

A Tale of Two Viruses: Social Responses to AIDS and SARS

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WHAT WOULD THE WORLD LOOK LIKE today if, back in the early 1980s, the response to the first cases of what would eventually become known as AIDS had been the same globally aggressive, cooperative, and successful effort as was seen during the recent SARS epidemic? Given that the poverty endured by the vast majority of AIDS victims—the same grinding poverty that greatly increases their vulnerability to infection with HIV in the first place—greatly increases the likelihood that they will die from some other preventable cause (e.g., tuberculosis (TB), malaria, work-related accidents, vaccine-preventable illnesses, or in childbirth), we can begin by speculating that at least some of the victims of AIDS would still have succumbed to some other pathology.

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It is probably still safe to assume, however, that tens of millions of people who have died or are now dying from AIDS, most of them in the primes of their lives, would nonetheless be living productively amidst their families and communities. Over twelve million children in sub-Saharan Africa would not be orphans today. The life expectancy in countries such as Botswana would have, in a hopeful world, continued to creep upwards instead of plunging from 63.3 years of age to less than 40 years in under two decades. In some of the poorest parts of Africa, Asia, Latin America, and Eastern Europe, public health care systems and their workers would not have been pounded to dust under the weight of the opportunistic illnesses and the protracted deaths endured by victims of AIDS.

We could be wildly optimistic for a moment and speculate about how all of the direct and indirect resources invested in fighting the HIV/AIDS epidemic (billions of

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dollars behind us, probably trillions ahead) could have been used to combat other killers such as TB and malaria. With the kind of full-scale assault on these diseases that those resources and focused attention could have engendered, we could have entered the new millennium marking the eradication or near-eradication of these ancient diseases. We could have been free to turn our attention to primary health needs such as the treatment of chronic diseases, the protection of infant and child health, the promotion and regulation of health in the workplace (making this a positive feature rather than a negative outcome of the globalizing of economies), and the assurance of universal maternal health and safety. In other words, globalization would now be synonymous with the universal diffusion of beneficial technology and humanitarian aid to those most in need of these advances. But perhaps most significantly, the global community could have begun to productively address the main roots of all of these deficiencies and illnesses: poverty and inequality.

200 This optimistic scenario first requires that we accept the assumption that the resources spent on AIDS would have been available for the investment in global health described above. This is where we encounter hard reality, because it is very easy to argue that the rapid response to SARS was less a response to a specific illness and its threat to humans than it was a response to a threat to areas of high economic traffic. Rather than focus on the demographic characteristics of the majority of those stricken by SARS (as was done and continues, to a lesser extent, with the AIDS epidemic), both the medical and the popular discourses surrounding the disease largely focused on how the airborne nature of SARS also made it an immediate threat to both international travelers confined on long flights with someone already infected and people who may have been exposed while traveling for business or vacation. The differing modes of transmission for SARS and AIDS cannot, however fully explain the widely divergent responses, however. TB is also an airborne disease, and it too has been transmitted on long-haul flights. But TB remained the leading single infectious killer of young adults throughout the "antibiotic era" without engendering the sort of coordinated response that SARS triggered within months of its description.

The first cases of SARS are now believed to have emerged from the Guangdong province on the Pearl River Delta of mainland China in November 2002. However, because the Chinese government did not report the illness, the World Health Organization (WHO) issued the first global alert about SARS on 12 March 2003, after tracking the outbreak from around mid-February in Vietnam. On March 22, WHO announced that both the virus and an effective test to diagnose it had been identified. On May 16, WHO convened an international meeting in Geneva to address SARS. By early June, the epidemic was subsiding or contained in all of the most heavily affected countries.

The initial response to AIDS was markedly different. The disease was first recognized as a distinct syndrome in 1981. We now know, given the often-delayed onset of symptoms, that the virus was beginning to spread in the 1970s, perhaps much earlier.

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identify what would become known as HIV. The former was characterized by unprecedented levels of international and inter-agency cooperative effort, as dealing with SARS became a priority of governments, international organizations, and multinational corporations around the world. In contrast, according to some accounts, the first responses to AIDS were marred by secretiveness, scandals, territorial infighting, and "turf wars."

It took years for AIDS to generate the concern that was evident within the first three months of the SARS epidemic. The primary reason has to do with the fact that, even after the etiology had been identified as infectious, the general belief was that the epidemic was and would remain contained within four distinct sub-populations (the "4-H theory"): Haitians, hemophiliacs, heroin addicts (intravenous (IV) drug users), and homosexuals. This theory would persist in isolating the disease. Furthermore, from the start, the popular and medical writing on the AIDS epidemic identified it as a disease of *individuals*—particularly of individuals who had distinct ethnic and social characteristics and who were classed as somehow apart from the general population.

