

Medical Officers of Health and Public Health Reform in Victorian
England

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ABSTRACT

1. **Statement of the Problem or Issue**

As epidemic diseases like Cholera and Tuberculosis swept through Europe and Britain in the 1830's and 1840's, the British government began a proactive set of public health reforms. These laws led to the creation of the Medical Officers of Health (MOH). These physicians were now responsible for inspecting and driving the sanitary changes to entire counties, cities and boroughs, mediating between the government, the public, and local organizations. Although scholars have not always agreed on the effectiveness of these medical officials, modern scholarship has swung the discourse to a more positive light. This thesis not only argues that they were effective in reducing mortality, but also discusses how and why they were effective. The how and why the MOH succeeded are not often analyzed in scholarship, which this thesis will hopefully shed some light on. The study of these intriguing professionals, who lived in an era of social, political, and medical revolutions is important. They were instrumental in creating the foundation of the modern medical state and public health policy. It is also important to study the public-response to diseases as we, just like them, are living in a time of uncertainty as new epidemics like COVID-19 are encountered.

2. **Brief Summary of the Literature**

Scholarship on nineteenth-century British public health movement is varied and extensive covering a wide range of complex medical issues. Works focused on MOH and the history of public health are less abundant, but a corpus exists and began with John Simon's *English Sanitary Institutions: Reviewed in their Course*

of Development, and in Some of their Political and Social Relations (1890). Simon was London's first MOH and he viewed the 1848 Public Health Act, which created the officers, as an important step in combatting epidemics. Other authors in the early twentieth century such as the physician and politician Frances E. Fremantle held this same view. A push towards modern public health in the 1950s led scholars like George Rosen to return to the subject. In his 1958 *A History of Public Health*, Rosen argued for the important role played by physicians in driving Victorian medical reforms, which led other scholars to examine changing health outcomes and the factors that contributed to them. Thomas McKeown and R.G. Record responded in 1962 with an article on "Reasons for the Decline of Mortality in England and Wales during the Nineteenth Century" in which they challenged the prevailing notion and argued physicians had less of an impact on mortality than other social and economic factors. More recent scholarship contradicted this view and restored the importance of the MOH, including Anne Hardy's *The Epidemic Streets: Infections, Disease, and the Rise of Preventative Medicine, 1856-1900* (1993), Mary Poovey's *Making a Social Body: British Cultural Formation, 1830-1864* (1994), and Christopher Hamlin's *Public Health and Social Justice in the Age of Chadwick: Britain, 1800-1854* (1998). Although these studies have made a case for the importance of MOH and the rise of public health policy for combatting disease, little attention has been paid to how they accomplished it. This question of "how" is the subject of my thesis.

3. Thesis Statement

The pandemics that swept through Britain in the nineteenth century created a crisis that instigated a government response that was proactive rather than reactive. Political leaders now saw it as their duty to enact measures to combat disease. Not everyone supported a health policy that came from the national government, however. Local officials and church leaders traditionally had distributed care during health crises, and laws set by Parliament might not address the health environment in each town, borough, or region (especially in Ireland where tensions existed between the Irish people and English rulers). No apparatus existed to convey the policies to the public, either. To solve these issues Parliament created MOH to act as a liaison between politicians and the populace. The physicians were integral in the fight against disease and contributed to improving mortality rates in Britain's cities by pushing politicians to adopt public health policies, reforming medical practices in their communities, and creating ways to share information with the public to protect them from diseases. Many of these practices remain, and the MOH established in Victorian Britain mark an important turning point in the development of modern public health.

4. **Statement of the Research Methodology**

This thesis offers a qualitative study of the MOH conducted through a textual analysis of primary source documents in a narrative form. Documents analyzed include reports from the Medical Officers of Health including John Simon's *Report on the Sanitary Conditions of the City of London*, articles from the *Journal of the Medical Officers of Health*, government acts ranging from the 1848 Public

Health Act to the 1872 Public Education Act. Letters and addresses from both public and government officials are utilized, as well as archival documents from the British National Archives, the Royal College of Physicians, and the Wellcome Institute, which holds the extensive Medical Officer of Health records.

5. Brief Summary of Findings

The MOH shaped public policy by working with the General Board of Health, investigating areas of poor sanitation, compiling their findings, and making recommendations to improve health in the urban areas. Perhaps greatest contribution they made to improving mortality-rates was through new means to disseminate information to the public. With the assistance of medical practitioners, they formed societies which taught members of all social classes (though focused on the poorer ones) sanitary skills.

6. Confirmation, Modification, or Denial of Thesis

My research confirms my thesis and supports the work of scholars like Harvey, Poovey, and Hamlin, who asserted the importance of MOH in improving health in Victorian Britain. This thesis explains how they impacted late-nineteenth century medical reforms leading to a reduction in mortality from diseases such as Cholera. The physicians who held this position promoted public health legislation through investigation, promotion of sanitary techniques, professionalized the medical field, created medical societies, and educated the public for their own benefit, creating a type of proto-health literacy even before the mid-twentieth century establishment of the term.

7. Statement of the Significance of the Findings

Since 2020 the world had dealt with the COVID-19 pandemic, and public health officials have come under much scrutiny, especially in the United States, as some

people have openly questioned medical professionals like Dr. Anthony Fauci who shape public health policies. This thesis can shed light on the historical origins of public health policy, and the role of physicians in work with politicians to shape formal responses to combat disease. Knowing how these early MOH succeeded may provide some ideas on how our own leaders can improve the response to the current pandemic.

8. **Suggestions for Future Research**

Future research can expand this topic in several ways. The first would be through a focus on other members of the 1848 General Board of Health including the secretaries who were responsible for compiling data and how they saw themselves in relation to the growing push for a national system of public health. Another would be on the topic of imperialism, or nationalism, in the context of health care in the colonies such as Florence Nightingale's attitudes towards native children of areas the British were colonizing during the 19th century which would be a further investigation into *The Collected Works of Florence Nightingale* (2010). In a similar vein continued research could be done on how the British Public Health system was spread throughout the colonies and how it clashed with traditional forms of medicine, which would be an expansion on work done by historian's studying how the Jenner vaccine was distributed through Latin America. As this thesis looks at public reaction and action when faced with new medical ideas, a greater research project could cover the growth of alternative medicine or even how new spiritualism, or the emergence of religio-medicine (in America, an example of this would be the establishment of the health-spas ran by religious

groups like the 7th Day Adventists) in the early 19th century impacted the efforts of the Medical Officers of Health and how it influenced public perception. One last way to expand the research is to focus purely on the education angle through a deeper investigation into the societies that helped spread medical-information from the MOH to the populace.

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I thank also Dr. Jessica Sheetz-Nguyen for having first introduced me to the topics of the Victorian Era and health through her interests in social-history and the history of the Foundling Hospital. She is also the one who convinced me to go to London in the 2017 school-year where I began my descent towards choosing my thesis topic. Thank you for your invaluable assistance and the lessons you have taught me while I was your student.

Thanks always to those who have supported me through my education, my parents, my step-brother Trenton, my cousin Dr. Craig Cruzan, and all the other members of my family and all the friends I've ever made. You've all been incredible people to me, and I can not thank you enough.

Chapter One

Introduction

During the early nineteenth century, devastating diseases swept through Britain including Cholera, Typhus, Smallpox, and Scarlet Fever. In 1830 Cholera claimed over 20,000 lives, and 16,000 people succumbed to Typhus between 1838 and 1842.¹ The deaths caused by these illnesses laid bare the urgent need for Britain's national government to protect the health and livelihood of its citizens. Journalists throughout the UK expressed this need including James Macaulay, editor of *The Leisure Hour*, who wrote, "the powers of sanitary science must be zealously applied, for it is there the very dirt ferments and the air becomes envenomed; and yet it is still a question how these powers are to be applied, for most of the denizens of these plague-nests have no more instinct for self-improvement than the unreasoning brute."² For Macaulay along with other writers, disease spread in urban areas populated by lower classes, who were not inclined to protect themselves. Britain's political leaders responded by developing proactive national health policies to protect everyone and prevent disease. The maladies that struck Victorian England led to the West's first attempts at public health, a coordinated, top-down, scientific approach to protecting communities and improving health for everyone.

¹ C.J. Duncan, S.R. Duncan, and S. Scott, "The Dynamics of Scarlet Fever Epidemics in England and Wales in the 19th Century," *Epidemiology and Infection* 17, no. 3 (1996): 494.

² James Macauley, "State of the Public Health in the City of London," *The Leisure hour: a family journal of instruction and recreation*; London Iss. 315 (Jan 7, 1858): 14-16.

The current COVID pandemic has underscored the importance of a modern, national public health policy, or the coordinated laws, decisions, and actions a government utilizes to combat disease that supports efforts in treatments, sanitation, public outreach, and research funding.³ In 1998, historians Christopher Hamlin and Sally Sheard reflected on changing attitudes towards public health since the Edwardian and Victorian eras, writing that “Public action can substantially improve the health of the general population now seems obvious, and it also seems obvious that public authorities owe their citizens that improvement. Both ideas were controversial in the 1830s and 1840s.”⁴ The pandemics that swept through Britain in the nineteenth century created a crisis that instigated a government response that was proactive rather than reactive. Political leaders now saw it as their duty to enact measures to combat disease. Not everyone supported a health policy that came from the national government, however. Local officials and church leaders traditionally had distributed care during health crises, and laws set by Parliament might not address the health environment in each town, borough, or region (especially in Ireland where tensions existed between the Irish people and English rulers). No apparatus existed to convey the policies to the public, either. To solve these issues Parliament created Medical Officers of Health (MOH) to act as a liaison between politicians and the populace. The physicians were a key part of a larger

³ F.U. Ahmed, “Defining public health,” *Indian Journal of Public Health* 55 (2011): 241. During the Middle Ages (500-1500) the efforts of public health were usually relegated to religious charities or by guilds, and during the Middle Ages the hospital developed originally in Islamic kingdoms such as three hospitals developed in Baghdad between the eighth and ninth centuries.

⁴ Christopher Hamlin and Sally Sheard, “Revolutions in Public Health: 1848 and 1998?” *The BMJ* 317, no. 7158 (Aug. 29, 1998): 587-91.

public health movement that led the fight against illness and contributed to improving mortality rates in Britain's cities by pushing politicians to adopt public health policies, reforming medical practices in their communities, and creating ways to share information with the public and to teach them to protect themselves from diseases. Many of these practices remain, and the MOH established in Victorian Britain mark an important turning point in the development of modern public health.

The 1848 Public Health Act created MOH to serve in towns and cities, and the physicians appointed to the position were key to the early public health movement's success by acting as an intermediary between the government and the local populations and by asserting themselves as defenders against disease. Although some scholars like Thomas McKeown and R.G. Record have asserted that changing economic circumstances in urban areas had a greater impact on reducing disease, this thesis argues the MOH were key players in reducing mortality throughout Britain. John Simon (1816-1904) was appointed the first MOH in London and, along with the other MOH, investigated and created recommendations for sanitary improvement to the counties and communities that they oversaw. The MOH were integral to the declining mortality rates through the creation of medical societies which began to "de-quackify" the medical profession, improve training for new physicians, and allow for its members to become involved not only in their work as practitioners, but also push for social and medical reform. Most importantly the MOH also fulfilled the role of teachers through instructing the public either through free lectures, dissemination of information through publications like the journal *Public Health*, or through visitations by members of medical societies. The

⁵ Thomas McKeown and R.G. Record, "Reasons for the Decline of Mortality in England and Wales during the Nineteenth Century," *Population Studies* 16, no. 2 (1962): 94-122.

information was made specifically to be easily accessible to lay-people, allowing for the public to form a type of proto-health literacy. The medical officers were a key part of establishing an early model for public health reform, creating a foundation on which the modern National Health Service (NHS) was created on July 5, 1948.

The waves of diseases that began in the 1830s ended more than a century of relative stability, with few large-scale health crises in England, and provided the urgent need for a public health strategy. Cholera had spread from the Indian Subcontinent and first appeared in Sunderland on October 20, 1831.⁶ Other maladies like Typhus were familiar to British people, having been around for more than 200 years, and several local outbreaks in the first half of the 19th century led to endemic status for this illness.⁷ Scarlet Fever claimed 15,000 lives in 1847, with new waves every five to six years over the following three decades.⁸ An outbreak of smallpox in London 1837-1838 initiated a

⁶ E. Ashworth Underwood, "The History of Cholera in Great Britain," *Proceedings of the Royal Society of Medicine*, Vol. 165, November 3, 1947, 1. The cholera crisis of the 1830s and the second major wave in 1854 brought about significant changes in British views towards public health. It could not have come at a better (or worse) time as the UK throughout the nineteenth century was experiencing upheavals in its socio-political makeup. The 1832, 1867, and 1884 Reform Bills expanded both property and voting rights of those throughout the UK and enfranchised much of the working and poorer classes of males (women's voting rights would not come until 1919).

⁷ Anne Hardy, "Urban Famine or Urban Crisis? Typhus in the Victorian City," *Medical History* 32 (1988): 405.

⁸ C.J. Duncan, S.R. Duncan, and S. Scott, "The Dynamics of Scarlet Fever Epidemics in England and Wales in the 19th Century," *Epidemiology and Infection* 17, no. 3 (1996): 494.

new European pandemic, killing an estimated 40,000 in England and 500,000 in Europe.⁹ It affected primarily the poorer areas of the nation, and a second major wave occurred in 1854. The diseases coincided with rising urbanization caused by the Industrial Revolution, with more than half of the people living in towns and cities with more than 2,500 residents. (This number increased to eighty percent by the 1890s.)¹⁰ The urban poor were most impacted, and historian Robert Woods argued that the diseases led to increasing mortality rates in cities between 1830 and 1840, reversing previous gains in British life expectancy.¹¹

British politicians viewed the urban poor with the framework of Benthamite Utilitarianism, an ethical philosophy associated with Jeremy Bentham (1748-1832) that described actions promoting happiness for the greatest amount of people were morally right, and they turned to the growing number of social scientists to address the state of the poor in cities. In 1832, Chancellor of the Exchequer John Charles Spencer announced in the House of Commons the creation of the Poor Law Commission, an independent royal committee to explore reforming social assistance laid out in the Elizabethan Era. Edwin Chadwick, a Benthamite and the commission's secretary, co-authored the report with Nassau Senior, an Oxford professor and economist. They called for reform, establishing new poor work houses which were a reworking of the original poor hospitals originally

⁹ Donald R. Hopkins, *The Greatest Killer: Smallpox in History*, (Chicago: University of Chicago Press; 2002), 87-91; Olga Krylova and David J.D. Earn, "Patterns of smallpox mortality in London, England, over three centuries," *PLOS Biology* 18, no. 12 (2020): e3000506.

¹⁰ Jan de Vries, *European Urbanization, 1500-1800* (London: Routledge, 2013), 65-76; E.A. Wrigley, R.S. Davies, J.E. Oeppen, R.S. Schofield, *English Population History from Family Reconstitution 1580-1837* (Cambridge: Cambridge University Press, 1997), 348.

¹¹ Robert Wood, *The Demography of Victorian England and Wales* (Cambridge: Cambridge University Press, 2000), 370-2.

