOR TEACHING AND LEARNING EVIDENCE-BASED PRACTICE IN THE EUROPEAN NURSING CURRICULUM

EBP e-Toolkit Project

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INTRODUCTION

Evidence-based Practice (EBP) is an approach that guides healthcare personnel decisions for using the best available research evidence with clinical expertise and the patient's unique values and preferences. The World Health Organization emphasizes the important role of EBP by nurses in order to improve health of families and communities. However, the adoption of EBP remains a challenge for the nursing profession and a large proportion of nurses are not prepared for EBP.

Implementing EBP has been recognized as a core competency by the European Federation of Nurses Associations based on the European Directive 2013/55/EU, which establishes the minimum educational requirements for nurses responsible for general care. However, there has never been an international consensus about the minimum EBP competencies for registered nurses who are delivering care in real-world clinical settings and who are responsible for facilitating and sustaining evidence-based care in today's healthcare systems in Europe.

Education level is strongly associated with EBP beliefs and its implementation, suggesting that university education increases the appreciation of this practice and instils the desire to use EBP also in clinical practice. In recent years, a growing number of universities have introduced EBP topics and lessons in the curriculum, with the aim of supporting students in the acquisition of such competency. However, EBP in nursing education varies among nurse educators and universities, the integration of their content is partially achieved through specific subjects, and we do not know the current situation in nursing programmes in the European context.

On the other hand, nursing teachers have highlighted obstacles in relation to limited knowledge about the most appropriate EBP teaching strategies, or lack of support from teaching institutions. The earlier literature has not measured the effect of teaching EBP strategies; Therefore, rigorous evaluation is needed to understand which educational strategies and innovations are most effective in preparing nursing students to enact EBP upon entering practice.



PURPOSES

These Guidelines have been developed to guide professors, educational policy makers and other stakeholders in the integration of EBP competencies into the Nursing Curricula across Europe at all educational levels.

The evaluation of the situation of EBP education in Europe has shown that that teaching of EBP varies between countries and within each country. Teaching EBP is not yet sufficiently integrated into nursing curricula. For a more efficient integration, changes need to be applied that aim at modifying the institutional focus, mission and objectives, and guidelines on the standardization of teaching approaches, and contents have to be developed in all three cycles of higher education (Bachelor's, Master's and PhD).

These Guidelines present a set of 24 Competencies and 117 Learning Outcomes which have been agreed upon through a consensus technique carried out by 30 European-level EBP experts. The set of EBP Competencies and Learning Outcomes can guide nurse educators, managers, and EBP stakeholders in the development of content that incorporates EBP knowledge, skills, and attitudes into educational programs. Prioritizing the EBP competencies and learning outcomes that are most necessary, and adapting them to every context, will provide educational organizations with guidelines for enhancing the education of nurses.

The Guidelines also describe the most effective educational teaching and learning strategies and educational innovations for EBP in nursing education.

We encourage the progressive integration of these recommendations to guide the development of future curricula in the European Nursing curriculum.

These recommendations should be integrated into both academic and clinical education programs to establish and continuously reinforce EBP.

The ultimate purpose of these Guidelines is to establish common standards and to strengthen the teaching of EBP in the European Nursing curriculum, in order to build more competent and prepared nursing professionals for the care of patients and their families.



METHODS

Three research methods were used to obtain the information necessary to develop a rigorous, objective and up-to-date Guideline.

They are briefly described below:

- Report on teaching of EBP in Nursing in partner institutions and countries. A mixed methods design was adopted which included cross-sectional descriptive quantitative and descriptive qualitative research. We collected quantitative and qualitative data to identify differences and gaps in the descriptions of the EBP courses in nursing at all three Bologna levels in six European countries (Spain, Greece, Poland, Italy, Czech Republic and Slovenia).
- Establish a consensus on essential EBP competencies for nurses that would guide inclusion of EBP skills and content in nursing education programs across European Countries.

A multi-phase modified Delphi survey was conducted. In Stage 1, a literature review was conducted to identify core EBP competencies for nurses. In Stage 2, EBP leaders from different European countries developed an initial set of EBP competencies (based on content analysis and review) for nurses at different levels of nursing roles in the European context. In Stage 3, a Delphi survey was conducted to determine consensus and to establish the final set of core EBP competencies for nurses and learning outcomes.

