Reviewer’s report

Title: The role of an Anesthesiology curriculum at improving bag-mask ventilation and intubation success rates of Emergency Medicine residents

Version: 2 Date: 18 August 2010

Reviewer: Andrea Vianello

Reviewer’s report:

This is a study which addresses an interesting area of research in the educational program for trainees who are developing their clinical skills in emergency medicine, namely the appropriate strategy in order to acquire ability to competently conduct tracheal intubation and bag-mask ventilation in the critically ill patient.

Although studies dealing with these topics are welcome, the paper is flawed by some limitations. In particular, the major aim of the study, namely the evaluation of the effective role of a course with an Anesthesiologist in the operating theatre, is obscured by several structural deficiencies.

Major Compulsory Revisions

1. the first problem is that the study does not seem really to be hypothesis driven. The investigators report a series of observations, but is unclear which is their primary focus. Are the investigators attempting to prove the importance of the practical course with an Anesthesiologist or the ability of non-anesthesiologists to perform acute airway management after appropriate training? This point needs to be effectively addressed by the Authors.

2. another methodological problem is the statistical analysis. More details should be given about tests used to compare continuous and nominal variables; concerning sample size: the authors should explain how they chose the number of subjects: was some pre-study calculation done, and what were the assumptions of this analysis? Of course, this is a main limitation.

3. it is important the Authors describe more clearly the training period in the operating room. Was a minimum number of patients expected to be intubated by the trainee under the supervision of the Anesthesiologist?

4. I’m left very surprised that approval of Ethical Committee was not required for a study which may enable optimal care for severely ill patients

Minor Essential Revisions

1. The title is not enough informative;
2. Abbreviations need improvement;
3. Introduction is too long and should be shortened;
4. Methods
- There should have been a protocol for how many intubation attempts were allowed.

5. Results:
- It would be useful if the Authors could explain what they intend by the term “ancillary techniques”, indicating procedures adopted in case of failure of bag-mask ventilation

6. The text is poorly written and should be considerably improved.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests