Reviews in Focus: SARS

The Focus section is a new regular feature that brings together reviews of books on related subjects to simulate debate and mark historiographic trends.

Thomas Abraham, *Twenty-First Century Plague. The Story of SARS*, Baltimore: The Johns Hopkins University Press, 2004. Pp. 176. \$24.95 (hbk). ISBN 0-8018-8124-2.

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SARS, like AIDS, is one of those elite acronymic words now seared into modern consciousness. Its shell-burst dissemination to dozens of countries in the first half of 2003, infecting over 8,000 persons and killing one-tenth of them, and its ominous pandemic potential, captured headlines for months. SARS also caused severe social and commercial disruption, forcing economic losses of approximately \$30 billion. Like HIV, SARS (Severe Acute Respiratory Syndrome) typifies the sort of unexpected new epidemic disease that can 'emerge' in response to the rapidly changing scale and intensity of modern human economic activity, environmental encroachment, and physical mobility.

This book, by an experienced Asian journalist, tells the story well. Thomas Abraham recounts, with impressive detail, the evolution of the short-lived pandemic and enriches the tale with insights into its political, cultural and commercial undercurrents. It chronicles the role of the World Health Organization (WHO), including its place in coordinating a remarkable (though inevitably competitive) international scientific collaboration to identify the virus responsible. The actual source of the SARS coronavirus remains uncertain. The evidence points to a zoonotic source, probably arising from animal husbandry or from live-animal trading in wet markets. As the author reminds us, most new infectious agents acquired by humans since agrarian settlement began have come from zoonotic sources via the occasional microbial mutant that successfully crosses the species barrier.

SARS emerged from the world's backblocks. In November 2002 a middle-aged villager in Guangdong province, southern China, was admitted to hospital with a mysterious respiratory disease. By the end of the year, another 25 persons developed similar severe respiratory symptoms, including seventeen health-care workers exposed to just two of the cases. Early in 2003 information began to filter out about these, public anxiety rose, and the provincial centre for disease control in Guanghzou despatched investigators. Soon the disease reached adjoining Hong Kong, where both hospital 'super-spreading' and defective sewerage design in high-rise housing amplified the spread. By March the WHO was involved and coordinating surveillance activities and control policies. Cases began to be reported more widely, especially from Canada. Propelled by modern air travel, SARS extended to all continents and 31 countries.

Meanwhile, the Chinese government remained secretive and insisted that the outbreak was limited in size, under control, and most likely due to 'atypical pneumonia'. The secretiveness was heightened by the politically exquisite timing of the outbreak, just before the central handover of power from Jiang Zemin to Hu Jintao. Party authorities wanted no rocking of the boat. Nevertheless, some courageous internal criticism (unthinkable several decades ago) and the manifest increase in the outbreak in Beijing during March–April finally forced the government to concede the magnitude of the problem; by now much greater than if open reporting had been followed earlier. This point was

made forthrightly by the then WHO Director-General, Gro Harlem Brundtland, in direct criticism of the Chinese government.

The enthusiastic reader can easily engage in the blow-by-blow detail. This is a classic tale of medical drama, intrigue, investigation, political cover-up, and human foible. Yet much of the book's value lies in its first and final chapters which set the issue in wider context and explore the significance for future pandemic risks. The opening chapter explores how the modern world creates diverse opportunities for the emergence and spread of human infectious diseases. Since the mid-1970s a complex mix of social, environmental, commercial, bio-technical, and behavioural influences has caused several dozen new infectious diseases to appear and others to rebound. Abraham examines the emergence of HIV, the Nipah Virus disease, monkeypox in southern USA, and successive pandemics of cholera. These illustrate the increasing potency of, respectively: changes in sexual mores, international tourism, and medical technology (blood transfusion); massive regional environmental changes and intensified livestock production; international trade in exotic pet animals; and the rapidity and reach of modern overland and sea travel. In two of the author's less felicitous phrases, today's societies are 'uniquely vulnerable' despite their 'infinitely sophisticated' modern defences. This was the backdrop to SARS.

Most recent books about this topic area (nearly all by American authors) have used a militaristic idiom to evoke a battle between men and microbes entailing attack, defence, invaders, enemies, battles, conquest, winning, and losing. This book, too, strays often into that idiom. Indeed, the author tells us that 'the analogy of war' echoes throughout the SARS story. This is unfortunate, since the meta-lesson from recent experience is that infectious agents are a natural, non-negotiable, part of our world. They too are engaged in a struggle to survive and thrive. With genetic agility, they adapt quickly to the new niches that we restless, intrusive, humans create. This adaptation is done out of self-interest without malign intent. Certainly, within the infected individual there is defence and counter-attack by the body's immune system and, often, subterfuge by the infectious agent. But at the population level, and over time, we the human species cannot 'conquer' the microbial world in any lasting sense. Rather, we must learn to cohabit judiciously and to protect ourselves.

The final chapter discusses the significance of SARS for our inevitable future transactions with the microbial world. This brief outbreak highlighted defects in national health systems, in international data-sharing, in pandemic preparedness and in our readiness to constrain the often increasingly intensive animal—human—microbe contacts that escalate the likelihood of new zoonotic infectious diseases. Compared to the millions of deaths threatened by a new human-transmissible strain of avian influenza, the spectre raised by current stirrings of the unusually lethal H5N1 avian influenza virus, the SARS outbreak was a modest event. SARS may have helped us learn the larger lessons about the conditions that predispose to such new infections and about the dimensions of public health preparedness that will be needed, both nationally and internationally.

TONY MCMICHAEL

The Australian National University, Canberra doi: 10.1093/shm/hki053

David P. Fidler, SARS, Governance and the Globalization of Disease, Basingstoke: Palgrave Macmillan, 2004. Pp. 240. £47.50 (hbk). ISBN 1-4039-3326-X.

One of the most striking aspects of the SARS epidemic was its timeliness in giving form to the slew of recent warnings about the threat from emerging infectious diseases. SARS was, of course, far from the first new infectious disease to appear but it was, and for the moment remains, the only one to be efficiently transmitted by respiratory means. As had been predicted, it spread rapidly across borders with the help of air travel. As had