Reviewer's report

Title: Perceived risk, anxiety, and behavioural responses of the general public during the early phase of the Influenza A (H1N1) pandemic in the Netherlands: results of 3 consecutive online surveys.

Version: 1 Date: 21 July 2010

Reviewer: Mary-Louise McLaws

Reviewer's report:

Minor essential revisions:

Background:
1. Paragraph 1, last sentence: please give a reference.

2. Paragraph 2 last 2 sentences: For flow I would advise the 2nd last sentence “When the World...” be moved to the end of Paragraph 1. The last sentence “In the Netherlands...” moved to be the first sentence of Paragraph 1 and start the next sentence with ‘Nevertheless, during the 2009...’

3. Paragraph 3: Add Seale et al who performed a general public survey using cross sectional design.

Methods

4. Timing: The second data collection period has the end date, please give the start date.

5. Participants: This section needed several readings. To clarify who constituted the study group it would be helpful to use the first sentence to state the study population from whom the study group was selected. Please include that ‘all’ respondents of the first and second survey were invited to participate (ie unlike the first and second survey the third survey were not a random selected from the 1st and 2nd).

Online questionnaire:

6. For researchers not familiar with behavioural theories a very brief rationale for the choice of these two specific ones over say the theory of planned behaviour which includes a control construct would be helpful. A discussion about control on risk perception and intention might be useful to consider in your Discussion section.

7. Clarify that the three survey periods used the same survey.

8. Mention whether there were any constructs with a Cronbach alpha <0.6 dropped from the first step of the MLR model?

9. Has there been any test retest reliability of the 1-5 scale?
Analysis:
10. Move the first sentence to Participants. I would also move all development of constructs to the development of the online questionnaire to allow readers to fully understand how you’ve developed the constructs before moving to the next subsection of the methods. This will leave only the chosen statistical analyses used in this section.

Results:
11. It would be helpful for readers around the world to have lower, intermediate and higher education described briefly in the Methods section.
12. Have you examined the unemployment in the study group by age group? The study group is more likely to be 50 years of age or older and less likely to have an 18 year child living at home suggesting that your study group may be retired rather than unemployed.
13. Mention the number of steps from the first to the final model.

Major revision:
Methods - Online questionnaire:
14. The development of several composite scales is usual practice and Table 2 explains each item for each construct. However, once you make a decision to use a composite scale an examination of the individual items (as in Table 2) undervalues the construct. I would move Table 2 to an appendix with the Cronbach alpha for survey 1 and remove all analysis between the survey periods.
15. With sample sizes relatively large and so I am surprised all constructs of a 1-5 scale were recoded into a dichotomous scale. Have you attempted a multiple linear regression entering the independent constructs as 1-5 scales (sum all items and divided by total number of items to get the scale back to 1-5) with the dependent variable on 1-5 scale. Then present the range, median and interquartile range for each in a new Table 2. Use the interquartile range to standardise the beta coefficients (IQR*beta coefficient prior to exponentiation) of each of the significant predictors in the two models. This way you can compare the effects of each construct on the dependent variable because each construct is now standardised.
16. Table 3 presents the survey 3 – why not model surveys 1 and 2 as the three surveys represent different periods during the 2009 H1N1 season.

Analysis:
17. I think the choice of presenting both univariate analysis and multivariate models leave readers with the dilemma about which analysis is preferable. Present the multivariate if the premise is that there will be a complex statistical dependence among independent variables. If you believe that participants’ perceived severity is not developed in the absence of say perceived vulnerability then presenting univariate analysis as well only causes confusion rather than add to the understanding of behaviour. On this basis I would remove the univariate
analyses from Table 3.

Results:

18. Given my suggestion that Table 2 be removed to an appendix without analysis between surveys for individual items the results pertaining to this table can be removed from the Results and focus of the impact of the your models.

**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.