Introduction

Medical Modernization and the Healthscaping of Tokyo

As the coronavirus pandemic began in the spring of 2020, it soon exposed the vulnerability of urban communities to outbreaks of disease, even in the twenty-first century. Population density, disparities in income and living conditions, constraints on the availability of medical care, cleavages among diverse communities of residents, and the fallibility of public health policies in the face of a new disease led to the rapid spread of the COVID-19 virus and spiraling rates of infection and death in cities as diverse as Wuhan, Rome, Lima, and New York. The devastating effects of disease on urban space, residents, and everyday life is of course not a new development. Indeed, as the epidemiologist Sandro Galea recently commented, "It is hard to think of the impact that epidemics have on society without thinking of them through the lens of cities, and conversely, it is hard to think of cities without understanding how epidemics have shaped their growth over the centuries."[1]

Historical research on cities around the world offers support for Galea's observation. The past two decades have seen the publication of many monographs on public health in cities like Mexico City, London, Buenos Aires, Shanghai, San Francisco, and Los Angeles, among others.[2] Several of these works explore the impact of a specific disease such as plague, cholera, tuberculosis, or yellow fever on urban residents and the resulting efforts at social management. To that end, these studies examine the development of

new policies to control the spread of disease, including efforts to establish new institutions such as quarantine hospitals and sanitoriums. Other works focus more broadly on efforts to improve health, such as the establishment of housing codes, the creation of public parks, and the development of new infrastructure consisting of drainage systems, sewers, and waterworks.

Despite their geographic and thematic diversity, these works share a concern for the period from the mid-nineteenth century to the early twentieth century, a time that saw both the rapid growth of cities around the world and a new political will to invest in medical institutions and public health, as health was reimagined as a key indicator of modernity and national strength, power, and influence. This was particularly the case for cities in countries outside of Europe and North America, which were dealing with the threat of imperialist encroachment (such as Shanghai) or seeking to overcome their colonial pasts (such as Mexico City). But even in cities in Europe and the US, efforts to improve public health were always political in nature and were mediated by the racial, ethnic, and socioeconomic tensions that were shaping these expanding urban spaces.

Mapping Medical Modernity draws inspiration from and seeks to contribute to this literature by exploring the process of medical modernization in Tokyo from the 1870s to about 1920. The focus on a single city is a departure from recent works on the social history of medicine in Japan, still a relatively new area of research. William Johnston's history of tuberculosis, Alexander Bay's study of beriberi, and my own work on leprosy are all framed by the boundaries of the nation-state rather than a specific locale, even though regional variations and the urban-rural divide are important—indeed, defining—aspects of Japan's modernity.[3]

The transformation of health care in the city is an essential but largely overlooked part of the history of modern Tokyo. The handful of monographs aimed at general readers that deal wholistically with the history of Japan's modern capital, including Edward Seidensticker's two-volume work published in the 1990s and more recent works by Keiko Packard and Stephen Mansfield, do not address public health or the many ways in which medical reforms reshaped the city.[4] Other aspects of Tokyo's history have received some scholarly attention: recent monographs have examined the role of Christian churches in the city, the function of expositions and museums, and the establishment of Ueno zoological park and its place in national and imperial culture.[5] The only work that gives some attention to public health is Sally Hastings's *Neighborhood and Nation in Tokyo*, which examines the impact of national policies

on a working-class Tokyo neighborhood after 1905.[6] I argue, however, that the period before 1905 was more significant for shaping the city and the lives of its residents.

In exploring the history of medicine and public health in Tokyo, *Mapping Medical Modernity* takes a granular approach to the city while also seeking to be attentive to the larger national and international contexts that were shaping policy decisions. Like many national capitals, Tokyo was a distinctive kind of city. Scott Campbell, a scholar of urban planning, has stated that capital cities "are far more heterogeneous than other kinds of cities." He notes that while every capital city hosts the government apparatus of the country in question, not every capital is to the same degree also a center of population, finance, industry, education, and culture.[7] Until 1868, Edo, as Tokyo was then known, was an early modern castle town, albeit the largest and most prosperous in the country. It was an administrative center and home to the political elite of the day, the Tokugawa shoguns and their vassals, as well as merchants and artisans and a large and heterogeneous population of marginalized people that included entertainers, day laborers, and so-called outcast people. Five decades later, Tokyo was not only the political capital of Japan and its expanding empire but also the industrial, commercial, cultural, and educational center of both. The city drew visitors from around the world who came as tourists, diplomats, students, and for economic pursuits. Many were from elsewhere in Asia, and they looked to the city and Japan for inspiration for their own nationalistic dreams.

