Will the severe acute respiratory syndrome epidemic recur?

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This article adds to the debate section that was published in the October issue of the journal (2003;57:770–7)

The severe acute respiratory syndrome (SARS), which appeared in China in November 2002 and disseminated rapidly to 29 countries, was the first emerging disease and the first pandemic of the current century.\(^1\)\(^2\)

Since then, a lot of research has produced a great amount of relevant information and knowledge. Although the announcement of the last case in June brought some relief, it also raised several new questions; the most important being: has SARS gone forever? (or: will it be back?). The answer to this question is not only expected from the scientific community, but practically by all people who were exposed to the massive media coverage of the pandemic, which made even those removed from the pandemic epicentre feel very close to it.

Several public health measures have been appointed as relevant for controlling SARS. The World Health Organisation, which coordinated the international effort, was vital in creating an atmosphere of international solidarity so absent in these unilateral times. Although the intensity of transmission decreased after the control measures were intensively applied, it is not safe to conclude that the end of the pandemic was the exclusive result of the application of such measures (any evaluator knows how misleading this type of evidence could be), rather than a consequence of other unknown factors.

In addition, a lot of unanswered questions related to the appearance, dissemination, and disappearance of SARS remain. As such, it is necessary to explore any clues that increase our understanding of the chain of events over the course of these past months. Examples of such questions are: What conditions favoured the possible emergence of the virus from the animal to the human realm? Were there any special events, in Guangdong (China) that have triggered the traffic of the virus between species? Why did several countries (such as Russia, Japan, and several European countries) with intense contacts with the affected areas not have any cases? How important are the different transmission routes? Could the virus be transmitted by other means (for example, water and sewage)? Some of these questions will be answered over the next few months, others in the coming years, and others perhaps never. But we must never stop asking questions, as SARS is not an isolated entity, but rather an expression of great disturbances in our physical and social environment.

With so many uncertainties, everyone must take a precautionary stance and work with the idea that SARS will come back. As a consequence, it is of maximum relevance to increase the capacity of rapid detection of cases, to maintain active international collaboration, and to implement all control measures supposed to be effective, when necessary. At least two important questions must be raised at this point: one, which is political, concerns information on infectious disease occurrences, as some governments treat this as classified and do not easily share such information; the other concerns how to improve the capacity of implementing diagnostic, curative, and preventive measures in the great majority of countries where, not by chance, the health systems present poor performance.\(^1\)

