Reviewer's report

Title: Role of Verbal Autopsy in determining high occurrence of cancer along Huai River Basin, in China

Version: 3 Date: 27 May 2011

Reviewer: Zhengming Chen

Reviewer's report:

The authors have revised the manuscript significantly in the light of previous comments from two reviewers. It is now focused more specifically on application of verbal autopsy to help establish whether there was excess cancer risk in certain regions along the Huai river in China. While the paper has been improved, further improvement can be achieved if the following issues can be addressed, some of which have already been raised to some extent in the previous communication.

1. It would be helpful to add a map showing the location of study areas, especially with reference to the Huai river, which is also requested by the other reviewer.

2. As discussed briefly in the paper, one of the major concerns with the validity of the study findings is the effects of uncontrolled confounding. Although the data collection is very limited, the data analyses could be expanded to improve the internal validity of the results, especially on the following three areas:
   
a). Apart from cancer, death from other major categories of diseases should be presented and discussed.

b). There should be a sensitivity analysis of the main results by length of time between death and interview to help assess the degree of recall bias.

c). Age- and sex-specific results should be presented to assess the internal consistency of the findings. In their response to the previous comments, it was claimed that it is not possible to separate the results by age. It is not clear why this is the case, since age should be the very basic factor collected in any surveys.

3. There should be more discussions of the specific study findings and their likely explanations (eg, lung cancer excess between study and control areas, which is unlikely to be due water pollution). Moreover, the implication of the study findings for future research should also be discussed.

4. The manuscript has a number of grammatical and spelling errors, and it would be helpful if it is checked and edited systematically by a native English speaker.

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, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests