Reviewer's report

Title: Measles Vaccine Coverage and Factors Related to Delayed Immunization among 18-month-old and 36-month-old Children in Kyoto, Japan.

Version: 1 Date: 16 November 2004

Reviewer: Barbara Bardenheier

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General
This paper presents important, relevant information about measles vaccination coverage in a country where immunizations were mandatory until 1994. Results of this study should be used to target the children most at risk for not being immunized.

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

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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)

1) I could not find where the outcome measure was defined. It should be in the methods section, but it only says (pg 5) that logistic regression was carried out to assess the factors related to measles vaccine coverage. On page 7 it says “predictors of low coverage” but doesn’t define what is “low coverage”. So is the referent group for the odds ratios in tables 3 and 4 being vaccinated or not being vaccinated? It should be made more clear. Also, on page 6 it says the coverage rate among 18 month olds is 73.2% which isn’t rare so relative risks should be presented or at least mention that odds ratios might be inflated. The ORs presented for the 36-month olds is fine because the rate was 88.9% (only about 11% unvaccinated is rare).

2) On pg 3. first paragraph: “In the US, indigenous measles transmission has been interrupted by supplementary mass vaccination campaigns.” has been misquoted. None of the articles cited mention anything about the United States doing mass vaccination campaigns. Rather, they discuss ways of improving the existing infrastructure to increase vaccination coverage. The paper by Ciro de Quadros mentions that “Since 1991, all the PAHO member countries in the Americas, with the exception of Canada and the United States, have conducted catch-up measles vaccination campaigns.” Hence, maybe the authors confused all the Americas except Canada and the U.S. with the U.S.? This needs to be corrected.

3) On pg. 3 first paragraph, last sentence: it says Japan is reported to be the principal exporting country of measles to the U.S.- this should be clarified to say “in 2000” because that was the only year it was reported to be so.

4) On page 10 first paragraph, last sentence: the vaccine risks discussed are what is used by WHO’s Expanded Programme on Immunization. Is that what is being used in Japan?
not the expert in this area, but I do know that in some countries WHO uses a measles only vaccine and not the MMR which is mentioned in other cited papers (Lieu, et al). Which vaccine is used in Japan should be mentioned.

5) On page 8, the second sentence in the Discussion section the authors mention that since 1994 vaccination was no longer mandatory. That should also be mentioned in the introduction when the Immunization Law is first brought up, on page 3 in the second paragraph.

6) On Table 2 above the columns it says 'percentage of respondents answering correctly'. Because some readers might not know what 'correctly' is I think they that the authors should put the percentage that said either 'yes' or 'no'.

Discretionary Revisions (which the author can choose to ignore)

1) On page 5 the first two sentences in the results section: describes Kyoto City and its population, which really is background, not results, and should be moved to the introduction section.
2) On page 9, third paragraph last sentence is awkward. ‘may be probably lower’ is redundant. Need to reword.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

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

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.