On 26 April 2009, the Hong Kong government instituted strict measures in response to the outbreak of swine flu (H1N1) in Mexico and the United States. This included a travel advisory to Mexico and the hospital quarantine of travellers arriving in Hong Kong with flu symptoms. Indeed, when a Mexican tourist became the first confirmed case of H1N1 in Asia on 1 May, the government set up a seven-day quarantine for all three hundred guests and staff at the city hotel where the tourist had stayed. Having experienced the SARS outbreak six years ago, the government was not taking chances. When the first local cases were found in early June, the government ordered the closing of all primary schools, kindergartens, and child care centres for fourteen days to control the community spread of the disease. With a population of over seven million and overcrowding in many of the high-rise tenements, Hong Kong is particularly vulnerable to the spread of infectious diseases. In fact, the history of Hong Kong, from the early colonial period to the post-1997 period, provides ample examples of the city's attempts to control such diseases as malaria, cholera, tuberculosis, smallpox, venereal diseases, avian flu, SARS, and swine flu, among others. Few scholarly studies, however, have chronicled the city's long struggle to combat diseases and its attempt to build a public health structure to protect its citizens.\* This documentary study is a

A recent study provides a valuable analysis of the historical development of Hong Kong's health and disease control policies. See Ka-che Yip, Yuen-sang Leung and Man-kong Wong, Health Policy and Disease in Colonial and Post-colonial Hong Kong, 1841–2003 (London: Routledge, 2016). For studies of specific diseases and institutional history of hospitals, see, for example, Elizabeth Sinn, Power and Charity: The Early History of the Tung Wah Hospital, Hong Kong (Hong Kong: Oxford University Press, 1989; rev. ed., Hong Kong University, 2003); Hong Kong Museum of Medical Sciences Society, Plague, SARS and the Story of Medicine in Hong Kong (Hong Kong: Hong Kong: Hong Kong University Press, 2006); Christine Loh and Civic Exchange, eds., At the Epicentre: Hong Kong and the SARS Outbreak (Hong Kong: Hong Kong University Press, 2004); and Deborah Davis and Helen Siu, eds., SARS: Reception and Interpretations in Three Chinese Cities (London: Routledge, 2007).

comprehensive attempt to examine critically the development of public health in Hong Kong from the 1840s to the early 1990s, with special attention to political, social, economic, and cultural factors, including the intersection of colonial priorities and indigenous agency and practices that affected disease development, government and local responses, as well as the emergence of health agencies and institutions. At the same time, it incorporates important historical documents selected from government archives, personal papers, and special collections that help to shed light on such developments. The documents will be invaluable and indispensable for specialists and nonspecialists who are interested in the social and public health history of Hong Kong. In short, this unique study brings a muchneeded critical historical perspective to our understanding of the history of public ed Materi health in Hong Kong.

# Organisation and Scope of Study

This study is organised chronologically so as to provide the necessary framework in which important events, policies, institutions, and advances in technology related to health developments in the colony are presented. The Pacific War (1941–1945) and the subsequent Japanese occupation of Hong Kong (1941–1945) served as a dividing line because colonial health policies before and after the war differed markedly as postwar conditions offered new challenges as well as opportunities. Part I examines the colonial government's attempts to deal with the many prevalent diseases through essentially environmental and sanitary improvements, the building of a sanitary infrastructure and health agencies, and the important role of local voluntarism in providing health care to many who had no access to curative and preventive care. Initial steps made by the government to train, register, and regulate medical and public health manpower are also discussed.

Part II begins with Chapter 5, which examines the damages brought about by the Japanese occupation on the colony's rather limited health infrastructure, and offers significant details about a little known period in Hong Kong's public health history. The rest of the chapters in part II focus on the postwar period when in addition to rebuilding the health infrastructure, the government shifted its attention to the building of preventive health services, and from the late 1960s, to the expansion of curative and rehabilitation services. A reason for this shift was that Hong Kong went through the epidemiological transition in the mid-1960s the mortality and morbidity profile had changed to one that was dominated by chronic noncommunicable diseases. The government also invested in health management by establishing the new Hospital Authority in 1990.

This study is not concerned with developments after the early 1990s as Hong Kong's transition to postcolonial rule and its retrocession to China in 1997 created a new milieu and different conditions for health care policy formation and implementation. Throughout the long history of developments before 1990, the attitudes and actions of colonial officials and health leaders in Hong Kong had been, to a significant extent, shaped by the interaction of the interests of the colonial state, international concerns, cultural assumptions, the emergence of new medical knowledge and technology, and local society. We shall now examine some of these major issues.

