# Piloting of a blended learning training programme for health information providers to enhance application of the guideline evidence-based health information

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### Background

The guideline evidence-based health information, published in 2017, addresses health information providers. It comprises ethical and methodological requirements as well as evidence-based recommendations for the development, content and presentation of evidence-based health information (EBHI).

Interviews with health information providers revealed shortcomings regarding their competences in evidence-based medicine (EBM). Therefore, we developed a blended learning training programme for health information providers to enhance guideline implementation.

**Aim** of this project was to test the training programme for acceptance and feasibility with health information providers and to optimise it prior to implementation.

#### Methods

We conducted a qualitative pilot study. Providers of health information were invited to the in-house training.

Data collection was integrated in the training sessions:

- Structured observation of the training and documentation of processes, interactions and working results
- Focus group interviews to assess the acceptance of the content and teaching methods, the comprehensibility of learning materials and work tasks, the usability of the web-based learning environment and the practical relevance of the contents

The focus group interviews were audio recorded and transcribed. Analyses were performed using qualitative content analysis of Mayring. Data saturation was intended by an iterative process of testing, analysing and revising the training programme.

### Results

We performed two trainings in November 2018 (five participants) and March 2019 (12 participants) (characteristics see table 1).

We identified eight categories via qualitative content analysis (Fig. 3). Main results:

- The case example was considered to be relevant and helpful.
- The learning material was rated as clear, the work tasks were understandable but also extensive and challenging.
- Participants asked for more information and definitions of (statistical) terms in advance.
- Partly, it was difficult to integrate the online phase into the working routine. The comprehensive literature searches seemed challenging.
- The practical relevance of the EBM module was rated rather low compared to the module on the application of the guideline.

The training programme was revised iteratively based on the results.

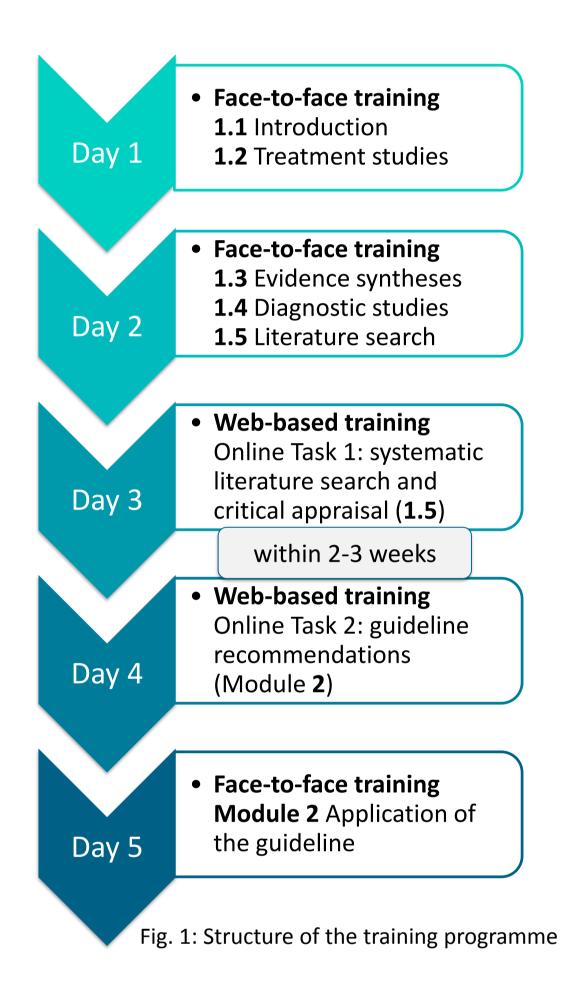
## Conclusion

Overall, the training was well accepted and feasible. The implementation of the guideline evidence-based health information combined with this training programme is currently being evaluated in a randomised controlled trial. In the long term, the aim is to improve the quality of health information and thus promote informed decision-making.

