Reviewer's report

Title: Descriptive epidemiology of selected birth defects, areas of Lombardy, Italy, 1999

Version: 1 Date: 1 February 2007

Reviewer: Kenji Shibuya

Reviewer's report:

General comments:
This paper provides a descriptive analysis of birth prevalence of congenital anomalies by using several different data sources in a region.

As it stands, the descriptive analysis in this paper adds very little to our knowledge on the birth prevalence and their aetiologies. However, the issues related to the system, which the authors have set up to monitor the birth defects, would deserve more careful investigation. Such an analysis would provide more useful implications for other regions and countries. In particular, there are several issues which the authors could explore, including the lack of standardized coding, the lack of records associated with abortions, and information on potential etiological and risk factors of birth defects.

Specific comments:
Page 5, first para. More details on manual verifications is needed: e.g., how to reconcile differences from multiple sources, how to make sure the consistency across datasets, and how to make sure the degree of completeness and quality assurance, etc.

Page 7, Results. Only point estimates were shown but it is preferable that they are accompanied by uncertainty ranges.

Page 12, second para. The authors claimed that the reduction in the reported number of the teratology of Fallot would be due to changes in underlying risk factors. Please add references to support this. There would be other factors which affect the trends in addition to the real changes.

What next?: Reject as not sufficiently sound

Level of interest: Reject as not of sufficient priority to merit publishing in this journal

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.