Reviewer's report

Title: Basic life support is effectively taught in groups of three, five and eight medical students. A prospective, randomized and double-blind study.

Version: 3 Date: 20 May 2014

Reviewer: Koenraad Monsieurs

Reviewer's report:

The revised manuscript has improved substantially.

Minor remarks:

- The answer to referee 1 states that students practiced in groups of three (two performing compressions and one ventilating). That seems quite crucial to understanding the study. However, I could not find this in the methods section.

Discretionary remarks:

- General thought: if I would want to determine the best group size, I would not keep hands-on time similar. I would keep total time similar, and try to find out from what group size on the learning outcomes would start to decrease.
- Abstract:
  - students prefer teaching in small groups”: While that may be true, to me the most important reasons for small group teaching is that it is already known to be effective. That is more important than student preference. Just the exact group size is unknown.
  - I am still puzzled why a time slot of 6 minutes of hands-on time per student was reserved, while actual hands-on time was in the range of 2-4 minutes. That merits an explanation.
  - Conclusions: “comparably” should be “comparable”. The conclusion that smaller groups “enable better teaching” seems an overstatement. Learning outcomes were similar for all groups, so how can there be “better teaching”? 
- Page 15: I am not convinced from the results that smaller groups are “the better investment”. Learning outcomes were similar, but there were differences in process.
- Table 2: the proportion of students adhering to the guideline provides useful insights. For compression depth, X3 had 56% and X8 had 78% of students performing according to the guidelines. Is that difference significant? It appears that the X3 group did actually worse.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I have no competing interests.