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10th International Conference for EBHC Teachers and Developers
10th Conference of the International Society for EBHC
Taormina, 25th - 28th October 2023

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Efficacy of an online training programme to support the application of the guideline evidence- based health information: a randomised controlled trial and process evaluation

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Background

The guideline evidence-based health information (Lühnen 2017)

- aims to improve the quality of health information
- comprises quality criteria and evidence-based recommendations
- is online available (www.leitlinie-gesundheitsinformation.de)
- addresses providers of health information



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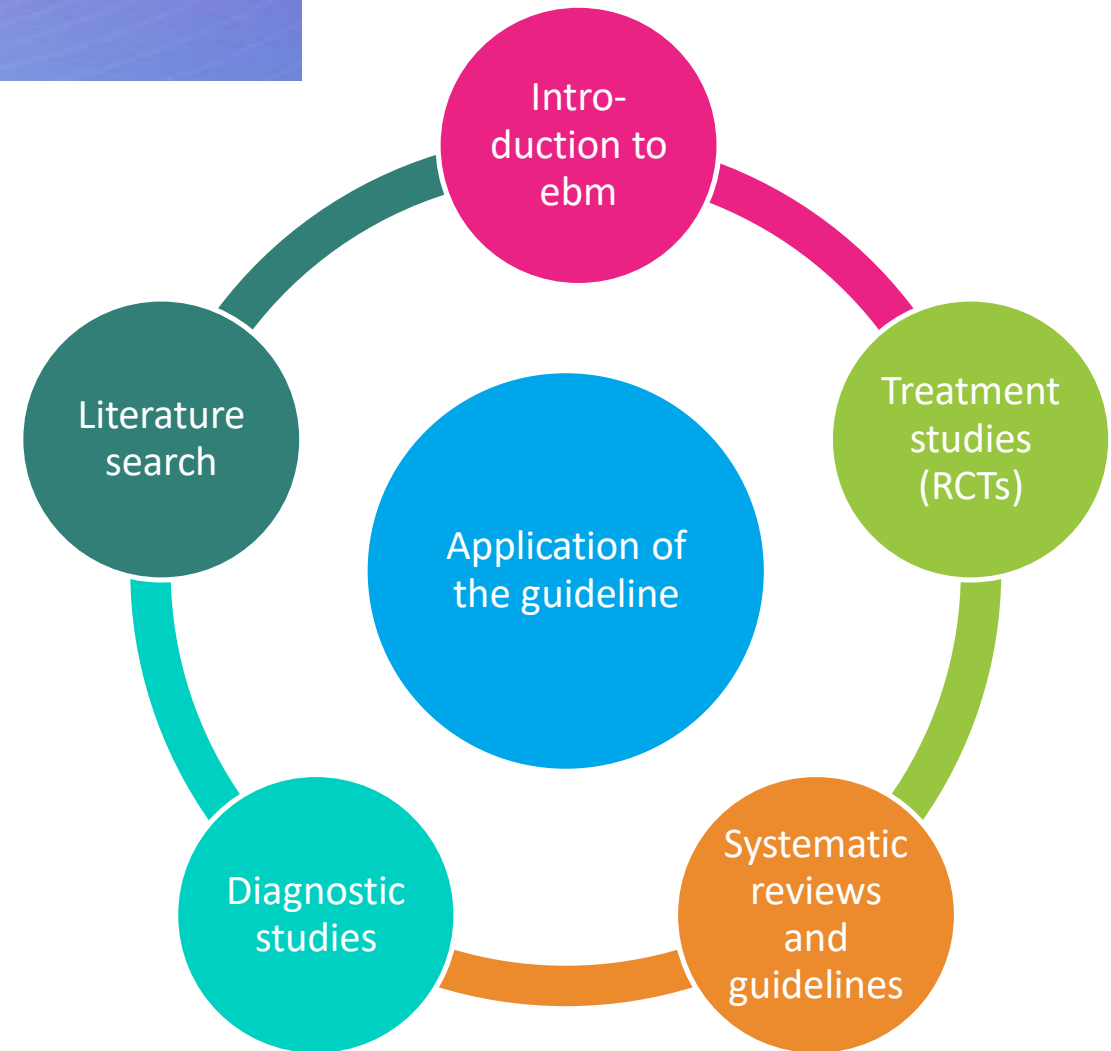


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Background

Online training programme to support the application of the guideline evidence-based health information:

- 40h over a period of 6 to 7 weeks
- self-study periods and 3 to 4 synchronous virtual meetings
- pilot tested (Hinneburg 2020)



Aims

Aim was to evaluate the efficacy of the training programme to support the application of the guideline evidence-based health information.

We expected the intervention to improve the quality of health information in comparison to the provision of the guideline alone.

We performed an accompanying process evaluation to assess barriers and facilitators for the implementation.



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Methods

Design: randomized controlled trial and process evaluation (Lühnen 2020)

Intervention: guideline and training programme vs. guideline only

Participants: providers of health information, sample size n=26

Primary outcome: quality of health information, assessed with the Mapping Health Information Quality (MAPPinfo) checklist

Process evaluation: interviews and assessment of critical health literacy with the Critical Health Competence (CHC) test (Steckelberg 2009) before and after training



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MAPPinfo

MAPPinfo: validated checklist (Kasper 2023), operationalised the guideline's recommendations; score 0-100% of the criteria met; 23 Items in 4 categories:

- **Definition** - To what extent are the target group and the objective described?
- **Transparency** - To what extent are details given about how the health information was created (e.g., authors, financing, timelines, sources)?
- **Content** - To what extent are relevant contents included (e.g., explanations about options, presentation of benefits and harms)?
- **Presentation** - Are the contents presented appropriately?



Results

Included: 18 providers (54 individual participants), heterogeneous in terms of organisational form, objectives and formats of the health information provided

Primary outcome: MAPPinfo score 31% (SD 8.26) in the intervention group vs. 23% (SD 7.68) in the control group; $p=0.0614$

Secondary outcomes: 3 single items out of the MAPPinfo checklist

- The benefit is presented adequately: fulfilled by one information (intervention)
- The harm is presented adequately: fulfilled by one information (intervention)
- The health information uses neutral language throughout: fulfilled by all despite one information (control)



Process evaluation

Critical health literacy (CHC test, person parameter, mean (SD))

	control	intervention
baseline	584± 90 (n=25)	555 ± 105 (n=25)
post-test	512 ± 249 (n=7)	656 ± 212 (n=20)

Qualitative content analysis: We identified individual and structural barriers to the implementation of the guideline recommendations such as uncertainties regarding literature searches and data extraction, lack of resources and differing requirements or interests of the institutions or experts involved.



Limits

The sample size of 26 providers of health information could not be reached. A significant barrier to recruitment was the lack of resources and the time-consuming training programme.



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Conclusions

We could not show a difference in the quality of health information between the groups, but the training content was considered relevant by the participants and there was an increase in critical health literacy.

The training will continue to be offered and further developed in the course of a guideline update. Structural barriers remain challenging and can hardly be addressed by educational interventions.



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