

## Reviewer's report

**Title:** Respiratory mortality and life expectancy of Yokkaichi Asthma patients, Japan: late health effects of air pollution in 1960-70s

**Version:** 1 **Date:** 17 August 2007

**Reviewer:** Tamara Schikowski

### Reviewer's report:

#### General

Title: Respiratory mortality and life expectancy of Yokkaichi Asthma patients, Japan: late health effects of air pollution in 1960-70s

This paper reports interesting data on whether patients with Yokkaichi asthma have late health effects after the exposure to severe air pollution in the late 1960-70s.

Data comes from patients registered between 1965-88 in Yokkaichi city and mortality data from the whole population of the Mie Prefecture. The authors used the Chiang method to calculate the life tables by sex and age, which is a valid statistical method for this approach.

The results show that life expectancy and mortality in the Yokkaichi cohort was adversely affected due to increased mortality from respiratory diseases also a reduction in air pollution has been happening since the early 1970s.

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

I have some major comments on this interesting paper.

1. There is no taking into account of exposure to other confounding factors for respiratory mortality such as smoking and occupational exposure, which actually can constitute an important risk factor for cardiovascular and respiratory mortality. Since this information is probably unknown by the researchers, it should still be discussed as potential source of bias in the discussion.
2. The authors did not define COPD diagnosis. I would like to know whether COPD was defined by lung function or any other measure?
3. The description of the results is rather short and I found it difficult to follow, since the tables are too long. I had some difficulties in understanding the statistical tables as they are overloaded with figures and explanatory headings and footnotes are missing. I would recommend that the authors reduce the tables to make them more readable and maybe replace them with graphs (especially table 3 and 4).

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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)

Some additional care with grammar and wording will be needed. Some English words are used wrongly and I would recommend that a Native speaker revised the manuscript. There are also spelling mistakes in the article, which should be corrected.

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Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.