## Public Health: An Evolving Concept

Writing in 1920, Charles Winslow defined public health as "the science and art of preventing disease, prolonging life and promoting physical health and efficiency through organised community efforts for the sanitation of the environment, the control of community infections, the organisation of medical and nursing services for the early diagnosis and preventive treatment of disease and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health."\*

This definition reflected the concept of public health based on the rise of scientific medicine supported by the germ theory of disease at the turn of the century. It certainly differed significantly from what Edwin Chadwick (1800-1890), a pioneer in English sanitary reforms, had envisioned as public health. In the mid-nineteenth century, when Chadwick published his report *The Sanitary* Conditions of the Labouring Population (1842), he recommended the provision of a supply of clean water, improvements to the drainage and sewage systems, and refuse disposal as key steps to improving public health. These ideas, which were designed to deal with health conditions among the English working class, were subsequently transferred to Hong Kong and became a long-lasting foundation of British colonial public health policy, which was essentially sanitary improvements and environmental health broadly defined. When Osbert Chadwick (1844–1913) was sent to investigate conditions in Hong Kong in 1881, his approach was that of an engineer, and, like his father (Edwin Chadwick), he proposed regulations that would improve sewage and drainage, supply of water, and housing conditions.<sup>‡</sup> Ordinances passed to regulate such developments focused on housing,

<sup>\*</sup> Charles Winslow, "The Untilled Fields of Public Health," *Science*, January 9, 1920, 30.

Reprinted in D. Gladstone, ed., Collected Works of Edwin Chadwick (London: Routledge, 1997). See also James G. Hanley, "All Actions Great and Small: English Sanitary Reform, 1840–1865" (PhD diss., Yale University, 1998).

<sup>\*</sup> See Document I B. 1b and Document II B. 1.

cleanliness and order. In fact, supposedly "health" ordinances at that time bore titles with words such as "cleanliness" and "order" without specifically dealing with public health per se in the modern sense of the word.\*

The rise of the new public health movement, which was based on scientific medicine by the turn of the century in the West, led to a shift from environmental to individual concerns. Public health was now supported by new diagnostic tools, medical examinations, organised health services, the building of a health infrastructure that included nursing and medical services, and new regulations of community health control. These were what Winslow advocated as parts of the comprehensive public health schemes. The question was whether a society had the resources to move beyond the sanitation movement to adopt all, or some, of these new developments. In Hong Kong, opposition from property owners, local politicians, and other vested interests as well as financial constraints resulted in the piecemeal adoption of some of the new aspects of public health; there was in fact much confusion over the actual functions of the Sanitary Board created to deal with environmental and cleanliness issues and the Medical Department, which argued for the control of medical and health issues that medical experts considered to be rightfully within their purview. The blurring of functions was not clarified until the 1930s when the Sanitary Board was abolished and replaced by the Urban Council, which took over basic urban services such as street cleaning, refuse disposal, and supervision of eateries and slaughterhouses, while the technical and medical aspects of public health were assumed by medical officers.† In the postwar period, the division of functions was clearly defined, and with the rise of new medical technologies and the development of large-scale preventive and curative services, medical professionals assumed further control of the public health infrastructure, which closely approximated what Winslow had advocated in 1920.

# Public Health: Managing Health Care

The management of health care and the evolution of health agencies and institutions in Hong Kong reflected to a significant extent changing perceptions of the sanitary and public health needs of the colony on the part of colonial officials, responses to health exigencies and local concerns and agency, as well as economic considerations. Osbert Chadwick's report condemned the state of the sanitary conditions of the colony and led to the creation of the Sanitary Board, although as noted earlier, the Board was not specifically focused on the medical and technical aspects of public health. It was not until 1929 when Dr. A. R. Wellington

<sup>\*</sup> See Document II A. 1a and Document II A. 1b.

<sup>&</sup>lt;sup>†</sup> See Document II A. 3.

was hired to reorganise the medical and sanitary services that the respective functions and authority of the Sanitary Board and the Medical Department were more clearly defined. In 1936, the Sanitary Board was replaced by the Urban Council while the head of the Medical Department became the Director of Medical Services, a title that continued to be used until 1950.

