

Blended learning: equally effective as face-to-face learning for teaching EBP to a general audience

Bert Avau^{1,2}, Vere Borra¹, Hans Hooyberghs³, Emmy De Buck^{1,4}, Philippe Vandekerckhove^{3,4,5}

¹ Centre for Evidence-Based Practice (CEBaP), Belgian Red Cross, Mechelen, Belgium; ² Cochrane Belgium, Centre for Evidence-Based Medicine (Cebam), Leuven, Belgium; ³ Belgian Red Cross, Mechelen, Belgium; ⁴ Department of Public Health and Primary Care, Faculty of Medicine, KU Leuven, Leuven, Belgium; ⁵ Faculty of Medicine, Ghent University, Ghent, Belgium



Background

- The Belgian Red Cross tries to spread Evidence-Based Practice (EBP) throughout its organisation.
- The Centre for Evidence-Based Practice (CEBaP) offers half-day face-to-face workshops to employees, unfamiliar with EBP, about the principles of EBP and developing a critical attitude towards information.
- A blended learning module, consisting of an E-learning module (3 sessions, 1 h to complete) and a face-to-face workshop (1.5 h) was developed to replace the former half-day workshop.



Aim of the study

Blended learning ↔ Face-to-face learning

- Attitudes
- Self-perceived EBP knowledge
- Actual EBP knowledge

Methods

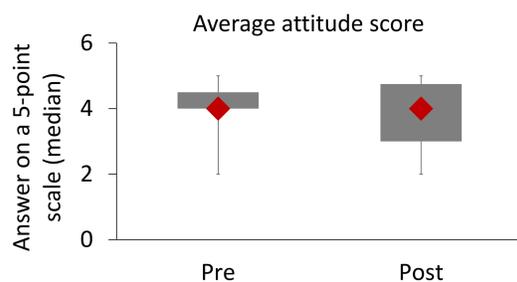
- Participants of the final face-to-face workshop (n=10) in January 2017 and participants of the first blended learning workshop (n=8) in May 2017.
- Quantitative measurement of attitude/knowledge with questionnaires (attitude: 19, self-perceived knowledge: 7, actual knowledge: 9 questions).
- Comparison pre-post and between workshops: Wilcoxon Log-Rank test.
- Qualitative enquiry about experiences with blended learning using a focus group discussion.



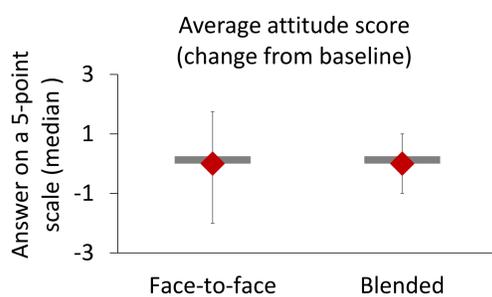
Results

1. Attitudes towards EBP

A face-to-face workshop does not influence attitudes towards EBP (p=0.4)

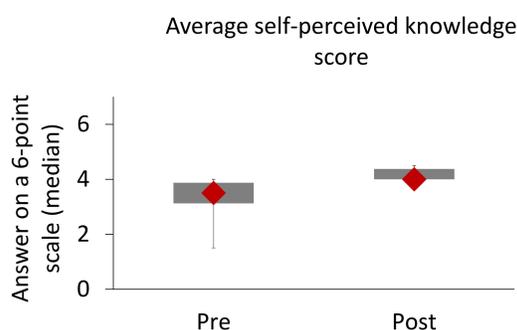


The change in attitudes towards EBP before and after learning does not differ between face-to-face and blended learning (p=0.38)

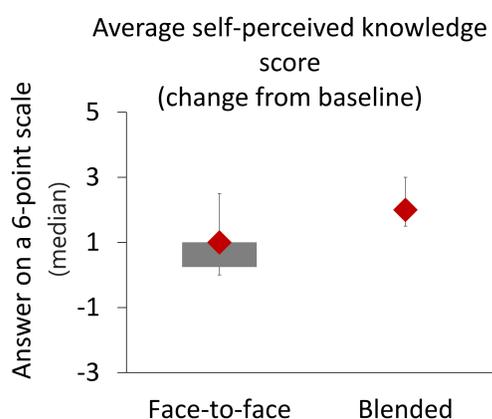


2. Self-perceived knowledge on EBP

Self-perceived knowledge tends to increase after face-to-face learning (p=0.09)

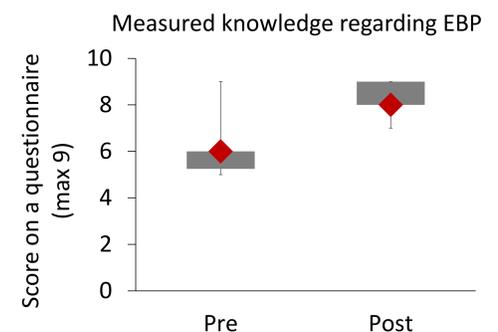


Blended learning increases self-perceived knowledge on EBP more than face-to-face learning (p=0.04)

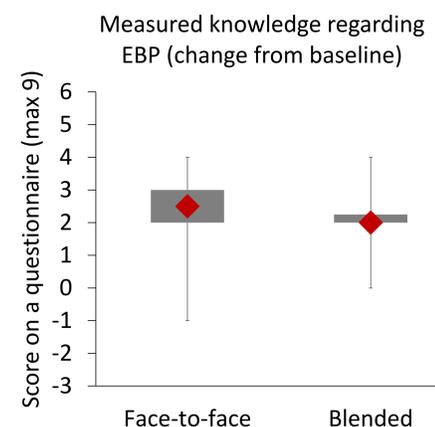


3. Actual knowledge on EBP

A face-to-face workshop increases actual knowledge on EBP (p=0.01)



A difference in knowledge on EBP after learning between face-to-face learning and blended learning was not found (p=0.67)



4. Experiences with blended learning for learning EBP

"The combination of an E-learning session and a face-to-face moment has added value, as the reiteration helps to really grasp the concepts"

"The E-learning module is pleasant to follow"

"I think everyone in the organisation should follow it"

"The course is very approachable, also for someone who is not familiar with science"

Conclusion

- A blended learning module seems equivalent to a traditional workshop for improving knowledge on the principles of EBP in a general audience.
- Blended learning is well-received by participants.

