Reviewer’s report

**Title:** A(H1N1) pandemic influenza and its prevention by vaccination: Paediatricians opinions before and after the beginning of the vaccination campaign

**Version:** 1  **Date:** 31 October 2010

**Reviewer:** Michaël Schwarzinger

**Reviewer’s report:**

1. Is the question posed by the authors well defined? Yes
2. Are the methods appropriate and well described? More or less (see below)
3. Are the data sound? More or less (see below)
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? No
6. Are limitations of the work clearly stated? No
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes
8. Do the title and abstract accurately convey what has been found? Yes
9. Is the writing acceptable? Yes

**Major Compulsory Revisions:**

The authors report significant increase in knowledge, beliefs and positive attitudes towards A/H1N1 pandemic vaccines among Canadian pediatricians after the mass vaccination campaign started on October 29, 2009. As a result, the proportion of pediatricians agreeing or strongly agreeing to recommend A/H1N1 pandemic vaccination to their patients increased from 84% before to 94% after the mass vaccination campaign started (Table 2).

I have two major concerns with the study results. First, explanatory factors of the willingness of pediatricians to recommend A/H1N1 pandemic vaccines to their patients (Table 3) were presented elsewhere based on the 714/912 (78%) pediatricians having returned the questionnaire before October 29, 2009 (reference 13 of the manuscript). As expected, the addition of 22% later respondents does not change the associations found previously.

Second, while the originality of the study is more about time trends in knowledge, beliefs and attitudes towards A/H1N1 pandemic vaccines among Canadian pediatricians, I am concerned that the cross-sectional study design has a strong potential for non-participation and selection biases. All 1,852 Canadian pediatricians were initially solicited by mail to respond to the survey in August-September 2009, with 2 reminders sent out before and after October 29,
2009. Overall, about 50% pediatricians responded to the survey. The authors do not provide any assessment of the representativeness of respondents versus all Canadian pediatricians, although variables such as the province of practice may be markedly associated with pandemic vaccination coverage (reference 40 of the manuscript). Moreover, the increase in acceptability of A/H1N1 pandemic vaccines among pediatricians after October 29, 2009, may result from a biased selection of respondents having more doubts about pandemic vaccination before the vaccination campaign actually started and then respondents who received the first shot when the vaccination campaign started. Table 1 provides some indication that the two samples seem comparable with regard to professional and demographic characteristics. Maybe some other attitudinal variables such as agreement with the usefulness to protect children with seasonal flu vaccine could help better figure out the direction and magnitude of a selection bias.

Minor Essential Revisions:

1) More details may be presented on the mass vaccination campaign in Canada: priority groups for vaccination, i.e., a first group including healthcare professionals; the use of mass vaccination centers versus family physicians and pediatricians?

2) Tables 1 and 2 refer to 914 early respondents, while 714 seems the actual number (page 8, first paragraph)

3) Table 3: unclear why 709 of 912 questionnaires were used in the multivariate analysis. While the analysis is adjusted on the “subset” variable (questionnaires received before or after October 29, 2009), why not presenting its OR?

4) Figure and multiple correspondence analysis: I’m not convinced such analysis and figure add to the study results; otherwise, a legend should describe all letters.

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.

Declaration of competing interests:

I declare that I have no competing interests