Evidence-based decision-making

Development and piloting of an online training for nurses

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Background

- Revision of the basic curriculum „Evidence-based Decision-Making“ by the German speaking “Network for Evidence-Based Medicine e.V.” in 2017
Aims

- To develop and pilot test an online training in a blended-learning format for academic and non-academic registered nurses in Germany
Methods

Phase 1: Development:
- Six-Step Approach (Kern et al. 2006)

Phase 2: Qualitative pilot study

After each module:
- Field notes (trainers) and feedback documentation

Before and after the training:
- Online questionnaire: Critical Health Literacy (CHC-test)

After the training + 8 months later:
- Focus group interview

Analysis:
- Qualitative content analysis according to Kuckartz (2012) and descriptive evaluation of the CHC-test
Case example

Mr. Müller (61 years old, married) has been on your ward with pneumonia since three days. Two months ago, he had a deep vein thrombosis in his right lower limb. To prevent a post-thrombotic syndrome, he was prescribed compression stockings. Now that he is feeling a little better and you encourage him to mobilize himself, he asks you if the stockings are really necessary. He finds them unbearable. In the morning, he can hardly put them on and when he has put them on, the torture really begins: the stockings slip despite the silicone-coated holding band and the skin itches. Sometimes they cut into the back of his knees. August was the worst for him. In the heat, he doesn't like to wear shorts anymore and sweats terribly. He asks you: Is that really necessary?
Results: Phase 2

- 55 participants; 4 cohorts; 24 drop outs
- CHC-test; average person parameters:
  - $427 \pm 120$; range 71-598 (pre-test, n=15)
  - $417 \pm 228$; range 64-703 (post-test, n=20)
- Age in years; range: 28-54
- Professional experience in nursing in years; range: 3-31
### Results: Phase 2

<table>
<thead>
<tr>
<th>Prior knowledge:</th>
<th>Motivation:</th>
<th>Framework conditions:</th>
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<tbody>
<tr>
<td>heterogenous</td>
<td>Desire to strengthen one’s own profession; refresh and deepen competencies</td>
<td>Technical requirement; high workload; self-organization challenging</td>
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<table>
<thead>
<tr>
<th>Content:</th>
<th>Materials:</th>
<th>Methods:</th>
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<tr>
<td>Comprehensible, relevant, appropriate level</td>
<td>Provided media and materials were supportive</td>
<td>Mix positive, motivating, case example increased comprehensibility; some preferred more variety</td>
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<tr>
<th>Red thread:</th>
<th>Interaction:</th>
<th>Practical relevance and feasibility:</th>
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<td>Recognizable; was supported by regular revisiting of the case example</td>
<td>Partly difficult e.g. some participated from their workplace and were frequently interrupted</td>
<td>Acquired a critical view of their practice; gained confidence in own research appraisal skills</td>
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"On the one hand, I thought it was very good that this case study of Mr. Müller went through and that one or the other story with Mr. Müller was very straightforward, but I would have liked to see another example, because as you said, that prescribing stockings is an activity where I am as a nurse not asked." (Transkript Feedback GRAVITA, Abs. 14)
Selection bias could have been occurred because only a small proportion of learners agreed to participate in the evaluation.
Conclusions

• Training is feasible, high dissemination potential
• Participation requires a high level of motivation and self-organization skills
• For sustainability, mentoring of participants would be desirable
References


Thank you!

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