E-learning to improve paediatric parenteral nutrition knowledge? A pilot study in two hospitals.

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Objectives

To assess and compare the impact of a newly created **E-learning module** on the ability of physicians to manage theoretical clinical cases in two hospitals. The E-learning module was focused on **prescription of paediatric parenteral nutrition.**

Conclusion

- The pilot study did not demonstrate a significant improvement on physicians' knowledge
- Participants were highly satisfied with the E-learning → further follow-up will be needed to evaluate the assessment of the E-learning

Background

- Education and training may improve prescription of paediatric parenteral nutrition
- Prescription of paediatric parenteral nutrition may be performed by physicians or clinical pharmacists in hospitals
- Differences in knowledge of prescribing and non-prescribing physicians may be expected

Methods

- Setting: two paediatric university hospitals

HUG	CHUSJ
Geneva - Switzerland	Sainte-Justine - Canada
Prescribing physicians	Non-prescribing physicians

- Study design : randomized controlled study in each hospital (Intervention (E-learning) vs Control-group)

	Mars	Avril	2016
Control-group (CG)	- Pre-test	- Post-test	
Intervention-group (IG)	- Pre-test	- E-learning module (45 min) - Satisfaction standardized questionnaire - Post-test	

- Pre- and post-test included 3 clinical cases (total score, range 0 to 250 points) :
  - ✓ Case one : to determine energy intakes
  - ✓ Case two : to perform appropriate monitoring
  - ✓ Case three : to find errors on a nutrition parenteral prescription
- Outcome: scores' difference between pre- and post-test in both groups (globally and in each hospital)

Results

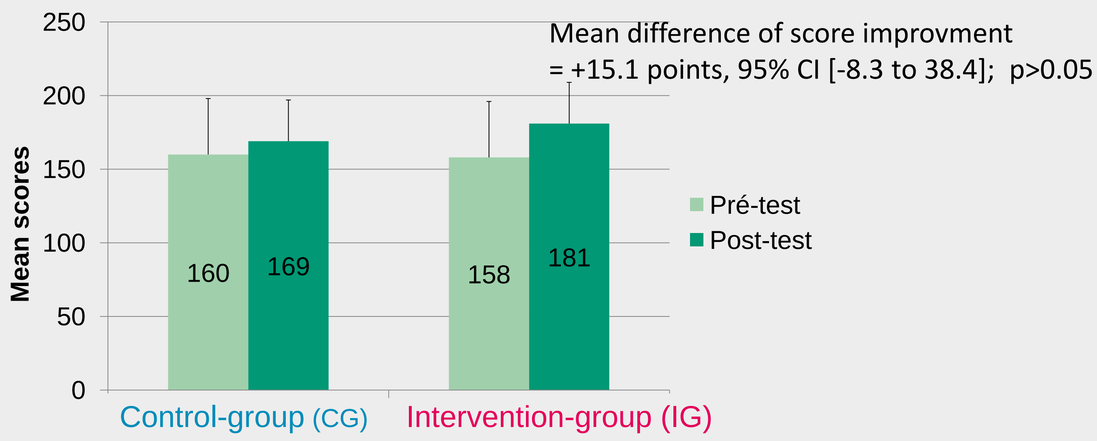
- 65 physicians

	HUG	CHUSJ
Number of physicians	36	29
Number of physicians in each group	(CG =18) (IG=18)	(CG=15) (IG=14)
Mean years of experience (± SD)	4.0 ± 2.8	3.1 ± 2.6
Pre-test scores (± SD)	180 ± 29	133 ± 24

p<0.001

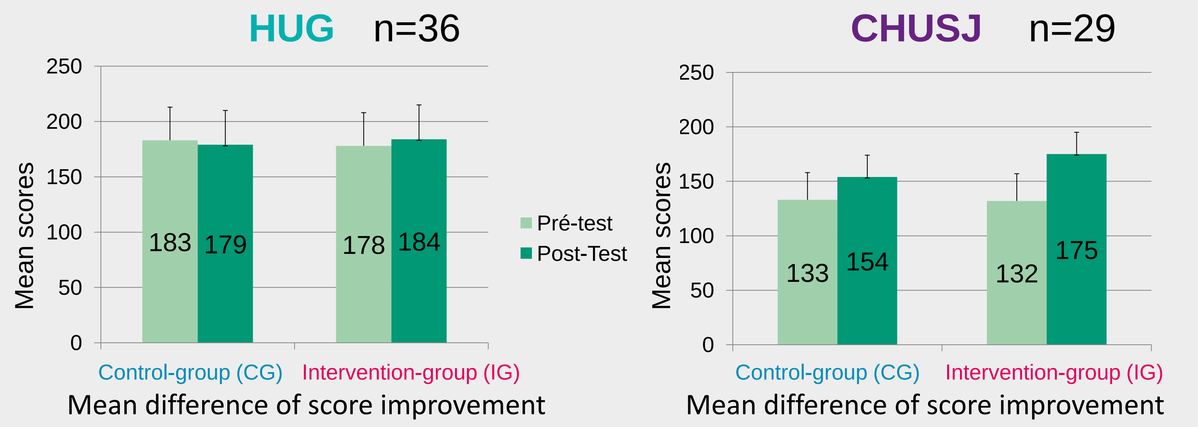
→ Initial knowledge scores significantly higher in HUG

- Global analysis (n=65) :
  Scores' difference between pre- and post-test



→ No significant E-learning impact observed

- Analysis in each hospital :
  Scores' difference between pre- and post-test



→ No significant E-learning impact observed

Global satisfaction

6. Would you recommend this module to your colleagues?

- ◯ Yes
- ◯ No

- 100% (n=32) estimated that the E-learning module meet their needs
- 100% (n=32) would recommend it to their colleagues

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eahp european association of hospital pharmacists

Authors report no conflict of interest

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