



Chapter Title: Smallpox Eradication and the Rise of Global Governance

Chapter Author(s): EREZ MANELA

Book Title: The Shock of the Global

Book Subtitle: The 1970s in Perspective

Book Editor(s): Niall Ferguson, Charles S. Maier, Erez Manela and Daniel J. Sargent

Published by: Harvard University Press

Stable URL: <http://www.jstor.com/stable/j.ctvrs8zfp.19>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Harvard University Press is collaborating with JSTOR to digitize, preserve and extend access to *The Shock of the Global*

JSTOR



Smallpox Eradication and the Rise of Global Governance

EREZ MANELA

THE YEAR 1979 was a significant one in the annals of postwar international history. Some of its familiar markers—SALT II, the Soviet invasion of Afghanistan—bring to mind the history of the Cold War, specifically the decline and fall of *détente*. Others, such as the Iranian Revolution or the oil shock, heralded the post-Cold War world, specifically the rise of political Islam and economic globalization. These aspects are all explored elsewhere in this volume, but they do not exhaust the significance of the year 1979 in international history. This is because that was also the year in which a commission appointed by the World Health Organization (WHO), after several years of intense work across dozens of countries, issued a report certifying that smallpox—one of humankind's oldest and deadliest diseases—had been eradicated from the face of the earth.¹ The eradication of smallpox may not be as well known as those other events, even (perhaps especially) among experts on international affairs. But consider this: in 1967, when the WHO's global Smallpox Eradication Program (SEP) effectively began, the disease was still killing some 2 million people annually.² And in the course of the twentieth century it caused an estimated 300 million deaths, more than twice the total death toll of all of that bloody century's wars together.³ Smallpox is also the first and to date the only major infectious disease to be eradicated worldwide, and the campaign against it has shaped all subsequent campaigns against disease, such as those against polio and HIV/AIDS. Surely, then, the eradication of smallpox warrants a place in any international history of the 1970s.

The SEP began in the late 1960s, but all of its major signposts occurred during the 1970s. West Africa, the first regional component of the global campaign to be completed, reached “smallpox zero” in 1970, despite ongoing political turmoil and the bloody secessionist war in Nigeria during those years. Indonesia reported no cases after 1972, and Bangladesh, the last remaining endemic country in Asia, reached the target in late 1975 after suffering numerous setbacks, including the reintroduction of the disease by returning refugees who had fled to India during the country’s 1971 war of independence. Finally, the last endemic region on earth, in the conflict-ridden borderland of the Ogaden Desert between Ethiopia and Somalia, experienced its last case of smallpox in late 1977 after years in which the SEP staff negotiated surveillance and vaccination activities in the midst of ongoing fighting and political upheaval. Then, at its annual session in May 1980, the World Health Assembly (WHA), the WHO’s governing body, officially ratified the verdict of the certification commission. Smallpox, it announced, was no more.

So the global eradication of smallpox occurred in the 1970s. But *in what ways was it of that decade, and what can it tell us about the 1970s as a pivotal period in modern international history?* This essay is a preliminary attempt to broach this question. First, it briefly locates the SEP within the longer history of the emergence of international and then global health, and it asks how the story of the SEP illuminates central themes in the international history of the decade. These themes include the evolution of international society beyond bipolarity and Eurocentricity and toward global integration; the growing if ambivalent role of international organizations in the global arena; and perhaps most broadly, the emergence of patterns and mechanisms of global governance, operating on the ground and around the world. Such temporal and thematic contextualization is especially crucial because international historians have to date rarely touched on issues of public health in their study of the postwar era; at the same time, historians of medicine, even those who write about international and global health, do not usually situate their subjects within the broader history of international relations.⁴