- Evaluate and synthesize current research evidence and practical experiences on innovations and interventions for integrating EBP into the nursing curricula and teachers' education. We managed a systematic review design which sought to systematically search for, appraise and synthesize research evidence, in accordance with the PRISMA statement. The review was carried out by an international partnership team that included all the researchers from the EBP e-Toolkit consortium.



RESULTS

Teaching evidence-based practice (EBP) in nursing curricula in six European countries

1. A total of 161 faculties agreed to provide data, of which 148 (91.93%) faculties were member of universities, and 6 (3.73 %) were outside of universities. In total, we analysed 276 nursing programs, 154 (55.8%) on the first Bologna level, 107 (38.8%) on the second, and 15 (5.4 %) on third Bologna level.
2. Subjects or modules on “Evidence-based Practice in Nursing or Healthcare” (abbreviation EBP/BSc) were found in 45 (29.4 %) Bachelors in Nursing degrees. Altogether, there are 40 obligatory EBP/BSc subjects/modules, mostly in the second year of the study program (n = 16; 40%), followed by the third year (n = 10; 25%). The average number of contact time was 50 minutes, an individual student’s workload takes 55.1 hours (SD = 32.8), and the online learning hours were 6.13. The subject had in average 3.5 ECTS. As for the subject’s instructor, most were nurses with a PhD or Master’s degree.
3. Only 30 (28.04%) Master’s programs had subjects/modules of “Evidence-based Practice in Nursing or Healthcare” (abbreviation EBP/MA). 20 subjects (76.92%) were obligatory, and 6 (23.08%) were optional. The average contact hours of the EBP/MA subject were 34.68 hours (SD = 20.71), with an individual student’s workload of 91.72 hours (SD = 58.70), the online learning hours were 15.00 (SD = 13.06), and average ECTS was 5.07 (SD = 3.12).
4. Only six faculties (37.5%) from two countries (Czech Republic, Slovenia) had subjects or modules of “Evidence based Practice in Nursing or Healthcare” in a PhD program (EBP/PhD)
5. EBP content was mainly included in the study programs in subjects that incorporated some concepts, and secondly, as independent courses.
6. The disparity of results between countries showed the necessity of establishing EBP guidelines to harmonize the Nursing Curricula across Europe.

RESULTS

Core Evidence-Based Practice Competencies and Learning Outcomes for nurse education in Europe

1. The basic set of documents to be analyzed comprised 88 records from 1998 to 2018, including EBP competency reviews and consensus studies for nurses and allied healthcare professionals.
2. Based on the content analysis of the basic set, EBP competencies for nurses were identified (n = 835).
3. Most statements were placed in Step 3 (25.6%), “Critically appraise the evidence that has been collected for its validity, reliability, and applicability, and then synthesize that evidence,” and Step 2 (20.3%), “Search for and collect the most relevant and best evidence to answer the clinical question.” The lowest percentage of statements was in Step 6, “Disseminate the outcomes of the EBP decision or change.”
4. On the basis of the 678 competency statements, an expert agreement was reached on a final set of 24 Competencies and 117 Learning Outcomes.
5. Competencies were grouped into seven steps according to Melnyk et al. (2014).
 - Step 0 – Introductory (5 competencies, 18 learning outcomes);
 - Step 1 – Ask (1 competency, 10 learning outcomes);
 - Step 2 – Acquire (2 competencies, 17 learning outcomes);
 - Step 3 – Appraise and Interpret (4 competencies, 19 learning outcomes);
 - Step 4 – Apply (4 competencies, 22 learning outcomes);
 - Step 5 – Evaluate (4 competencies, 17 learning outcomes);
 - Step 6 – Disseminate (4 competencies, 17 learning outcomes).
6. The competencies and learning objectives that were finally selected are available at the end of the Guidelines (Annex).



