Web-based training and certification program – how did it go?

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Background

- Training for research staff is important to ensure high quality
  - of the trial intervention
  - of patient care
- Web-based training may be a pragmatic solution to train research staff in multicenter studies
  - Not well documented in literature

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Aims

- Heighten knowledge about the trial and intervention
- Heighten quality of primary outcome assessment

- To report on the development
- To assess the feasibility

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Mathias Hansen

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ANNOUNCEMENTS SafeBoosC III web-based training and certification program is now open for training!

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Administration

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The modules

Based on your clinical position, we recommend that you complete the following modules:

1) Nurses: introduction, NIRS

2) Neonatologists/residents: introduction, NIRS, treatment guideline, cUS

3) Radiologists: cUS

4) Principal investigators: introduction, NIRS, treatment guideline, cUS, Good Clinical Practice

- Introduction
- NIRS
- Treatment Guideline
- cUS
- Good Clinical Practice
- Introduction Chinese 简介模块
- NIRS Chinese NIRS 监测模块
- Treatment Guideline Chinese 治疗指南教学模块
- cUS Chinese 头颅超声模块
- GCP Chinese 良好临床试验实践
- TG Turkish Tedavi kılavuzu
- NIRS Turkish NIRS modülü

Methods

- All sites were invited to participate in training
- Principal investigators reported total number of staff involved in patient care on training and delegation logs
- Available in English, Spanish, Chinese, Turkish, Italian, French, German, Czech
- Tracked certification rates before randomisation, 1 month, 3 months and 6 months after start of randomisation
- Principal investigators continuously received reports of local certification rates

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How did it go?

Tabel 1: Total number of certifications six months after start of randomisation

	Total number of certifications	Total number on training and delegation logs
Neonatologist	378	810
Nurses	517	1493
Radiologist	31	44
Total	926	2347*

**the staff numbers are continously updated by investigators*

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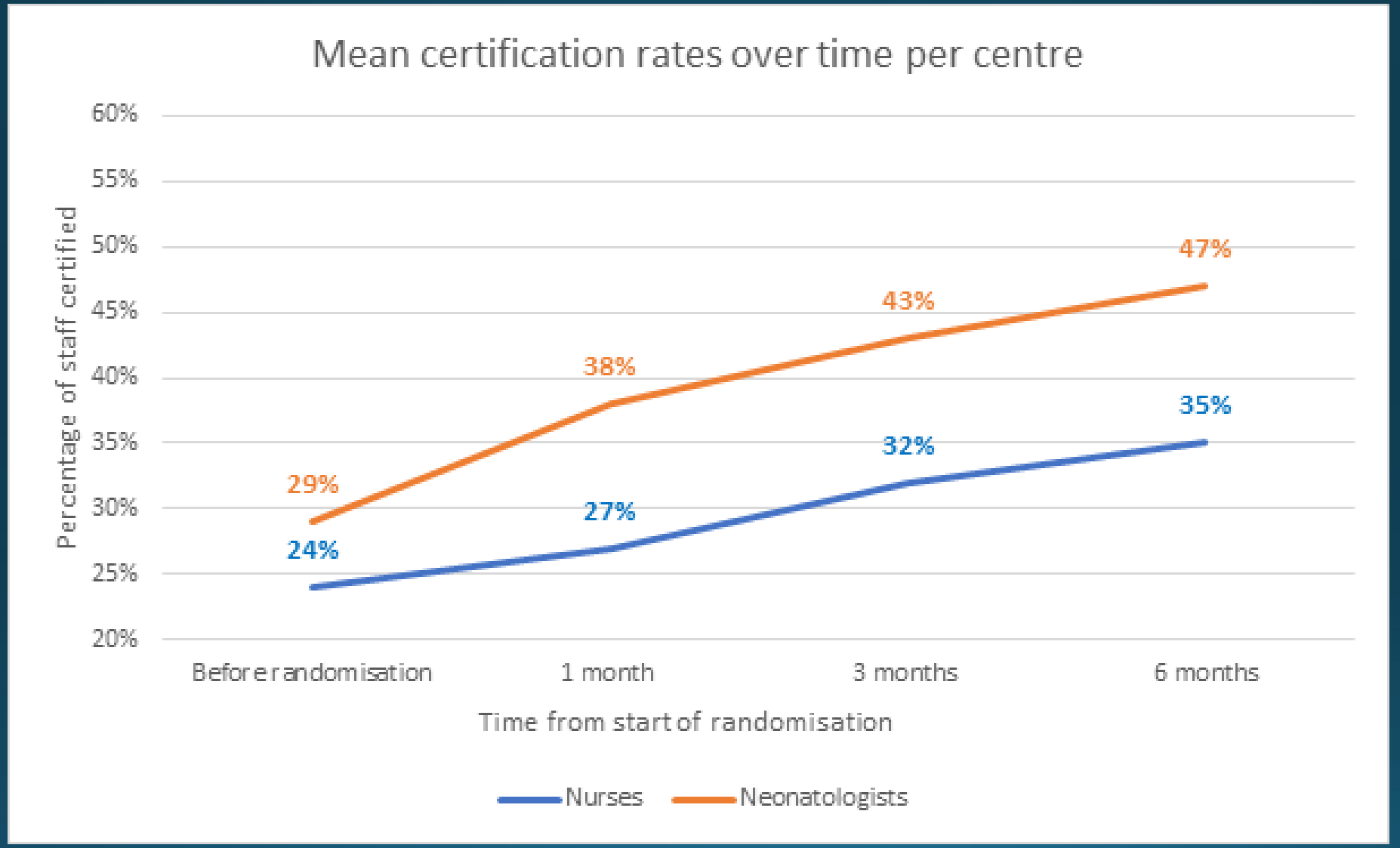

