

European JBI symposium of Evidence-Based Healthcare in Clinical Practice Guidelines,  
Decision making process and Evidence synthesis - Czech Republic

# EVIDENCE-BASED PRACTICE EDUCATIONAL PROGRAM: A PORTUGUESE EXPERIENCE WITH UNDERGRADUATE NURSING STUDENTS

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HEALTH SCIENCES  
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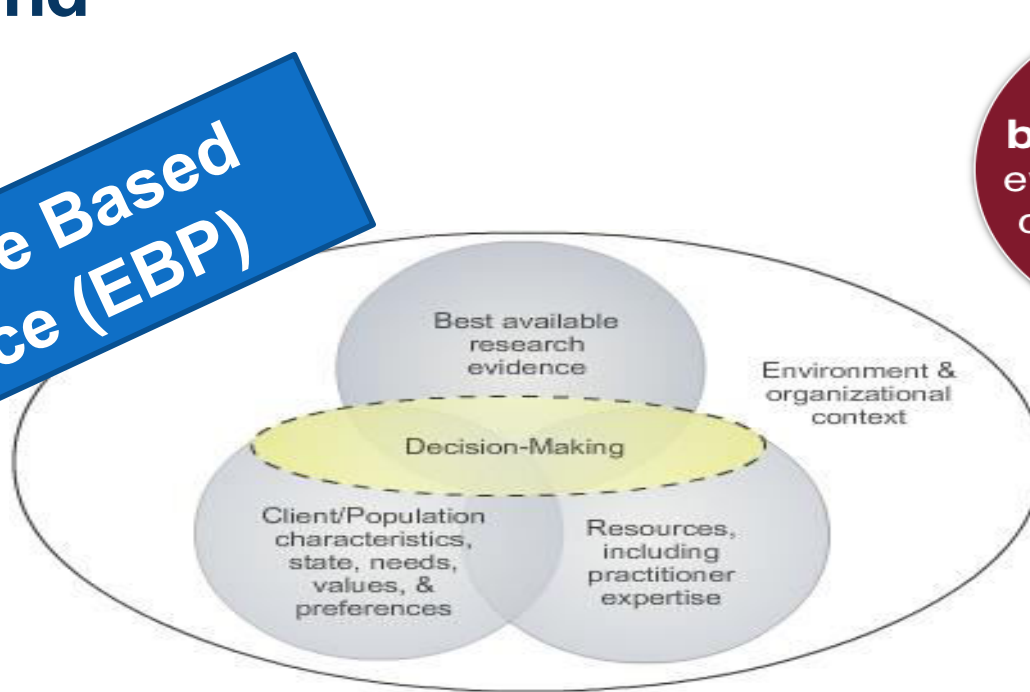
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# Background

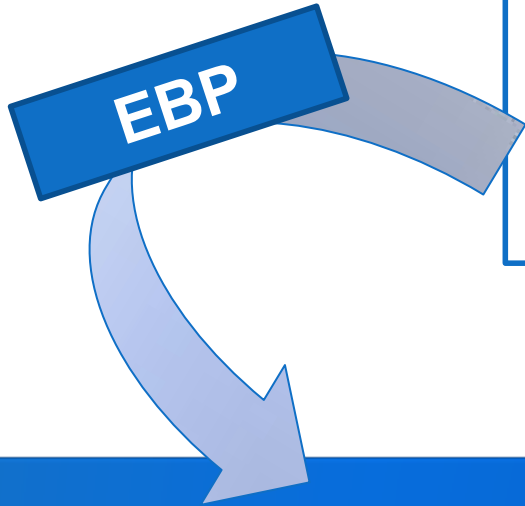
**Evidence Based Practice (EBP)**



**Evidence-based Practice**  
evidence, context,  
client preference  
judgement

(Pearson, Wiechula, Court, & Lockwood, 2005)

# Background



- Promotes high-value health care;
- Improves the patient experience;
- Improves health outcomes;
- Reduces health care costs.

