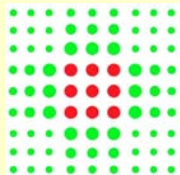


4th International Conference of EBHC Teachers & Developers
Better Evidence for Better Health Care
Taormina, Italy - 2007

Education of EBP through
problem-based interactive
participation modality:
an expertise-based
randomized controlled trial.



Centro Studi EBN – Azienda Ospedaliero Universitaria di Bologna



Background

- The Centro Studi EBN has carried out, since 2001, Evidence Based Nursing courses for nurses, physiotherapists, midwives, dieticians, speech language therapists.
- Our courses are articulated on 6 days, during which the Evidence Based Nursing major topics (answerable questions, therapy studies, aetiology studies, prognosis studies, systematic reviews, guidelines) are discussed.

Aims

The expertise based randomized controlled trial was performed in order to verify if an educational methodology based on clinical questions, rather than the EBN methodology contents, was more effective.

Methods

- All courses carried out since October 2006 to June 2007 were included in the trial:
 - 6 were randomly assigned to an **experimental group** and 6 to a **control group**;
 - totally 213 practitioners (nurses, midwives, physiotherapists, dieticians, speech language therapists, technicians) were involved.
- In order to be included in the study, courses had:
 - to be directed to practitioners,
 - to have from 14 to 25 learners,
 - to last from 3 to 6 days,
 - to be carried out in Italy or in Italian Switzerland
- Learners were informed about the study at the beginning of the first lesson and it was asked them to sign an informed consensus.

Methods

- **Interventions:**

- **Experimental group:** lessons were set up in order to answer to a clinical question. Teaching methodology was interactive, as learners were asked to participate to the discussion. EBN contents were cited to answer to learner questions or as the result of the discussion.
- **Control group:** after the presentation of a specific theoretical content, in a frontal way, learners were asked to apply it to a specific exercise (as RCT critical appraisal).

- Experimental and control courses were performed by two different groups of EBN teachers.

