Paediatric Resuscitation Instructor Training: Bridge to the future: from basic to highly advanced simulation

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Background: Traditionally Resuscitation courses use different levels of training & learning effects. But use of highly advanced simulation integrated into standard resuscitation courses is unfrequently described (1)

Idea / concept: to supplement the didactic concepts in core-instructor courses for Paediatric Instructors in training with an overview of the range of simulation techniques from basic to highly advanced (2, 3) including five children (4).

Methods / implementation: An additional day to the standard core instructor course provided the following. Practical training on all stations of the PBLSPALS Paediatric Basic and Advanced Life Support provider course. A variety of debriefing techniques and mannequins:- PBLS/PALS-debriefing and materials on following stations:- Basic life support & respiratory insufficiency - Vascular access & neonatal resuscitation - The integration of real children into a trauma scenario - Highly advanced simulation with audiovisual-debriefing (5) - Cardiac arrest & team work:here, instructor trainees worked as learners. Instructor team was drawn from several formal teaching systems:
- Italian Society of Paediatric Emergency Medicine (SIMEUP), American Heart Association, European Resuscitation Council
- 3 Highly Advanced Simulation Centers were involved:
  - DFR-lufthettung, PICU Paediatric Intensive Care Unit / Childrens Hospital Manchester, White Cross
  - Nearly all instructors worked together in previous courses

Results: Compared to standard core resuscitation instructor courses, instructor trainees of paediatric life support courses had:
  1) more practical training by Instructor trainers with specific paediatric emergency background.
  2) training at different levels of debriefing with different substitutes for real patients
  3) the course was international at instructor- and participant-level. The course was in German, English and Italian (Brixen/Southtyrol, 16th dec. 2009).

Discussion: The different systems of resuscitation courses are sound, but often without the integration of highly advanced simulation which could enlarge and deepen the training effect of the trainees (4, 6, 7). Highly advanced simulation often not integrated into the continuum of low fidelity utilized by standard resuscitation courses.

Conclusion: Over the past few years we have worked on expanding the levels of simulation our courses offered. This additional day will hopefully contribute to broadening the views of simulation seen by recently trained instructors and their home institutions.

References:
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