Author's response to reviews

Title: Role of an anesthesiology curriculum in improving bag-mask ventilation and intubation success rates of emergency medicine residents: a prospective descriptive study

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Author's response to reviews: see over
Dear reviewers,

Thank you for your thoughtful review of our manuscript. We take your concerns seriously and have addressed them to the best our abilities. We asked from Biomedical editorial services (http://www.biomedes.co.uk) to edit the manuscript. We address your comments point by point in red and brown fonts as follow:

**Reviewer: Maaret Castren**

- According to reviewer comments’, Regional Ethic Committee approval is necessary for my manuscript entitled “The role of an Anesthesiology curriculum in improving bag-mask ventilation and intubation success rates of Emergency Medicine residents”. Although, this curriculum had been approved in our university, to meet the reviewers comments’, we present the research to Regional Ethic Committee. Herewith; I attach the Regional Ethic Committee letter’s and edit the manuscript as following:

  The patients gave consent before admission. Although our study had been designed for description efficacy of the anesthesiology curriculum and we did not do any intervention on the routine training program; however, ethical approval was achieved for this study.

- The references, also, have been changed to one format.

**Reviewer: Henry Wang**

Based on reviewer’s comments we summarized introduction and discussion sections and revised methodology of manuscript as following:

- The end point for successful bag–mask ventilation was defined as an ETco2 trace increasing to 20 mm Hg and back to baseline. If this was achieved at a total fresh gas flow of 3 L/min and an APL valve at 20 cm H2O, bag–mask ventilation was considered to be successful as the primary outcome. If it was not achieved, it was mandatory to use **ancillary techniques** to ensure adequate bag–mask ventilation. These techniques were defined as a secondary outcome and included increasing the FGF to 6 L/min, closure the APL valve to 30 cm H2O, use of the oxygen flush device and use of a 2-person technique (the resident using 2 hands to secure the mask while an assistant squeezing the bag)...

- A successful orotracheal intubation was defined as tracheal intubation with confirmed endotracheal tube position with primary (chest rise and auscultation) and secondary
confirmation (positive end-tidal CO2). The intubation was also considered successful when it was completed on the first attempt and within 20 seconds. This time was defined as that from cessation of bag-mask ventilation to the time of confirmation of successful tracheal tube placement, being recorded by an investigator on the scene.

- We asked from Biomedical editorial services (http://www.biomedes.co.uk) to edit the manuscript.

- As we mentioned in the title of manuscript, our study was a prospective descriptive study. Because of this curriculum was mandatory, then we could not consider a control group who did not include in the curriculum.

**Reviewer:** Andrea Vianello

Based on reviewer’s comments we did major revisions on manuscript and explain reviewer’s desires point by point as following:

1- Although trainees have an opportunity to develop specific learning objectives for airway management during their period in the skills lab and operating room, our research is based on two of the most important skills in airway management. The aim of this study was to determine the efficacy of the anesthesiology curriculum on the success rates of bag-mask ventilation and tracheal intubation performed by EMR’s.

2- The data were analyzed using SPPS version 15. Nominal scale data were reported as absolute, and relative frequency and continuous scale data were reported as mean±sd. To detect differences between before and after education, data were analyzed by McNemar and marginal homogeneity tests for nominal variables. For comparing continuous variables, we used paired t-test. P<0.05 was considered to be statistically significant. The total census of the ED residents was included since the department has been newly established, thus making the sample size of the study small.

3- The residents were asked to bag-mask ventilate and intubate at least 50 patients in the operating theatre, as hands-on training.

4- Regional Ethic Committee approval is necessary for my manuscript entitled “The role of an Anesthesiology curriculum in improving bag-mask ventilation and intubation success rates of Emergency Medicine residents” . Although, this curriculum had been approved in our university, to meet the reviewers comments, we present the research to Regional Ethic Committee. Herewith, I attach the
Regional Ethic Committee letter’s and edit the manuscript as following: The patients gave consent before admission. Although our study had been designed for description efficacy of the anesthesiology curriculum and we did not do any intervention on the routine training program; however, ethical approval was achieved for this study.

- We asked from Biomedical editorial services (http://www.biomedes.co.uk) to edit the manuscript. We address your comments point by point in red and brown fonts and you can find in the manuscript all minor essential revisions which recommended by reviewer.

Looking to hear from you

Best regads

Authors