RESULTS

Educational Interventions for teaching Evidence-Based Practice to nursing students

1. The search strategy retrieved 8901 records in total. After screening for duplicates and eligibility, 20 articles were included in the qualitative synthesis.
2. Studies were mainly conducted in Europe and the USA.
3. Regarding their design, 17 were “quasi-experimental studies with pre-post-test”, one used a mixed methods design, one was an experimental study with one control group, and the last was a longitudinal panel study.
4. The sample size varied from 32 to 292 students. Studies included on-line, face-to-face or mixed interventions. Some educational approaches provided credits, and the courses/lectures/training lasted from thirty minutes to one semester. The studies included single (lectures/lessons/workshop/tutorials) or a combination of different approaches.
5. The most effective interventions were those which lasted around one semester. The use of different approaches such as lecturers, tasks, discussion in class, individual work and use of small groups increased the effectiveness of an EBP program. Additionally, the use of interactive methods was an added value for an effective EBP program.
6. A combination of lectures, voiced-over PowerPoint, videos, team-based learning, computer-based learning, small groups, individual projects, and problem-based learning were shown to be effective in different studies.
7. Different attributes related to EBP were assessed with instruments that limited comparability. Even then, the benefits were consistent in most of the studies in favor of educational interventions in the acquisition of EBP competence, EBP knowledge and skills, future use of EBP, and other aspects such as mental efficiency or critical thinking.



RECOMMENDATIONS

1. The curricula for the education of undergraduate nursing students should have as a mission and priority objective, to educate future nurses on the use of EBP in clinical practice, and in the development of attitudes, knowledge and skills related to EBP.
2. A culture of EBP should be fostered in higher education institutions and at all levels of education through an environment that encourages critical questioning of clinical practice and the use of scientific findings to promote and evaluate nursing care.
3. Educational institutions must be equipped with resources and means to facilitate the application and use of EBP by all those involved in education: managers, teachers, librarians, clinical tutors. This means having technical and human resources that allow, among other activities, the consultation of scientific evidence, discussion, and dissemination of results.
4. Training courses in EBP should be carried out to train both academic teachers and clinical mentors, instilling the importance of integrating EBP in the educational programmes of all subjects taught in the teaching curriculum.
5. The teaching of specific EBP content should preferably be delivered by nursing faculty with postgraduate training (Master's/PhD) and knowledge of EBP.
6. EBP competencies and learning outcomes should guide the incorporation of EBP knowledge, skills, and attitudes in nursing education, adapting them to the 3 levels of education (Bachelor's, Master's, and PhD). Their incorporation should be progressive throughout all courses of education, including the most basic completions and learning outcomes in the early years, progressing to more advanced ones in the upper years.



RECOMMENDATIONS

7. The incorporation of EBP content should be performed through both specific subjects that provide basic and advanced knowledge and skills in EBP, and in turn, complemented by the involvement of clinical content subjects that demonstrate the use of EBP and its incorporation as a clinical ability.
8. Educational interventions should be developed that involve learning in clinical settings with the collaboration and involvement of clinical mentors, and that facilitate practical learning in which decision making and interventions are supported by evidence.
9. Students should know the basics of research methodology, not so much to generate new knowledge, but to answer clinical questions, critically evaluate evidence, and integrate and apply it in clinical practice.
10. The teaching of EBP should include all steps of the EBP process, avoiding fragmented teaching by educational levels.
11. The steps of the EBP process include: Step 0 "Cultivating a critical spirit", step 1 "Posing the clinical question", step 2 "Searching and collecting evidence", step 3 "Critically evaluating the evidence and synthesising it", step 4 "Applying the evidence", step 5 "Evaluating that application", and step 6 "Disseminating the results obtained".
12. During the undergraduate level, it is recommended to focus on the initial steps 0 to 3, but attention should also be paid to steps 4 to 6 so that students are aware of the purpose and use of EBP.
13. At higher levels of education (Master's and PhD) students should be encouraged to be producers of evidence. Through their learning, postgraduate students will be able to develop, and in some cases implement, an action plan to bring about changes in clinical practice, which will be analysed and disseminated as part of their research.



