Reviewer’s report

Title: Statistics teaching in medical school: Opinions of practising doctors

Version: 1 Date: 9 August 2010

Reviewer: Carl Heneghan

Reviewer’s report:

On the whole this is nice piece of work addressing an important issue, and if my concerns are addressed is fit for publication.

The introduction is well thought through and makes a good case for why the current study is important.

Major compulsory revisions

Methods
• The methods should include a description of how the questions were developed, and why the question outlined in table one were the ones selected?
• Were they piloted?
• Simple issues like was the questionnaire in a word doc or in a survey tool should be outlined?
• How did you analyse the open ended responses
• I would like the authors to refocus the methods so that this study could be repeated by a second medical school to replicate the findings, currently as above there is too little detail to replicate.

Results
• 130 doctors responded – can we have the % response
• In terms of their demographics how does this match the overall structure of the 473. I'm not so much worried about the response rate as who the results apply to, so if 25% were GP respondents how many is this of the total GP invited. It seems to me the sample over represents consultants is this so?

Discussions
• Whilst acknowledging the limitations of the small and local sample, with its undergraduate teaching associations, the findings of this research are supported by the literature.

The local sample isn’t an issue

The limitations should discuss
1) Problems with response bias need to be discussed
2) Problems with recall bias need to be discussed
3) The generalisability of these results to other medical schools. Does your medical school differ in anyway does the course differ
4) There seems to be a high number of consultants, discuss the implications of this in terms of GP findings — consider analysing these two groups separately to see if there were any major differences

Minor essential revisions
• Can you keep the number consistent. Id go with the raw numbers and the( %) as per the latter of these . please check throughout the doc for consistency, otherwise it is hard to read
• Sixty-three percent (82/130) of participants remembered being taught probability and statistics
• as an undergraduate medical student. However, of these 82 participants, only 33 (40%)
• Consider shortening as well for clarity
• In terms of the following section:
Twenty-four participants outlined details of specific methods that they thought students should learn. These included mention of epidemiology (n=6); probability, uncertainty and risk (n=15); descriptive statistics including variability (n=4); statistical significance including confidence intervals (n=7); statistical tests and measures of effect (n=12).
Consider removing it from the paper. The numbers are so small it does not add to the paper and the findings are not relevant in the context of the rest of the paper.

Discussion
• In terms of:
• Our findings suggest that, whilst less than half of doctors recognised the value of their own undergraduate training in probability and statistics at the time, the majority had found their learning relevant to their subsequent career, in support of GMC recommendations [1,2].
• The term majority should be clarified in the context of less than half - Isn’t it ¾
• How did you come up with the list of recommendations – this should be added to the methods

• the findings of this research are supported by the literature – it would be helpful to cite this literature at this point

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests' below