Reviewer's report

Title: Infant mortality rate in Brazil, 2000-10: correction of vital statistics based on a proactive search of deaths and live births

Version: 1  Date: 17 March 2014

Reviewer: Fatima Marinho

Reviewer's report:

The manuscript is well written. This is an important topic of child mortality and improvement of vital statistics information, highlighting the project supported by the Ministry of Health of Brazil in partnership with Brazilian Universities.

I have some comments on the pursuit of making the manuscript more comprehensible to readers.

Introduction

I suggest that the authors add some information about the two systems of vital statistics mentioned (SIM and SINASC): how many deaths and births are collected annually, plus a brief description of the operations of the systems, for example, is it a centralized system? Is the collection of data following any international standard?

Methods

I believe that the first paragraph of the Methods would fit better at the end of the introduction. It would be great if the authors gave us some information regarding the proactive search project. Why was the active search performed in two regions? There is also a sub-registration of deaths and births in 4 of the 5 regions of Brazil.

To facilitate the better understanding of the readers it would be important to describe the proactive search sampling process a little bit more. This research was fundamental to define the basic correction factors for infant mortality and general mortality for all municipalities; thereby a better description of the active search helps readers understand not only the planning and implementation of research, but also the construction of correction factors. For example, 133 municipalities were selected in two of five regions, what is the number of municipalities in total? How was the stratification selection process? What is the size of the population covered by the study?

In the same vein, making the description of the method clearer would be helpful on page 7, showing that the "Correction of the numbers of deaths Reported" is referring to municipalities across the country as well, not only to the two regions where the proactive search of deaths occurred. On page 7 the description is not clear enough - the proactive search municipalities and the entire country's municipalities - and, at times, the description is not clear on what is being talked about.
The first paragraph on page 7 is not clear: "The deaths or births found in the proactive search Not reported to any of the health information systems ... " It would be good for the readers to know more about the “health information systems”. How many systems are there? How did the authors search the vital events in those systems? 

The description of the standard population used is not clear enough. At the end of the 5th paragraph, page 7, it was said "For each year, the Brazilian population used was the standard population". Was the same Brazilian population used for each year or different populations by year?

I believe this manuscript will be a good contribution to the countries, which want to strengthen their vital statistics system, and to international organizations that have responsibility to strengthen vital health information.

**Level of interest:** An article of importance in its field

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

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

**Declaration of competing interests:**

I declare that I have no competing interests.