Author's response to reviews

Title: Diagnosing migraine in research and clinical settings: The validation of the Structured Migraine Interview (SMI)

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Author's response to reviews: see over
Dear Dr. Alam,

December 16, 2009

Re-Article title: Diagnosing migraine in research and clinical settings: The Validation of the Structured Migraine Interview (SMI)

Authors: Zainab Samaan, E Anne MacGregor, Andrew Dowson, Peter McGuffin and Anne Farmer

Journal: BMC Neurology

We have the pleasure in submitting a revised version of the manuscript titled “Diagnosing migraine in research and clinical settings: The Validation of the Structured Migraine Interview (SMI)”.

We have addressed the reviewers’ comments to the best of our abilities and the manuscript has been revised extensively including adding additional cases for the validation study. We were able to add 129 cases making the total 170. We would like to thank the reviewers and the Associate Editor for their helpful comments that we believe have improved the manuscript greatly.

Specifically, we have addressed the following comments:

The Associate Editor handling the manuscript feels that further consideration of the manuscript is dependent upon complying with the requests of the initial reviews and the re-reviews. In particular, one of the original concerns was regarding the low number of cases which have been included in the analysis. The Associate Editor feels that by increasing the number of patients for specificity determination from 6 to a higher number (having data for 646 patients), you could choose to increase the number of subjects for analysis from 41 to a much higher number, etc. However, in the revised paper instead of increasing the numbers for analysis you chose to explain that a 100% specificity calculated from 6 cases is fine, even though you refer to other similar studies with much lower specificity. Instead of increasing the number for analysis, you explained how you randomized the patients for analysis to be left with the initial 41 subjects in the analysis. The problem of the low number of cases in the analyses had been brought up by all initial reviewers, and we feel that this has not been solved during revision.

Our Response:
We have increased the number of cases to 170. Please see table 2 page 19.
Referee 1: Reviewer's report
Too many of the answers to my comments are not within the text and should be, as the reader might need much of this information, especially those not experts in ICHD II classification.

Our Response:
We have incorporated the answers into the text. Please see pages 3, 2nd paragraph, 7, 14 last paragraph and 15 1st paragraph.

Referee 3: Reviewer's report
I have reviewed the answers of Samaan et al to the issues I had raised when reviewing the first draft of their paper. I sincerely think that the authors have significantly improved the manuscript. Yet there are two points that in my opinion still need some refinement.

One such point is the use of self-reported migraine and antimigraine drug use as the means of assessing the SMI's reliability. The shortcomings of these indicators were exposed in my review. I am afraid that the authors cannot rely on historical data obtained in a different study of a different population with different methods (ie. Rasmussen et al, Headache, 1991) when trying to establish self-reported migraine as a reliable indicator of migraine.

Our Response:
We have acknowledged the limitations of such indicators. Please see page 12, 1st paragraph.

The second point that might be improved is the case of those twenty patients who had been administered the SMI in a face to face interview in a previous study and re-interviewed by phone in the present study, a mean 2.5 years after the face to face interview. The main issues here are the small sample size and the long time frame between the two measurements. The authors have not addressed these issues in the revised text. I still think that an average of 2.5 years between the two administrations is not safe, as subjects may change over time (eg. a patient not having migraine before may have developed migraine in this time frame), and is substantially different from the usually suggested time frame of approximately 1 month. Moreover, the authors do not seem to be aware of the fact that test-retest reliability measures stability over time with all other circumstances unchanged, so the use of two different administration methods (face to face vs. phone interview) is not justified. The way the discussion of this part is worded (last paragraph, page 14 of revised manuscript) seems to indicate that the authors wish to demonstrate that administering the SMI by phone may be as valuable as a face to face one. While this is an important issue for the future usability of the SMI, I think that this
study is not suited to decide this. I hope these comments can help the authors in the preparation of the final version of their paper.

**Our response:**
Due to the significant lapse in time since the study onset, increasing the sample size for this portion of the study is not possible. We thank the reviewer for the helpful and thorough comments and have acknowledged the limitations of this part of the study. Please see page 15, 2nd paragraph.

Yours sincerely,

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