Reviewer's report

Title: When empathy is higher in senior than in first year medical students: A cross-sectional study

Version: 2 Date: 23 May 2011

Reviewer: Gary Rogers

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Major Compulsory Revisions

The authors have not yet adequately addressed the issue raised in comment 2 of the original review. They still make the assertion that 'empathy declines throughout medical school' as if it were a firmly established premise in the second paragraph of the Background and in the abstract.

They explore the evidence for this assertion more in the third paragraph of the Background and demonstrate that the literature, outside of the one US medical school that has published most on this topic (Jefferson), is, in fact, distinctly mixed in its findings on the issue, especially in relation to non-English speaking jurisdictions.

At the end of that paragraph they suggest a need for further studies ‘to identify the institutional strategies that may effectively nurture, or at least maintain, the idealism and enthusiasm for patients typical of entering students’, citing two references from Jefferson Medical School. This again implies that the ‘loss of empathy’ contention is well established to be universal when in fact it isn’t.

Their paper could still be a significant contribution to the evidence on this issue, but their positioning of its importance as a surprising contrast to ‘established facts’ simply doesn’t hold water.

The authors have also not fully addressed the point made in comment 4 of the original review. They have retained the phrase ‘an even more accurate account’ (page 13, paragraph 1). The word ‘even’ is not justified by their methodology, despite the welcome addition of information about curricular and pedagogical stability across the cohorts studied.

The paper continues to include many instances of phraseology that sound odd to the native English speaking reader, as well as frequent grammatical errors. Indeed multiple new linguistic problems have been introduced with the revisions. Further language editing would be essential before publication.

Examples include:

'This study intends to confirm this previous results about the students' empathy ...' (wrong tense, number disagreement, inappropriate use of the definite article)
'...females rather than male students...' (‘compared with’ would be much more appropriate)

'... one example of a medical school that seems contradict the empathy decline of medical students.' (wrong verb form, should be the infinitive, ‘to contradict’)

'... is positively associated with the compliance, the satisfaction and clinical outcomes in the patients.' (three examples of incorrect, unnecessary, use of the definite article)

'... a study in Trinidade and Tobago also reports empathy declines, but other performed in Japan and Korea found ...' (misspelling of place name in English, number disagreement)

'However, the conflicting results and methodological limitations in the published studies prevent the drawing of a convinced conclusion as to the effect of training on the development of medical students empathic.' (very odd expression ['convincing conclusion'], missing possessive, verb for noun substitution ['empathic' instead of ‘empathy’])

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

**Quality of written English:** Not suitable for publication unless extensively edited

**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.