Significantly, further differentiation of functions and authority within the Medical Department took place in the early 1950s when the government concentrated a large amount of health-related resources on the establishment of preventive health services in order to ensure a healthy environment for economic development. The building of this preventive health infrastructure and its success was a significant achievement that enabled the government to increasingly turn its attention to the expansion of curative services, an area that it had neglected since the early days of the colony.

In fact, medical services for the general population in the early days of colonial rule had been provided in large part by Christian mission societies, Protestant and Catholic alike, and local charitable organisations due to the lack of government attention on the health needs of the Chinese. Moreover, most of the local population relied on Chinese medicine for medical relief. The Tung Wah Hospital, a Chinese institution using Chinese medical treatments, filled the gap when it opened in 1872. The deficit of government-established hospitals in the prewar period continued even with the opening of the Queen Mary Hospital in 1937.\* After the war, the government relied heavily on mission and philanthropic organisations to take care of the huge population, which included the recent influx of mainland refugees. It was not until the mid-1960s that the government began to launch medical plans and establish new hospitals to provide care for the vast number of people who had no access to affordable medical care. Throughout the 1970s and 1980s, the government gradually moved to consolidate control and management of hospital services, leading eventually to the formal establishment of the Hospital Authority in 1990. This was a move that simultaneously improved medical care for the population and, to some extent, undermined attempts to strengthen public health services just at the time when Hong Kong was confronted with newly emergent global diseases in the 1990s.

### Public Health: Disease Control

The colonial government's strategies of disease control were designed to ensure the physical survival of the colonisers as well as the economic development of

See Chapter 4.

<sup>&</sup>lt;sup>†</sup> See Chapter 6, Section D.

Hong Kong. After a period of low economic growth during the early decades of its colonisation, Hong Kong began to enjoy rapid economic expansion and prosperity beginning from the 1870s. Certainly, the physical well-being of the population was important to the colony's growth; yet, as noted, for a long time the health needs of the Chinese were not a government priority so long as there were no health crises that would threaten the social and economic well-being of the city. But the government possessed the power to impose drastic sanctions—political, social, and even cultural—in the name of combating diseases when it deemed necessary. The control measures introduced after the outbreak of plague in 1894 and the subsequent resumption of some of the land was a good example of biopolitical governance.\*

During the prewar period, a central concern in disease control policies was the protection of the colonisers through segregation. This was based on the assumption that the indigenous population and areas of hostile environment were sources of threatening pathogens. Europeans therefore had to be protected from the unsanitary conditions, lifestyle, and cultural practices of the Chinese. Residential enclavism was sanctioned in the European District Reservation Ordinance of 1890, which preserved specific areas for Europeans and Western-style houses. There is no doubt that the overcrowding and squalor of the tenements where most Chinese resided were not conducive to promoting a healthy environment. However, opposition from landlords and the reluctance of the governments in both Hong Kong and London to make costly investments in improving housing and the overall sanitary infrastructure in the prewar period meant that only piecemeal and stopgap measures were adopted. The interwar years saw a deterioration of housing conditions as industrial growth encouraged the proliferation of small sweatshops in tiny apartments. It was not until the postwar period that the government moved ahead with the construction of resettlement housing for the underclass of the colony. Such housing, while in many ways still substandard, did help to improve living conditions for many. Together with the government's promotion of preventive measures such as vaccination campaigns in the 1950s, these initiatives contributed to the decline in mortality and morbidity caused by communicable disease.<sup>‡</sup>

The attempts to control diseases were also based on existing and new advances in medical knowledge. By the turn of the century, Western biomedicine dominated such attempts. Europeans in general believed that Western biomedicine was superior to indigenous methods and healing practices, and that modern

<sup>\*</sup> See Document III A. 1.

See Document I A. 2.

<sup>&</sup>lt;sup>‡</sup> See Chapter 6, Sections A, C; and Chapter 7, Section A.

hygiene, the hallmark of modernity, should be promoted so that the local indigenous population would learn to embrace Western medicine and hygiene practices. Some Chinese social leaders also considered it progressive to lend their financial and moral support to the introduction of Western medical education, which contributed partly to the eventual creation of the medical faculty at the University of Hong Kong.\*

Of the many examples that illustrate the need for the modifications of behaviour, cultural practices, and social conditions in disease control, the battle against tuberculosis deserves special attention. Tuberculosis is typically transmitted by sneezing, coughing, or spitting, especially in the overcrowded housing areas where the poor Chinese resided. The prewar government was not prepared to tackle head-on the problems created by the unhygienic conditions in overcrowded tenements, and tried to legislate proper behaviour by banning spitting as an "uncivilised" behaviour practised almost entirely by Chinese. † In this case, science helped to validate the colonial government's "civilising" mission. When BCG vaccination became widely used in the postwar period, the government introduced massive vaccination campaigns against tuberculosis.

