Reviewer's report

Title: Ecological study on socio-economic indicators and prevalence of asthma among schoolchildren in urban Brazil

Version: 2 Date: 10 February 2007

Reviewer: Neil Pearce

Reviewer's report:

General

This is a useful study, bearing in mind the limitations of such ecologic analyses.

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

My major concern is that the findings are presented in terms of correlation coefficients. There is a vast literature (see, e.g. Rothman and Greenland, Modern Epidemiology) on the invalidity of using correlation coefficients as outcome measures. For example, the fact that the Gini coefficient showed a stronger correlation with asthma prevalence in 13-14 year olds than the infant mortality rate did, should not be taken to indicate that the Gini coefficient is a more important determinant of asthma mortality. It may simply be that the Gini coefficient varies more between the different centres than the infant mortality rate does. What should be reported instead of (or in addition to) the correlation coefficient is the regression coefficient (for some standard change in the parameter, e.g. a 1% increase in the illiteracy rate), 95% CI, and p-value. This particularly applies to table 2, but also to the results and discussion sections.

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)

What next?: Accept after minor essential revisions

Level of interest: An article of limited interest

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

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

Declaration of competing interests:

I declare that I have no competing interests.