(Melnik, Gallagher-Ford, Long, & Fineout-Overholt, 2014)

**Important**  
**The adoption, implementation and sustainment of EBP in healthcare organizations**

(Apóstolo, Cardoso, & Rodrigues, 2016)

# Background

- Agency for Healthcare Research and Quality (2001)
- Directorate-General of Health with Portuguese National Health Plan 2012-2016 (Ministry of Health, 2012);
- National Council of Nursing (2006)
- International Council of Nurses (ICN, 2012)



**Recommend EBP  
implementation**

- ▶ **Decision-making is simplified;**
- ▶ **Uncertainty, risk and variability are reduced;**
- ▶ **Quality of care is improved**

# Background

## Sicily statement on evidence-based practice



“All **health care professionals** need to **understand** the principles of EBP, **recognise** EBP in action, **implement** evidence-based policies, and have a **critical attitude** to their own practice and to evidence”

(Dawes et al, 2005).

# Background

EBP



It is not the standard  
of care in the world

Research

Clinical  
Practice



(Melnik et al., 2014; Oliver et al., 2014)

Studies  
recognized



(Asokan, 2012; Black et al., 2015;  
Mohsen et al., 2016)

# Background

**Committee on the Health Professions Education Summit (2003)**



**Recommended the development of competencies regarding the EBP  
use in all health professional educational programs**

# Background

Undergraduate  
nursing  
curricula



Based on EBP  
principles



To promote an  
EBP culture on  
future nurses

This will improve health outcomes, with a positive impact in patients' safety, costs and health systems



# Aims

- To develop an EBP Educational Intervention designed for undergraduate nursing students.
- To explore the opinion of students who underwent the intervention.

# Methods

## 1<sup>st</sup> Phase Development of intervention

2 science synthesis researchers developed an EBP Educational Intervention for undergraduate nursing students following the GREET checklist.

## 2<sup>nd</sup> Phase Experts Opinion

The draft was sent for opinion to **8 experts** of different backgrounds (nursing, psychology, education and physiology).  
Their opinion was evaluated and the suggestions were incorporated into the intervention.

## 3<sup>rd</sup> Phase Application in Portuguese Context

Between February and June 2018, the intervention was applied to Portuguese 4<sup>th</sup>-year undergraduate nursing students.  
It was request the feedback of participants through an online questionnaire.

## Results – 2<sup>nd</sup> phase

Eight experts analysed the EBP Educational Program proposal.



In overall, they considered that the program is **well design**, but recommended some adjustments:

- Clarify Objectives;
- Add the target population;
- Include a final assessment of the students' opinion regarding the program.

# Results

Due to **specific learners' needs** (lack of knowledge about primary research) and **time constrigent** it was not possible to include the objective concerning critical analysis.

Limitations of the program:

- Do not promote critical appraisal skills
- Time constrigent

# EBP Educational Program - Final

**Intervention:** EBP Educational Program

**Theory:** JBI Model of Evidence-based Healthcare<sup>8</sup>

**Learning Objectives:** Main objective – To enhance the EBP use.

Specific objectives:

- a) To know EBP models, mainly the JBI Model of Evidence-based Healthcare;
- b) To develop a focused review question;
- c) To identify the most appropriate study design to answer the question;
- d) To show knowledge regarding database search;
- e) To analyze the search results to answer a review question;
- f) To know software to develop systematic reviews;
- g) To identify important aspects that determines the relevance and validity of a particular study.

# EBP Educational Program - Final

**Schedule:** 6 sessions during 17 weeks

Sessions 1-3: **12 hours** (4 hours by session) during the first 7 weeks.

Sessions 4-6: **6 hours** (2 hours by session) during the last 10 weeks.

**Materials:** Powerpoints, Papers of reference, Worksheets

**Instructors:** Daniela Cardoso and João Apóstolo

**Target population:** 4<sup>th</sup>-year nursing undergraduate students

**Amount of time learners spent in face to face contact with instructors and time spent in self-directed learning activities:** The student is face-to-face with instructors for the entire session period. It is expected that most students spend about 10 hours to prepare each mentoring session (sessions 4-6).