In fact, the story of smallpox eradication and the pursuit of global health more broadly in the postwar period point toward a narrative of twentieth-century international history that moves beyond the usual emphasis on world wars and the Cold War, great power politics, and superpower conflict. Instead, this narrative highlights the gradual if fitful growth and ex-

pansion of institutions and mechanisms of global governance: the development of international norms, networks, exchanges, and organizations, both governmental and nongovernmental, whose impact permeated the boundaries and sovereignties of nations and often crossed the postwar global divides between East and West, North and South.⁵ The SEP, after all, was anchored in an international body, the World Health Organization, that was part of the United Nations system, and it was carried out on the ground by experts and health workers whose sense of collective identity drew on the normative and technical discourse of their profession and who were members in a global network that straddled the political and cultural boundaries of postwar international relations.⁶

Within that narrative of postwar history, moreover, the SEP marked the advent of a new stage, and not simply because it succeeded where previous eradication campaigns—most notably the one against malaria between 1955 and 1969—had failed. The Malaria Eradication Program (MEP) had been palpably marked by Cold War tensions, supported from the mid-1950s on by the United States even as the Soviet Union and the other Eastern bloc countries persisted in their boycott of the WHO.⁷ The SEP, by contrast, was from the beginning a joint U.S.-Soviet collaboration, even if U.S. officials occasionally adopted Cold War arguments to defend it domestically. Moreover, though the MEP provided individual countries with external funding and technical advice, it still operated as a collection of national programs. The SEP, too, worked through national governments and national programs, but the degree of coordination in its operations and the unity of its leadership set it apart and arguably made it the first truly global public health program. The SEP, therefore, may be seen as the public health iteration of a broader process that characterized the 1970s, namely, the beginning of the transition from an international society toward a global one and the move, however difficult and fitful, toward the institution of operational mechanisms of global governance.⁸

Smallpox, a deadly, infectious viral disease, had plagued humankind for millennia. Although the disease could take various forms, the most typical one had a 30–40 percent mortality rate. Survivors were left badly scarred, though with lifelong immunity. In many regions of the world smallpox was endemic and attacked mainly children, but at times, particularly in isolated or sparsely populated regions, it could cause devastating epidemics

that swept across entire populations.⁹ Evidence suggests that smallpox afflicted the ancient Egyptians—Ramses V may have been a victim—and the disease can be positively identified in Chinese and Indian medical texts from the early Middle Ages. If, as John R. McNeill has argued, disease can be considered a historical agent when it has a differential impact on groups involved in a historical encounter, then there is little doubt that smallpox played its greatest, most destructive role on history's stage as the deadliest among the horde of Old World pathogens that came across the Atlantic to decimate some 90 percent of the immunologically naïve native populations of the Americas.¹⁰

Techniques to induce immunity to smallpox date to ancient times, but the 1796 discovery of the smallpox vaccine by Edward Jenner, an English physician, was a crucial milestone in controlling it. Unlike the other techniques, Jenner's vaccine used a bovine virus, similar enough to the human *variola* virus to induce immunity but without the risk of contracting the disease itself.¹¹ The practice of vaccination spread slowly across Europe and the Americas in the ensuing decades, often in the face of stiff resistance within the medical profession and among the broader population; it also followed the pathways of imperial expansion into Asia and Africa. It was not until the mid-twentieth century, however, that vaccination had largely eradicated the disease in Europe and North America; even then it remained endemic in many parts of the global South, including South Asia, sub-Saharan Africa, Indonesia, and Brazil.¹²

The history of sustained international coordination on health begins in the middle of the nineteenth century, when successive cholera epidemics in Europe and North America prompted a series of conferences among the major powers resulting in international treaties that established and regulated international quarantine regimes.¹³ It was during this period that disease control came to be viewed as an important responsibility of emerging nation-states in Europe and elsewhere, both reflecting and shaping state-building projects that sought to delineate and control the geographic and demographic boundaries of the nation and to render mass populations more legible and productive.¹⁴ But the quarantine regimes of the nineteenth century construed disease control as primarily a *national* task even as they instituted mechanisms of *international* cooperation to achieve it. The primary purpose of the treaties, after all, was to help each government ensure that its own territory remained contagion-free rather than to control or eliminate disease on a global scale. In this context the

prevalence of a certain disease elsewhere, certainly outside Europe, was important only to the extent that it could endanger European populations or colonial possessions.

