Reviewer’s report

Title: Implementation of a large-scale simulation-based cardiovascular clinical examination course for undergraduate medical students – a pilot study

Version: 0 Date: 03 Jul 2019

Reviewer: Marko Zdravkovic

Reviewer's report:

General comments:

I would like to commend the authors on implementation of the simulation course for their students as well as the improvements they managed to achieve from the first to the second year. Having said that, my major concern with this manuscript is that it can be hardly justified to publish as original research article. A more appropriate format would be a short report on an educational intervention and its evaluation.

Overall, one way to decrease the faculty burden is to include near peer-teaching (senior students teaching younger students). This would also improve students' teaching skills as future doctors are expected to be able to teach the new generations of physicians.

Specific comments on the manuscript improvement:

Background:

I would omit the word semiology - it is a study of signs. I have never encountered this word in medical studies before (despite being trained in several European countries) and it might be more often used in French speaking environments. I doubt many readers will understand what you mean by it. I would recommend to definitely remove it from the title and the manuscript, but if you want to keep it in the text, you should define what it means at the first instance.

p. 5, line 95: 1h15 / please correct: 75 minutes

p. 5, line 96: please be specific instead of > 400 students write the exact number or replace with: just over 400 students

p.7 line 159: please omit reasonable. The data is either available upon request or not. And you should define what data is available rather than describe it as reasonable request.
Method:

This is more appropriate format for a short evaluation report rather than a full 3,000+ word article. Content validity and piloting of the questionnaire are not clear.

Results:

Table 1: even though the statistical tests performed show significant difference, it is of little "value", for example quality of teaching method 2.60±0.57 vs 2.75±0.45 (p=0.001). This tends to happen with large samples. As appropriately reported in the text, Quality of the simulation equipment is the only one that truly stands out.

Discussion:

Overall, this paper is too long given what has been done. It is more of an evaluation of a course and should at most be published as a short report. It does not warrant to be regarded as an original research article.

Conclusion:

Given what you studied, skills acquisition would be a more proper term rather than knowledge (spending as you report significant human and material resources for knowledge acquisition though simulation is not cost-effective). Furthermore, what behavioral changes do you expect with refereeing to them in the conclusion? I would suggest omitting this part.

Declarations:

AVAILABILITY OF DATA AND MATERIEL - please redo spell check for the entire document; it is unclear to me why anonymity would be questionable here and a reason not to share the database - survey responses were anonymous or did students have to report their names on the forms?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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