Reviewer's report

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

Version: 1 Date: 10 January 2007

Reviewer: Nicholas H de Klerk

Reviewer's report:

General
This paper describes the formation of a new Birth Defects Registry in the Lombardy region of Italy and presents some preliminary results for 1 year of data for 3 provinces from the region. The paper is interesting and well-written and emphasises the need for formal Registries such as this.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
To put their results in context, the authors present comparisons with rates from 3 other regions which form much of the Discussion and, I think, has caused a few problems:
1. The authors need to describe differences in methods of collection in the different Centres – e.g. are they all up to age 1 or are some up to age 6 (as is commonly done)? Is registration voluntary or compulsory? What sources do the Registries use? etc.
2. In order to make some conclusions about any observed differences (e.g as the authors have done re Hirschprung’s disease on p15), some idea of how much of the difference my be due to random variability would help. One easy way would be to produce 95% confidence limits (exact Binomial or Poisson would be OK) for the prevalences, with just upper limits for zero prevalence.
3. Given that no zero prevalences are reported by the 3 Centres, the authors should clarify whether ‘Not reported’ actually means zero.

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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)
There are a few minor spelling errors – ‘coartation’(p8), ‘coartaction’(p12) and I thought it was Prader-Willi. I think that some mention of Ethics Committee approval is needed.

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Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

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