The emphasis on individuals and bounded risk groups was illustrated by the sensationalism that surrounded the announcement of the discovery of patient zero, a gay man whose name was widely reported and whose behavior was dissected in the media. If there was no general urgency to act in the early years of the AIDS epidemic, it was because there was a sense, from policy makers on down, that the disease was contained within distinct populations and, as such, did not pose a significant risk to the general public. Though children and hemophiliacs were characterized as innocent victims of the disease, HIV positive Haitians, gay men, and IV drug users—by virtue of where they were born, what their sexual preferences were, and whether they practiced behaviors considered morally reprehensible by much of mainstream society—had few public champions. These moralizing judgments aided and abetted the ability of the world community to compartmentalize the disease as something that was a

threat to neither general health nor to the economy.

This is not to say that, from the start, there were not small, highly dedicated, but generally isolated, groups of public health workers and scientists who almost immediately recognized the threat posed by the HIV virus and worked tirelessly to identify the microbe and its transmission patterns in an effort to contain the growing epidemic. But without human or financial resources, without high-level government recognition that AIDS was indeed a serious threat, and without the ability to move the popular press beyond its sensationalistic, accusatory discourse, many of these public health leaders were also marginalized. The expansion of the epidemic resulted in efforts to conceal the mounting threat from the general public, rather than increased investigation and treatment. The sluggish response to the spread of AIDS within the blood banking communities of the United States and France stands as a case in point.

The contrast with SARS is stark. Few people outside of China knew where Guandong province was, but that was relatively unimportant in establishing the need for an urgent response to SARS. In a globalized world, once SARS emerged, it was only a matter of time before it could make its way anywhere. Much has been made of the negative economic impact of the quarantines and restrictions on travel imposed from Singapore to Toronto. In fact, this may be the first disease epidemic about which we can find a higher volume of citations in *Factiva.com*, the Dow Jones-Reuters business and industry compendium, than in Ovid's MEDLINE, which indexes international biomedical information and articles. For example, note the following:

MONTREAL: Clothing retailer Pantorama Industries Inc. said Thursday a 12.7-per-cent drop in sales, some it related to the impact of SARS on retail shopping in Ontario, resulted in a quarterly loss of \$3.27 million. ... *Edmonton Journal*, 30 May 2003;

BEIJING: The SARS outbreak could cause major domestic carriers to record losses for all of 2003 as plummeting passenger numbers take a huge bite out of revenues, aviation analysts said... *AFX International Focus*, 30 May 2003;

KHON KAEN, Thailand: The 21-member Asia-Pacific Economic Cooperation (APEC) forum drew up an action plan Friday to cope with severe acute respiratory syndrome (SARS) and mitigate its impact on trade and investment... *Organization of Asia-Pacific News Agencies*, May 2003.

There was, from the start, the recognition that short-term hardship from quarantines was more acceptable than increased spread of the disease (the rationale for every quarantine since the Dark Ages). But never before has the focus and outcome of that rationale so often been quantified in economic rather than human terms. As *Businessweek Online* noted of Hong Kong, its:

its streets are eerily empty. The jostling, noisy crowds that characterize this fast-paced city have retreated in fear. For a city that depends on the service sector to generate 86% of its gross domestic product and is powered with hundreds of thousands of small businesses, this disease could be a real economic killer.¹

The alarmist tone in the mass media sprang from the recognition that SARS was an illness easily and rapidly spread by airborne microbes. SARS quickly spread through the crowded buildings and peri-urban shantytowns populated by the destitute and the working poor in China, yet the global media largely focused on the ease of transmission among airline passengers and people staying at international hotels. As of September 2003, WHO reported the total number of known SARS cases to be 8,098, among them 774 confirmed fatalities. Cases were found in 29 countries around the world, with by far the greatest number (5,327) in mainland China, followed by Hong Kong (1755) and Taiwan (346).² Eighty eight percent of the fatalities also occurred in these three regions. So, the majority of people who contracted and died from this disease were working-class individuals in China, including over 1,000 who were identified as health workers. But they were very much citizens of the globalized economy—indeed of its leading edge.

There were no fatalities among the 29 confirmed cases of SARS in the United States, supporting the contention that with correct diagnosis, access to health care, and the rapid initiation of supportive therapy, this was, in the end, a dangerous but manageable disease, not unlike a particularly virulent flu. As with AIDS (or TB or malaria or a host of other diseases), the people most vulnerable to this disease were poor people living in crowded conditions with limited or no access to health services. The difference was that in a world of trade and commerce, the ease of transmission made it a viable threat to the mainstream populations within the developed world. The mere possibility of spread and the resulting economic downturn mobilized an unprecedented coordinated response.

The reaction to AIDS was comparatively sluggish and uncoordinated. By December 1983, there were 1,146 people in the United States alone who had *died* from AIDS; however, it wasn't until several months later that blood banks began testing for HIV in their blood products. And it would be over three more years (and over 20,000 U.S. deaths) before the disease was first mentioned in a speech by President Ronald Reagan.³ AIDS had long since crossed international borders by this time and begun the inevitable expedient growth in infection rates. Today, it is estimated that 28 million people have died of AIDS worldwide since the disease was first identified and that over 42 million people are now infected with HIV.

