BLS-AED course taught by a student leader or an instructor: is there a difference?

(W. Renier, C. Aubry, Faculty of Medicine, K.U.Leuven)
Procedural Skills training for medical students

Initial problem

- 400 students need exercise in procedural skills in preparation of OSCE (practical exam) in 5th year
- Guided selflearning opportunities

Pilot in 2005-2006
• Start PAL in 2006:
  – Peer leaders:
    • medical students from 3th to 5th year,
    • voluntary (selection)
    • engagement: 6 hours training and 6 hours sessions/year
– Students:
  • 2th to 5th year students

– Skills:
  • Procedural skills: venapuncture, injections, suturing, catheterization, ...: guided selflearning
  • Resuscitation training: 1000 students each year (small group learning, overloaded clinical staff)
Research question

- Peer-led resuscitation training for healthcare students: a randomised controlled study
  (Perkins, 2002)

  Students taught by their peers were significantly more successful in the end of course practical CPR test than those taught by clinical staff.
Research- methodology

• Training in CPR-AED for medical students (ERC guidelines):
  – Short theoretical background and demonstration for max. 18 students.
  – Training in 2 groups: PAL leader and course director (C.D.)

• Posttraining practical test
  – in vivo and videotaped (C.D.)
Results (1)

- 205 students videotaped
  - 27 exclusions (practical problems)
  = 178 students

  - 90 students from 1 year

  - 47 students supervised by C.D.
  - 43 students supervised by PAL leader
Results (2)

- Scores on post practical test
  - 10% failed (n = 9)
  - 70% scored 80% and more (n= 63)

  no significant difference for two groups

- Inter-observer reliability (video- in vivo)
Results (3)

• Similar results for important items:
  – Call for help
  – Immediately start of hartcompressions
  – 30:2 ratio
  – Use of AED

• Small differences in results for two groups:
  – Insufficient hartcompressions (sequence and depth)
  – AED safety
  – Insufficient breathing (chinlift and 10 sec. evaluation)
Conclusions

• Overall satisfying results:
  – 2 hours of training is sufficient
  – Peer-led resuscitation training is sufficient

• Special attention for items with significant lower score will improve results
Special thanks to PAL leaders !!