

Authors' response

Mohapatra's letter¹ (in response to our editorial²) 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-rooted¹. 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.

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References

1. Mohapatra PR. Responding to gaps in India's health systems. *Indian J Med Res* 2010; *131* : 461-2.
2. John TJ, Muliylil J. Pandemic influenza exposes gaps in India's health system. *Indian J Med Res* 2009; *130* : 101-4.