Reviewer’s report

Title: Effects of participation in a peer-assisted learning programme in clinical examination skills on volunteer tutors skills and attitudes towards teachers and teaching.

Version: 1 Date: 23 December 2006

Reviewer: Jennifer Mary Weller

Reviewer’s report:

General
Ethics approval is not reported.
Peer assisted teaching is an interesting and topical concept. With the emphasis on learning in small groups, combined with the feasibility of finding sufficient paid tutors for large classes of medical students, and the evidence that teaching is a useful method of learning, this is a very worthwhile initiative and deserving of evaluation.

It would be interesting to know something about the interventions the students devised, group numbers, satisfaction of 3rd year students, and pass rates of the 3rd years who participated compared with the non-participants, allowing for academic ranking. Was this analysed? With the apparent lack of any statistically significant difference between groups and the low response rate, the interest may be more from a description of the intervention, how it was supported, what the students chose to do for their tutorials, did they work in pairs etc.

The reader needs to know how many students were sent the questionnaire in order to determine the response rate.

The authors state that 43 students were identified as having responded to both before and after questionnaires, but it is unclear if these students could be positively identified. If they were identified, they would be the only valid group on which to do before and after comparisons, but this is not made explicit by the authors either in the text or the figures.

As we don’t know the numbers sent the questionnaire, it is possible that the group answering the before question were different to the group answering the after questionnaire, apart from the 43 positively identified students, which would invalidate comparisons. Could the authors please clarify?

The authors describe their method for determining statistical significance but don’t report this. If there was no statistically significant difference, could this be reported?

Results
It is very unclear from the text and the figures exactly what is being analysed. I presume figure 1 refers to pre- and figure 2 to post, but this is not stated in the figure headings. How many questionnaires are included in each analysis? Is this just the 43 paired questionnaires or the whole lot? Are the numbers in the bars percentages, or actual numbers?

Authors state:
“Whilst only 50% of pre-course respondents undertook OSCE tutor to enhance their Curriculum Vitae, 82% of post OSCE tutor respondents felt that taking part had done so.”

This comparison would only be valid if the authors are comparing the responses from the group of students who answered both before and after questionnaires. It is not clear if this is the case.

Figures 3.a and b. Text implies these are before and after comparisons. What are these figures reporting? The table heading and description are not helpful. Again, it is not clear if it is valid to make before and after comparisons. Are the numbers in the bars referring to absolute numbers of percentages? They appear to all add up to 41 at a glance, which doesn’t correlate with any numbers in the text.

Open responses.
How many written responses were there? These may potentially be a valuable part of the evaluation. The method of analysis of the written responses is not described. How were the responses coded and how did
the authors draw their conclusions? It is hard for the reader to know to what extent the author’s interpretation is valid and how much weight to give it. Could the author please describe this in more detail?

Discussion
The authors can conclude that the higher achieving students were more likely to volunteer for the programme, and this is the main thrust of the discussion. Speculation on the failure of less able students to enrol is not particularly relevant to the study. The method of recruitment of the volunteer tutors was not described and it may be that poorer students felt they would be better off with an additional clinical attachment.

There seems to be some confusion here and in general about the purpose of this intervention - initially it started out being an intervention to promote teaching ability and interest, but the discussion is about the intervention as a way of improving the personal clinical examination skills of the tutors. With the quality of the data as presented, I don’t think the authors can reliably draw many other conclusions from this study.

Limitations to study
There are a number of limitations to this study, which the authors should address in the discussion (low numbers, low response rate, anonymity versus ability to pair before and after), and it would be useful for them to propose future studies to answer some of the questions raised by their study.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. Provide information on response rate.
2. Align discussion and abstract with methods and results.
4. Describe qualitative data and qualitative analysis methods.
6. Revise abstract and conclusions to remove claims that cannot be supported by the data.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. Describe figures so they can be understood, explain numbers in the figures.
2. Describe study limitations in the discussion.
3. Describe ethics approval.

Discretionary Revisions (which the author can choose to ignore)
1. Describe the teaching methods the students used with their students.
2. Describe how (if?) the students are supported during the OSCE tutor programme after the initial workshop.
3. Provide data on OSCE outcomes for participating and non-participating 3rd year students, with their academic ranking.
4. Provide data on 3rd year attendance as well as enrollment in the OSCE tutorials.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.