

## Emerging infections and sensationalism: in Aesop's fable, the boy who cried wolf had a dreadful fate

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In this issue of CMI, Memish *et al.* [1] show that circulation of the Middle East respiratory syndrome coronavirus (MERS-CoV) in Saudi Arabia is much lower than was feared, announced, or predicted. One year after the discovery of this novel coronavirus, the Saudi Arabian Virology Reference Laboratory has tested 5065 people for MERS-CoV direct detection with WHO-recommended real-time RT-PCR tests [2,3]. Interestingly, no significant increase in detection rates was observed in a period of 1 year. Moreover, mass gatherings of people in the Kingdom of Saudi Arabia during the Hajj pilgrimage in 2012 and 2013 were associated with neither an increased number of cases nor reported clusters of cases [4], suggesting poor or moderate interhuman transmission. The findings of this important study [1] are congruent with results reported in approximately 100 peer-reviewed published studies. They tend to temper the alarming initial predictions and claims for pandemic potential. On the other hand, one must remember that the alert does not halt the circulation of common pathogens, which silently cause many more casualties than the newcomer.

The last decade has witnessed a large number of emerging or re-emerging infections. It is obvious that improving our capacity to respond is an important goal. It is important for preparedness and response programmes to be developed, and gaps in capacities must be identified and corrected [5]. These programmes have to provide the medical community with detection tools that are applicable in routine diagnostic laboratories to enable the rapid detection of cases and to monitor, in a timely manner, the unpredictable dissemination of emerging pathogens.

When the SARS coronavirus emerged a decade ago, the discoverers of the virus provided public access to sequence data, thus allowing all laboratories with reasonable equip-

ment to implement detection of the virus. The same happened with MERS-CoV weeks after the virus was discovered [2,3]. In contrast, despite public announcement of the discovery of dengue 5 virus on 15 October 2013 [6], sequence data are still not publicly available for diagnostic purposes, making laboratory preparation for the diagnosis of dengue 5 impossible for academics and public health authorities, and resulting in serious gaps in preparedness and response programmes. The reasons for this long embargo are not clear, but may relate to intellectual property issues.

There is no doubt that tackling emerging infections demands efficient preparedness for rapid risk assessment of the alert. Regarding this issue, overreaction (which is to be expected during the first weeks after the alert) should be moderated by the dissemination of reassuring evidence, if any, that the situation is less catastrophic than initially believed or predicted. For mysterious reasons, good news is rarely spread with enthusiasm in public media. Surprisingly, some scientists tend to follow the same trend, by acting as Cassandras and doom-mongers even when the scientific evidence contradicts this attitude, as exemplified with H5N1 and H7N9 influenza [7,8].

It is our duty as physicians to avoid disproportionate reactions, and to have a moderate and wise attitude when it becomes clear that a newly discovered pathogen is clearly less dreadful than initially feared: one should not throw oil on the fire, because focusing attention on one target that is, in fact, not so serious reduces the amount of attention given to other agents that cause many more casualties 'silently'. Sensationalism must be avoided in medical journals, because it is in conflict with the Hippocratic Oath. One should keep in mind that 'the boy who cried wolf' (in Aesop's fable) had a dreadful fate!

## Transparency Declaration

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The author declares no conflict of interest.

## References

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1. Memish ZA, Al-Tawfiq JA, Makhdoom HQ *et al.* Screening for Middle East respiratory syndrome coronavirus infection in hospital patients and their healthcare worker and family contacts: a prospective descriptive study. *Clin Microbiol Infect* 2014; in press.
2. Corman VM, Müller MA, Costabel U *et al.* Assays for laboratory confirmation of novel human coronavirus (hCoV-EMC) infections. *Euro Surveill* 2012; 17: pii: 20334.
3. Corman VM, Eckerle I, Bleicker T *et al.* Detection of a novel human coronavirus by real-time reverse-transcription polymerase chain reaction. *Euro Surveill* 2012; 17: pii: 20285. Erratum in: *Euro Surveill* 2012; 17: pii/20288.
4. Rashid H, Azeem MI, Heron L, Haworth E, Booy R, Memish ZA. Has Hajj-associated MERS-CoV transmission occurred? The case for effective post-Hajj surveillance for infection. *Clin Microbiol Infect* 2013; doi: 10.1111/1469-0691.12492.
5. De Sousa R, Reusken C, Koopmans M. MERS coronavirus: data gaps for laboratory preparedness. *J Clin Virol* 2014; 59: 4–11.
6. Normile D. Tropical medicine. Surprising new dengue virus throws a spanner in disease control efforts. *Science* 2013; 342: 415.
7. Morens DM. Editorial commentary: pandemic H5N1: receding risk or coming catastrophe? *Clin Infect Dis* 2013; 56: 1213–1215.
8. Lam TT, Wang J, Shen Y *et al.* The genesis and source of the H7N9 influenza viruses causing human infections in China. *Nature* 2013; 502: 241–244.