¹² Nassau Senior and Edwin Chadwick, *Poor Law Commissioners' Report of 1834* (London: HMSO, 1834).

established during Queen Elizabeth's reign.¹² Despite the Commission and Chadwick's good intentions, critics condemned the workhouses as horrendously cruel, as Charles Dickens portrayed them in the serial *Oliver Twist* published between 1837 and 1839. (Dickens was familiar with the Poor Law reforms. He had observed the parliamentary proceedings and published transcripts of them in *The Mirror of Parliament*, a journal founded by his uncle and that published weekly records of debates from both houses of Parliament). Despite opposition, Parliament passed the Poor Law Amendment Bill in 1834. The act adopted the recommendations, establishing a new government Poor Law Commission to inspect and supervise local officials and to create new boards of governors to oversee each of the workhouses. This legislation moved away from the Elizabethan workhouses supported by local parishes towards Victorian ones that placed local governments and the Poor Law Commission in charge of social help. According to historian Robert Tombs, "The Poor Law principle of universal legal right to assistance was so deeply engrained that it continued to influence English social policy long after the Poor Law itself was formally abolished in 1948."¹³

Cleanliness of urban centers was a major challenge in the Industrial Revolution, particularly for the poorer classes inhabiting cities, and the pandemics led social scientists and engineers to pay greater attention to water's effect on sanitation, including fresh drinking water, drainage of waste water, and the role of water in spreading disease.¹⁴ An

¹² Nassau Senior and Edwin Chadwick, *Poor Law Commissioners' Report of 1834* (London: HMSO, 1834).

¹³ Robert Tombs, *The English and their History* (New York: Vintage Books, 2014), 447.

¹⁴ It would not be until John Snow's second report *On the Mode of Communication of Cholera* (published in 1849) and his famous mapping of the Broad Street pump, that Cholera's method of spreading through water would be accepted by the larger medical community in Britain.

1838 report produced for the Poor Law Commission “emphasized the importance of adequate water supplies in poor districts for drainage and sewerage purposes, and to allow ‘sufficiently’ the washing of streets, houses, clothing, and persons.”¹⁵ Such measures required significant infrastructure and oversight that political authorities could, and should, provide. In 1842, Chadwick authored a new report drawing a connection between disease and insufficient sanitation, and emphasizing the need for a legislative solution.¹⁶ Five years later, he was appointed to a Committee of Inquiry to look at sanitation in London, where he continued his case for political leaders to address the problems. He drew a causal link between poor hygiene and disease, and he argued there was a connection between sanitation and poverty.¹⁷ He proposed a new plan to improve living conditions in London that led to the creation of the General Board of Health in 1848 and, as will be discussed later, he was appointed to lead the new board. The rapid rise in urban population caused by the Industrial Revolution and the urgent need to improve circumstances for the poor and working-class inhabitants in cities and towns drove politicians towards public health policy and intersected with significant changes within the medical community, namely the establishment of the MOH and reforms to professionalize medical practitioners.

Since the turn of the twentieth century, the history of public health and the government’s responsibility in combating illness has received some scholarly attention,

spreading through water would be accepted by the larger medical community in Britain.

¹⁵ Anne Hardy, “Water and the Search for Public Health in London in the Eighteenth and Nineteenth Centuries,” *Medical History* 28 (1984): 263.

¹⁶ Ian Morley, “City Chaos, Contagion, Chadwick, and Social Justice,” *Yale Journal of Biology and Medicine* 80 (2007): 69-70.

¹⁷ Morley, “City Chaos,” 69.

and the studies on Britain fall into two broad categories: history of public health and urban social history. Histories of public health tend to be top-down and focused on science, especially epidemiology, and concentrate on how leaders within the medical community or in governments responded to health issues and shaped politics, infrastructure, medical technologies, and treatments. The emergence of social history in the mid-twentieth century has allowed for historians to look at the same subjects from new perspectives. Namely the social history of medicine focuses on bottom-up approaches and how various groups of peoples, including women or minoritized populations reacted to and advanced public health. The social history of medicine also looks at different classes or socio-economic groups of people and their responses to pandemics, and how they shaped public health. Social history has influenced studies of public health by introducing the public into the narrative of health policy.

One of the first studies on the subject was written by John Simon, a surgeon from King's College Hospital and London's first MOH, and later Medical Officer for the Privy Council. In 1890 he published *English Sanitary Institutions: Reviewed in their Course of Development, and in Some of their Political and Social Relations*, exploring the history of public health, presenting a whiggish interpretation of its progression from the earliest known civilizations to the end of the nineteenth century.¹⁸ Indeed, he made a case for the current push for public health by showing that this approach had originated in the classical world and could be traced through to his present day. Perhaps not surprising for his time, he described public health as important for civilization and empire, explaining it had been a part of great predecessors like the Roman Empire and noting the popular

¹⁸ Sir John Simon, *English Sanitary Institutions: Reviewed in their Course of Development, and in Some of their Political and Social Relations* (London: Cassel, 1890).

sentiments of his day, “without health, is no wealth” and that “good government” was key to protecting the population and the empire.¹⁹ Simon presented the 1834 Poor Law amendment as a continuation of a long history and as an important step in prioritizing preventative medicine and making public health a branch of government. He devoted much attention to the 1848 Public Health Act, explaining that Parliament’s creation of the MOH in the act to report on the living conditions of Britain’s poor and to counsel local authorities on medical matters marked a watershed moment in the country’s history. He explained that two trends contributed to a growth in “humanitarian sentiments” that led to the push for what he called “Preventive Medicine,” the “evangelical revivals,” known in North America as the Great Awakening, that led to the emergence of new groups like the Methodists who drew large crowds, and the changing political climate after the eighteenth century revolutions which he said made leaders focus more on the needs of the populace.²⁰ He described the nineteenth-century acts, a product of this humanitarian sentiment, “As a first step in the modern utilization of Medicine by the State,” and the men who held this position derived authority from Parliament’s sanction.²¹

Physician and politician Francis E. Fremantle, who worked as an MOH and had served as a plague doctor in India, expanded on Simon’s work in a short article published in 1910 that focused on the MOH for the *British Medical Journal*.²² He praised the

¹⁹ Simon, *English Sanitary Institutions*, 18-29 and 178.

²⁰ Simon, *English Sanitary Institutions*, 128 and 136.

²¹ Simon, *English Sanitary Institutions*, 184-5.

²² Francis E. Fremantle, “Part-Time Medical Officers of Health”, *The British Medical Journal* 2, no. 2592 (Sept. 3, 1910): 598-9.

medical officers who split their time between their duties caring for patients and time spent shaping public policy. He, too, presented the nineteenth-century medical reforms as a move towards good government to protect citizens. He portrayed Parliament's sanction as a legitimizing force for the men who held this office, but also argued that it was their continued service as physicians caring for patients that gave them authority to shape public policy.²³

Healthcare reforms in the United States and Britain in the 1950s sparked renewed interest in the history of public health.²⁴ George Rosen, a physician and professor at Columbia University published, in 1958, *A History of Public Health*. His work is regarded as one of the key texts on the subject and has been re-published several times, most recently in 2015. Like Simon had done in his earlier work, he traced the history of public health back to classical Greece. He, too, asserted humanitarian concerns instigated the move towards modern public health and that the foundations of it could be found in the sanitation movement in nineteenth-century Britain.²⁵ Rosen's work detailed the creation of an ethos based on order, efficiency, and social discipline leading to various campaigns for social improvement. He also noted the importance of the proliferation of education. In contrast to the top-down approach of Simon and Fremantle, where medical reforms were seen as the produce of good governance, he viewed the physicians as

²³ Fremantle, "Part-Time Medical Officers of Health," 599.

²⁴ The American Department of Health and Human Services was created on April 11, 1953, and The Centers for Medicare and Medicaid were established on July 30, 1965. This, along with the establishment of national medical services in the UK, led historians to delve into public health as a form of social history.

²⁵ George Rosen, *A History of Public Health* (Revised edition, Baltimore: Johns Hopkins University Press, 2015), 114.

drivers of reform who encouraged the politicians' legislation to address the problems in urban areas. Some disagreement exists among scholars about how to interpret the MOH, either as products of good government or as the source of it.

One historiographical debate has emerged over the impact of physicians and MOH on improving mortality rates in the 1850s and 1860s. Thomas McKeown and R.G. Record sparked the debate in 1962 with their article "Reasons for the Decline of Mortality in England and Wales during the Nineteenth Century."²⁶ McKeown was a physician, epidemiologist, and historian, and the two authors downplayed the popularly-held notion that physicians had played a significant role in improving mortality rates, arguing instead that changing economic and social conditions in the cities contributed more to declining death rates in the latter part of the nineteenth century.²⁷ Some scholars have challenged this view including historian Simon Szreter who, in 1988, published his study, "The importance of social intervention in Britain's mortality decline c.1850-1914: a re-interpretation of the role of public health," in which he tested the assertion that improving nutrition was the principal factor leading to an improvement in life expectancy.²⁸ He argued that agency was important when considering causality and that, while nutrition and rising standards of living were not unimportant, the key agency came through the battle waged by local governments against disease.²⁹ MOH were at the center

²⁶ McKeown and Record, "Reasons for the Decline of Mortality in England and Wales during the Nineteenth Century," *Population Studies* 16, no. 2 (1962): 94-122.

²⁷ McKeown and Record, "Reasons for the Decline of Mortality in England and Wales," 121-2.

²⁸ Simon Szreter, "The Importance of Social Intervention in Britain's Mortality Decline c.1850-1914: A re-interpretation of the Role of Public Health," *Social History Med* 1, no. 1 (1988): 1-38.

²⁹ Szreter, "The Importance of Social Intervention," 37.

of this struggle. Anne Hardy, honorary professor at the London School of Hygiene and Tropical Medicine, also challenged McKeown and Record's assertion in her 1993 book *The Epidemic Streets: Infectious Disease and the Rise of Preventative Medicine, 1856-1900*. She explored various responses to diseases like Whooping Cough, Smallpox, Typhoid, Typhus, and Tuberculosis. While some measures were less effective, she argued that nurses and the MOH were instrumental in combating the diseases and bringing the pandemics to an end.³⁰

A second debate has emerged among scholars over the explicit or implicit motivations behind public health policy in Victorian Britain. Mary Poovey, for example, addressed this in her collection of essays published under the title, *Making a social body: British Cultural Formation, 1830-1864*. She examined the new capitalism and government forms, and how they interacted with the non-elite of British society or the "Social Body."³¹ The text is an epistemological study of how modernity affected the concept of social body, something the author argued had emerged due to attempts by the government and individuals to comprehend and to define the lower order. In this way, public health measures were influenced by the middle class attempts to define the poor as both similar, a part of the social body, and at the same time different as the lower order. In a similar way Deborah Lupton used sociocultural and political theories to examine public health in her 1995 book *The Imperative of Health: Public Health and the*

³⁰ Anne Hardy, *The Epidemic Streets. Infectious Diseases and the Rise of Preventive Medicine, 1856-1900* (Oxford: Clarendon Press, 1993), 293-4.

³¹ Mary Poovey, *Making a Social Body: British Cultural Formation 1830-1864* (Chicago: University of Chicago Press, 1995), 6.

Regulated Body. She explored the assumptions and meanings behind public health as a combination of medicine, social science, and aggregated bodies, and positioned it as a highly political and constantly changing field rather than a neutral one.³² Lupton argued for contesting accepted assumptions about public health and health practices and to open up space in the discourse of public health for new alternatives.³³ In other words, attitudes about class, gender, and social order should be considered when discussing public health. In 1998 Christopher Hamlin's *Public Health and Social Justice in the Age of Chadwick: Britain, 1800-1854* challenged Rosen's claim that modern public health was driven by humanitarian concerns, instead arguing the focus on sanitation limited the scope of how public health was defined, excluding matters like poverty, wages, and access to healthcare to something focused narrowly on sanitation. In other words, medicine's moral economy was shaped by the political economy of early nineteenth century British industrial capitalism.³⁴ More recently, Brian Lund's 2002 book *Understanding State Welfare: Social Justice or Social Exclusion?* examined the rise of social policies in the late nineteenth century and the development of state welfare throughout the twentieth century. Lund explored the relationship between poor relief and social distribution policies, and he argued that the ideals of social welfare emerged due to a greater interest in the state assisting all of society, which led to a redistribution of resources as a means to

³² Deborah Lupton, *The Imperative of Health: Public Health and the Regulated Body* (London: SAGE Publications, 1995), 2.

³³ Lupton, *The Imperative of Health*, 15.

³⁴ Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick: 1800-1854* (Cambridge: Cambridge University Press, 1998), 14-5.

enhance “social justice and reduce social exclusion.”³⁵ Works like these explore deeper the meaning and motives behind public health measures.

This study examines the emerging public health movement in Victorian Britain, the MOH, and the role of the public in the creation of the modern medical state. Building on the work of Szreter and Hardy, the present examination explains how and why the MOH were able to effect change. Analysis of the officers and their reports allow for exploring how these medical professionals understood their place in the framework of nineteenth century public health efforts, their views on what was important in their own line of work, and the historiographical questions about their influence and impact. The rich collections from the London Society of the Medical Officers of Health archives have been used, as well as government documents, newspapers, and the published writings of the physicians. This research sheds light on how they understood and integrated into the grand scheme of Victorian public health, how these physicians were forming their identities as both agents of government action and as medical professionals.

The following chapters examine the early history of the modern medical state in Britain during the nineteenth century. Chapter two examines the creation of the MOH focusing primarily on the work of John Simon, the first MOH for London and later Medical Officer for the Privy Council. The physicians who filled this post took on a new role as government advisors, identifying sanitation improvements, and recommending actions which, in turn, affected government public-health policy. The MOH also became defenders of the public, fighting back disease to protect the innocent citizens of Britain.

³⁵ Brian Lund, *Understanding State Welfare: Social Justice or Social Exclusion?* (London: Sage Publishing, 2002), 27.

Chapter three explores the historical context for changing ideas about public health by analyzing the emerging professionalization, through the example of reforms to nursing, and the establishment of the St. Thomas Nursing School by Florence Nightingale, and the struggle for a Registered Nursing System in Britain. Nightingale and her contemporaries changed the understanding of modern public health by establishing positions within workhouses and in hospitals that were filled by professional, paid, and experienced medical practitioners. Chapter four explores how the MOH established themselves as the key conduit for sharing information with the public, how people utilized information given to them by the officers and how local societies created a system for communication and provided agency in the fight against disease. This study will center the MOH in the discussion of public health, and demonstrate how and why they were key to the movement's success.

The public health reforms of the nineteenth-century had far-reaching impacts in the following century. These developments formed the groundwork for Britain's modern medical state, or medical modernity, in which professional medical institutions, public consciousness, and laws promoting health became ingrained into the infrastructure of a nation and has led people to assume a connection between public health and the rights of citizens. It is important to recognize that these attempts at a national public health system faced significant challenges not unlike what we experience today. The nineteenth-century reformers faced stringent bureaucracy, the remnants of the 1840's anti-vaccine movement, the growth in alternative medicine, and local authorities who pushed back against any form of centralized power. Even though it would take two world wars for a true nationalized system of healthcare to be formed, these nineteenth-century reforms

built the foundation for a system of public healthcare that spread throughout most of the developed world and paved the way for entities like the UK's National Health System and American Medicare and Social Security. Understanding this history may help leaders shape healthcare reform and response to diseases in our present day.

Chapter 2

A New Approach: Medical Officers of Health and Fighting Disease

Writing in 1848 about the passage of the Public Health Act, journalists William and Roger Chambers noted that the new law required towns to establish committees to oversee sanitation, and councils were to appoint a “legally-qualified medical practitioner” to serve as MOH.¹ The authors hinted at some of the challenges presented by the new law. The act set national policy dictating how local authorities should govern their communities, and the councils comprised of civic leaders might not always agree with recommendations made by physicians, not normally accustomed to setting public policy. Despite the potential for friction, the act marked an important turning point for physicians who, through the new office, took on a new role in shaping public health policies in addition to, or as an extension of, their work curing the sick. A writer for *The Observer* noted the duality in 1855, explaining, “The Importance of the first selection of medical officers can scarcely be overrated, as if good men are chosen, in the case of another epidemic, they might form one of the most useful bodies in the kingdom. By meeting together, and joining together their experience, they might be able to lay down rules or offer suggestions that would be of immense value not only to the metropolis but to the entire kingdom.”² In other words, MOH were not just good for the cities they served, they were key for maintaining a healthy empire.

