

Team based learning and nurse education: a systematic review

Summary of: Alberti S, Motta P, Ferri P, Bonetti L. The effectiveness of team-based learning in nursing education: A systematic review. *Nurse Educ Today*. 2021 Feb;97:104721. doi: 10.1016/j.nedt.2020.104721. Epub 2020 Dec 11.

Background and purpose

- This is a summary of Alberti, Motta, Ferri and Bonetti (2021)
- Team-based learning (TBL) is an active, student-centred method of teaching, used with increasing frequency in nurse education. Students work in small teams, using their knowledge and interaction with peers to resolve problems and pass tests.
- Although several studies have explored the effectiveness of using TBL in pre-registration health professional education, this is the first systematic review to evaluate the methodology and the achievement of learning outcomes and competencies in nursing.
- The purpose of this review was to identify, appraise, and summarise primary research studies that explored the effectiveness of TBL used in undergraduate nurse education.

Methods:

Inclusion criteria

- Papers included in the review were primary studies that focused on:
 - undergraduate nurse training, from any country.
 - TBL, structured according to the original methodology and developed to the field of nurse education
 - The assessment of learning outcomes from TBL sessions as the measurable result of a learning experience.
- Studies published in English or Italian.

Search strategy

- Searches were conducted between March and July 2019
- The following databases were used: Cochrane Library, PubMed/MEDLINE, CINAHL, PsycINFO and ERIC.

Appraisal and analysis:

- The Joanna Briggs Institute critical appraisal checklists were used to appraise the quality of studies and to ensure suitability for inclusion.

Results and areas for future research

- 12 primary studies were included in the review. These included two randomised controlled trials, six non-randomised controlled trials and four pre-post studies without a control group.
- A total of 2,482 participants were enrolled across the studies. Sample sizes of included studies ranged between 40 and 425 students, from Italy, Hong Kong, South Korea, Taiwan and the United States.
- In 9 of the 12 studies exam results were significantly higher following the introduction of TBL compared to those of students who were educated using other, more traditional methods of teaching.
- 7 of the 12 included studies concluded that TBL was effective in helping students to develop skills in communication and interprofessional collaboration, and self-directed learning.
- Future research should focus on cultural and subjective evaluations of TBL, how the learning outcomes of TBL should be defined and measured and on developing validated tools for their measurement.

Take home messages

- TBL is an effective method to support undergraduate nursing students to achieve learning outcomes, however there is insufficient evidence to warrant it is more effective than other teaching methods.
- The use of TBL increased classroom engagement, however, this not significantly correlate with improved academic performance.
- Students included in the studies demonstrated high levels of accountability, and overall satisfaction, however they did not prefer TBL sessions over traditional lectures.

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Competing interests

None.