By the turn of the twentieth century, the growing acceptance of the germ theory of disease introduced a range of new methods of disease control. Although it was European scientists—most famously Louis Pasteur in France and Robert Koch in Germany—who led the scientific discoveries in the field, the U.S. acquisition of overseas colonies after 1898 afforded American physicians and officials opportunities aplenty to establish disease eradication programs abroad as well as at home. Perhaps the best known among them is the campaign to control the mosquito-borne diseases yellow fever and malaria in the Panama Canal Zone, whose success made the canal project possible and established army surgeons Walter Reed and William Gorgas in the annals of public health. But the United States pursued disease control programs elsewhere, including in Cuba and the Philippines, designed both to protect the occupying forces and to help legitimize colonial rule as a civilizing mission.¹⁵ At the same time, the Rockefeller Foundation also began to fund disease control programs abroad, largely in Latin America and China.¹⁶ Thus the idea of disease control as a problem that was global rather than a national or even an international one began to take root, though even the Rockefellers did not yet dare to attempt anything close to a global eradication campaign.

The establishment of the League of Nation's Health Organization marked another stage in the rise of disease control as an arena of global governance, at least in theory. LNHO leaders construed their responsibilities as global, but with few resources at their disposal they could not put this notion into practice. Instead they focused largely on collecting information and developing international standards for medical practice, for example, in recording causes of death. But the professional networks of experts and activists that formed around the LNHO began to cohere into a public health "epistemic community," whose interconnections and shared outlook laid the groundwork for the postwar programs in the field.¹⁷ And as the institutionalization of internationalism entered a new stage in the wake of World War II, the World Health Organization emerged from the ashes of the LNHO much more ambitious than its predecessor. Its designation as a *world* organization rather than an international one was not accidental and reflected the global ambitions of its founders: it would serve not nations but humanity itself.

By the time the WHO's ambitious constitution was ratified in 1948, however, the Cold War had begun. With the Soviet Union and the other Eastern bloc countries boycotting the organization, the United States remained the sole superpower backer of the WHO's first major disease control program, the one against malaria. Unsurprisingly, the program reflected U.S. strategic concerns, focusing on regions, such as Southeast Asia, where Washington wanted to increase its influence.¹⁸

When the Soviets returned to the WHO as part of Nikita Khrushchev's policy of "peaceful coexistence," they therefore brought with them a competing proposal for a major campaign of disease eradication. Moscow's 1958 proposal to the World Health Assembly called for a five-year plan for global smallpox eradication through a program of compulsory vaccination that would cover the entire population of endemic countries. The USSR had eradicated smallpox within its borders in the 1930s by means of a massive national campaign of compulsory vaccination, but it still experienced hundreds of cases annually owing to importations across its long borders with endemic regions to its south. And the world's growing interconnectedness meant that other smallpox-free countries were also in constant danger of importation from endemic areas and were forced to maintain costly domestic vaccination programs. A global eradication campaign, the Russians said, would cost much less than the indefinite continuation of such national vaccination programs.¹⁹ To underline their commitment, they promised an annual donation of 25 million doses of the heat-stable freeze-dried vaccine, crucial in tropical countries where the climate was hot and refrigeration scarce.²⁰