¹ William Chambers and Rober Chambers, “The Public Health Act,” *Chamber’s Edinburgh Journal*, no. 249 (October 7, 1848): 232.

² “Election of Medical Officers under the Metropolis Act,” *The Observer*, Dec 10, 1855, 5.

John Simon, a surgeon from King's College Hospital and lecturer in anatomical pathology at St. Thomas's Hospital, was appointed as London's first MOH in 1848. His career provides an opportunity to view how these physicians navigated the space between local authorities and the national Parliament, how they advised sanitation committees and the populace, and how they viewed their role in the emerging public health strategy. The MOH worked with authorities to address sanitation in communities and they drew on their medical knowledge to advise lawmakers and to shape public policy. They expressed their duties in nationalist and imperialist terminology, too, describing themselves as defenders of the British public and caretakers of the urban poor, whom they saw as a principal threat to a strong nation and empire.³ Their duty to clean up cities, shape policy, and protect the citizenry provided them an agency and legitimization, and through their activities they crafted the nineteenth-century modern medical state.

Before examining the new officers, important changes in epidemiology and understanding of how diseases spread should be discussed, and how they set the stage for the 1848 Public Health Act and the MOH. Prior to the eighteenth century, political leaders seldom set policies to address health, leaving care of the sick and poor largely to ecclesiastical institutions. The Industrial Revolution and the growing urban centers made health a more pressing issue in the nineteenth century, and public leaders began to act. A short-lived general board of health had been created in 1806.⁴ The epidemics of the

³ William and Robert Chambers claimed the greatest threat to British towns and cities was the large numbers of Irish "working poor" who inhabited them. Chambers and Chambers, "The Public Health Act," 233.

⁴ Colin Brockington, *Public Health in the 19th Century* (London: E&S Livingston, 1965), 9.

1830s fueled the push for government intervention, and this was aided by new and competing ideas about how illnesses like Typhus and Cholera spread. By the early nineteenth century Zymotic theory, which attributed contagious diseases to the presence of certain elements, was gaining popularity. Many social reformers and politicians, in contrast, subscribed to Miasma theory, which had blamed the maladies on breathing foul air. Despite their differences, both groups focused on sanitation as a means to combat illness and emphasized the need to clean up places of nuisance, such as pigpens, butchering shops, chicken coops, cow stalls, horse stables, and roadways.⁵ Sir Edwin Chadwick (1800-1890), a miasmatist, sanitarian, and social reformer, completed in 1842 a *Report on the Sanitary Conditions of the Labouring Population of Great Britain* in which he demonstrated the higher mortality rates for people in cities.⁶ The text sparked debate among government leaders about measures they could take to address the problems and it led to the passage of the Public Health Act in 1848.⁷

Although the growing industrial centers faced many challenges that impacted health including poverty, a lack of workplace safety, and limited access to healthcare, the new act focused public health on sanitation and the role government could play in cleaning up cities and towns. The legislation began,

⁵ Acts and Reports, "An Act for Promoting the Public Health," 31 August 1848, 11 & 12 Vict. c. s. 63: 749.

⁶ Edwin Chadwick, *Report on the Sanitary Condition of the Laboring Population of Great Britain; Sanitary Condition of the Laboring Population of Great Britain; a Supplementary Report on the Results of a Special Inquiry into the Practice of Interment in Towns: Made at the Request of Her Majesty's principal Secretary of State for the Home Department* (London: W. Clowes and Sons, 1843).

⁷ Elizabeth Fee, and Theodore Brown, "The Public Health Act of 1848," *Bulletin of The World Health Organization* 83, no 11 (2005): 866.

Whereas further and more effectual provision ought to be made for improving the sanitary condition of towns and populous places in England and Wales, and it is expedient that the supply of water to such towns and places, and the sewerage, drainage, cleansing, and paving thereof, should, as far as practicable, be placed under one and the same local management and control, subject to such general supervision as is herein-after provided.⁸

It placed local authorities in control of their own boards of health and sought to curtail wasteful spending, explaining “No officer or servant appointed or employed by or under the Local Board of Health shall anyway be concerned or interested in any bargain or contract made with such a Board for the purposes of this Act.”⁹ Anticipating the potential for misuse of power, the authors warned that if the officers attempted to profit from their new positions, they ran the risk of being removed from office.¹⁰ Local authorities were to appoint MOH to work with the boards, indicating the politicians saw a need for trained physicians to make recommendations to the boards and drive sanitation and other health policies. This placed the doctors in a pivotal position; they were members of the communities they served while, at the same time, creating and enforcing national and local policies governing their communities. By the last half of the 19th century, the

⁸ Public Health Act, 23 Vict. c. s. 63: 721-2.

⁹ Public Health Act, 23 Vict. c. s. 63: 740-1.

¹⁰ Public Health Act, 23 Vict. c. s. 63.

number of Medical Officers of Health in England had grown to over 730 members,¹¹ not counting those who also worked alongside the Poor Law Medical Officers who by 1860 ranked three to four thousand members.¹²

Simon and the other officers entered new territory in terms of their position, and they needed to form identities to promote the formation of a modern medical state and to protect citizens from disease. The legislation went on to explain,

If any such Officer or Servant be so concerned or interested, or shall, under color of his office or employment, exact, take, or accept any fee or reward whatsoever, other than his proper salary, wages, and allowances, he shall be incapable of afterwards holding or continuing in any office or employment under this Act. He shall forfeit and pay the sum of Fifty Pounds, which may be recovered by any person with full costs of suit, by action of debt.¹³

The importance the act placed on curtailing personal greed and opportunism presents insight into the emerging role created for the MOH. The fine of fifty pounds for fraud detailed above can be compared to the average annual salary of a laborer in 1850 who was paid £20, or a bailiff whose annual income was £40.¹⁴

Although wages for MOH could vary because they were paid by local

¹¹ United Kingdom Parliament “Return of Appointments of Medical Officers of Health in England and Wales Under the General Sanitary or Local Acts,” LXXXVI.121, August 12th, 1887, 1-46.

¹² Commons Sitting of Tuesday, July 12, 1853.

¹³ Public Health Act, 23 Vict. c. s. 63: 741.

¹⁴ W.H.R. Curtler, *A Short History of English Agriculture*, (Oxford: Clarendon Press, 1909), 356.

magistrates, their income likely was similar to bailiffs who also held an administrative role. The fine for fraud was a heavy penalty.

As the new officer in London, Simon focused his attention on sanitary improvements as a means to improving health. He examined and collected information on conditions in the City and surrounding area. He produced reports detailing the poor conditions that many laborers and workers experienced. Through his inspections on London's water and sanitation needs, he concluded the situation was dire and reform was needed:

I would beg any educated person to consider what are the conditions in which alone animal life can thrive. To learn, by personal inspection, how far these conditions are realized for the masses of our population; and to form for himself a conscientious judgement as to the need for great, if even almost revolutionary reforms.¹⁵

He compared the urban, working classes' living conditions to that of animals and he asked those who derided the poor to spend at least one hour visiting "some very poor neighborhood" such as those found in Saint Giles and Tower Hamlets, to the east and west of London.¹⁶ Although Simon, like other MOH, was trained as a physician, he focused on sanitation as a way to combat illness rather than emphasizing medicinal treatments or addressing the root causes of poverty. Like other Sanitarians, he agreed that poor neighborhoods needed to be cleaned in order to improve health in industrial cities.

¹⁵ John Simon, *Preface to Reports Relating to the Sanitary Condition of the City of London* (London: John W. Parker and Son, 1854), ix.

¹⁶ Simon, *Preface to Reports Relating to the Sanitary Condition of the City of London*, ix.

Simon joined other reformers like Chadwick in defining sanitation as the key factor in public health. He acknowledged, however, other factors existed like low wages and limited access to public education. He noted in the preface to his *Reports to the City of London*:

If such and such conditions of food or dwelling are absolutely inconsistent with healthy life, what more final test of pauperism can there be, or what clearer right to public succour, than that the subject's pecuniary means falling short of providing him other conditions than those? It may be that competition has screwed down the rate of wages below what will purchase indispensable food and wholesome lodgment. Of this, as fact, I am no judge; but to its meaning, if fact, I can speak. All labor below that mark is masked pauperism. Whatever the employer saves is gained at the public expense.¹⁷

Certainly, he recognized that higher wages could combat poverty, but this required employers to give up their wealth. Perhaps he thought this was too difficult for a physician to address or it was beyond his means to correct through public policy. Instead he focused exclusively on recommending policies that could improve the health of the poor through sanitation measures.

Simon's views on sanitation were integral to his understanding of the plight of the urban poor and how to help them. The aim of public health was to promote the wellbeing of the working and poorer classes, which he had not viewed necessarily as children or wards but rather saw them as people who, through proper education and force-of-will,

¹⁷ Simon, *Preface to Reports Relating to the Sanitary Condition of the City of London*, xi-xii.

could emerge from their squalid conditions. He explained, “I entertain great hope and little doubt, that, within a few years, the working classes will have organized for themselves extensive means of suburban residence...in so far as it may affect the City, great assistance will be given to those endeavors which will be made, under authority of your Act...to diminish the too dense array of houses inhabited by the poor.”¹⁸ This changing view of the poor shaped how Simon and other MOH acted as both activists and reformers.

Simon’s reports also demonstrate how he understood disease and the global nature of the illnesses afflicting British subjects. He noted, “Even while I was addressing you on the subject, the plague had again kindled its smoldering fire, and was widening its circle of destruction.”¹⁹ He likened disease to an evil, malevolent force that was a world-wide problem that had come “Perhaps from the eastern centers of its habitual dominion from the alluvial swamps and malarious jungles of Asia, where it was first engendered amid miles of vaporous poison, and still broods over wasted nations as an agent of innumerable death.”²⁰ He explained, for example, that the “Asiatic Cholera” was a destructive force that not only threatened lives but it also jeopardized the entire empire. He described the disease as an invader that “Repelled again from the dry and airy acclivities of the earth, and their hardier population, it filtered along the blending-line of

¹⁸ Simon, *Preface to Reports Relating to the Sanitary Condition of the City of London*, 205.

¹⁹ Simon, *Preface to Reports Relating to the Sanitary Condition of the City of London*, 222.

²⁰ Simon, *Preface to Reports Relating to the Sanitary Condition of the City of London*, 220.

land and water the shore, the river-bank, and the marsh.”²¹ Simon was creating a new, untamed and uncivilized enemy - a threat to the innocent civilians of Britain - and the arrest of said enemy would be the duty of the MOH through meticulous investigation. The MOH played a crucial role cleaning up cities to protect the poor and working classes and, at the same time, defending the empire.

Simon and his colleagues employed systematic and social-scientific approaches to addressing sanitation and illness in the urban areas. MOH focused their attention on water supplies and distribution, as it was becoming increasingly clear that this was a source of disease. The 1848 Public Health Act gave the officers power to investigate and acquire information about water supplies, which pioneered a new cross-discipline in medical engineering. Simon clarified why water was such a concern in one of his reports:

But there are other evils belonging to these waters, less appreciable indeed by chemistry, but open to universal observation, and meriting unqualified blame. They are conducted to the metropolis in open channels; they receive in large measure the surface washing, the drainage, and even the sewage of the country through which they pass; they derive casual impurities from bathers and barges. They are liable to whatever pollutions mischievous or filthy persons may choose to inflict on them; and then on their arrival in the metropolis are distributed, without filtration, to the public.²²

²¹ John Simon, *Report to the Local Board of Health, Croydon, with Regard to the Causes of Illness Recently Prevailing in that Town* (Croydon, U.K.: Local Board of Health, 1853), 15-16.

²² Simon, *Water Supply*, 7.

The solution to contaminated water supplies required safer ways to transport and deliver it, especially to the poorer members of society. He and the other officers pushed political leaders for changes and, at the same time, positioned themselves as mediators between the public, the government, and the companies or commissions carrying out the work to clean and protect water supplies. This pivotal position between these groups could be tricky to navigate, as Simon demonstrated in one report where he asserted that more local control could benefit communities:

But while the works of drainage executed under your orders lose much of their sanitary usefulness for want of an effectual water supply, your Honorable Court has no power of interference in the matter, closely associated as it is with the performance of your other functions. These anomalies would be removed, and a most beneficial power over the distribution of water would be vested in the hands of your Commission, if in the renewal of your Act of Parliament, you procured authority to represent the citizens in this matter. All the advantages which could possibly be gained by competition, together with many benefits which no competition could ensure, would thus be realized to the population under your charge; if, namely, a clause were inserted in your Bill, empowering you, at your discretion, to contract corporately with any person or any company for the supply of water to the City of London.²³

He emphasized the need for legislative solutions that could improve the livelihood of people living in urban areas.

²³ Simon, *Water Supply*, 7-8.

Simon's reports, like those of other MOH, became part of a growing corpus that examined sanitation problems and recommended action that could safeguard Britain. These physicians were taking on a role as social scientists, collecting data and recording observations, as well as political advisors to the city boards and Parliament to inform and persuade them to improve the general health of citizens. This was new territory for the men who had been trained as doctors to treat illness, and it placed them in a visible public role as health experts. Simon, however, had not viewed this as a new role, arguing instead that MOH followed the historical example set during the Roman Empire. He asserted that physicians had guided public health in the classical world, but that there were some differences including the plight of the poor in Victorian England and increasing scientific knowledge of his day.²⁴ He explained, "every educated layman is well aware that, in proportion as Medicine has become a Science, it has ceased to be the mystery of a caste...as sanitary laws and sanitary administration mean to me laws and administration for the saving and strengthening of life, so the worth which they have or promise in outcome of that sort is the only worth I have cared to measure in them."²⁵ In other words, physicians could use their knowledge to make laws and set regulations that could, above all, save lives and protect people.

Several MOH contributed to a report to Parliament based upon investigations in 1848 and 1849, in which, similar to Simon, they described disease as an unnatural force and an evil that must be exterminated. Simon employed similar language in his account on the water supply. He explained, "It is possible to conceive that an epidemic

²⁴ Simon, *English Sanitary Institutions*, 27.

²⁵ Simon, *English Sanitary Institutions*, x-i.

constitution might be so intense as to destroy every human being exposed to its influence. Those very sanitary evils which tend to propagate epidemics have a direct influence in degrading the human race, and in leading to ignorance, vice, and crime.”²⁶ Indeed, poor sanitation led to sickness that, in turn, contributed to other social ills experienced in urban areas including bad-smells, sounds, and public-intoxication as examples. Physicians like Simon were not only responsible for cleaning up cities and preventing disease, they viewed their job as curing a broad array of vices that plagued the growing industrial urban areas.

The report to Parliament confirmed tensions between MOH and local authorities over the ability to respond quickly and efficiently to the threat of disease. In some cases, the physicians expressed disdain for magistrates. A Member of the General Board of Health (but not one of the MOH), Mr. Grainger, wrote that, “In a great number of instances, the proceedings of the local authorities were altogether inadequate for ensuring those prompt, comprehensive, and vigorous measures so urgently demanding in the presence of a great and destructive epidemic like malignant Cholera.”²⁷ He criticized local authorities for their attempts to divide public health responsibilities, making it difficult for MOH to oversee and enforce reforms. He recalled one example from late December, 1848, where a local board of health had given civic leaders instructions to clean areas suffering from a Cholera outbreak. Grainger participated in inspections and he

²⁶ Command Papers, “Report of the General Board of Health on the Epidemic Cholera of 1848 & 1849: Presented to both Houses of Parliament by Command of Her Majesty,” 1850, 9.