# EBP Educational Program - Final

Session	EBP content	Educational Strategies	Delivery and Environment
1	Introduction to Evidence-based Health Care and International collaborations for EBP; Introduction to systematic reviews; Types of systematic reviews and types of primary studies; Review question development.	Expositive method with practice tasks	4 hours by session  Face-to-face (groups of <b><u>20-30 students</u></b> )
2	Searching for Studies		Classrooms
3	Study selection process; Data extraction and synthesis; Software to synthesis		

# EBP Educational Program - Final

Session	EBP content	Educational Strategies	Delivery and Environment
4	Definition of a review question of interest to students and important in the context of their Clinical Practice/Fieldwork.	Active method–mentoring	2 hours by session
5	Definition of a search strategy to answer the review question previously defined.		Face-to-face (groups of <b><u>2-3 students</u></b> )
6	Clarification and guidance of the study selection process, the data extraction and the synthesis of studies.		Small meeting rooms



## Results – 3<sup>rd</sup> phase

Sixteen undergraduate nursing students, who underwent the intervention, answered to an online opinion questionnaire.



**Positive feedback**, but:

- recommended the inclusion of **more hours of mentorship**.

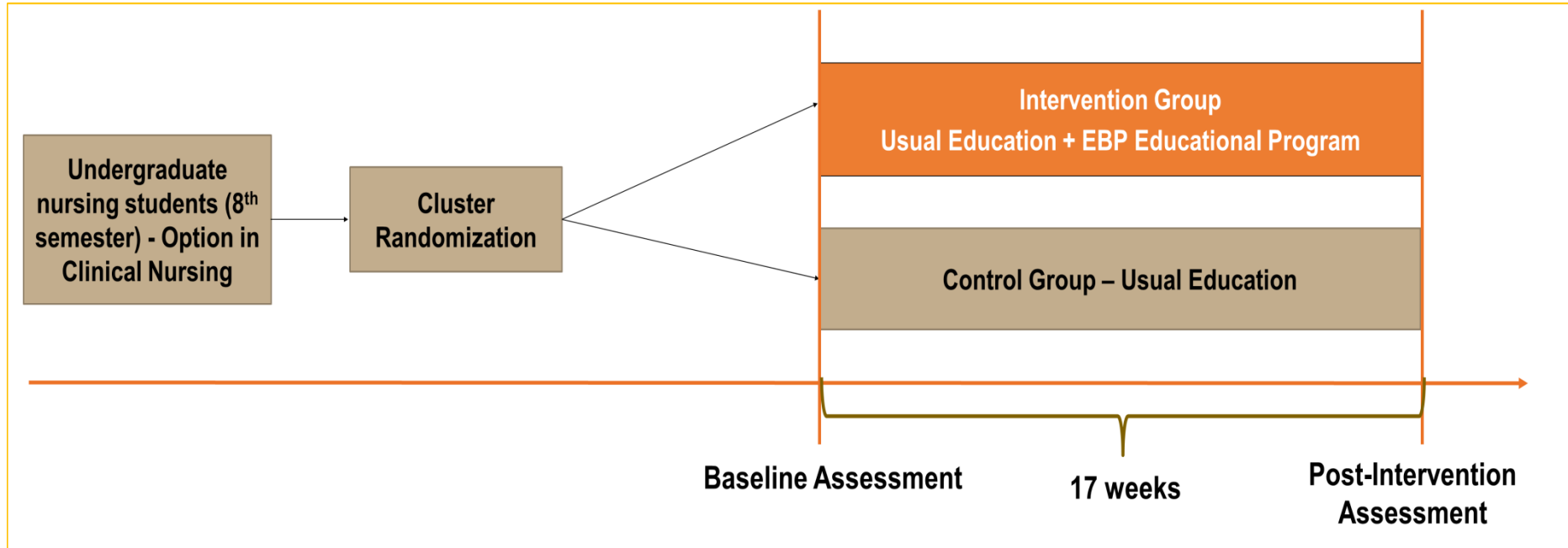
# Conclusion

Positive feedback from experts and students



The EBP educational program seems to be an appropriate educational intervention to embed EBP in the undergraduate nursing curricula, nevertheless some recommendations (for example, include more hours of mentorship) should be considered for future implementations of this intervention.

# Experimental study



**Outcomes:** EBP beliefs and knowledge in EBP

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