Partly as a gesture to the Soviet Union, the WHO officially established a smallpox eradication program the following year. But Washington initially remained aloof, and the program languished with only token budgets and skeleton staff.²¹ By the mid-1960s, however, the U.S. position began to shift. For one thing, the malaria campaign was clearly sputtering, struggling against insurmountable logistical problems and facing growing concern about the environmental effects of one of its primary weapons, the synthetic insecticide DDT.²² The image of the United States in the developing world, moreover, was rapidly deteriorating as the war in Vietnam escalated, and the Johnson administration was eager to shore it up by demonstrating its support for international cooperation; the United Nations, after all, had declared 1965 International Cooperation Year.²³ The United States was on a quest, the president said, to find "new techniques for

making man's knowledge serve man's welfare," and smallpox eradication seemed a relatively inexpensive, uncontroversial way to showcase this commitment.²⁴ In May 1965 Johnson, echoing John F. Kennedy's man-on-the-moon pledge earlier that decade, announced an American commitment to wiping out smallpox within a decade.²⁵

Although this effort would be carried out in close collaboration with the Russians, administration officials often justified the program domestically as a bulwark against the spread of communism in the Third World. The author of one administration document, titled "The United States and Worldwide Offensive against Disease," noted:

Two-thirds of the human race lives on less than \$100 per year, with a life span of less than 35 years, and besieged by infectious disease. . . . What does this mean for the United States? I leave aside all *soft-spoken* questions of humanity and brotherhood. I speak only of *hard-headed* self-interest. The best breeding place for Communism is disease and poverty. If we are going to lead the free world in its fight against the bondage of Communism, we have to do something about the health of these poor people.

Helping the world's millions of sick, the document continued, was "a tool which can penetrate any Iron or Bamboo curtain to reach the minds and the hearts of man." It would promote world peace, showcase the United States as "the fountainhead of medicine," and help U.S. allies combat the temptations of communism, for "what good is any man as an ally if, doubled up by disease, he is unable to rise to his full height and be counted in the militant fight against encroaching Communism?"²⁶ But, whether to limit the influence of Moscow or to promote cooperation with it, Washington now wanted to pursue the global eradication of smallpox.

Thus in 1967 the WHO launched an "intensified"—that is to say, an actually funded and staffed—global eradication campaign. As the SEP unfolded over the subsequent decade, it operated across dozens of countries on three continents, with the most extensive operations in sub-Saharan Africa, the Indian subcontinent, Afghanistan, and Indonesia. Progress depended on technological advances such as the jet injector and the bifurcated needle, and on epidemiological and organizational innovations such as the surveillance-containment method and the use of dedicated operations officers to facilitate the logistics on the ground. But it also required the constant management of political tensions and cultural encounters on numerous levels: delicate jockeying in international forums in Geneva, ne-

gotiation of “country agreements” with all participating governments, and the coordination of vaccination campaigns with a host of local actors, from Hausa emirs in northern Nigeria to village heads in rural Uttar Pradesh.

Operating simultaneously in numerous regions and on numerous levels, the SEP depended on close U.S.-Soviet cooperation, and the relationship occasionally required some careful handling. The Russians, for example, were initially displeased when Donald A. Henderson, an epidemiologist from the Communicable Disease Center (CDC) in Atlanta, arrived in Geneva to head the program. The SEP, after all, had been the Soviets’ initiative, and they thought that a Russian should lead it. Henderson worried about the fate of Moscow’s crucial vaccine donations, but when he gingerly approached the Russians about this issue, the response surprised him. “I want you to know,” Henderson recalled his counterpart telling him, “that we have checked you out and are now confident that you are honest and a good scientist, that your only objective is to eradicate smallpox. You will have our full support.” The Russian added that while he could not officially guarantee vaccine donations more than one year at a time, the nature of the Soviet system was such that once a certain annual production quota was decreed, it would likely remain in place in subsequent years.²⁷

