Reviewer's report

Title: Role of SimMan in teaching clinical skills to preclinical medical students

Version: 1 Date: 6 September 2012

Reviewer: kristin fraser

Reviewer's report:

• Major Compulsory Revisions

1) Unfortunately, many details of this experiment are missing; therefore, it is difficult to interpret the relevance and importance of the results. Please describe:

-Student groups: you describe 3 students per group with an MD as facilitator. Was this for both the “SimMan” and the “peer” portions of the experiment? Please describe the nature of the facilitator role for each session. Were there stated learning objectives available to the students and/or facilitators for the session? How much time was allowed for each session and was the full time used?

-In the student group did each student get the opportunity to examine another student or did they miss out on the experience if they were the “patient” for that session?

-Please provide the 10 item evaluation tool so we can see what knowledge items were tested and if they matched the learning objectives for the sessions.

-Describe the “performance exam” (also referred to as “formative”) in more detail please. Specifically, was this done after all teaching in the session had concluded or was there ongoing feedback during the exam? Who did the assessment of performance? Was each student assessed individually or as a group? Could you provide the checklist or at least comment on some of the expectations of the performance on Sim Man vs. peer assessment (for example, JVP cannot be seen on “SimMan” and diaphragms cannot be percussed on “SimMan”). Finally, it would help if the performance exam was added to the flow sheet in figure 1 along with some indication of timing for each phase of the study. A table of the performance scores at each stage would be useful, similar to what is in Table 2 for the knowledge test.

-Clarify: did the feedback questionnaire refer to just the ‘SimMan” portion of the study or to the entire teaching session? Was it administered at the end of the entire teaching session?

2) Discussion: There needs to be an interpretation of the increase in confidence in differentiating normal from abnormal sounds after using “SimMan”. Specifically how does this relate to clinical practice and the examination of real patients (or does it)? Given the expense of SimMan, are there other options to consider? What are advantages of “SimMan” over standardized patients, the ventriloscope, or Harvey, the cardiopulmonary simulator?
3) Formative Exam Interpretation: The finding that Group B scored better on the "peer examination" could be explained by the fact that they had had more training ("SimMan" and "peer") than Group A (they had only been exposed to "peer" at the time of the "peer" formative exam.)

- Minor Essential Revisions

I recommend using one term consistently for the OSCE-type examination. You have referred to it as a performance exam and also as a formative exam.

- -exciting is misspelled in conclusion section

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.