RECOMMENDATIONS

14. Educational interventions that have led to improvements in the learning of EBP content and that should be taken into account in the planning of teaching programmes include:
 - Duration of content-specific training of more than 45 hours.
 - Educational strategy included in courses from different academic years or covered in a specific subject.
 - Use of different teaching modalities, face-to-face, online, blended learning, small groups.
 - Carrying out activities that facilitate tutoring and monitoring of activities and that involve the application of what was learnt, through an active teaching methodology (debates, tests, quizzes, PBE project).
15. Validated evaluation tools should be used to assess students' acquisition of competences in EBP, the preparation of teachers, and the assessment of the teaching environment and centres. The incorporation of EBP into clinical and internship teaching programmes should also be assessed.
16. Future research should investigate how curriculum design could build on the students' initial positive attitudes towards EBP and enhance its use in practice.
17. More robust research is needed to compare different educational strategies and to improve the learning of EBP in different educational contexts.



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ANNEX

Set of core EBP competencies and relevant learning outcomes for nurse education in Europe

STEP 0. CULTIVATE A SPIRIT OF INQUIRY WITHIN AN EBP CULTURE AND ENVIRONMENT

Competencies	<ul style="list-style-type: none"> · Questions clinical practices for the purpose of improving the quality of care. · Outlines clinical problems using internal evidence (evidence generated internally within a clinical setting, such as patient assessment data, outcomes management, and quality improvement data). · Participates establish and sustain an evidence-based practice culture. · Mentors others in evidence-based decision making and the EPB process. · Implements strategies to establish and sustain an EBP culture.
Learning outcomes related to EBP competency for nursing roles	
Affective domain	<ul style="list-style-type: none"> · Assumes the role of a change agent for the organization. · Believes that EBP results are the best clinical care for patients. · Fosters EBP organizational culture, infrastructure, and teamwork. · Supports a culture of inquiry. · Understand the impact of the clinical practice questioning on improving individual/group health outcomes.
Cognitive domain	<ul style="list-style-type: none"> · Describes ethical principles related to variation in practice and EBP. · Explains the purpose and importance of EBP in clinical practice. · Explains the significance of practice variation related to evidence-based care. · Justifies that 7 steps of EBP help to make decisions in clinical practice. · Defines EBP as the integration of the best research evidence with clinical expertise and the patient's unique values and circumstances. · Understands the distinction between using research to inform a clinical decision making vs conducting research.
Skills domain	<ul style="list-style-type: none"> · Identifies gaps in the clinical practice. · Identifies the need for change based on evidence. · Acts as a resource on current, rapidly advancing evidence-based quality initiatives and change forces. · Addresses clinical problems and quality improvement issues with the evidence-based practice process. · Participates in the organizational culture of evidence-based quality improvement in care. · Provides leadership for integrating EBP in clinical practice. · Facilitates movement of practice change through formal institutional channels collaborating with stakeholders and resource managers.



STEP 1. ASK THE BURNING CLINICAL QUESTION IN THE FORMAT THAT WILL YIELD THE MOST RELEVANT AND BEST EVIDENCE (I.E., PICOT FORMAT)	
Competencies	<ul style="list-style-type: none"> · Converts a clinical problem into an answerable, clinical question using a structured format (i.e.: PICO(T) or others).
Learning outcomes related to EBP competency for nursing roles	
Affective domain	<ul style="list-style-type: none"> · Recognizes the relevance of meaningful clinical questions to address clinical practice. · Keeps an open mind to be an inquiry about the clinical practice.
Cognitive domain	<ul style="list-style-type: none"> · Differentiates the key components of a structured, clinical question (PICO(T) format or others). <p>Explains the difference between the types of questions that cannot typically be answered by research (background questions) and those that can (foreground questions).</p> <ul style="list-style-type: none"> · Identifies different types of clinical questions, such as questions about treatment, diagnosis, prognosis, etiology, and meaning.
Skills domain	<ul style="list-style-type: none"> · Formulates a structured question in response to clinical query/issue. · Classifies the major study designs for each type of clinical question. · Identifies clinical problems that can be addressed through evidence-based practice. · Uses frequency and relevance criteria to prioritize clinical questions. · Uses generic accepted terminology in creating a structured, clinical question.