²⁷ House of Lords Papers, “Cholera: To Report of the General Board of Health to her Majesty on the Epidemic Cholera of 1848 and 1849. Report by Mr. Grainger,” 1850, 119.

discovered that authorities had failed to sanitize the area and another twenty people had died as a result.²⁸ He explained that if MOH were to succeed in protecting the working poor reforms were needed. He asserted,

Having witnessed the lamentable results of those proceedings; knowing that the health, the lives, and the happiness of the Labouring classes of this great city are immediately and deeply concerned. Above all considering, that, if our poorer fellow-citizens are to be guarded by sanitary measures, a desideratum infinitely more important than protection from the occasional invasions of cholera, some more efficient machinery than has hitherto been employed must be devised.²⁹

The tensions between the physicians and local magistrates was a reoccurring theme in the reports. The problem was not the general boards of health, but rather was the political leaders who neglected recommendations and circumvented the boards' authority.³⁰

The MOH tension with magistrates is best viewed in the context of the struggle over local control and who was in charge of preventative health measures. The London board revealed the source of the conflict in a letter to the Secretary of State for the Home Department, Viscount Palmerston, in 1854. It wrote, "The object of the entire procedure was to aid the local authorities without interfering with their freedom of action, and to lead them to fulfil the obligations imposed on them without resorting to any attempts at compulsion by means of provisions under which the President was advised that the

²⁸ House of Lords Papers, "Cholera: Report," 120.

²⁹ House of Lords Papers, "Cholera: Report," 118-20.

³⁰ House of Lords Papers, "Cholera: Report," 137.

directions could not be enforced.”³¹ As the letter indicated, parliament had created the boards and MOH to assist local authorities efforts to clean up urban areas, but the magistrates sometimes viewed them as adversaries, forced on them from the top-down and who impinged on their so-called freedom of action.

MOH faced a significant challenge as they carved out a new role for themselves in the emerging public health strategy and navigated this territory between local and national officials. On the one hand they were appointed by local magistrates to work with the health boards, yet at the same time they advised and worked with Parliament, too, to shape and enforce national policy. In something akin to what we have experienced in the current pandemic, civic leaders sometimes resented the MOH acting as agents of the national government. The physicians who held this post had to walk a tightrope between advising the magistrates about sanitation measures to fight disease and respecting local authorities’ right to make their own decisions. At the same time, the MOH understood Parliament had to take up new sanitary measures to modernize its cities and to protect its people and the empire. They despised the tenement houses and crowded urban areas, for example, which they considered to be a sanitary evil and a sign of societal backwardness. Yet magistrates could ill afford to carry out large-scale infrastructure rebuilding.

Liverpool was among the first cities to clear its slums and rehouse the working poor,

³¹Letter of President of General Board of Health to Secretary of State for Home Dept.; Report from Doctor Sutherland on Epidemic Cholera in the Metropolis, 1854 25

which it began in 1890.³² Change in the urban areas was a slow process rife with tension between the parties involved in shaping public health.

Despite the policy conflicts, the MOH had a positive impact on new attitudes about the poor. This change was influenced by the growing reliance on social sciences they employed to report on and combat disease. William Farr (1807-1883) had served as the first Compiler of Abstracts in the national Register General's Office, an entity created in 1836 and responsible for compiling all birth and death records (something previously recorded in individual parishes). These statistics helped MOH track the impact of disease and measure the effectiveness of reforms to combat illness. Simon, influenced by the growing popularity of social science, began to view the impoverished people, collectively, as a social body, and he was interested in how this corpus interacted with other social units and how he could observe this interaction. Others like John Snow (1813-1858), a physician known as the father of epidemiology and a founding member of the Epidemiological Society in London founded in 1850, investigated why Cholera proliferated among this social group, asserting that contaminated water in certain areas of London caused the illness.³³ He was able to show that 1854 Cholera deaths were clustered around a specific water pump, for example.³⁴ Men like Simon began to change

³² Colin G. Pooley, "Housing for the poorest poor: slum-clearance and rehousing in Liverpool, 1890-1918," *Journal of Historical Geography* 11, no. 1 (1985): 70-1.

³³ Theodore H. Tulchinsky, "John Snow, Cholera, the Broad Street Pump: Waterborne Diseases Then and Now," *Case Studies in Public Health* (New York: Academic Press, 2018), 77-99.

³⁴ Walford, Nigel Stephen, "Demographic and social context of deaths during the 1854 cholera outbreak in Soho, London: a reappraisal of Dr. John Snow's investigation," *Health Place* 65 (2020): 102402.

the way the poor were defined, moving away from view they were a source of disease towards one that viewed them as a social group afflicted by it. The more sanitarians, medical practitioners, and social reformers understood about the source of disease, the easier it was to make this transition.

Critics of public health policies found a lot to complain about. They blamed the national government and its attempts to coerce and dictate local policies. Some pointed the finger at faulty engineering and profiteering engineers, as one newspaper reported, “Recent works of eminent engineers, uninstructed by sanitary science have aggravated the evils intended to be remedied.”³⁵ Overall, however, the press was largely positive and often expressed support in imperial language. As one journalist explained in 1850, “The wealth which is retained through a selfish refusal to cooperate in this good cause, may in the end be found not so secure, as all who love the advancement of civilization, must ever wish to see it.”³⁶ The author, like many Victorian writers, used the term “civilization” to refer to the progressive notion of an ordered, advanced society which, in this case, was able to combat disease and protect its citizens. A sense for the common good, can be seen here, too, as the author noted that attempts to defend against illness could be restricted only by those “eager speculators” who were motivated by personal gain.³⁷

³⁵ Hunt Leigh, “The Health of the Population,” *The Examiner* (London, U.K.), May 1858.

³⁶ William, Empson, “Report of the General Board of Health on the Measures appointed for the Execution of the Nuisances-Removal and Diseases-Prevention Act, and the Public Health Act, up to July 1849,” *The Edinburgh Review* 91, no. 183 (January 1850): 228.

³⁷ Mansfield Horatio, “The Water Question,” *Tait’s Edinburgh Magazine*, January 1852, 57.

Parliament enacted further changes in the late 1850s strengthening the MOH, a further sign of support for the work they carried out. The success of sanitation reforms and declining Cholera cases convinced the majority of parliamentarians that public health policy should be a national effort. Charles Dickens reflected on how things were improving in a general sense, writing in 1857,

Let us confirm our minds upon this subject and at the same time fortify them against any undue despondency when we fall upon details of our present state that are disheartening and sickening, by looking at the increase of health and duration of life actually produced by improvement in the public sense of what is wholesome. In London, in the year seventeen hundred, one person died out of every twenty-five. Fifty years later one died out of every twenty-one. In the first year of our present century there died only one in thirty-five, and in eighteen thirty, one in fourth-five.³⁸

One newspaper article published in 1857 suggested that people saw the MOH as an important reason for the increasing life expectancy. The author explained that the physicians that held this office “register work done, collect and diffuse important information, and abound in practical suggestions of which here and there one must be destined to bear fruit after a time. Their reports prove them to be distinguished not only for activity and intelligence, but for the use of that tact which usually characterizes men

³⁸ Charles Dickens, “A Healthy Year in London,” *Household Words/Conducted by Charles Dickens* 15, no. 388 (August 1857): 194.

of their profession.”³⁹ Local boards still faced challenges such as the competing interests of water companies and a lack of funding and political support.⁴⁰ The solution seemed to be to strengthen the hand of the national government. An 1858 act transferred the powers of the local boards to the Privy Council, placing in the hands of the British government responsibility for the safety and health of the country and the duty of protecting the public health. Although the boards were disbanded following the act, MOH continued to operate throughout the country.

By 1860, the British government was in charge of public health and was assisted by the MOH, who acted as its agents throughout the country. Infrastructure for a modern medical state was beginning to take shape. Simon continued to affect policy, in particular the 1866 Sanitary Act and the 1875 Public Health Act. He and the other MOH had carved out a space as conduits for information, overseeing and enforcing regulations at the local level and reporting to Parliament on conditions and recommending reforms. The Local Government Act, passed in 1888, established county councils, creating elected boards to govern the counties, and it placed MOH under their jurisdiction. England’s largest cities were defined as their own counties. Thirteen officers served in the counties directly after the act’s passage.⁴¹ Simon was promoted to the position Chief Medical Officer of Health

³⁹ “London Officers of Health,” *The Examiner* (London, U.K.), August 1857, 499.

⁴⁰ “Sanitary Repentance in the City,” *Examiner* (London, U.K.), September 1853, 210.

⁴¹ Miscellaneous Subjects: Local Government Act, 1888 (Medical Officers of Health): Return of The Medical Officers of Health Appointed by County Councils under Section 17 of the Local Government Act, 1888, and the Councils Appointing them, and Return Showing the Representations, if Any, Made to the Local Government Board Under Section 19 of the Act, and the Results of Such Representations. House of Lords Papers.

(a title which still exists), reporting directly to the Privy Council. Forty years after the office was created the MOH were recognized as a key part of the national public health apparatus. The following chapters will examine the MOH in the broader context of medical professionalization and how they established themselves as they gained legitimacy as the preeminent medical authorities.

Chapter 3

Medical Officers of Health in Historical Context: Victorian Reforms of Medicine

In the book *Complete Domestic Medicine* printed in 1848, physician and author William Buchan described some of the key challenges medical doctors faced in Victorian England. He complained that few people understood advances in the field because practitioners often wrote in foreign languages making the works “unintelligible to the rest of mankind” and, unlike other philosophies, medicine was not universally studied as part of a “liberal education.”¹ He went on to explain causes for disease including “unhealthiness of parents,” a sedentary lifestyle (which he explained was caused by sending children to school too early), want of “wholesome” air, lying on damp ground or breathing night air, indulging in excess, and bending posture while working.² He even noted that intense thinking caused illness, explaining “few instances can be produced of studious persons who are strong and healthy.”³ Absent from the discussion were new ideas about contaminated water and germs popular among the MOH and sanitarians. Buchan added, however, that a challenge in combatting illness was the poor who seldom understood medicine or trusted its practitioners. He claimed, “Instances of this are daily to be met with among the ignorant peasants, who, while they absolutely refuse to take a

¹ William Buchan, *Complete Domestic Medicine, or, a Treatise on the Cure and Prevention of Diseases, by Regime and Simple Medicine* (Otley: William Walker and Son, 1848), XV

² Buchan, *Complete Domestic Medicine*, 15, 28, 36, 38, 42-3, and 45.

³ Buchan, *Complete Domestic Medicine*, 48.

medicine which has been prescribed by a physician, will swallow with greediness anything that is recommended to them by their credulous neighbors.”⁴

As Buchan’s text suggested, Britain’s political leaders and physicians faced numerous obstacles to creating a uniform public health strategy. Old ideas about what had caused disease, distrust of medical practitioners and hospitals, and skepticism of medicines and treatments had to be overcome. The 1848 Public Health Act and the creation of MOH helped address these concerns, but it is important to recognize these steps were part of a larger reform movement in the medical field that sought to systematize and rationalize care. Changes were introduced to standardize training of doctors and nurses, define more clearly their duties and roles, ensure quality of care at hospitals, and to regulate who worked in the trades. The MOH were a part of this larger reform movement that contributed to their success in combating the waves of diseases afflicting England’s cities beginning in the 1830s.

In the early nineteenth century, distinctions were made between different classes of medical men from general physicians to apothecaries, who studied the treatment of illness through medicines. The newly formed University College London, founded in 1826, separated education of different students which drove the need for specialization in the field. Previously, physicians often were separated and elevated above surgeons and apothecaries, as the duty of a physician was held in high regard when compared to the more physical-science based surgeons or apothecaries. This began to change during the French Revolution with the introduction of legal dissection of humans which was gaining

⁴ Buchan, *Complete Domestic Medicine*, v.

popularity in England from 1806 to 1828.⁵ Surgeons, who previously had to acquire their subjects through illegal means, now received allotments of bodies to various medical institutions for observation and individual dissection. Because of this, the boundaries separating the classes of surgeons, physicians, and apothecaries by 1835 began to fade as the general practitioner emerged who could not only perform medical tasks but could also write prescriptions.⁶ There was even further demarcation between 1835 and 1850 with the establishment of druggists and consultants, who were encouraged by the growth of population in urban centers to start businesses charging based on income brackets. These rapid changes in a fifteen-year timeframe accompanied a growing emphasis on pathology and clinical instruction as core tenants of a medical education.⁷

After 1858, consensus was growing among medical practitioners and politicians that universities were failing to adequately train doctors to meet the needs of the entire nation. Each school developed its own method of instruction, which could vary widely, and in some cases no diplomas were granted to demonstrate mastery of skills. Historian Sydney W.F. Holloway noted that no legal qualification existed to be a medical practitioner and all one needed to practice medicine was some training. Reformers pushed to change medical education, revising and standardizing the curriculum and placing value on competency and knowledge.⁸ The practice of clinical education meant

⁵ Sydney William Frederick Holloway, "Medical Education in England, 1830-1858: A Sociological Analysis," *History* 49, no. 167 (1964): 1-5.

⁶ Holloway, "Medical Education in England," 13.

⁷ Holloway, "Medical Education in England," 15-26.

⁸ Rosemary, "Medical and Nursing Education," 2.

that medical students were taught by physicians, usually during a set of rounds, who provided medical knowledge as well as experience. In addition to educational reforms, the British government passed the Medical Act in 1885, creating a General Medical Council comprised of physicians to examine doctors in order to ensure qualified people filled the positions.⁹ These educational reforms were an important step in standardizing and professionalizing medical care.

New organizations also emerged in the nineteenth century which further systematized in training and education, and acting as a type of union to lobby in their interest. Among the most significant was the Royal College of Surgeons, which traced its origins to the eighteenth-century livery company known as the Worshipful Company of Barbers. The surgeons who had belonged to this organization split from it in 1800, receiving a royal charter to operate as the Royal College of Surgeons in London. The new entity oversaw the education and training of its members and, by royal decree, had the sole power to issue surgical diplomas in England which placed them at the forefront of medical education.¹⁰ Its members resisted calls to reform instruction as that would remove their crown-given authority, but eventually relented due to mounting pressure in the latter half of the century, and they followed the universities in standardizing and systematizing curriculum and examinations.¹¹ Other organizations sprung up to support the growing class of physicians including the Medical and Chirurgical Society, created in

⁹ Rosemary Weir, "Medical and Nursing Education in the Nineteenth Century: Comparisons and Comments," *International History of Nursing Journal* 5, no. 2 (2000): 2.

¹⁰ William Jerdan, "On Medical Reform," *The Literary Gazette* 1, no. 904 (1934): 1.

¹¹ Holloway, "Medical Education in England," 25.

1805 and later reformed in 1905 as the Royal Society of Medicine, which was a learned society meant to facilitate discussions among medical professionals and advance medical knowledge. This was the first professional society that welcomed practitioners from all of the various fields. The society served as an informational link between both the members of the society and non-affiliated physicians, communicating their findings in the *Medico-Chirurgical Transactions*.

Other organizations advocated for further reforms to standardize the profession. Charles Hastings (1794-1866), a surgeon from Worcester, founded the Provincial Medical and Surgical Association (PMSA) in 1832 to fight for greater access to medical education, increased medical care for the poor, to rout out malpractice, and to reduce questionable medical treatments like homeopathy or hydrotherapy.¹² The latter treatments were viewed as falling outside of scientific approaches to medicine. The organization was popular among practitioners, rising to over 2000 members by 1858, and it became an important voice for change. The association, which had changed its name to the British Medical Association in 1856, pushed for new laws and fervently called for reforming and strengthening previous legislation including the 1858 Medical Act. The organization published critiques of current laws, and it influenced the passage or rejection of new statutes.¹³ The association was successful in its efforts to pass the 1875 Public Health Act

¹² John Mauger, "To the Committee on Irregular Practice of the Provincial Medical and Surgical Association," *Provincial Medical Surgical Journal* 15, no. 19 (1851): 531.

