

## Correspondence

### Responding to gaps in India's health system

Possibly under media pressure and uncertainty prevailing in India during the time, John and Muliylil<sup>1</sup> expressed their views on the gaps in India's health system. There might be inadvertent lapses, in common with other countries' pandemic plans including UK. Even then 'The UK performed much better than most, particularly the US, where in the early stages of epidemic growth, case information on attack rates and morbidity was released slowly, despite high case numbers'<sup>2</sup>. Every country has its own priorities. India's burdens of diseases like tuberculosis, malaria, rabies are more than other countries. So far the virus is proving relatively mild, with potentially less impact than a standard seasonal flu outbreak<sup>3</sup>. Pandemic will pass at its own course but we have to keep on struggling for controlling diseases like tuberculosis, HIV, malaria, rabies, diarrhoeal diseases, *etc.*

Clinically one cannot differentiate H1N1 influenza (swine flu) from any other influenza. The morbidity and mortality due to common influenza is also similar to H1N1. The drug available is Oseltamivir, is also same for seasonal influenza. If one cannot differentiate and treatment remains the same, should we test and report all suspected (except high risk) cases of H1N1 influenza exhausting country's limited resources. The new guidelines (with categorization) have helped us in reducing unnecessary investigations. The most recent recommendations from the World Health Organization are that people who are not considered at high risk need not be treated<sup>3</sup>. In such a situation, our vigilance is important but we should not forget our other true priorities.

In the response to the emergence of a novel H1N1 influenza virus and its subsequent spread worldwide including India, existing national health priorities should not be neglected. Much resource might have been diverted for influenza pandemic in term of diagnosing and treating H1N1 influenza. Costly equipment like

real time PCR is being used for the diagnosis in addition to other expenses of transporting sample long distance maintaining low temperature. The true positivity rate of the diagnostic tests done throughout the country may be clue to the cost-effectiveness. Who are the gainers? One of them possibly the drug company, the only manufacturer of Oseltamivir is gaining by huge sale of the drug to the detriment of resistance and adverse effect<sup>3</sup>. Oseltamivir has provide a partial help by offering a modest reduction in the duration and severity of symptoms<sup>3</sup>.

But we should mainly focus at calling for a wiser use of the available national surveillance data. Public health interventions should be guided by facts (not by emotions), and one should always take their cost-effectiveness into account. We should not forget that it is a Pandemic not Endemic. The pandemic will hopefully pass according to time without causing additional problems. It is not known the extent to which the national pandemic preparedness plans and control strategies can slow or stop the process. However, despite preparedness efforts, it appears that, particularly local chains of virus transmission can sustain autonomous dynamics which may lead to the next pandemic. Forecasts of influenza experts usually rely on information related to new circulating strains. Predictions based on simulations from a stochastic model with the values consistent with recent estimations from the out break in Mexico and recently published data, show that a multi-wave pandemic with a large attack rate is possible and may be curtailed using different immunization strategies<sup>4</sup>. In the absence of existing human herd immunity to this virus, only immunization may provide a significant hope of suppressing the long-term impact of this newly emergent virus. While we should prepare for the influenza pandemic, but we must also consider other priorities to manage the new and existing challenges.

**Prasanta R. Mohapatra**

Department of Pulmonary Medicine  
Government Medical College & Hospital  
Chandigarh 160 030, India  
prmoapatra@hotmail.com

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**Authors' response**

Mohapatra's letter<sup>1</sup> (in response to our editorial<sup>2</sup>) addresses the theme of gaps in India's health system two ways: influenza-specific gaps and gaps in the context of tuberculosis (TB), malaria, rabies, *etc.* While the influenza-specific gaps in the health system were described to be "inadvertent", the gaps in the programmes of control of TB *etc.*, were implied to be real and more deep-rooted<sup>1</sup>. We agree. None of the listed diseases (and many more not listed) is under control. There is no programme against rabies. Malaria is increasing in geographic prevalence. Its earlier control status is unsustainable. The incidence/prevalence of TB infection or disease has not declined in spite of decades of control efforts. These examples illustrate how serious the gaps really are in India's health system.

The fear that the pandemic influenza virus may "sustain autonomous dynamics" through local chains of transmission and lead to the next pandemic is unwarranted. What might happen is that the pandemic virus may become endemic and exhibit 'antigenic drift'

and 'reassortment'. Pandemic influenza is not seeded by antigenically 'drifted' but 'shifted' virus that finds the entire world population immunity naive.

Neither the 1917 pandemic influenza virus (also H1N1 but not the parent of the novel 2009 pandemic H1N1 virus), nor 1957 pandemic H2N2, nor 1968 pandemic H3N2 virus re-emerged as another pandemic. When H1N1 virus closely related to the 1917 pandemic virus re-appeared in 1977, it did not cause pandemic since most of those who were born before 1957 were immune to it. Currently the descendants of 1968 H3N2 and the 1977 H1N1 are endemic; it will be interesting to watch if the 2009 pandemic virus (with novel swine influenza antigens) will replace the currently endemic H3N2 and H1N1 viruses or simply co-circulate with them.

The insinuation that the Government's liberal policy of testing and treating more individuals than necessary was to provide undue gains to drug manufacturing companies is an interesting one. We did not suggest any deliberate policy with ulterior motives. On the other hand this policy was illustrative of the gap in the epidemiological expertise available to the Government. Testing policies for public health purposes and for healthcare needs were mixed up, resulting in the said policy. We agree that the end result was probably undue gains to industry.

**T. Jacob John & Jayaprakash Muliylil**

Christian Medical College  
Vellore 632 002, India  
tjacobjohn@yahoo.co.in  
jayaprakash@cmcvellore.ac.in

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