STEP 2. SEARCH FOR AND COLLECT THE MOST RELEVANT AND BEST EVIDENCE TO ANSWER THE CLINICAL QUESTION (E.G., SEARCHING FOR SYSTEMATIC REVIEWS, INCLUDING META-ANALYSIS)

Competencies	<ul style="list-style-type: none"> · Searches for external evidence (evidence generated from research) to answer focused clinical questions. · Systematically conducts and an exhaustive search for external evidence to answer a clinical question
Learning outcomes related to EBP competency for nursing roles	
Affective domain	<ul style="list-style-type: none"> · Is aware that it is necessary to screen and select the appropriate information to answer a clinical question.
Cognitive domain	<ul style="list-style-type: none"> · Recognizes major document types and resources included on principal bibliographic databases. · Classifies scientific evidence as primary research evidence, synthesis (systematic reviews) and evidence summary”. · Describes the hierarchy search of a clinical question. · Describes the principal health sciences and allied sciences bibliographic databases/ resources to search. · Details the search strategies (controls vocabulary, thesaurus, keywords, limit function, and Boolean operators). · Distinguishes scientific evidence as primary research evidence and pre-appraised literature (systematic reviews, clinical practice guidelines, evidence summaries...) · Distinguishes between filtered (pre-appraised) and unfiltered (un-appraised) database resources and recognizes the common databases in use (e.g. Medline, CINHALL...)
Skills domain	<ul style="list-style-type: none"> · Conducts a systematic approach to search for evidence in appropriate databases (i.e., development of synonyms from the PICO question and correct use of Boolean operators per the database in a search). · Searches the literature on electronic databases and online repositories. · Constructs an appropriate search strategy for answering clinical questions. · Reviews and select the appropriate evidence after reading the title and abstract. · Demonstrates computer searching skills. · Obtains the full text of articles and other evidence resources. · Understands the evidence written in English. · Uses available supports (healthcare librarians) that help her/him find the evidence to answer their clinical question. · Employs bibliographic databases tools (i.e. history, related articles, etc.).



STEP 3. CRITICALLY APPRAISE THE EVIDENCE THAT HAS BEEN COLLECTED FOR ITS VALIDITY, RELIABILITY, AND APPLICABILITY THEN SYNTHESIZE THAT EVIDENCE

Competencies	<ul style="list-style-type: none"> · Critically appraises pre-appraised evidence (such as clinical practice guidelines, evidence-based policies and procedures, and evidence syntheses). · Critically appraises published research studies to determine their strength and applicability to clinical practice. · Evaluates and synthesizes a body of evidence gathered to determine its strength and applicability to clinical practice. · Leads a team to synthesize the evidence from primary research and synthesized evidence.
Learning outcomes related to EBP competency for nursing roles	
Affective domain	<ul style="list-style-type: none"> · Encourages to evaluate clinical practice guidelines and other evidence for applicability and feasibility in practice. · Appreciates the practical utility of research findings.
Cognitive domain	<ul style="list-style-type: none"> · Distinguishes the importance of the difference between evidence-based documents and opinion-based documents. · Describes the different quality level of the designs of the investigation studies. · Explains the principal measures of association and the potential impact that allow evaluating the magnitude of the analyzed effect in investigation studies. · Identifies key criteria in any evidence reports using critical appraisal checklists. · Identifies the strengths and limitations of various types of research studies (quantitative and qualitative). · Identifies the biases in the principal investigation designs and the impact of these on the results. · Lists of advantages of pre-appraisal documents as a strong evidential foundation for clinical decision making. · Recognizes how qualitative research can inform the decision-making process.
Skills domain	<ul style="list-style-type: none"> · Participates in institutional initiatives for evaluation and synthesis of a body of evidence gathered to determine its strength and applicability to clinical practice. · Assesses reliability, validity, and limitations of the research evidence. · Distinguishes the difference between clinical importance vs statistical significance. · Creates or participates on teams oriented to synthesize evidence. · Grades the research studies result in the following level of evidence (quality) and grades (strength) of recommendation. · Interprets different types of measures of association and effect, including key graphical presentations and confidence intervals. · Uses relevant appraisal tools to evaluate the evidence. · Interprets the grading of the certainty in evidence and the strength of recommendations.