¹³ Medical Act (1858) Amendment Bill: Special Report from the Select Committee of the House of Commons on the Medical Act (1858) Amendment (No. 3) Bill (H.L.); Together with the Proceedings of the Committee, Minutes of Evidence, and Appendix. House of Lords Papers, Reports of Committees.

which required, among other things, that new homes built in cities must include running water and sewer drainage. It also required that every public authority appoint a MOH and a sanitary inspector. Professional organizations like this one played an important role in shaping education and training of new medical physicians, in disseminating new discoveries and treatment methods among practitioners and the public, and informing public policy.

The same push to systematize and rationalize physicians can be seen in nursing, and it was led by Florence Nightingale (1820-1910) and her efforts at St. Thomas Hospital in the 1860s. Prior to her reforms, the occupation was a charitable endeavor performed primarily by religious organizations such as the Daughters of Charity of Saint Vincent de Paul. Nightingale made great strides in professionalizing and modernizing nursing by introducing standardized training, reforming duties, and integrating nurses into a medical system now focused on public health. This latter point is important because it underscores the rising concern for public health that led to the creation of the MOH and the professionalization of medical practitioners in nineteenth-century England.

Nightingale, credited with creating modern nursing, was born in Florence, Italy, on 12 May 1820, and her experiences abroad shaped her ideas about nursing reform. She was deeply religious and described a divine call to service she had received at the age of 16.¹⁴ She desired to help end the suffering of others and, as she would recall later in her life, the call was to nursing which she had learned at the Institute of Deaconesses in

¹⁴ Florence Nightingale, *Collected Works of Florence Nightingale: Florence Nightingale's Spiritual Journey - Biblical Annotations, Sermons and Journal Notes*, edited by Lynn McDonald (London: Wilfrid Laurier University Press, 2002), 405.

Kaiserwerth, Germany, in 1850. Five years later the British Government sent her and thirty other women to Istanbul, to treat wounded from the Crimean War at the Scutari Barrack Hospital. She found the facility to be ill-equipped for the sheer number of patients coming in by ship, which sometimes reached up to twelve hundred a day.¹⁵ She wrote extensive reports on the hospital's shortcoming in her *Notes on the Health of the British Army*, blaming primarily the poor management of medical needs by the army and also the building's dilapidated state. Nightingale's notes on how hospitals should be managed included comments on how the buildings should be constructed, what materials should be used, how sections should be lit, and the amenities available to both staff and patient. She emphasized clear attention to open spaces and clean areas, which fit in with the Sanitarian ideology of the time.¹⁶ Like Chadwick had done in his 1842 *Report on the Sanitary Conditions of the Labouring Population of Great Britain*, discussed in the previous chapter, she targeted poor sanitation as the cause for the further spread of disease.

In addition to criticizing sanitation, Nightingale advocated for structural reform as a way to strengthen the British Army and the empire. Reflecting the social scientist approach common among reformers of her day, she asserted that during the Crimean War the death toll from wounds and disease was thirty percent higher than among civilians afflicted with the same ailments.¹⁷ She calculated that, out of the sick who arrived at the

¹⁵ Florence Nightingale to Sydney Herbert, 15 February 1855, Victorian Britain Collection, The British Library.

¹⁶ Nightingale, *Collected Works of Florence Nightingale*, 706.

¹⁷ Nightingale, *Collected Works of Florence Nightingale*, 878.

hospitals in Bosphorus in February 1855, the death toll was “415 percent per annum.”¹⁸ She blamed poor management as key to the spread of the “great calamity,” or the high death rate, and recommended alterations to the duties of all hospital care-givers including army physicians, ward masters, and stewards. Leading the military hospitals should be a medical governor, elected by the War Office. Nightingale noted that,

He [the hospital governor] ought to be responsible for the whole management of the hospital, to have authority in it similar to that of the governor of a fortress, and over everyone in it, whatever be his professional rank, unless over special commissions of inspection, to correspond directly with the War Department or the commander of the forces, whose representative he is, subject to the orders of no one else, and not subject to the head of the Medical Department with the army. The governor should see to the combination of the highest efficiency with the greatest economy in the hospital, keeping in view that the most economical hospital is that which restores the greatest number of men in the shortest time to the ranks, and not that which is conducted at the smallest monthly expenditure per head. He must have the fullest discretion, in order to secure the complete efficiency of the hospital at all times, and under all circumstances.¹⁹

Her reforms addressed nursing as well as included changes to the organization of military hospitals and, similar to the public health reforms described in the previous chapter, she

¹⁸ Nightingale, *Collected Works of Florence Nightingale*, 881.

¹⁹ Nightingale, *Collected Works of Florence Nightingale*, 788.

advocated for integrating medical practitioners with public institutions, in this case the War Department. She seemed to accept readily that the national government had a role to play in healthcare.

Florence Nightingale thought knowledge gained from experience was most important, rather than learning purely from lecture or research. This stance caused conflict with MOH John Simon, who viewed further research as the most important tool to combat unsanitary urban environments. In 1859 she published, a study comparing conditions at the Crimea and Scutari hospitals in Turkey. She concluded that overcrowding, poor ventilation and drainage, and lack of cleanliness and hospital comforts led to the higher mortality rates at Scutari.²⁰ While Simon advocated for more medical research as the most prudent course of action to save lives, she argued for sanitation improvements. Their conflicting ideology on how to best combat the public-health crises of their day, ultimately led to Simon's removal from the Privy Council in 1876.²¹

Nightingale pushed for trained and well-paid nurses, to replace the charitable pauper nurses as they were called. It is perhaps not surprising that the same push to professionalize physicians had an impact on nursing, too. One article in the 1848 edition of *Fraser's Magazine* explained that, "If, then, we wish to meet the evil" referring to the

²⁰ Florence Nightingale, *Notes on Matters Affecting the Health, Efficiency, and Hospital Administration of the British Army* (London: Harrison and Sons, 1858), 81.

²¹ Historians and other writers have noted changing ideas towards Nightingale's disputes with Simon, some omitting the role of Chadwick and Farr, her two allies. Others state that Nightingale's fame alone would not have led to Simon's retirement from government.

scourge of disease, “we must meet it by providing for nurses a training which shall fit them for their work. They must go through a period of probation, in which they may be placed under good influences. They must enter upon their work, not as a dernier [last] resort, but with the right habits already formed.”²² In 1856, the *Leader and Sunday Analyst* reported on the need for more qualified nurses and argued that trained lay-women should replace women from religious habits because “Charitable Institutions” could not keep up with demand.²³ Physicians like Edward Sieveking added to the discussion, reporting in 1856, to the Epidemiological Society, a group formed six years earlier to combat disease in London, that in addition to sanitation reforms, nurses caring for the poor could “prevent a large amount of disease, and consequently effect a considerable pecuniary saving to the community.”²⁴ Important is his emphasis on the financial benefit of combatting illness among the poor and working classes in England’s cities.

One central theme present in the discussions about nursing reform was a focus on who should take up the profession. Advocates for professionalization argued that women working in this job needed firm moral training, should be removed from religious sisterhoods and the church as a whole, must understand the physical pains and social conditions afflicting patients, and be familiar with workhouse conditions experienced by the poor in urban centers. For this reason, many viewed working-class women as ideally

²² “Hospital Nurses as They are and as They Ought to be!” *Fraser’s Magazine for Town and Country* 37, no 221 (May 1848): 540.

²³ “Where to Find Nurses?” *Leader and Saturday Analyst* 7, no. 313 (Mar 22, 1856): 266.

²⁴ Edward Sieveking, “A Plan for Providing the Poor with Nurses in Time of Epidemic Sickness,” in *The Journal of the Workhouse Visiting Society* (London: Longhouse Publishing, 1859), 20.

suited for nursing. Indeed, there were plenty of lay women who could fill the role; data gathered by the Epidemiology Society in 1856 showed 20,000 able-bodied, working-class women were able to work as nurses in the UK.²⁵

Support for educational reforms were bolstered by a growing concern for the charitable nurses, or pauper nurses. In 1858, Louisa Twining founded the Work-House Visiting Society to promote so-called moral and spiritual improvement among workhouse inmates of England and Wales. The group investigated conditions and concluded pauper nurses were more likely to harm inmates because they lacked proper training and education.”²⁶ Emboldened by her experiences abroad and the discussion at home, Nightingale created a school of nursing at London’s St. Thomas Hospital in 1860. It was the first professional training program of its kind, and became the benchmark for nursing education in the West. She established it to address perceived shortcomings in the profession and to model how to train women to provide the best care for their patients, especially in a hospital setting.²⁷ Students worked with nursing instructors through a mixture of lecture and practical work. In addition, the school adopted a similar style of teachers taking the students on rounds to give them experience in a professional setting. Nightingale’s new school was a success, and in the first thirty years it had over 900 graduates.²⁸ New trained nurses gradually replaced pauper nurses and others who were

²⁵ “Where to Find Nurses?”, 266.

²⁶ *Journal of the Workhouse Visiting Society*, 19.

²⁷ Nightingale, “Address of Florence Nightingale,” 1.

²⁸ Florence Nightingale, *Collected Works of Florence Nightingale: The Nightingale School* edited by Lynn McDonald (London: Wilfred Laurier University Press, 2009), 38.

untrained. Her educational reforms were instrumental in professionalizing nursing and moving it away from its religious and charitable foundations.

The proliferation of trained nurses led to professional organizations advocating on their behalf, similar to the rise in professional organizations for physicians that had occurred thirty years earlier. Among the earliest associations for nurses was a group formed in Lichfield in 1865 to provide “trained nurses for hospitals, parochial schools, and private families.”²⁹ Lichfield Nurses Association held no religious requirement for membership, and trainees were required to follow any orders given to them by the association.³⁰ The group established a fund to pay the nurses £20 per year and stipulated how the payments would be acquired. Five years later the British Nursing Association was founded in Paddington, London, followed by the Metropolitan and National Nursing Association in 1875. These associations were established with similar goals, to ensure the education of new nurses and to advocate for members.

These associations performed an important function as the religious orders had struggled to keep up with the growing demand for qualified nurses. A hospital, workhouse, or dispensary, could employ ten to forty nurses at any given time (for both day and night shifts) while religious orders usually employed up to five nurses.³¹ This need for a nursing association that could bring in more trained and experienced nurses was pushed by both experts and the general public as a way to create a distinct profession

²⁹ “A Nursing Association for the Diocese of Lichfield,” *The Manchester Guardian* (Manchester, UK) Dec. 13, 1865.

³⁰ “A Nursing Association for the Diocese of Lichfield”.

³¹ *Return Irish Hospitals*, 114.

for women, especially from the working classes. Florence Nightingale underscored the importance of associations in a letter to the *Times* in 1876, explaining that the “secret of success” of nurses abroad was their “independence, enterprise, indomitable self-reliance, and capability of training”, as well as the “real help and the real home” that religious orders provided. In her view, the associations provided the help and home that the convents had provided.³²

Professional nursing associations had a formidable challenge in changing public perception of nurses, perhaps best reflected in Charles Dickens’ depiction of them in his 1842-1844 serialized novel *Martin Chuzzlewit*. In the text, nurse Sarah Gamp was described in unflattering terms:

The face of Mrs. Gamp--the nose in particular--was somewhat red and swollen, and it was difficult to enjoy her society without becoming conscious of the smell of spirits. Like most persons who have attained to great eminence in their profession, she took to hers very kindly; insomuch that, setting aside her natural predilections as a woman, she went to a lying-in or a laying-out with equal zest and relish.³³

The associations took women from all classes and provided moral and professional training, and they assisted with job placement.³⁴ Some detractors like Warrington Haward questioned whether the associations could affect the moral character of nurses, and the perceived shortcomings of poor and working classes, in the same way as religious

³² “Florence Nightingale’s letter to *The Times* on ‘Trained Nurses for the Sick Poor,’” 1876.

³³ Charles Dickens, *The Life and Adventures of Martin Chuzzlewit* (London: Penguin Books, 1999), 19.

³⁴ “Nursing as a Profession for Ladies,” *Reformed Church Messenger* 38, no. 14 (Apr 3, 1872): 2.

order.³⁵ Concern was not with new approaches to training and education, but rather on whether or not lay nurses were best equipped for the charitable role caring for the urban poor. In this context, Nightingale's advocacy for associations as a suitable replacement for religious orders is important.

Concerns for the plight of urban poor and public health contributed to Nightingale's success with her nursing reforms. Henry Fleming, secretary of the Poor Law Board which had been created in 1847 to administer the Poor Law Amendment Act, wrote or circulated in 1865 a writing on behalf of the board that promoted Nightingale's reforms, stating "The office [of nursing] is one of very serious responsibility and labor, and requires to be filled by a person of experience in the treatment of the sick, of great respectability of character, and of diligent and decorous habits."³⁶ Others criticized untrained nurses. An article in *Lancet* in 1879 decried the conditions of the workhouses and the skills of the pauper nurses as "a disgrace to our civilization."³⁷ The language used is revealing, associating the state of workhouses and the urban poor as a threat to the civilized world. Parliament passed the 1867 Metropolitan Poor Act, an attempt to nationalize the parish system by placing control of the parishes into the hands of the Poor Law Board. The act created new districts with an asylum in each one to replace the

³⁵ Warrington Haward, "Ladies and Hospital Nursing," *The Contemporary Review* 34 no 1 (Feb 1879): 490-503.

³⁶ "Circular by Poor Law Board to Metropolitan Guardians, to Appoint Trained Nurses to Attend Sick in Workhouses of Metropolis, May 1865." 1.

³⁷ "The Metropolitan Poor Act," Policy Navigator, *The Health Foundation*, last accessed March 23rd, 2022, <https://navigator.health.org.uk/theme/metropolitan-poor-act>.

workhouses, and it brought in paid professional nurses.³⁸ It established the Metropolitan Poor Fund acquiring money through these new districts and could pay for equipment, fees, maintenance, and salaries of the nurses and other medical officers at the asylums.³⁹ Most importantly, this act also created the Metropolitan Asylum Board (MAB) to oversee various hospitals to treat the sick and to pay for their care through the Poor Fund, and these facilities were widely considered to be the first state-run hospitals.⁴⁰ The MAB provided places where Nightingale's trained nurses could work, and a reporter for the *Observer* noted the changes in positive terms:

It is not so very long ago since a hospital nurse was another name for a gin-drinking, dissolute, mercenary harpy. But a gradual change has been going on, even in the most traditionally conservative of the London hospitals. Now no woman is held qualified as a nurse without some certificate of competency or without undergoing some period of probation.⁴¹

As a sign of success, by 1875 620 professional nurses were employed in the Metropolitan district.⁴²

³⁸ Bill for Establishment in Metropolis of Asylums for Sick, Insane, and other Classes of Poor, and Dispensaries; and for Distribution over Metropolis of Portions of Charge for Poor Relief, and for other Purposes Relating to Poor Relief in Metropolis, 5.

³⁹ Bill for the Establishment of Asylums, Dispensaries, and Distribution, 13-14.

⁴⁰ Peter Higginbotham, "The Metropolitan Asylums Board," *The Workhouse, Workhouses*, Last Accessed June 5, 2022, <http://www.workhouses.org.uk/MAB/>.

⁴¹ "Hospital Nurses," *The Observer* (London, UK), 21 Nov, 1869.

⁴² Local Government Board: Fifth Annual Report to Her Majesty of the Local Government Board, 1875-76.