Tensions between local, national, and international concerns are central to the story of medical modernization in Tokyo. Until 1889, the urban space of Tokyo was subsumed within Tokyo-fu (Tokyo Prefecture), which included six rural districts and was under the direction of the appointed prefectural governor. But from the 1870s the urban wards of the prefecture became objects of intense concern for officials within the central government. In 1874 the authority of the prefectural government was challenged when many aspects of city life came under the control of the newly created Tokyo Metropolitan Police (Keishichō, hereafter TMP), which was under the direction of the Home Ministry, although financed by prefectural taxes. The TMP's duties encompassed not only the maintenance of social order but also the policing of entertainment (including prostitution), public health, and many aspects of the built environment. Over time its authority expanded, and the TMP became involved in surveilling political activism and the nascent labor movement. Clashes between the TMP and Tokyo officials would shape both the evolution

of public health policy and the responses of Tokyo residents who often resisted the heavy-handed tactics of the TMP.

International tensions, in what was the age of high imperialism in East Asia, also reverberated in Tokyo, shaping priorities and policies and affecting the lives of Tokyo residents. In the 1850s the Tokugawa shogunate, under duress, signed a series of "unequal treaties" with the US and many European countries that gave foreign nationals extraterritoriality and fixed import and export tariffs. The new government inherited these treaties, the terms of which soon became a hot-button domestic issue in this era of growing nationalism. Although the government made multiple efforts to revise the treaties, it was only in 1911 that the last of their terms was abolished. As a result, public health policies too were constrained by international pressure. A case in point is the government's attempt in 1877 to establish a system of maritime quarantine in nearby Yokohama, the largest and most prosperous of the treaty ports, to prevent the introduction of cholera via ships coming from regions where the disease was present. When the British consul complained that this was an unnecessary infringement on his country's treaty rights, the government backed down and, in the aftermath, turned of necessity from attempting to control the introduction of the disease to Japan to regulating traffic into and activities within the city to stop its spread.

In exploring the history of medical and public health reform in Tokyo, *Mapping Medical Modernity* draws upon a large body of Japanese scholarship. While the first wave of historical works on public health was largely celebratory, casting medical modernization as one of the crowning achievements of the modern state, recent work by scholars such as Kojima Kazutaka and Kasahara Hidehiko is more nuanced in exploring the struggles and missteps that accompanied the formation of national policy.[8] At the center of their work is Nagayo Sensai, a physician who became the head of the national government's Medical Affairs Bureau, the predecessor of the Hygiene Bureau, in 1874. He was one of the architects of the Medical Policy (Isei), an ambitious plan for reform that sought to remake medical care in Japan with profound implications for Tokyo. It addressed medical education and licensing, the pharmaceutical industry, and the creation of a public health system. An advocate of the Anglo-American approach to public health, which gave localities considerable autonomy, Nagayo pushed back, with growing futility, against the centripetal tendencies of the new government.

While I have learned much from this body of scholarship, my concern is less the struggles among elite officials over national policy than the impact of

policies on the city and the lives of those who lived within it. The central government responded to the Medical Policy by designating the country's three largest cities—Tokyo, Osaka, and Kyoto—as testing grounds for the planned reforms. Of these, Tokyo proved to be the most contentious and arguably the most important site of reform, as tensions emerged between local needs and national aspirations. My work is particularly indebted to two scholars whose research centers on Tokyo, Kitahara Itoko and Ishizuka Hiromichi.[9] Although Kitahara focused on efforts to provide health care to the poor and Ishizuka was concerned with the relationship between disease, health, and the built environment, both gave much needed attention to the impact of public health on the city and its residents. The depth of their empirical research and their attention to marginalized Tokyo residents who were often the intended objects of public health policy have shaped my own approach. Important too is Kobayashi Takehiro's study of public health in Kyoto, which, like the research of Kitahara and Ishizuka, prompted me to think beyond the conventional focus on the nation-state that has shaped so much work on Japan.[10]

Mapping Medical Modernity is based on extensive archival research in the Tokyo Metropolitan Archives, which houses prefectural and municipal records, but it draws as well on a large and heterogeneous body of print sources including scientific, medical, and police reports, medical journals, personal memoirs, literary works, and products of the popular press, including newspapers, magazines, and guidebooks to the city. One particularly important resource was the statistical data collected and published annually from 1882 until 1943 in the *Tokyo Prefectural Statistical Handbook* (*Tōkyō-fu tōkeisho*), which always included a section on "hygiene" (*eisei*).[11] Organized by the fifteen wards and the rural districts that made up the prefecture, the handbook offers a window onto the changing landscape of health and health care in its detailing of rates of disease, numbers of medical professionals and the nature of their training, numbers of hospitals, rates of death, births, stillbirths, and more. This information was compiled with the support of private practice doctors, who by statute were required to participate in the collection of data and its submission to ward officials.

Certainly, these data contain blinders, gaps, contradictions, and even perhaps some degree of purposeful obfuscation. Information was gathered at the level of the ward, the administrative boundaries of which were developed for reasons other than the promotion of public health, and these are often unwieldly units for exploring health and its management within the city.[12] In this period, the fifteen wards varied greatly in topography, no less than in