STEP 4. INTEGRATE THE EVIDENCE WITH ONE'S CLINICAL EXPERTISE AND THE PATIENT'S PREFERENCES AND VALUES TO IMPLEMENT A CLINICAL DECISION

Competencies	<ul style="list-style-type: none"> · Collects practice data (e.g., individual patient data, quality improvement data) systematically as internal evidence for clinical decision making in the care of individuals, groups, and populations. · Integrates evidence gathered from external and internal sources in order to plan nursing care. · Implements practice changes based on evidence and clinical expertise and patient preferences to improve care processes and patient outcomes. · Leads transdisciplinary teams in applying synthesized evidence and internal evidence to initiate clinical decisions and practice changes to improve the health of individuals, groups, and populations.
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Learning outcomes related to EBP competency for nursing roles

Affective domain	<ul style="list-style-type: none"> · Chooses evidence-based approaches over routine as a base for own clinical decision making. · Considers the patients' preferences and values when designing interventions or protocol changes. · Promotes the delivery of care on the unit(s) or clinic(s) aligns with evidence-based practice recommendations. · Promotes practice changes based on evidence and clinical expertise and patient preferences to improve care processes and patient outcomes. · Purposes modifications at the workplace/organization to implement.
Cognitive domain	<ul style="list-style-type: none"> · Describes potential barriers and supports to knowledge translation and strategies to overcome these. · Identifies the components of the change process using a planned change model.



STEP 4. INTEGRATE THE EVIDENCE WITH ONE'S CLINICAL EXPERTISE AND THE PATIENT'S PREFERENCES AND VALUES TO IMPLEMENT A CLINICAL DECISION

Competencies

- Collects practice data (e.g., individual patient data, quality improvement data) systematically as internal evidence for clinical decision making in the care of individuals, groups, and populations.
- Integrates evidence gathered from external and internal sources in order to plan nursing care.
- Implements practice changes based on evidence and clinical expertise and patient preferences to improve care processes and patient outcomes.
- Leads transdisciplinary teams in applying synthesized evidence and internal evidence to initiate clinical decisions and practice changes to improve the health of individuals, groups, and populations.

Learning outcomes related to EBP competency for nursing roles

Skills domain

- Interviews individuals, families to identify patient health status.
- Adapts synthesized knowledge and recommendations from clinical practice guidelines to accommodate local clients, populations, and settings.
- Creates or participates in an implementation plan for incorporating the consideration of best evidence into clinical practice.
- Engages patients in the decision-making process, using shared decision making, including explaining the evidence and integrating their preferences.
- Creates strategies for supporting colleagues to implement practice changes.
- Uses a comprehensive set of relevant variables within and across the system to measure the quality of care.
- Uses organizational information (policies / guidelines, etc.) to change practice.
- Changes clinical practice using guidelines/ evidence-based protocols.
- Changes the clinical practice based on patient assessment data.
- Uses organizational quality indicators to identify health needs in patients.
- Delivers care using evidence-based CPGs and another types of evidence.
- Explains evidence and discusses options with the patient in lay language.
- Updates nursing guidelines/standards/rules.
- Leads or participates the team to develop evidence-based practice recommendations for unit(s), clinic(s), and/ or organization.
- Manages or participates an interdisciplinary team for implementing practice changes.



STEP 5. EVALUATE OUTCOMES OF THE PRACTICE DECISION OR CHANGE BASED ON EVIDENCE

Competencies	<ul style="list-style-type: none"> · Interprets obtained outcomes after the evaluation of an evidence-based changed practice. · Measures processes and outcomes of evidence-based clinical decisions. · Generates internal evidence (evidence generated internally within a clinical setting, such as patient assessment data, outcomes management, and quality improvement data) through outcomes management and EBP implementation projects to integrate best practices. · Evaluates outcomes of evidence-based decisions and practice changes for individuals, groups, and populations to determine best practices.
Learning outcomes related to EBP competency for nursing roles	
Affective domain	<ul style="list-style-type: none"> · Recognizes the need to evaluate the impact on outcomes. · Recognizes the importance of facilitating the evaluation (register) for the EBP.
Cognitive domain	<ul style="list-style-type: none"> · Describes an evaluation plan to analyze the changes produced. · Identifies data and indicators to evaluate services for individuals, families, and groups. · Identifies a strategy for direct measures of care outcomes, e.g. derived from clinical documentation, case review, patient's feedback. · Relates cost outcomes and patient benefits. · Describes specifically safety and quality outcomes of nursing care.
Skills domain	<ul style="list-style-type: none"> · Interprets analysis of indicators/outcomes in terms of quality of care. · Assesses the effectiveness of the interventions to determine improvement in patients or practice. · Changes practice based on patient outcome data. · Collects practice data (e.g., individual patient data, quality improvement data) systematically for clinical decision making in the care of individuals, groups, and populations. · Manages the interdisciplinary team for outcomes evaluation. · Evaluates the application of interventions and identify areas for improvement. · Implements processes to monitor and evaluate the impact of practice change (individual, service, and organization). · Participates in evidence-based quality improvement processes to evaluate outcomes of practice changes. · Participates in the review of practice outcomes, standards, and guidelines; review of policies, procedures, and guidelines based on evidence. · Uses audit and feedback of data as an implementation strategy to promote the use of the evidence-based practice in the unit(s) or clinic(s).



