The effectiveness of Student 4 Best Evidence as a tool to improve Evidence-Based Practice competencies in undergraduate health professional students: a pilot study

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**Background.** Evidence-based practice (EBP) is an essential element in the delivery of high-quality care. In EBP, healthcare professionals make clinical decisions based on the best available research results while considering the preferences and clinical circumstances of their patients. Experts and international organizations have emphasized the need for healthcare professionals to possess adequate knowledge, skills, and attitudes for EBP. An EBP learning laboratory has been established at an Italian university to educate medical and other health professional students in the use of evidence in clinical practice and research. Students 4 Best Evidence (S4BE) is an online community of students from around the world, from school age to university, who are interested in learning more about evidence-based practice. As well as featuring a library of learning resources, the site also provides a platform for students to write their own blogs.

The aim of this study is to evaluate the effectiveness (change in EBP attitudes, knowledge, skills and EBP) of an Evidence-Based Clinical Practice laboratory, using S4BE as an educational tool, to teach EBP competence to undergraduate students of Physiotherapy.

**Methods.** An observational perspective study carried out and included 70 students completing a bachelor’s degree in Physiotherapy at an Italian University. The intervention consisted of the use of S4BE to teach EBP competence. The evidence-based practice questionnaire (EBP²Q) has been used to evaluate EBP attitude, knowledge and skills, at the start of laboratory (T0), after 24 training hours (T1) and after 3 months of clinical practice training (follow-up). Statistical analysis was performed with SPSS 17.0 An intra-group analysis has been conducted to verify the improvement during the time. Statistical significant was set at p<0.05.

**Results.** Our data showed a statistical improvement of terminology and practice EBP²Q domains after clinical practice training. Indeed, relevance and confidence EBP²Q domains remained stable during the time.

**Conclusion.** The students kept the EBP competences, based on individual’s abilities with EBP skills, during their clinical practice training and improved the terminology and the individual’s use of EBP competences.

The clinical practice training could help on the use of EBP skills during every day clinical practice of the students.

**References**