The asylum system with its public hospitals created by the act marked an important shift in healthcare in the kingdom. A single facility could treat over 8,000 medical cases per year including sprains, broken bones, bullet wounds, and hit-and-run incidents. Despite the obvious benefits, some people voiced concern over finances. Various reports such as John Chapman's "Medical Charity: Its Extent and Abuses" (1874),⁴³ William Gilbert's "The Abuse of Charity in London: The Case of the Five Royal Hospitals" (1878),⁴⁴ and Fairlie Clarke's "How to Make our Hospitals More Useful" (1879)⁴⁵ were written not only as a critique of public hospital charities, but also an investigation into how those charities and the royal hospitals could be reformed. John Chapman's "Medical Charity" for example, estimated that the London hospitals spent £150,000 treating patients in 1872, but the hospitals and charities took in over £600,000 during that same period.⁴⁶ Criticism showed the charities as bloated organizations that spent more on bureaucratic overhead than they gave to the care of the poor and infirm.⁴⁷ There were other criticisms labelled against the distribution of care to those being treated by public charities. Surgeon William Fairlie Clarke estimated that out of 3,251,804

⁴³ "ART. VII. Medical Charity: It's Extent and Abuses," Chapman, John (ed.). *Westminster Review* 45, no. 1, (Jan 1874): 174-224

⁴⁴ William, Gilbert, "The Abuse of Charity in London: The Case of The Five Royal Hospitals," *The Contemporary Review* 31, (Mar 1878): 770-789.

⁴⁵ Fairlie Clarke, "How to Make our Hospitals More Useful," *The Contemporary Review* 35 (1879): 91-106.

⁴⁶ "Medical Charity," 174-224.

⁴⁷ "Public Charities and their Abuses," *The St. James's Magazine*; London 1, no. 12 (Mar 1874): 665-673.

people in London, only one in four had received medical care through the public funds.⁴⁸ His “Public Charities and Their Abuses” report, written in 1874 described the institutions as wholly inefficient:

It demoralizes as much as possible the applicants; it raises as much as possible the proportion of the sums spent upon irrelevant objects to those spent in real charity. It removes all guarantees for the distribution of funds raised to the persons who most deserve them, it supports a whole body of parasitical agents whose interests are directly opposed to the avowed institution. It gives every opportunity for direct fraud; it releases the managers from all real responsibility, and it tends to substitute a mechanical and demoralizing system for the spontaneous work of personal charity.⁴⁹

The criticism was aimed at the institutions created to administer medical care, rather than at the physicians and nurses responsible for providing it.

Despite the criticisms, supporters praised the hospitals as an example of the progress of science and technology against disease. Edward Stanley, Earl of Derby, stated in an 1882 public address, “We might not be always successful or judicious in our experiments, but at any rate we were not indifferent. We recognized the fact that there was no better test of a true civilization of a country than its death rate, and there was no such evidence, and at the same time, no such cause of true national well-being as the

⁴⁸ Fairlie Clarke, “The Use and Abuse of Hospitals,” *Macmillan's Magazine* 25, no. 150 (Apr 1872): 448-454.

⁴⁹ “Public Charities and their Abuses,” 2.

health of the population.”⁵⁰ Proponents also emphasized the social implications; no matter your social class or your wealth you could be given the greatest possible care. Journalist Charles Marvin noted the benefits in the journal *Time* in 1886, writing that a person “the moment he was injured, became entitled to nursing and doctoring in a comfortable ward, costing, inclusive of the maintenance of the hospital, twenty-six shillings a week!”⁵¹

Despite lingering questions about the Poor Fund’s efficiency, the act’s important impact on public health was clear. By 1880, thirteen years after Parliament had passed the Metropolitan Poor Act, more than 75 hospitals and 45 dispensaries worked to treat patients for a wide range of diseases, making healthcare more accessible for the urban poor and providing places for professional physicians and nurses to work. The proliferation of nursing led to the creation of the British Nurses’ Association in 1887. At a meeting that year led by physician Bedford Fenwick and his wife Ethel Gordon Fenwick, participants advocated for the formation of a national association that could administer a series of examinations that could lead to a registry of qualified nurses. The goal was to weed out poorly-trained ones, however some medical practitioners objected to it, including Nightingale, who thought the additional examinations unnecessary. Critics of the proposal argued hospitals should go to “reputable institutions” and “respected nursing schools” to find qualified nurses.⁵² Nightingale added that the association acted

⁵⁰ “Lord Derby on Hospitals,” *The Observer* (London, UK), 26 Mar, 1882.

⁵¹ Charles Marvin, “Our London Hospitals and Hospital Sunday,” *Time; London* 15, no. 19 (Jul 1886): 1-7.

⁵² Gerald Harper, “The British Nurses’ Association,” *British Medical Journal* 2, no. 1496, (Aug 31, 1889): 496.

only as a registrar rather than a vocational union of nurses, removing the group's charitable role. The opposition was formidable, and hospital administrators and medical professionals forced them to abandon the association.⁵³

Despite the setbacks they faced from the British Nursing Association, the Fenwicks continued to push for a register in the journal *The Nursing Record*, which they created in 1893. In 1904, Parliament formed a committee which examined over thirty-four witnesses about the proposed professional examinations, the lack of training schools, and the question of whether or not a registration system might harm the vocational spirit of nurses. Proponents and opponents spoke before the committee, with many critics arguing that the register was based on technical knowledge and not on the sympathy a nurse might exhibit, while others argued that in the three years of training the technical knowledge obtained would outweigh any "sympathetic power."⁵⁴ Although a vote was not unanimous, the committee ruled in favor of a national register created by the government and overseen by a body consisting of matrons, nurses, and representatives of nursing schools. The committee agreed that while examinations should take place for a nurse to become registered, in order to take the examination a nurse must have completed three years of training at a reputable school, which should present students with

⁵³ Susan McGann, "Fenwick, Ethel Gordon," Oxford Dictionary of National Biography, Oxford University, Last Updated 12 November, 2020,

<https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-33106?rskey=56LUvq&result=1#odnb-9780198614128-e-33106-div1-d495303e135>.

⁵⁴ Stewart, Isla "The State Registration of Nurses," *A Monthly Review* 55, no. 328, (Jun 1904): 991-995.

certificates to prove mastery of knowledge and good “moral character.”⁵⁵ The new rule secured the important role of the nursing association in accrediting new nurses, and it finally was codified into law in the Nursing Registration Act in 1919.

The 1919 act was an important step towards modern nursing. During the First World War, the British Medical Corps were overwhelmed by patients and disease ran rampant among troops, much like it had during the Crimean War. Nurses along with medical supplies were in short supply and the Influenza Epidemic ravaged campsites and small rural communities where clinics only had one physician available to treat too many patients. The act created the register of nurses, distinguished between different fields of nursing, and included a register for male nurses. It established the trade as a profession by institutionalizing and codifying its practices and creating a central licensing procedure. Although some training schools still had ties to their religious past, the efforts to bring nursing under the purview of the central government succeeded. Nurses who completed their training became known as Registered Nurses (RN), they became part of something greater than an individual sisterhood, they became part of the modern medical state, and as of 2021 there are over 600,000 Registered Nurses in the UK alone.⁵⁶

Professionalization and the creation of a registered nursing system was an important medical reform, but it was just one of the many parts of the greater Victorian

⁵⁵ Registration of Nurses: Report from the Select Committee of the House of Commons on the Registration of Nurses; Together with the Proceedings of the Committee, Minutes of Evidence, and APPENDIX, House of Lords Papers, iv.

⁵⁶“Registration Data Reports,” *Nursing and Midwifery Council*, last edited September 30, 2021, <https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/>.

public health revolution. The Nightingale nurses chipped away at the system of pauper nurses, much like how the MOH chipped away at the old systems of quackery and negative opinions about physicians. Experience outweighed everything and this was the same as the original vision of the MOH created by Chadwick in 1848. This emphasis on experience is what led to the push for a registered nursing system coinciding with the pleas for centralization that led to the consolidation of regions into medical districts. Alongside this were the associations calling out for reform and to award the MOH more authority. While the 1875 Public Health Act addressed sanitary issues to fight diseases such as Tuberculosis, the MOH would find that they needed more than just passing laws in order to sanitize the U.K. They would need to become more than just sanitary engineers or bailiffs, they needed to be educators and preachers for a more literate and conscious public.

Chapter 4

The Growing Public Consciousness

The 15th Earl of Derby Edward Henry Stanley (1826-1893), former Secretary of State to India and Secretary of State for Foreign Affairs, spoke in 1872 in front of a crowd in Bootle, a small borough north of Liverpool. He was congratulating the town on the completion of a new hospital, and he gave one of his most impassioned speeches regarding public health, observing “the conviction which sanitary knowledge brings with it as to the preventability in general of disease is one of quite incalculable importance.”¹ He was drawing a direct link between the squalid living conditions in urban areas and the spread of illness and death. To our modern ear, this language describing sanitation as a means of prevention sounds like a reasonable response to disease. In the late nineteenth century, however, Lord Derby’s ideas were less common, and sometimes controversial, and he was justifying and defending this tool to save lives. His speech demonstrates an important tactic employed by reformers. In addition to the negotiations between MOH and political leaders, and the discussions among reformers taking place in the professional organizations, successfully combatting disease required educating the public. Stanley’s public speech was one-way reformers could use to inform the urban poor and working classes, and to engage them in the battle against diseases like Typhoid and Cholera.

Lord Derby emphasized the crucial role of education and public engagement in the fight against disease in his speech, elevating it above legislative measures, claiming

¹ Edward Henry Stanley, *Speeches and Addresses*, (London: Longmans, Green, and Co., 1894), 175.

“no sanitary improvement worth the name will be affected, whatever Acts you pass, or whatever powers you confer upon public officers, unless you can create a real and intelligent interest in the matter among the people at large.”² He added, “I will not waste words in dwelling on the importance of this question of national health. Everything depends upon it.”³ MOH understood the vital need for education as part of a public health strategy, and they instituted new means, namely written materials and public lectures, to communicate with lay audiences. The new emphasis on education reflected Victorian attitudes about moral reform of the poor and working classes as well as the agency of MOH, who established themselves as the primary conduit for sharing information with the public. This new role as public educators secured the MOH position as the primary drivers of public health in the late nineteenth century.

Before discussing how medical reformers sought to teach the public about disease and how to combat it, the nature of education in nineteenth-century England. No national school system existed for children who, due to the economic challenges of the Industrial Revolution, began working at a young age. By 1800, only ten percent of children attended any kind of school, mostly those run by parishes (such as a Sunday School).⁴ Although grammar and other schools for young children existed, historically these had been reserved for middle and upper classes, leaving the poor and working-class children with limited access. Victorians introduced change, viewing education as important for

² Stanley, *Speeches and Addresses*, 175-6.

³ Stanley, *Speeches and Addresses*, 175-6.

⁴ Amy Lloyd, “Education, Literacy, and the Reading Public,” Gale, University of Cambridge, last accessed June 20, 2022, <https://www.gale.com/intl/essays/amy-j-lloyd-education-literacy-reading-public>.

improving morals and circumstances of the poor, and Parliament passed the Factory Act in 1833 requiring employers to provide two hours of schooling each day for child laborers. In 1841 and 1844, Parliament passed School Sites acts that, among other things, allowed for government grants to support education of poor students. This may have had some positive results. Historian Amy J. Lloyd asserted that by 1850 sixty percent of male and forty of female working-class populace was literate.⁵ Reformers continued to push to more education, and in 1870 leaders passed the Elementary Education Act, Public Schools Act, the Education of Boroughs Bill, and the Forster Education Act.⁶ These government led efforts promoted both religious and secular education of children and even imposed penalties for those who denied any children in England their education, including their parents.⁷

Victorian social reformers thought all children should have access to education, which they saw as another tool to deter crime and poverty in England's growing industrial centers. The Elementary Education Act, for example, connected directly public health and poor-relief, working with the Poor Law Board to form school boards.⁸ The 1870 Education of Boroughs Bill took this a step forward by allowing for schools in the various boroughs to use the local Board of Health to contribute to the school rates, or to

⁵ Lloyd, "Education and the Reading Public," <https://www.gale.com/intl/essays/amy-j-lloyd-education-literacy-reading-public>.

⁶ United Kingdom Parliament, "Public Schools Act 1868," 31 & 32 Vict. C. 118, 1868, 1-18; United Kingdom Parliament, "The Borough Education Act," 33 Vict., 1870, 1-100; and United Kingdom Parliament, "Elementary Education Act 1870," 33 & 34 Vict. C. 75, 1870, 1-483.

⁷ "The Borough Education Act," 5-6.

⁸ "Elementary Education Act," 18-9.

school funding, and the board members could appoint someone from their ranks to positions on school committees.⁹ The legislation was important because it was moving the kingdom towards national public education in a similar way that it had moved towards a national public health system, however not everyone was pleased with the changes. In 1872, prominent members of the Church of England and Parliament, including Undersecretary of State for Foreign Affairs Edmond Fitzmaurice and education reformer George Dixon, protested against the Forster Education Act at Bloomsbury Chapel, situated near the slums of St. Giles. Protesters used the Baptist chapel as a site to criticize the government and to form a united front against what they saw as growing secular intrusion into the lives of common people. Other critics were less threatened by the legislation. The Bishop of Manchester, James Fraser, and Earl of Derby, speaking at a meeting of the Manchester Diocesan Board of Education supported a national education scheme but saw the 1870 act as merely a “tentative and experimental measure.”¹⁰ The Bishop of Canterbury Archibald C. Tait spoke out against the legislation and those who disparaged religious schools, saying “I believe that in this diocese of Canterbury there has been a great movement of late years. It is pleasing to reflect that the number of parishes in which there are no schools is not great. But of course, in small agricultural parishes there is always great difficulty in making those schools thoroughly efficient.”¹¹

⁹ “Borough Education Act,” 20.

¹⁰ “The Earl of Derby and the Bishop of Manchester on Education,” *The Manchester Guardian*, 21 Oct 1870, 4.

¹¹ “Archbishop of Canterbury,” *The Manchester Guardian*, 6 Oct 1870, 7.

Prime Minister William Ewert Gladstone, who led the Liberal Party and was influential in the development of the bill, overcame the opposition in several ways. He emphasized the importance of effective education, moving the debate away from the question of whether it was religious or secular education. The prime minister's cabinet, including William Edward Forester who had introduced the bill into Parliament, convinced George Dixon, a parliamentarian known as an educational reformer, and his supporters to rescind their opposition. Dixon, also from the Liberal Party, thought the question of religious schools should be left to local authorities. Finally, Gladstone's actions and the amendments made by former President of the Board of Health, William Cowper-Temple ensured that while students were not allowed to be attached to one denomination over another, religious education was still an option for educators but not a requirement for students, this ultimately won support of the nonconformist opposition.¹² The 1870 education acts, including the Forester Education Act, were seen as hallmarks of Gladstone's career. In 1870, journalist and music critic E.J. Broadfield reflected while presenting grant prizes at the Dob Lane School, "Mr. Forester's Education Act had proved one of the most beneficent and civilizing ever passed by the British Parliament."¹³ The acts expanded education and by the end of the century literacy improved in England, with illiteracy dropped to below five percent. The larger reading public opened up new audiences for medical reformers and provided fertile ground for MOH and others to educate the public about sanitation and health.

¹² Geoffrey Chorley, "Gladstone and the 1870 Education Act," 12.

¹³ "The Working of the Education Act," *The Manchester Guardian*, 29 Nov 1888, 7.