STEP 6. DISSEMINATE THE OUTCOMES OF THE EBP DECISION OR CHANGE

Competencies	<ul style="list-style-type: none"> · Disseminates best practices supported by evidence to improve quality of care and patient outcomes. · Formulates evidence-based policies and procedures. · Leads or participates in the generation of external evidence with other healthcare professionals. · Communicates best evidence to individuals, groups, colleagues, and policy makers.
Learning outcomes related to EBP competency for nursing roles	
Affective domain	<ul style="list-style-type: none"> · Performs activities to disseminate EBP. · Believes in the importance related to communicate and share results of practice changes to colleagues, patients, and stakeholders. · Encourages experience sharing to emphasize the need for change and positive outcomes of change
Cognitive domain	<ul style="list-style-type: none"> · Defines a variety of methods to disseminate results of practice changes tailored to communities/ populations. · Describes ethical, legal and policy guidelines in the dissemination of data and information. · Identifies the principal sections of scientific communication (oral and poster presentations, papers, etc.). · Lists peer-reviewed journals and national-level meetings for dissemination of evidence-based practice outcomes.
Skills domain	<ul style="list-style-type: none"> · Creates strategies for dissemination of evidence-based practice into the health care environment. · Prepares (or participates on) academic writings for results dissemination. · Synthetizes (or participates on) the results of practice change in an understandable way. · Shares (or participates on) structural, process and patient outcomes from an EBP implementation project. · Gives feedback regarding patient outcomes and achieves to colleagues in a constructive way. · Utilizes the information and communications technology in sharing results of practice changes. · Adapts (or participates on) the communication of obtained outcomes to the different audiences (patients, colleagues, policy makers) and/or media and audiences. · Demonstrates public speaking and active listening skills. · Leads or participates in interdisciplinary teams, including patients and professional associations to the dissemination of outcomes. · Discusses implications of research with colleagues.



MORE RESOURCES

Open Educational Resources (OER)

OER is an online library that includes all types of online and free licensed resources related to Evidence-based Practice (EBP), focus on nurses learning. Target audience are nursing students, nurses, educators, and nurses in general interested in learning EBP.

Resources are available in English and all the 6 languages of the EBP eToolkit project partner's members (Spanish, Greek, Italian, Polish, Czech and Slovene).

Each resource was evaluated following the quality criteria: relevance, accuracy, production quality, accessibility, interactivity and licensing. Evaluation scores from 0 till 32. The cut off for being selected is 12.

OER platform permit to search resources through the access to the 7 EBP steps categories and subcategories (see menu below) or filter by categories, language, quality score, format or target user group.

Link: <https://europeannursingebp.eu/oer/>

Learn with us

The EBP e-Toolkit Course is an open online course that will provide you competency on Evidence-Based Practice. Step by step through 7 modules you will increase your competency on Evidence-Based Practice (EBP).

If you are a nursing student, nurse educator, a registered nurse that work as clinical mentor or just a professional interested on improving your clinical practice, using the best results from the research, your clinical expertise and patient preferences, discover the EBP eToolkit.

Teachers and experts on EBP from 6 countries have developed a course that you could take at any moment, any place and that let you learn on your own. It is designed so that through self-learning you can address all the main EBP concepts and acquire the skills that will allow you to go further in your career.

Link: <https://europeannursingebp.com/es/>





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for Learning Evidence-Based Practice



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