

Teaching Musculoskeletal Clinical Skills: A Best Evidence in Medical Education
(BEME) Systematic Review of Techniques and their Efficacy

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Background and Purpose: Musculoskeletal (MSK) complaints make up 12-20% of primary health care visits and are a source of significant health care expenditures and morbidity. Despite this, MSK examination is often neglected and is an area of low confidence among physicians. Several studies have raised concerns regarding the inadequacy of MSK clinical skills teaching. However, increasing teaching time alone does not guarantee an improvement in MSK clinical skills. This study aims to systematically evaluate the literature in order to identify the educational strategies that successfully transfer MSK clinical skills to medical trainees at varying points in their education.

Methods: This project was approved by the Best Evidence in Medical Education (BEME) organization as a registered systematic review. As such, a rigorous predetermined systematic search strategy was applied to collect and review all relevant comparative studies. Two authors screened titles, extracted raw data, assessed its quality and then data was pooled for analysis.

Results: 5089 titles were screened, of which 24 studies were included. All stages of training were represented, although undergraduate medical education dominated (18/24). Selected studies were too heterogeneous to allow quantitative statistical analysis. Qualitative analysis showed: 7/9 studies were equivalent or favoured patient educators, 5/6 studies favoured interactive small group and 2/2 studies favoured peer assisted learning. Other teaching modalities were supported though with smaller numbers.

Conclusions: This study provides supportive systematic evidence for the use of several instructional methods with most studies supporting patient educator and interactive small group teaching.