U.S.-Soviet collaboration also helped overcome resistance to the program at the WHA and elsewhere. Every year the U.S. and Soviet delegations worked together to ensure that smallpox was placed on the agenda for the session, which afforded the opportunity to subject endemic countries that did not report sufficient progress to a public shaming at the plenary. Henderson also enlisted the help of U.S. and Soviet diplomats in various countries to deal with health officials whom he deemed uncooperative, and he worked with the Soviets on staffing issues, traveling to Moscow to interview Russian candidates for the program personally, in English, which was the working language of the program. When problems arose with the quality of some batches of Soviet vaccine donated to the program, the Geneva staff discreetly informed the Russians, who agreed to shut down several substandard production facilities. In the final years of the program, moreover, when specimens from suspected smallpox cases required analysis in specialized laboratories, the Institute of Virus Preparations in Moscow and the CDC lab in Atlanta split the work between them.²⁸

How do we account for such collaboration between avowed Cold War

antagonists? For one thing, it clearly helped that elites within the two superpowers, despite their political and ideological disagreements, shared what Odd Arne Westad, following the social theorist David Harvey, has described as a “high modernist” outlook on the question of progress. Both sides subscribed to a “belief in linear progress” that would emerge from “rational planning” of the social order, and agreed on the centrality of scientific knowledge and technological expertise to achieving it.²⁹ When President Johnson, for example, announced his support of International Cooperation Year, he called for it to be a “year of science,” one that would constitute a “turning point” in the course of world politics in which the struggle of “man against man” would be replaced by a more noble one of “man against nature.” It was this shift that would allow humanity to “begin to chart a course toward the possibilities of conquest which bypass the politics of the Cold War.”³⁰ Such a call for the conquest of nature through the power of science, a defining feature of the high modernist sensibility, was fully in tune with the approach of the Soviet elites of the time.³¹

Second, much of the global SEP operated under the radar of the top leadership on both sides and thus circumvented the currents of political tensions between the superpowers. Once the political leaders gave their initial approval for the program—the Kremlin in the context of the post-Stalin policy of “peaceful coexistence” and the White House as part of the mid-1960s push for international cooperation—they showed little sustained interest in it. The SEP, after all, did not require significant budgets, nor could it easily be used to exert pressure on Third World governments, in the way that Johnson, for example, had tried to deploy food aid to India around the same time.³² After the initial commitment was in place and the green light was given, progress depended on the working relationships between mid-level technocrats, for whom a shared discourse of medical-scientific knowledge, technical competence, and organizational wherewithal usually trumped questions of ideological conflict or political interests. The lack of sustained attention from the top political leadership also gave mid-level officials a wide berth. Thus when the CDC’s longtime director David Sencer concluded that his mandate to protect the health of Americans allowed, indeed required, him to divert staff and budgets to smallpox eradication in Bangladesh, he could do so with few questions asked.³³

Although the international leadership of the SEP came largely from developed countries—many were Americans, though numerous other na-

tionalities were represented—they were diverse in their backgrounds and motivations. Henderson, a native of Ohio, was an archetypical hard-charging technocrat, forceful and relentless, who did not mind occasionally highlighting his family's Canadian roots when it helped smooth relations with Third World officials who were critical of U.S. foreign policies. William Foege, an American and a leader in the West African and later in the Indian program, had been in Africa as a Lutheran medical missionary when he was recruited into the program. Yet another American, Lawrence Brilliant, who helped lead the Indian campaign, was a self-described hippie who had initially arrived in India on a spiritual quest and has credited his Indian guru with insisting that he join the SEP.³⁴ Then there was Nicole Grasset, a Swiss-French epidemiologist who joined the SEP after a stint with the Red Cross in Biafra, and who wrote impassioned letters to world leaders such as Indira Gandhi and the Shah of Iran asking for their support (and in the latter case also for donations of fuel for SEP vehicles). Grasset, the sole woman within the program's top tier, became something of a legend among program staff, and stories of her venturing, unruffled, into muddy fields in rural India in elegant high heels circulated widely.³⁵

