

OP-27: Effectiveness of problem-based learning in physiotherapy undergraduate curriculum: a systematic review

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Introduction: The effectiveness of problem-based learning (PBL) in physiotherapy education is not clearly studied. The aim of this study was to determine the effectiveness of PBL compared to traditional methods (TM) in physiotherapy education.

Methods: PubMed, Pedro, Science direct, and Google Scholar Databases were searched on 11 January 2022 for randomised controlled trials, non-randomised control trials, quasi-experimental trials, before and after study designs and cohort studies published in English from 2000 to 2022. Two reviewers conducted screening, eligibility assessment, data extraction, and risk of bias assessment independently. A narrative synthesis of outcomes is presented. Preferred Reporting Items for Systematic reviews and Meta Analysis (PRISMA) was used to report the review. Meta-analysis was not performed due to the heterogeneity of studies. This protocol was registered in Prospero (Prospero ID: CRD 42022301693).

Results: The primary search strategy identified 2826 potentially relevant articles, of which 1666 remained after removing duplicates. After title and abstract screening, 22 potentially eligible studies were identified. Out of those, two studies met all the predefined eligibility criteria. One had a mixed method study design and it was categorised as moderate bias while the other one had a quasi-experimental design which was categorised as serious bias according to the risk of assessment tool. The results indicated that PBL was effective compared to the traditional methods in terms of promoting early evidence-based practice (EBP), PBL facilitated learning strategies and study preference was high for PBL in comparison to traditional teaching.

Conclusions: PBL was reported to be effective in developing different competencies in physiotherapy undergraduates such as promoting early EBP and was preferred over traditional methods. Since there is limited evidence to confirm this finding, research studies with high methodological quality should be performed in future.

Keywords: problem-based learning, physiotherapy, undergraduate, curriculum