Evidence-based practice integration in physiotherapy education: A survey among students in clinical placements

Nina Rydland Olsen, Centre for Evidence Based Practice, Faculty of Health and Social Sciences, Bergen University College (BUC), Norway

Co-authors:
Hildegunn Lygren (BUC), Birgitte Espehaug (BUC), Monica Wammen Nortvedt (BUC), Peter Bradley (Public Health Wales, Cardiff, UK), Jan Magnus Bjordal (University of Bergen)
Background

- Evidence-based practice (EBP) should be incorporated into health care students’ curriculum and training.
- Few studies since the first Sicily statement.
Aim

• To investigate if there was an association between the degree of EBP integration in a bachelor program and 3rd year physiotherapy students’ self-reported EBP behaviour, abilities and barriers during clinical placements.
Methods

• A questionnaire-based cross-sectional study.
• Five cohorts with 3rd year students (2006-2010) from a bachelor program in physiotherapy at BUC (n=246).
The degree of EBP integration

EBP sessions:
- Year 1
- Year 2
- Year 3

Not integrated
Partly integrated
Fully integrated

Hours

Questionnaire

• Section 1: Background data
• Section 2: Related to clinical placement
  – EBP behaviour (25 items)
  – EBP abilities (3 items)
  – EBP barriers (10 items)
  – Number of articles read (2 items)
• Section 3: Comments on the questionnaire (2 items)
Results

• Response rate of 73 %
• Cronbach’s alpha values:
  – 0.69 EBP behaviour and abilities items
  – 0.71 EBP barriers items
Results

- **Need practice knowledge**
  - Not integrated
  - Partly integrated
  - Fully integrated

- **Ask PICO questions**
  - Not integrated
  - Partly integrated
  - Fully integrated

- **Ask effect questions**
  - Not integrated
  - Partly integrated
  - Fully integrated

- **Ability to search**
  - Not integrated
  - Partly integrated
  - Fully integrated

- **Ability to critically appraise**
  - Not integrated
  - Partly integrated
  - Fully integrated

- **Lack critical appraisal skills**
  - Not integrated
  - Partly integrated
  - Fully integrated

- **p ≤ 0.05**
- **p < 0.001**
Results

• The association between EBP integration and essential EBP behaviour was not statistically significant:
  – Use of research evidence
  – Use of checklists
  – Use of evidence to change decisions
Discussion

• Why limited reports of EBP behaviours?
  – EBP not clinically integrated
  – Lack of time
  – Lack of knowledge in scientific methods
  – Lack of support/role models in EBP
Limits

• The questionnaire had not been evaluated for reliability and validity.
• The sample in this study was relatively small and from a single-institution.
• Self-report data.
Bottom line

• The association between EBP integration and essential EBP behaviours was not statistically significant.

• Future strategies must consider:
  – Teaching in clinical setting
  – Support
  – Timing and amount
  – Content and type of teaching approach