Author's response to reviews

Title: We should not be complacent about our population-based public health response to the first influenza pandemic of the 21st century

Authors:

Heath KELLY (heath.kelly@mh.org.au)
Patricia PRIEST (patricia.priest@otago.ac.nz)
Geoff MERCER (geoff.mercer@anu.edu.au)
Gary DOWSE (gary.dowse@health.wa.gov.au)

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Author's response to reviews: see over
Dear Editor,

Re: 1453806101466629 - We should not be complacent about our population-based public health response to the first influenza pandemic of the 21st century

Thank you for the opportunity to respond to the reviewers’ comments.

The points made by the reviewers are listed below by category with our responses.

• Border Screening

Reviewer 1 (compulsory)
The authors stated that border screening was of little value. It is true that some passengers may be in incubation period or have asymptomatic infection. But these facts do not exclude a possibility that some infected passengers can be detected at the border. Cowling et al reported that entry screening for pandemic (H1N1) 2009 had led to short-term delay in local transmission (BMC Infect Dis. 2010 Mar 30;10:82.). There are certain limitations for border screening as they discussed, but there are also some potential benefits despite these limitations.

Reviewer 2 (discretionary)
The authors cogently argue that border control measures were almost totally ineffective, as had indeed been suggested by natural history of influenza, as well as by modelling studies. One may wonder which was the rationale behind it in national pandemic plans, considering that border controls have been attempted also by several countries that are not as "islands" as Australia.

Response
In response to Reviewer 1, we have amended the final paragraph of the border control section to acknowledge that some cases were detected at the border, and to cite the paper by Cowling et al. We have slightly altered the wording of the second paragraph of the border control section to better reflect the perplexity about the wide use of border control measures that we share with Reviewer 2.

• School closures

Reviewer 1 (compulsory)
Several negative aspects of school closure in Australia are mentioned with some data, and they concluded that school closure in Australia 'would not have been effective in interrupting the spread of pandemic' without providing any actual data.

Reviewer 2 (discretionary)
Several other studies beyond [27] exist on modelling school closures. The authors could mention at least Cauchemez S, Valleron AJ, Boelle PY, Flahault A, Ferguson NM. Estimating the impact of school closure on influenza transmission from sentinel data. Nature. 2008;452:750–4 where it is shown that limited school closures cannot interrupt an epidemics, but can delay the peak and, if well timed, decrease peak incidence and somewhat attack rate.
The experiences in Japan and Hong Kong cited by the authors show indeed the effectiveness of school closure in temporarily reducing infection transmission, although not necessarily leading to an overall positive effect. I agree with the authors that these experiences should be accurately reviewed, in the planning of more flexible pandemic responses.

Response
Our description of the patchy and poorly implemented school closures in Australia, in comparison with the information from modelling studies, is intended to show that in principle what actually happened in Australia would be unable to interrupt the pandemic – there are no actual data available that demonstrate this. We have changed the sentence to “Too limited in scope and time, these strategies could not have been effective in...”

Yours sincerely

Dr Heath Kelly
Head | Epidemiology Unit
Victorian Infectious Diseases Reference Laboratory
10 Wreckyn Street North Melbourne Victoria 3051 AUSTRALIA
t: +61 3 9342 2608 | m: +61 437 098 423
f: +61 3 9342 2666 | e: heath.kelly@mh.org.au

Associate Professor & Adjunct Associate Professor
School of Population Health, University of Melbourne
School of Computer Science, University of Western Australia
National Centre for Epidemiology & Population Health, Australian National University