Reviewer's report

Title: Audio computer-assisted self-interviewing (ACASI) may avert socially desirable responses about infant feeding in the context of HIV

Version: 2 Date: 21 December 2004

Reviewer: Charles F Turner

Reviewer's report:

General

This is an interesting study, and it clearly reflects a lot of ingenuity and hard work on the part of the investigators. I have one statistical concern that I would suggest the editor enlist someone more expert than I to review prior to making a publication decision.

The authors report testing 80 mothers in a repeated measures design. Seventy mothers (perhaps the first 70 Ss) were first interviewed in ACASI mode then the questions were repeated in FTF mode. Ten mothers (perhaps the last 10 Ss) were interviewed in the reverse order. No explanation is provided for use of a 70-10 ratio for this assignment, and the assignment may not have been explicitly randomized.

It seems likely to me that statistical tests that treat the ACASI and FTF results as two "independent samples" may confound any sequence effect with estimates of the mode effect. Since ACASI was administered first in 70 of 80 cases, the advantage of ACASI could - at least in theory - reflect the impact of the first (vs. second) questioning. (I do not find this intuitively likely, but I am concerned that this interpretation cannot be ruled out.)

The availability of cases - unfortunately only 10 - where the mode sequence was FTF followed by ACASI should provide some basis for addressing this issue, and the authors indicate that they made use of some statistical tests that may be appropriate in this situation. More needs to be said about these issues, and I strongly suggest that editors solicit a review from a statistician expert in repeated measures designs.

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

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

Discretionary Revisions (which the author can choose to ignore)
Statistical review: Yes