Perhaps not surprisingly, professional societies like those discussed in the previous chapter were at the center of efforts to inform the poor and working classes. The Society of Medical Officers of Health, founded as the Association of Metropolitan Medical Officers of Health in 1855 by MOH Frederick W. Pavy, a physician from Guy's Hospital, took up that challenge. This organization elected John Simon as its president and, by 1873, adopted the new name the Society of Medical Officers of Health.¹⁴ In May 1888, the association published its first journal, *Public Health*, which presented itself to be an independent, scholarly, and advisory publication meant for practitioners and members of their organization. Some evidence suggests the editors hoped for a broader audience among anyone involved in public health. The editors noted in the journal that “Gentlemen not being medical officers of health, but interested in the promotion of sanitary science, are eligible for election as associates.”¹⁵ Although anyone with an interest in the subject matter could join, the annual fee of ten shillings and sixpence (compared to the average annual income which rose to over £42 by 1900),¹⁶ which entitled the member to receive a copy of the journal, placed it out of reach of poor and working class citizens.¹⁷ They explained that the association's power was in its numbers, and that “There are many objects which can only be obtained by a strong, united and

¹⁴ A. Engineer, “The Society of Medical Officers of Health: It's History and It's Archive.” *Medical History* 45, no. 1, January 2001, 98-100.

¹⁵ *Public Health, Vol 1*. May 1888–April 1889, 1-3.

¹⁶ “The Golden Age?” Events of 1901, The National Archives, Last accessed July 20th 2022, <https://www.nationalarchives.gov.uk/pathways/census/events/polecon3.htm#:~:text=Average%20income%20per%20head%2C%20which,one%2Dninth%20of%20its%20population.>

¹⁷ *Public Health, Vol 1*. May 1888–April 1889, 1-3.

large body. Its influence cannot fail to be more effective in a variety of ways than that of a number of separate associations which, however great their zeal and ability, must necessarily be wanting in that power which is only secured by unity of action and concentration of effort.”¹⁸

Public Health, while having been written predominantly for practitioners, also disseminated information more broadly to the public as the advertising it contained suggests. Advertisements within the journal ranged from warning readers about the dangers of unregulated curatives (what we would refer today as snake-oil cures) to information regarding public lectures. For example, an advertisement for a set of lectures in 1890 was aimed at female-readership regarding lectures on household-cleanliness, food-chemistry, and child-culture (care).¹⁹ Other information was targeted at families with young children or even to rural-citizens, such as in an 1896 article discussing the proper ways to boil (pasteurize) milk. These articles not only were informative to the public, but written in a way to mimic travel-logs that were popular at the time, which peaked reader’s interest.²⁰ Dissemination of medical knowledge between physicians and the growing literate public by the society was also helped in that copies were also sold to citizens via book-sellers.

Over time, the association’s membership grew and expanded to include more diverse members. New branches formed in the later 1880s including the Northern (Newcastle upon Tyne), Southern (Portsmouth), Northwestern (Manchester), and The

¹⁸ *Public Health, Vol 1*. May 1888–April 1889, 1-3.

¹⁹ *Public Health Vol 1*. May 1888–April 1889, 371

²⁰ *Public Health Vol 9*. October 1896–September 1897, 104.

Metropolitan branches, each consisting of around twenty men who were either medical men or associates, also known as public rate-payers. The organization merged with similar groups in Birmingham, Midland, and Yorkshire, and by 1900, the larger society had over 300 regular members and seventy associate members, the latter group included the general public.²¹

Public Health joined an expanding corpus of medical press that fed the appetite of increasingly literate audiences. Among the offerings was *The Lancet*, a journal which London physician Thomas Wakley had founded in 1823. Promoted as an independent journal, he published it weekly which allowed him to tackle topical, and sometimes controversial, issues surrounding the debate over medical reform. The first edition appeared on October 5, 1823, and explained the aim was to convey “to the Public, and to distant Practitioners as well as to Students of Medicine and Surgery” information being discussed in the City’s hospitals.²² Imperial language is evident here, too, as the editors noted the articles would describe important cases “whether in England or on any part of the civilized Continent,” and they noted among the intended audience was “Colonial Practitioners.”²³ Part of the journal’s success may be due to its combative nature that made for entertaining reading. The editors sought to challenge the medical establishment and explained “we are well aware that we shall be assailed by much *interested*

²¹ *Public Health* 12, Issue 12, September 1900, Pages 4B-20B.

²² *The Lancet* 1, no. 1 (1823), 1.

²³ *The Lancet* 1, no. 1 (1823), 1-2.

opposition; but we will fearlessly discharge our duty. We hope the age of ‘*Mental Delusion*’ has passed, and that mystery and concealment will no longer be encouraged.”²⁴

Another factor contributing to its success was accessibility. The journal took the form of a Penny Magazine, which was a genre of illustrated print that could be sold cheaply and was aimed at working class readers. (The first issue sold for 6d, commonly known as sixpence.²⁵) The journal was popular reading, which historian W.H. McMenemey attributed to the editor’s “spicy” comments, and after just two years its circulation already exceeded 4,000.²⁶ By 1830 he had doubled the copies, making it one of the highest circulations in London at the time.²⁷ English scholar Brittany Pladek noted that the estimated number of medical practitioners in London was around 4,000, which suggests *The Lancet* found an audience of eager readers beyond the profession.²⁸ *The Medical Register* created in 1818, *The Medio-Chirurgical and Philosophical Magazine*, started in 1823, *The Medical Dissenter*, begun in 1834, and *The British Medical Journal*, founded in 1840, are among more than 315 medical journals that debuted in the UK between 1800 and 1870, nearly ten times as many as published in the previous century.²⁹

²⁴ *The Lancet* 1, no. 1 (1823), 1.

²⁵ *The Lancet* 1, no. 1 (1823), 1.

²⁶ W.H. McMenemey, “The Lancet 1823-1973,” *The British Medical Journal* 3, No. 5882 (1973): 681.

²⁷ Brittany Pladek, “‘A Variety of Tastes’: The ‘Lancet’ in the Early-Nineteenth-Century Periodical Press,” *Bulletin of the History of Medicine* 85, no. 4 (2011): 561-2.

²⁸ Pladek, “‘A Variety of Tastes,’” *Bulletin of the History of Medicine*: 561-2

²⁹ W.R. Lefanu, “British Periodicals of Medicine: A Chronological List,” *Bulletin of the Institute of the History of Medicine* 5, no. 8 (1937): 742-61.

This rapid rise in medical literature was characteristic of the expanding literary culture in the Victorian period. Similar growth occurred in novel literature which, prior to the nineteenth century was viewed as injurious to young people's personal growth and development. Critics in publications like *The Kaleidoscope* asserted the damage of sustained novel reading: "Instead of now adorning the first circles of society, he (the novel reader) is a poor wretched outcast, reduced to beggary and want, the consequence of this one failing, which, if properly combatted in its infancy, might easily have been overcome."³⁰ Popularity of this genre grew during the 1800s, driven by authors including Jane Austin, Mary Shelly, Oscar Wilde, and Charles Dickens, and many of the works addressed the realities of life in urban centers. Dickens, for example, reflected on topics like workhouses, the general state of the poor and wretched, as well as the rising social tension of the Victorian Era in his works. Victorians understood novels as a tool to improve moral character of the working classes who read them and as a method to advocate for social change. As English scholar Kate Flint noted, "Fiction, it was also thought, might guide one's sympathies for those with whom one would otherwise have little in common."³¹

Medical reformers seized on newspapers, too, including the *Manchester Guardian*, *The Observer*, and *The Morning Post* to make their case to a broader public about reform. Reporting on Dr. Campbell Munro, head of the Scottish branch of the Incorporated Society of Medical Officers of Health, a writer for *The Scotsman* reported,

³⁰ "On Novel Reading," *The Kaleidoscope*, 2, no. 60 (1821), 54.

³¹ Kate Flint, "Victorian Readers," The British Library, Published May 15, 2014.

<https://www.bl.uk/romantics-and-victorians/articles/victorian-readers>.

“Seven Years ago, he [Munro] said in conclusion, the public health law of Scotland, especially in relation to rural districts, and its application, lagged sadly behind that of England. To-day the law, and, he thought he might add with reference to rural districts, its application, was distinctly in advance of that of England; and he did not hesitate to say that this advance was to a considerable degree due to the action of the Society of Medical Officers of Health for Scotland.”³² The author played on traditional rivalries between England and Scotland in order to advocate for a greater centralized form of health. The Scottish health laws according to Munro were more effective than English laws as the authority was centralized in Scotland which allowed it to handle rural health matters more effectively.³³ An article in *The Athenaeum* in 1856 introduced readers to physician Henry Wyldbore Rumsey’s new book *Essays on State Medicine*. Rumsey served as honorary secretary of the Sick Poor Committee of the Provincial Medical and Surgical Association, a professional organization created in 1832 to disseminate medical knowledge, and he advocated for a state-run public health system to protect the poor and working classes. In his essays, Rumsey notes the importance for making information affordable and easily accessible,

In order to carry public sympathy and approval along with a national organization for the purposes of sanitary inquiry, in order to bring home a sense of the personal importance of the subject to every family, the information collected must be made us of in each locality. The facts and

³² “Incorporated Society of Medical Officers of Health,” *The Scotsman* (Edinburgh, Scotland), 28 July 1898, 11.

³³ “Incorporated Society,” 11.

events observed in every district should not only be reported to local authorities, but should be compiled on the spot, in a form easily available for reference to the inhabitants. For as these become better informed on the various circumstances which affect their physical well-being, prejudices will subside, opposition to improvements will cease, and local councils will become more useful and effects.³⁴

It is perhaps not surprising that given the grown literacy in the Victorian era MOH and medical reformers turned to popular print to make their case to the general public.

The press reports reveal some of the challenges MOH faced when educating poor and working classes. A report published in the October 20, 1893, edition of *The British Architect*, a Penny Magazine aimed at the general public and focused on events in and around Manchester, described a presentation made by Dr. Boobbyer told the members of the Birmingham and Midland Branch of the Society of Medical Officers of Health. He was speaking on the subject of sanitation and the public baths in Nottingham, where attendants working there had “assured him that the majority of those who frequented those places never washed themselves at home.”³⁵ This caused a troubling problem, as the doctor explained, because “The three-penny swimming bath there, when emptied, showed a percentage of free ammonia one-third that of a sewage effluent!”³⁶ The report’s author explained that Dr. Boobbyer described

³⁴ Henry Wyldbore Rumsey, *Essays on State Medicine*, (London: John Churchill Publishing, 1856), 119.

³⁵ “The Public and Public Health,” *British Architect* (London), 20 Oct. 1893, 272-3.

³⁶ “The Public and Public Health,” *British Architect* (London), 20 Oct. 1893, 272-3.

the great difficulty in getting the public to understand their individual responsibility in the matter of sanitary reform. Poor people would rather sleep in overcrowded bedrooms than use the living-room for sleeping purposes, and so lessen the evils of overcrowding. But the general public can hardly be expected to know and do the right thing when the teachers in public schools prefer to keep the windows closed, even though some of them include the subject of hygiene in their teaching, and others in like positions of authority fall short.³⁷

He hinted at a couple of challenges here. The poor are ill-informed and teachers are not always teaching them what they need to know to make better decisions.

Despite the concerns expressed about the public's want of knowledge, evidence shows some were engaged with these matters and the newspapers and journals provided a way for the MOH and reformers to engage in discussions and debates with the public. In some cases, people turned to newspapers to voice their opinions and advocate for public health. For example, in 1893 an anonymous citizen wrote into the *Manchester Guardian* arguing for greater sanitary action by the health boards, and criticized the local public works companies which they viewed as opposed to the greater public health questions.³⁸ Another anonymous writer to the *Guardian* in 1897 advocated for the purchasing of highly visited areas (St. Peter's Priory in Chorlton in this case) in order to turn it into a recreational areas and public parks.³⁹

³⁷ "The Public and Public Health," *British Architect* (London), 20 Oct. 1893, 272-3.

³⁸ "The Pollution of the Salford Docks," *The Manchester Guardian*, 19 September 1893, 12.

³⁹ "The Sewage Problem: St. Peter's Priory Chorlton-Committee," *The Manchester Guardian*, 5 April 1897.

In some cases, the press could be used as a call for action. In the April 5, 1875, edition of *The Manchester Guardian*, journalist John Malam reported on responses to Cholera, noting that people flocked to the city's gasworks to protect themselves from the disease because they thought the tar-smoke cleaned impurities from the air. Part of what fueled this was the observation that many survivors of Cholera worked or lived near the gasworks.⁴⁰ Another journalist, J. Looan, called citizens to action in 1891, reporting that the city's Cleansing Committee was looking to acquire a site to use as safe refuge for people during disease outbreaks, but that they were having difficulties acquiring the land. He reminded readings "it is as much the duty of the public to assist them in their difficult functions as it is to criticize their proposals to meet the case. It is a matter of public interest and moment."⁴¹ He noted the extra cost could be born by the citizens and it "would hardly be felt as an extra burden."⁴² The printing press provided a way for MOH and medical reformers to disseminate their message and, at the same time, a forum for engaging with the public who stood at the center of their health policies. Indeed, the citizens were becoming more active in the conversations around public health.

The utilization of print media originated with the professional associations and the desire to disseminate scientific and medical knowledge, and the shift towards the public was influenced by rising literacy. Although it may not have started as conscientious effort to engage broader audiences, it seems by the end of the century the MOH were thinking of it in that way. E. Gwynn, the President of the Incorporated Society of Medical Officers

⁴⁰ Malam John, "Gasworks and the Public Health," *The Manchester Guardian*, 22 Feb. 1875, 7.

⁴¹ J. Looan, "The Town Yard's Problem," *The Manchester Guardian*, 5 Nov. 1891, 7.

⁴² J. Looan, "The Town Yard's Problem," *The Manchester Guardian*, 5 Nov. 1891, 7.

of Health, wrote in *Public Health* in 1898, that the officers “should be able to influence public opinion on many important sanitary questions...he must possess influence, otherwise he will become a voice crying in the wilderness, *vex et praeterea nihil* [all sound and no substance].”⁴³ This quote underscores the increasingly important role of public engagement in the effort to protect people from disease.

In addition to print communication, medical professionals employed lectures to inform and engage the public and to shape opinion. Elizabeth Blackwell founded the National Health Society in 1871 to spread knowledge on healthy living conditions through free lectures given to all those who wished to hear them regardless of their class or sex.⁴⁴ Physicians gave the talks, covering a broad range of topics including composition of healthy homes, chemical makeup of food, proper drainage, and nursing techniques for the sick. Some even proposed to take children from the most crowded areas of cities out into parks during the summer.⁴⁵ The society’s lectures aimed to change the living habits of all classes of peoples in order to improve public health. For example, preventative lectures detailed the role of clean air in eliminating the fetid, carbonic compound air, and others argued for reduction or a restructuring of tenement houses to avoid overcrowding. A talk sponsored by the Manchester and Salford Sanitary Association argued for workers to live outside the city limits as a way to improve their

⁴³ E. Gwynn, “The Medical Officer of Health as a Public Teacher,” *Public Health Volume 11*, October 1898–September 1899, 76.

⁴⁴ “The National Health Society,” *British Architect* 5, no. 131 (30 Jun. 1876): 346.

⁴⁵ “The National Health Society,” *British Architect*, 346.

health.⁴⁶ The lectures provided another means to address the public, and organizers even utilized comedy and public spectacle to attract crowds and entice poorer members of society.