There are dissimilarities between AIDS and SARS, many of them rooted in biology and natural history, that could account for some of the differences in the initial

responses to these diseases. For example, it was discovered within two months of the first SARS cases that the responsible organism was a new variant of the well-known coronavirus, the same virus group from which the common cold emerges. HIV, on the other hand, was a highly complex, newly described virus that demonstrated significant variation. This variation, referred to as *extensive sequence heterogeneity*, leads to muta-

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tion into groups and subtypes that in turn can each be composed of multiple subtypes that can subsequently form still new variants. Thus, a much greater effort was required to identify the causative organism of

AIDS.⁴ Also, though SARS has a well-defined, recognizable constellation of primary symptoms, AIDS was actually the underlying cause for a fairly wide array of infections and diseases (e.g., Kaposi's sarcoma, *Pneumocystis carinii* pneumonia, and toxoplasmosis), many of which were uncommon in humans or presented in an atypical fashion. It required the identification of some commonality to reveal that these unusual infections were themselves actually a symptom of an underlying disease. In the case of AIDS, it was the discovery that many of the earliest victims in the United States shared one feature: they were gay men. This in turn resulted in an effort to identify some behavioral component, both beyond or related to the fact that they were men having sex with men, before attention finally turned to the search for an underlying pathogen responsible for the destruction of cell-mediated immunity.

But neither the complexity of AIDS nor the layers of illness and disease that had to be peeled away to find its underlying cause, can fully explain the failure of serious investment in resources and efforts during the first years of the epidemic. The way in which the costs of the AIDS and SARS epidemics are reported is illustrative of their respective places in the world view: the cost of the SARS epidemic varies widely but most reports now cite figures in excess of 30 billion dollars. But this is not simply the cost of the effort to isolate and identify the microbe, nor the massive, global quarantine efforts, not even all of these combined *plus* the treatment that was required by those infected. This is the estimate of what *did not happen*: of the flights cancelled, the hotel bookings that went unfilled, the theater performances that never occurred, the stocks that did not rise. In other words, when the cost of the SARS epidemic is referred to, we are speaking of its negative impact on the global market and of the economy of important financial centers and not the lives it destroyed.

On the other hand, when the cost of the AIDS epidemic is discussed, it is a discourse of victims, scarcity of resources, of impossibilities and regrets. Again, it negatively individualizes a global disaster by still frequently blaming the victims of the epidemic while simultaneously asserting the impossibility of treatment. This was never even a remote consideration with SARS. In fact, until it was clearly and relatively recently articulated that the entire sub-Saharan region of the African continent was imperiled by the AIDS pandemic—with every indication that it was also making rapid inroads into heavily populated regions such as China, India, and Eastern Europe—most of the discussions about the economics of AIDS centered on the impossibility of treating people in poor settings. The impetus that guided the response to the SARS epidemic has just, in the past four to five years, begun to make its way into discussions about AIDS: healthy economies require healthy communities. It is an indictment of the current dominant global view that it took a critical mass of impoverished populations in impoverished countries to be imperiled before real action began to stir.

So while the immediate and successful response to SARS was an impressive display of a highly successful global collaboration, we must pause to ask why it is that we found this so extraordinary, so noteworthy. Perhaps the more valuable question, the one that teaches us some critical but very painful lessons is why *wasn't* this done with AIDS?

This began with the fantasy of a world in which AIDS had been as decisively addressed and controlled in the early 1980s as SARS was in 2003. It ends with the idea that, having missed that opportunity, we still are able to draw on the years of hard-learned lessons within both the context of AIDS and other infectious diseases in relation to the response to SARS. For a start, we had a graphic demonstration of not only the value but the reality of the international community's ability to move quickly, cross institutional and national boundaries, draw on experience and expertise within all levels of the health care and research communities, share rather than reproduce research and effort, and leave all of the regrets and territorial behavior in the dust of productive, cooperative action. It works best when this effort is mobilized early, but it works at any stage.

The lesson here, of course, is that determining how to respond to an epidemic or illness based on whether or not it poses a direct threat to people who ride in jets, have white skin, or behave within the narrow range of mainstream societies' accepted behaviors, ultimately defeats us all. The response to SARS demonstrated the power of the intelligent application of collective resources, information, and research. AIDS challenges us to repeat this lesson. ❧

NOTES

1. Mark L. Clifford, "How SARS is Strangling Hong Kong," *Business Week*, 11 April 2003. <http://www.businessweek.com/bwdaily/dnflash/apr2003/nf20030411_8175_db065.htm>
2. World Health Organization, "Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003" (Washington, D.C.: World Health Organization, 2003). <http://www.who.int/csr/sars/country/table2003_09_23/en/>
3. Mark Carnes, History BC3067x Syllabus, Fall 2000. <http://www.barnard.columbia.edu/history/faculty/carnes/3067/lecture_outlines/aidslecture.html>
4. Mohammad H. Wahdan, "AIDS-the past, present and future in the Eastern Mediterranean Region," Vol. 1, Issue 1 (1995): 17-26. <www.emro.who.int/Publications/EMHJ/0101/02.htm>

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