Bridging the global East-West and North-South divides was crucial for the success of the SEP, and here the WHO served as an indispensable forum. It provided an institutional framework for conceiving of disease control as a global problem, for coordinating a global campaign, and, no less important, for taking credit for success that neither superpower would have wanted to cede to the other. But the WHO's relationship to the SEP throughout the life of the program was more complicated and ambivalent than this summary suggests. Early on, top WHO officials, including long-time director-general Marcolino Candau of Brazil, were skeptical of the project's prospects and wary of committing to a program that might become another embarrassment for the organization. For Candau, the failure of malaria eradication had dealt a serious blow to the WHO's credibility, and he feared that another high-profile failure would cause irreparable damage. Many other top WHO officials, both in Geneva and in the regional offices, were also opposed or indifferent to the project, whether because they shared the director's views, had other priorities, or wanted to protect their turf.³⁶

And while the program's apparent success by the mid-1970s rendered some of these fears moot, it gave rise to another set of concerns that were related to the contested nature of the WHO's mission. In the wake of the

tumult of the 1960s—the youth revolts, decolonization, and calls for a new international economic order—in the 1970s many in the field of international health shifted away from technocratic high modernism and toward social medicine, an approach which argued that public health programs must take into account and seek to alleviate the wider social and economic determinants of illness. Advocates of this view worried that “vertical” programs such as the SEP, which targeted one specific health problem for elimination, were drawing resources away from “horizontal” programs that emphasized primary health care services and sought to transform broadly the social and economic conditions that were related to health problems in developing societies.³⁷ Although it may have been coincidental, it was surely significant that in 1978, just as the SEP had achieved “smallpox zero” worldwide, the WHA released the Alma-Ata Declaration, which committed the WHO to the goal of “health for all by the year 2000” and stressed the priority of promoting broad change in health conditions over the control of specific diseases.³⁸

Still, even if some WHO officials were ambivalent and even hostile to the SEP, the organization remained essential to the program in all its stages. It provided a discursive space in which health officials could conceive of and articulate smallpox eradication as a problem that required a global solution and then pursue it as such, transforming the issue of disease control from a matter of defining and policing sovereign boundaries—as it was in the era of international quarantine treaties—into one of transcending them. And international organizations also played other, more concrete roles in the history of the SEP. It was after all the United Nations’ declaration of 1965 as International Cooperation Year that provided internationalists in the Johnson administration with the opportunity to make global smallpox eradication an official U.S. goal, and the WHO afforded a space that allowed the two superpowers to bracket Cold War rivalries in pursuit of shared notions of progress. If the WHO as a concrete bureaucracy was more often than not an obstacle that the program had to overcome, as a symbolic and collaborative space it was indispensable.

History, of course, is rich in irony, and the story of the smallpox program is no different: even as the Russians worked with Americans to eradicate smallpox, they worked separately to weaponize the virus.³⁹ We should not, however, allow this irony to tempt us back into the warm embrace of the traditional Cold War narrative. First, the drive to eradicate smallpox was surely no less significant historically than the efforts to weaponize it. Sec-

ond, integrating the story of the SEP into the history of the 1970s brings that decade into focus as a pivotal time in the emergence of processes of global governance. It offers a perspective on the international history of the 1970s that encourages us to look beyond nation-states and consider the impact of international organizations and other non-state actors in the global arena. It also suggests that we need to disaggregate states rather than imagine them as unitary actors in international affairs, shifting some of our attention away from the official organs of foreign policy and onto components of the U.S. government, such as the CDC, that have hitherto rarely made an appearance in traditional narratives of the international history of the decade.

Tracing the networks of historical causation and significance that neither are produced primarily by foreign policy and diplomatic establishments nor lie within the boundaries of any one state, then, permits us to explore aspects of the history of globalization and global governance—epidemic disease and public health, the dissemination of scientific and technical knowledge, and the environment in its global context, to give but a few examples—that have thus far remained on the margins of the international history of the 1970s. Given the growing salience of precisely these themes in the contemporary conversation on global affairs, it is not a moment too soon to begin writing their history.