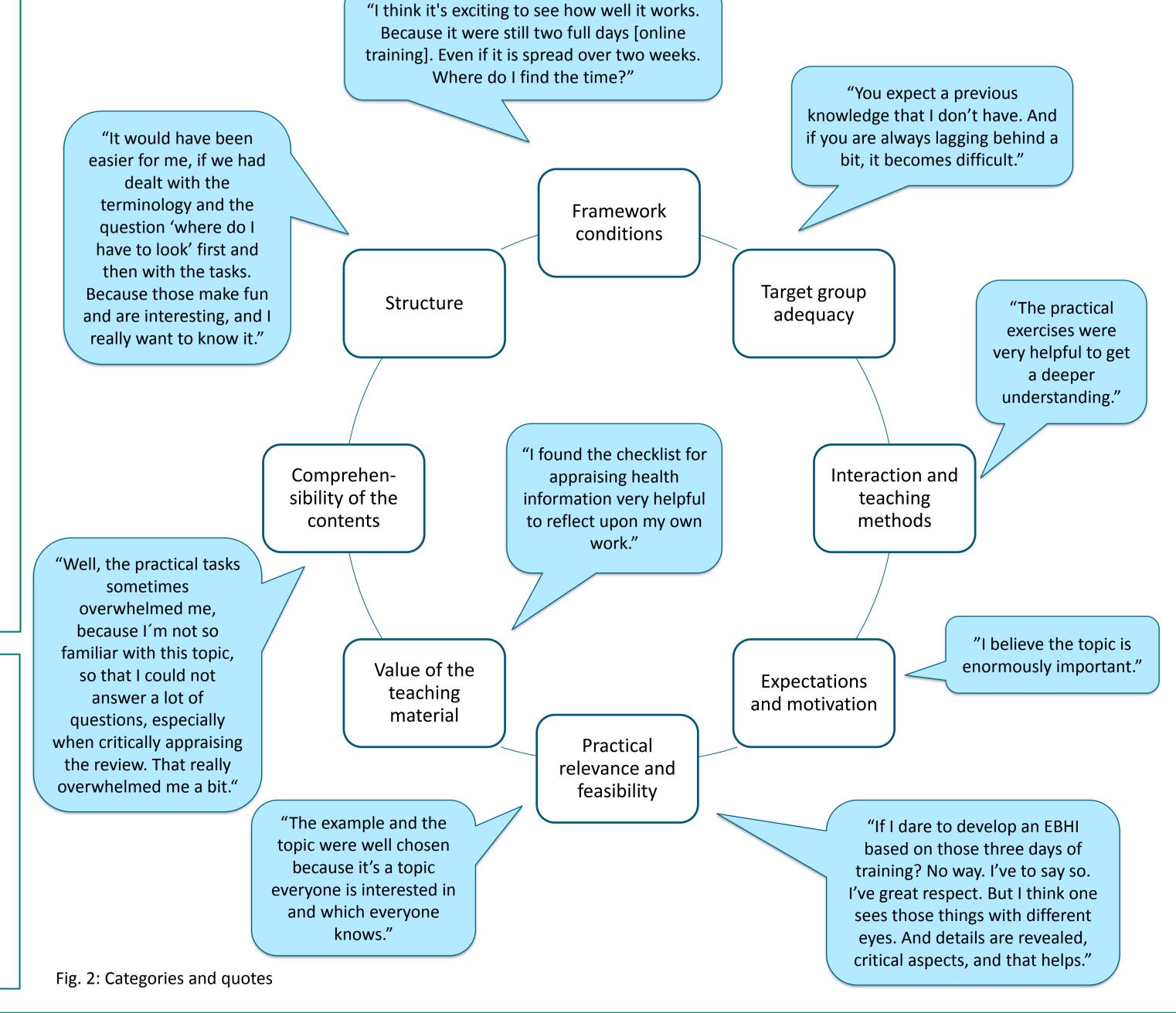
#### **Training programme**

We set up a case example about smoking cessation to link theory to practice by case-based learning. The training programme includes two modules in a blended learning format (Fig. 1):

- **Module 1** comprises two days of face-to-face training followed by one day of web-based training. It aims to impart competences in searching for, critically appraising and extracting relevant literature according to the principles of EBM (Sub-modules 1.1. - 1.5).
- Module 2 is designed as a converted classroom scenario with one day of web-based training followed by one day of face-to-face training. It comprises the criteria for EBHI, critical appraisal of health information and the reflection of provider's processes to develop health information.



Age (mean, range)	41 (28-51)
Sex	
female	9 / 17
Self-estimated English skills	
A1	0 / 17
A2	2 / 17
B1	2 / 17
B2	10 / 17
C1	3 / 17
C2	0 /17
Education status	
university degree	15 / 17
in medicine	1 / 15
general education school-leaving certificate	2 / 17
Self-estimated ebm knowledge	
low	2 / 17
moderate	11 /17
good	3 / 17
very good	1/17
Sources for the development of health information	1
medical databases	9 / 17
journals	10 /17
guidelines	12 / 17
experts	11 / 17
others	7 / 17





**Declarations** 

**Contact:** Birte Berger-Höger The study protocol is available online and ethical clearance has been obtained from the Email: birte.berger-hoeger@medizin.uni-halle.de ethics committee of the Martin Luther University Halle-Wittenberg. Written informed

consent was obtained. The study is funded by the Innovations fonds zur Förderung von

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