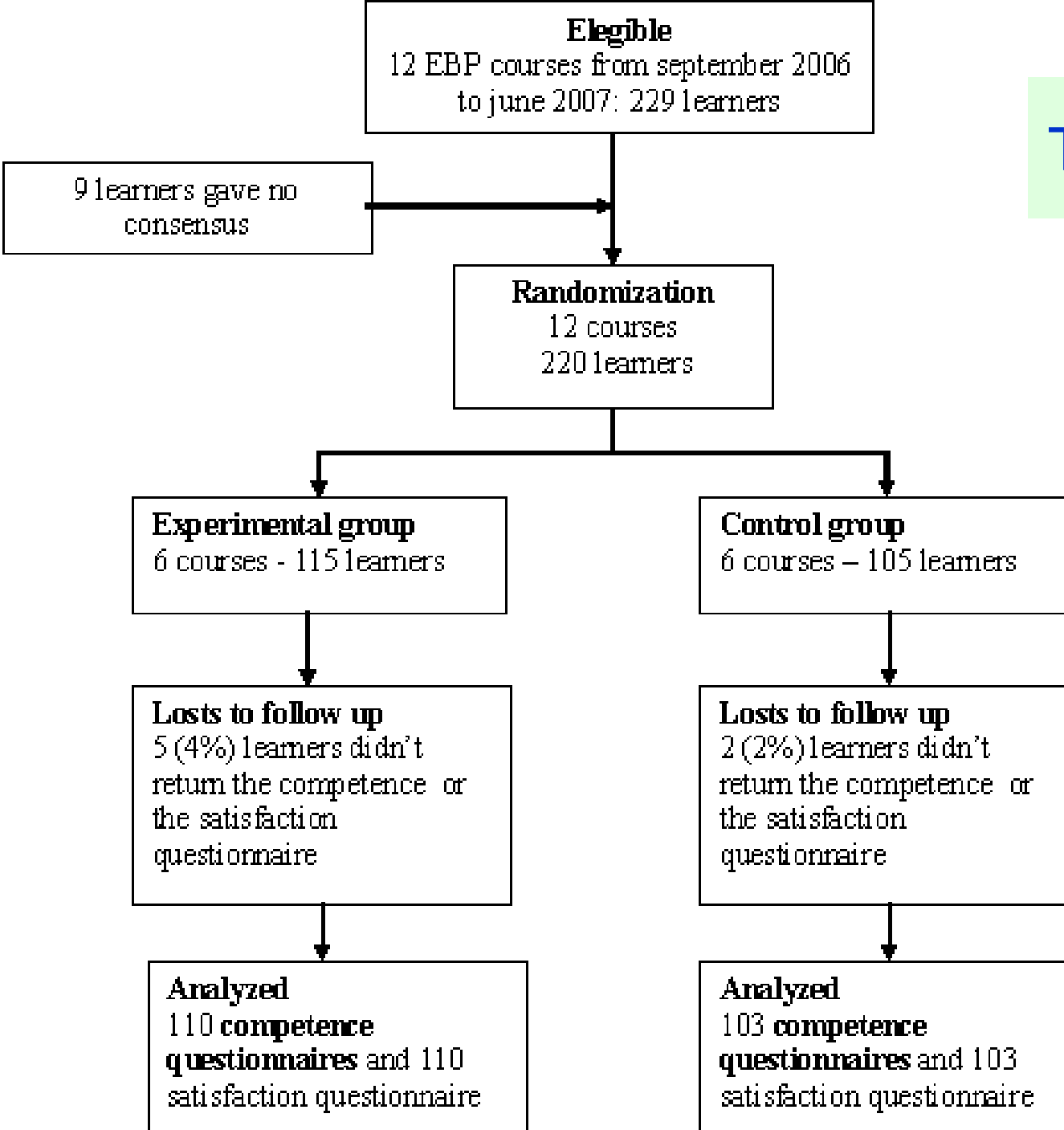
- **Outcomes:**

- Primary outcome: learning level of EBN competence verified through a questionnaire.
- Secondary outcome: learners' satisfaction.

The Questionnaire

- The tool used to measure the learning level is composed by 37 items of which:
 - 27 “open” questions;
 - 10 questions with multiple choice answer.
- The questions concerned course subjects and EBP methodology;
- A different score, related to the difficulty, was given to each question.
- The maximum score was 50 points.
- The internal coherence was good, being Cronbach alpha 0.72.

Trial flow chart



Results

Features of experimental and control group were similar. There was statistical difference in the professional role (more practical nurses, physiotherapists, dieticians in the experimental courses) and in the course participation voluntariness (there were more volunteers in the control group).

Results

Courses	Mean learning level Experimental courses	Mean learning level Traditional courses	Mean difference	p
1	35,04 SD 4,73			
2		29 SD 5,33		
3	24,94 SD 5,31			
4	35,2 SD 4,57			
5	25,06 SD 5,35			
6	28,83 SD 5,25			
7		26,71 SD 5,33		
8	25,18 SD 9,41			
9		34,55 SD 3,22		
10		28,76 SD 6,28		
11		30,14 SD 3,7		
12		27,37 SD 6,63		
Mean	29,96 SD 7,17	29,63 SD 5,72	0,33	0,71

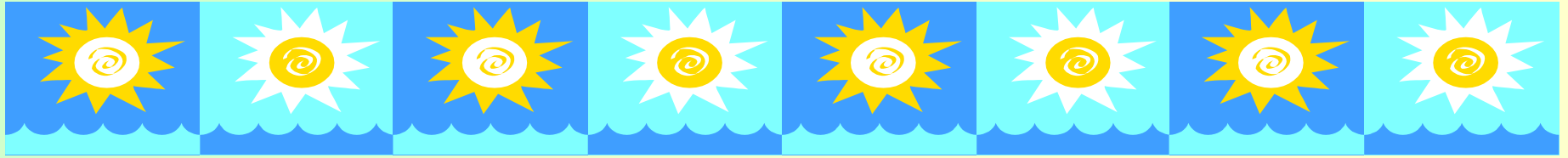
Conclusions

We found no difference in the EBN competences between groups.

Conclusions

Possible explications:

- The questionnaire was not validated but was “homemade”
- It was difficult to find interesting subjects for all the learners because of their belonging to different professional areas.



*Thanks
for your attention*