The attempt to control smallpox also highlights very well the conflict between local health practices and Western medicine. Colonial health officials had attributed the frequent smallpox epidemic outbreaks to the fact that the Chinese used variolation, not vaccination, and recommended that the former method be banned. When many Chinese continued the traditional practice, the government decided to intervene even when there was no immediate health crisis since vaccination could be implemented without large-scale infrastructural improvement. In 1890 and 1923, the government passed vaccination ordinances banning variolation and mandated that every child born within the colony be vaccinated within six weeks of birth. Many Chinese parents ignored this law, arguing that infants should not be vaccinated until they had passed their second Chinese New Year. The result was that a child born just after the Chinese New Year would be two years old before being vaccinated.

Economic imperatives also helped to shape medical and public health policies. It was certain that the government of Hong Kong would act to prevent outbreaks of diseases or epidemics if they threatened the colony's economic development and position in international trade. The vigorous and prompt response to the outbreak of plague in 1894 was as much a reaction to the physical devastation of the disease as an attempt to avoid the potential huge economic cost of

See Chapter 4, Section E.

<sup>†</sup> See Document III A. 3.

Fee Documents III A. 2a and A. 2b.

nonaction. In the postwar period, the mass anti-smallpox campaign resulted partly from a fear of international isolation as smallpox was a quarantinable disease. Economic considerations, however, did not necessarily lead to the formulation of health policies that would bring relief to the greatest number of people. Although tuberculosis was extremely prevalent in the first decade of British rule, it was not considered one of the more pressing health problems. Moreover, the government was not ready to invest heavily to improve housing conditions. In the case of anti-malaria strategies, the government opted for a cost-effective method of combining limited sanitary improvements with anti-vector measures after the role of mosquitoes in the transmission of malaria was discovered. The residual spraying of DDT after the war was limited because such action was found to be

Public Health: Local, Regional, and International

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national description The history of public health in Hong Kong is a story of local, regional, and international developments. First, the training of medical professionals in Hong Kong, to a significant extent, was shaped by and, at the same time, influenced international medical developments. Patrick Manson, the father of tropical medicine, was one of the founders of Western biomedical education in Hong Kong. With the growing attention paid to tropical diseases by the international medical community in the nineteenth and early twentieth centuries, studies of medical developments in Hong Kong occupied considerable space in major medical journals such as The Lancet. Moreover, medical education and the pursuit of higher professional qualifications has been one of the significant links connecting Hong Kong with the rest of the world. Hong Kong's medical faculty trained not only local students but also students from Southeast and South Asia. Many physicians trained in Hong Kong usually acquired additional professional qualifications in Britain or other Commonwealth countries. The medical profession in Hong Kong was highly cosmopolitan and international in outlook.\*

As a busy port located on the southern coast of mainland China, Hong Kong was, and still is, highly susceptible to imported cases of communicable diseases, especially when only limited regulations of movements of people existed in the past and the preventive health infrastructure of Hong Kong was not yet well developed. Large-scale influx of refugees from the mainland in the 1920s to 1930s and in the immediate postwar period, for example, aggravated the unhealthy living conditions of many residents, resulting in high morbidity rates for many

See Chapter 9.

infectious diseases.\* At the same time, the arrival of a large number of Vietnamese boat people in the late 1980s also contributed to a surge in incidences of such diseases as malaria and cholera. As international trade has been vital to Hong Kong's economic survival, the government has been particularly sensitive to the potential of the city's isolation, resulting from the imposition of international quarantines when there were outbreaks of quarantinable diseases.

By the 1970s and 1980s, Hong Kong began to establish communication and collaboration channels with mainland China and other Asia-Pacific countries in areas of health information exchange and disease surveillance. Moreover, Hong Kong cooperated with the World Health Organisation in developing strategies for disease control in the region. The outbreaks of global health threats such as avian flu, SARS, and H1N1 influenza reinforced Hong Kong's urgent need to be vigilant in preventing and controlling the spread of emergent diseases transcending geographical boundaries. This documentary history will provide valuable lessons for readers concerned with the ever-changing nature of health and disease in our society, the making of health and social policies, and the future of global health.

\* See Chapter 8, Section D.