Reviewer's report

Title: Are the results of telephone interviews and self-administered questionnaires equivalent? Randomised controlled comparison of the standardised instruments SF-12 and GCPS

Version: 1 Date: 14 August 2007

Reviewer: Heinz Dieter D. Basler

Reviewer's report:

General
The authors address a very important research question that has been widely neglected in the past, although the answer has important methodological consequences regarding the mode of collecting subjective data. Many designs rely on self-administered questionnaires and on telephone interviews in the same trial without much knowledge about the equivalence of the data obtained by use of the different strategies.

The authors investigate two different types of subjective data, firstly data regarding mental status and, secondly, those regarding physical status in a group of patients having been treated with acupuncture for headache disorders. They change the sequence of self-administered questionnaires (SAQ) and telephone interviews (TI) in a systematic way. Different from the vast majority of studies, they do not test for differences, but for equivalence of two strategies. Tests for equivalence need a sophisticated statistical approach that has been facilitated by the contributions of the two statisticians among the authors.

The principal outcome is that the sequence impacts the mental status data significantly, but much less the physical status data. TIs reveal less psychological impairment in comparison with SAQs, which most probably is due to a social desirability bias inherent in interviews.

The strength of the study is the innovative approach, the randomisation of the subjects to the different groups, the statistical competence of the authors, and the important practice implications of the outcome.

There are two constraints in the present form of the paper which I suggest to work on.

Firstly, they authors do not mention if they had information about the point in time when the addressees actually filled out the questionnaires. Did they conduct the telephone interviews a fortnight after the subjects had returned the questionnaires, or did they conduct them a fortnight after they had mailed the questionnaires to the addressees? More detailed information would help to specify the time period between SAQ and TI.

Secondly, table 2 and 3 would profit from a better arrangement of the data. The
present layout appears rather confusing. I suggest to leave out the first column and to add the three columns most to the right in the second part of the tables to the three columns in the first part. The headlines of the three columns should receive the headings “TI” and “SAQ” respectively.

Unfortunately, due to the format of this page, I can only present my suggestions in different rows and not in one single row, one item after the other:

Information about second survey
Survey-mode sequence
Telephone Interview
SF-12p SF-12m
Self-administered questionnaire
SF-12p SF-12m
N

To my opinion, this would facilitate the understanding of the tables significantly.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

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What next?: Accept after minor essential 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