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The intervention

Tabel 3: Total number of completions for each module

	Introduction	NIRS	Treatment guideline	Cerebral ultrasound	Good Clinical Practice
Neonatologist	401	404	397	372	85
Nurses	537	517	6	6	0
Radiologist	2	0	0	31	0
Total	**940**	**921**	**403**	**409**	**85**

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The primary outcome assessment

- Number of centres with one or more staff having completed the cUS module:

  59 out of 70 centres
- Total number of neonatologist/radiologist with completed cUS:

  493 out of 854 reported on training and delegation log

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What have we learned?

- The web-based training program proved feasible in an international, multicenter study with a low budget
- The mean certification rate was high, despite the web-based training being non-mandatory
- Despite short completion time, there is room for improvement in web-based training program

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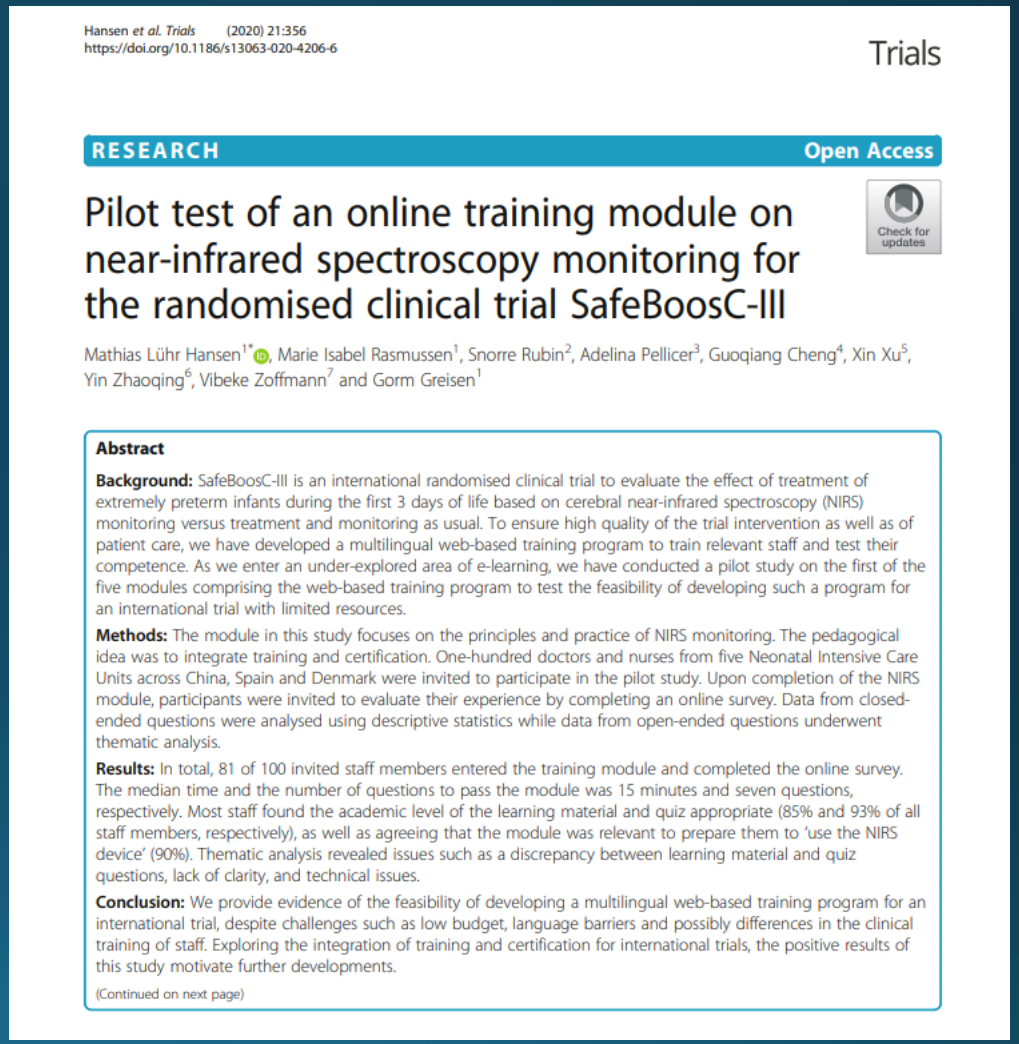
Next step: publication

- To report on the development
  → already published
- To assess the feasibility
  - Transparency
  - Learning



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Trials

RESEARCH Open Access

Pilot test of an online training module on near-infrared spectroscopy monitoring for the randomised clinical trial SafeBoosC-III

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Abstract

Background: SafeBoosC-III is an international randomised clinical trial to evaluate the effect of treatment of extremely preterm infants during the first 3 days of life based on cerebral near-infrared spectroscopy (NIRS) monitoring versus treatment and monitoring as usual. To ensure high quality of the trial intervention as well as of patient care, we have developed a multilingual web-based training program to train relevant staff and test their competence. As we enter an under-explored area of e-learning, we have conducted a pilot study on the first of the five modules comprising the web-based training program to test the feasibility of developing such a program for an international trial with limited resources.

Methods: The module in this study focuses on the principles and practice of NIRS monitoring. The pedagogical idea was to integrate training and certification. One-hundred doctors and nurses from five Neonatal Intensive Care Units across China, Spain and Denmark were invited to participate in the pilot study. Upon completion of the NIRS module, participants were invited to evaluate their experience by completing an online survey. Data from closed-ended questions were analysed using descriptive statistics while data from open-ended questions underwent thematic analysis.

Results: In total, 81 of 100 invited staff members entered the training module and completed the online survey. The median time and the number of questions to pass the module was 15 minutes and seven questions, respectively. Most staff found the academic level of the learning material and quiz appropriate (85% and 93% of all staff members, respectively), as well as agreeing that the module was relevant to prepare them to 'use the NIRS device' (90%). Thematic analysis revealed issues such as a discrepancy between learning material and quiz questions, lack of clarity, and technical issues.

Conclusion: We provide evidence of the feasibility of developing a multilingual web-based training program for an international trial, despite challenges such as low budget, language barriers and possibly differences in the clinical training of staff. Exploring the integration of training and certification for international trials, the positive results of this study motivate further developments.

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Questions?

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