By making public presentations free the society ensured that the information, including printed materials, might reach the greatest number of people. In addition to using lecture halls, members used other public spaces including private drawing rooms, schoolhouses, and working-men's-clubs. By 1894, the National Health Society had expanded beyond London to include nineteen counties in southern England, from Devonshire in the west to Hertfordshire in the east.⁴⁷ The society's lectures were popular, and by 1891 it had over 2,000 students who had completed lectures and examinations given by the organization. Its members also employed other philanthropic measures to improve lives of the urban poor including creating new public parks and supporting educational funds. In 1874 it joined the London School Board to raise £42,000 (approximately equivalent to six million dollars today) for education, some of which was given to young women studying physiology.⁴⁸

The London model was followed in other cities including the Hulme Health Home Society (HHHS), which had been established in Manchester in 1894. The organization offered courses consisting of eleven lectures and, while their first meeting attracted over 1,000 interested citizens, by 1905 their membership had remained steady at

⁴⁶ "Popular Health Lectures," *The Manchester Guardian*, 23 November 1882, 8.

⁴⁷ "The National Health Society." *The Manchester Guardian*, 31 July 1894, 9.

⁴⁸ "London Local Administration," *The Observer* (London), 28 June 1874, 8.

between seven and eight hundred.⁴⁹ Much like the National Health , the HHHS's main goal was to provide medical information and education to all who attended their lectures, but the group had a clear focus on the poorest in Manchester and children, even offering theater and other forms of entertainment in order to help diffuse their sanitary knowledge amongst kids.⁵⁰ The lectures were successful enough in engaging the local poor and working classes that they continued into the 1920s, however, the National Health Service, created after the Second World War, assumed these roles and made groups like the HHHS and National Health Society obsolete.

Many professional medical schools also offered classes and lectures to the public. University of Edinburgh teamed up with the Edinburgh Health Society to offer public lectures. The talks began in February, 1889, and continued into the early part of the twentieth century, and they established a link between educational institutions and the public. The public embraced the lectures. The first one was so well attended that the lecture hall had to be extended to a nearby Free-Church Assembly Hall, and the estimated attendance was more than 2000 people within the first three days alone.⁵¹ The success of the Edinburgh Health Society lectures was copied elsewhere, with the St. Andrew's Young Men's Literary Association simply repackaging them for their own audiences.⁵²

The push by MOH and medical reformers to educate the populace as a means for disease was successful. More of the poor and working classes were thinking about

⁴⁹ "Hulme Healthy Home Society," *The Manchester Guardian*, 2 May 1908, 11.

⁵⁰ Alex S. Faclener, "The Public Health," *The Manchester Guardian*, 14 Jan. 1898, 3

⁵¹ Rae Martin, "Health Lectures," *The Scotsman* (Edinburgh), 10 Feb. 1881, 3.

⁵² Martin, "Health Lectures," *The Scotsman*, 3.

sanitation in the home and diet as a means to maintain good health. Working class and poor women joined in the effort, creating exhibitions to demonstrate to their neighbor's proper drainage and ventilation techniques, and some of them even were awarded prizes for their work.⁵³ Falling mortality rates suggest the education measures were effective. In Salford, for example, the death rate from disease in 1903 was 19.1 per one thousand, a sizeable decline from the 1871 rate of 30.3.⁵⁴ In Manchester, the city which Friedrich Engels called hell upon earth in the early nineteenth century, experienced a gradual decline in its death rate from fifty per one thousand inhabitants in 1897, just in Angel Meadow, 30.7 per one thousand for the entire borough by 1905.⁵⁵ While there were some contemporary writers that attributed these declines to "fairer weather" or "a drier climate," the impact the public consciousness had on declining death rates cannot be understated.

In 1875, just three years after the Lord of Derby's speech discussed at the beginning of this chapter, the Manchester and Salford Sanitary Association held their annual meeting where, during an opening lecture, Dr. Noble, a member of the Royal College of Physicians, reflected on the progress made:

If we contrasted the present state of public opinion on sanitary topics with that which was obtained some 30 years ago we should be very much

⁵³ Priestley, "The Progress of Sanitary Knowledge Among the Women of England," *Public Health Pap Rep*, 19 (1893):172.

⁵⁴ "Salford Health Statistics: Improved Sanitation, Lower Death-Rate, Improved Sanitary Conditions, Infant Mortality, N.E. Housing Schemes," *The Manchester Guardian*, 10 Sept. 1904, 5.

⁵⁵ "Manchester Health Statistics," *The Manchester Guardian*, 16 Mar. 1905, 4.

struck with the beneficial progress which it had made. A generation back such things as ventilation, drainage, and pure air had little or no interest for those who were outside professional and scientific circles. The earlier acts which initiated the present system of sanitary administration were little more than tentative, and their value was greatly reduced by being permissive. But at last public opinion had caused legislation to be more decisive, and it might now be said that many useful enactments had been obtained which authorized improvements in the mode of dealing with sanitary matters; and in many respects these enactments were of a compulsory character.⁵⁶

He referred here to an important outcome of the effort to engage the public, namely that the focus on cultivating public opinion gave people agency in shaping health responses. Through a growing educated and more literate public (including all economic classes of society), it was now possible that they could read the medical literature of the day, at the same time however it was necessary that the public interacted with medical practitioners who could offer advice, demonstrate models, and make sure they understood the best course of action. By 1904 death rates in urban centers in England and Wales dropped to the lowest point since the public lectures began, to 15.4 per one thousand people as compared to twenty per one thousand in October of 1890.⁵⁷ The main causes cited by

⁵⁶ "Sanitary Association Lecture," *The Manchester Guardian*, 28 Oct. 1875, 5. "Manchester Ladies' Health Society," *The Manchester Guardian*, 20 Jan. 1897, 10C.

⁵⁷ Henry Handford, "Death Rates in Rural Districts in the county of Nottingham, Higher than the Urban Rates," *Public Health*, 17 (October 1904), 769.

MOH such as Henry Handford was decreased child-mortality rates and the environment impact of healthy homes. The officers saw it as part of their duty to education the populace, and it seems people came to view them as having this role, too, in one instance even referring to them as “preachers of sanitation and hygiene.”⁵⁸ Newspapers, print advertisements, medical journals, free lectures, and popular entertainment focusing on medical topics could thrive and succeed with a more literate and engaged audience. Through this engagement the public were able to utilize what was being offered to them, a relationship that is characteristic of the modern medical state.

⁵⁸ T.C. Abbott and W.S. Scott, “The Church and Public Health,” *The Manchester Guardian*, 12 Oct. 1894,

Chapter 5

Conclusion

The 1848 Public Health Act was the first significant piece of legislation in Victorian Health Reform. The MOH, which included John Simon, could investigate, report, and suggest changes in order to improve the sanitation and therefore health of their counties. This was an important shift in official response to disease, moving from reactive to proactive, and allowed physicians to be seen in a more positive way as defenders against illness. The MOH rise coincided with the professionalization of medical practitioners and moving away from medieval and early modern practices. The new associations that followed led to the MOH having greater powers of sanitary investigation and, through the power granted them by new government boards, drove the nation's public health policy. The MOH also utilized popular print and lay societies to spread sanitary information to all economic classes as a preventive measure to combat disease. The public gaining information from attending lectures or through reading periodicals that published the works of medical men. The MOH navigated through a tense political climate between local authorities and the growing power of the central government, between a uniform and coordinated response to combat illness and traditional responses to disease, and misinformation about how to best protect the public. These medical officials succeeded in securing their place and led to some of the most important health legislation in the modern era, setting the stage for Britain's modern system of public health.

As discussed in the introduction to this thesis, scholars have questioned the impact MOH had on improving health in the later-half of the nineteenth century, and the answer is they played an important role in decreasing mortality. This thesis shifts focus to the question of why they were successful. Three aspects of the MOH contributed to their success. The authority given to them by Parliament and local health boards empowered them to act as liaisons between the public and local and national government. Through this role they were able to address and recommend changes at both the local and parliamentary level. The emergence of various professional associations for physicians provided ways to share information, build consensus, and launch campaigns to expand public health laws, transforming their health reforms from local measures to a coordinated national effort. Recognizing the office's importance, Parliament awarded greater powers under the General Board created by the 1875 Public Health Act. Finally, the MOH seized upon popular print and lectures share information with the public and, in particular, the poor and working classes. Their roles as liaisons, advisors, and teachers helped to spread their medical innovations and reforms, and contributed to the improving mortality rates in Britain's urban areas.

The importance of MOH for modern medicine in the UK is underscored by the changes that came about in the twentieth century. On November 30, 1904, the president of the Royal Society of London presented an obituary of several of its members, one of which was John Simon. He praised the former London officer, saying "What Lister did for surgery, and Pasteur for bacteriology, Simon may be said to have accomplished for sanitation. Deeply grateful to his memory, we mourn one who by his life-work conferred

incalculable benefit upon the whole civilized world.”¹ Simon and other medical reformers of the nineteenth century had succeeded in changing the medical landscape, elevating sanitation and hygiene as preventive measures against disease, engaging the public in the struggle, and advocating for a top-down public health policy led by Parliament and its advisors. Although they had made great strides in modernizing medical care, work still remained and a new generation arose to carry out further reforms.

Among the most important of the new generation was Liverpool physician Benjamin Moore, a member of the Royal College of Surgeons of England and a licentiate of the Royal College of Physicians in London, held the Johnston Chair of Biochemistry at the University of Liverpool. In 1911, he published *Dawn of a New Health Age* which laid out his plans for a new public health entity that he described as a national health service. He called for a major overhaul of the current medical services, which he complained were not serving everyone’s best interests.² Recognizing the work of men like Simon to educate the populace, he noted that things had been worse for the previous generation but now “there is a great and general awakening of the public mind, voiced by the thoughts and actions of millions of the best of the inhabitants of the country, towards a real scientific and continued endeavor to deal with the problems of poverty and disease in a way that means eradication from the race, and not merely amelioration of the lot of the

¹ Address delivered by the president, Sir William Huggins, K.C.B., O.M., F.R.S., at the Anniversary Meeting on November 30, 1904, *Proceedings of the Royal Society of London. Series B, Containing Papers of a Biological Character*, 76, No. 507 (Apr. 22, 1905): 3.

² Benjamin Moore, *Dawn of a New Health Age* (London: J.A. Churchill, 1911), v.

individual.”³ He advocated for creating a “National Health Service” that would take over the duties of municipal authorities in care for the sick and poor.⁴ Moore also proposed a “State Medical Association” that would push for greater reforms while “allowing as much freedom for citizens to choose their doctors, the members to be paid a gradual salary, and open to anyone who wanted to participate in that service.”⁵ Although his suggestions were criticized by many, one supporter understood the importance of his vision, noting “His proposals may be looked upon by some as radical but that is what he intends them to be, for he aims at striking at the root of disease.”⁶ He failed to convince contemporaries of his proposals, but Moore succeeded in laying the groundwork for the future National Health Service that was created in 1948, a century after Simon took up his job as a MOH.

In the same way that the Cholera and Typhoid epidemics instigated change in the nineteenth century, a new pandemic in the twentieth century brought further reform. In 1918, in response to perceived failures to combat the influenza epidemic, Parliament passed the Ministry of Health Act which, much like the 1855 legislation discussed previously, strengthened a top-down approach to healthcare by transferring power from the General Board of Health to the newly created office of “Minister of Health.” This elevated health matters to a cabinet position, which a century before had been viewed as a

³ Benjamin Moore, *Dawn of a New Health Age* (London: J.A. Churchill, 1911), 179.

⁴ Benjamin Moore, *Dawn of a New Health Age* (London: J.A. Churchill, 1911), 180-3.

⁵ Robin Agnew, “Benjamin Moore FRS (1867-1922),” *Ulster Medical Journal* 82,1 (2013): 31-4.

⁶ Ben Moore, *Benjamin Moore F.R.S. Biochemist, Doctor, and Medical Reformer* (Raleigh NC: Lulu Enterprises Inc, 2010), 91.

matter for local government religious organizations. The first minister, Dr. Christopher Addison, worked alongside Prime Minister Lloyd George during the First World War, and he earned a reputation for several of his reform acts. Most notable among his proposals was the Housing, Town Planning, &c. Act passed in 1919 (also known as the Addison Act) which resulted in over 200,000 government-owned homes built for the poor. Despite some successes, various controversies surrounded Addison and he was forced to resign in July, 1921, largely due to accusations of wasteful spending. As one reporter opined, Addison “has taken upon his shoulders a sacred burden, which grows heavier as he proceeds. One wonders if he will get over the river with it, or whether he will have to drop it on the way.”⁷

Under the leadership of Sir Winston Churchill, the Conservative leader who first served as Prime Minister beginning in 1940, efforts continued to modernize healthcare. Economist William Beveridge produced a report known as the Beveridge Plan in 1942, describing various recommendations for reforms including the creation of a Ministry of Social Security, an extension of insurance against extensive disabilities, training benefits, and combining some of the previous social security schemes to support the poor and working classes. Most importantly for this study, Beveridge recommended that all people regardless of their class should be insured for medical treatment by creating a nationwide healthcare service.⁸ Promises were eventually made by the government in 1944 that a national program was coming despite some opposition from medical practitioners.

⁷ “Phantom Houses and a Fagged Whip,” *The Graphic*, (December 20th, 1919): 1.

⁸ War Cabinet, *Social Insurances and Allied Services: Summary of Report by Sir William Beveridge*, W.P. 42-547, (1942): 155-7.

Churchill's government failed to deliver on this promise before losing the 1945 election to Charles Attlee and the Labor Party, but Aneurin Bevan, the new Minister of Health succeeded in creating the National Health Service. Bevan was from a coal-mining family and elected as an independent in 1922, later rising to prominence as a MP for the Ebbw Vale in 1929.⁹ He was an unlikely champion for the reforms. He was a staunchly opposed to the Conservatives, at one point even referring to a party MP as "lower than Vermin."¹⁰ Yet Bevan was determined to carry out the recommendations made by the rival party. One barrier was the British Medical Association (BMA), whose members had voted 23,110 to 18,972 against negotiations to create the new health service. Undeterred Bevan pushed forward with the plan, convinced it was the BMA organization that was against it and not the British medical practitioners.¹¹ Despite the vote, he continued negotiations with association and was able to reach consensus with his opposition on several critical issues including payments to the doctors who joined the National Health Service. Physicians were to be paid in one of two ways: either a capitation (fixed) payment of 18 shillings a year per person or a £300 annual salary with a reduced

⁹ Dai Smith, "Bevan, Aneurin (Nye)," Oxford Dictionary of National Biography, Last Updated January 6, 2011, <https://www-oxforddnb-com.vortex3.uco.edu/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-30740?rskey=q4W1Ys&result=2#odnb-9780198614128-e-30740-div1-d135446e1054>.

¹⁰ "Churchill to Attlee: Disavow Bevan," *The Observer* (July 11, 1948): 1.

¹¹ "British Medical Bill Splits Doctors and Health Minister: Public Opinion Poll Viewpoint of Doctors Protest by Bevan Room for Negotiation Age Question Raised Conservative Viewpoint," *Christian Science Monitor* (Boston, Dec. 20, 1946): 20.

capitation fee.¹² Under the 1948 National Health Service Act, practitioners who joined the newly created National Health Service (NHS) could continue to maintain their own offices as they had done before. Overwhelming public support for the legislation may have been the decisive force that led the BMA to continue negotiations. With the passage of this legislation, the minister of health was now in charge of over 450,000 hospital wings and 130,000 professionals, and the public enjoyed free medical and maternity care, with the exception of some specific treatments that had to be paid out of pocket.¹³ The creation of the NHS capped a century-long reform of medical care that began in the Victorian period with the MOH and the assumption that government should provide for the health of citizens.

Today the NHS is comprised of Public Health England, Public Health Wales, Health Protection Scotland, and the Public Health Agency for Northern Ireland. It is an example of a modern medical state, that is to say a systematic, top-down approach that employs civil servants working through medical institutions to provide care for the population. In 2019, the Kings Fund, an English health charity, surveyed 3,300 people about their satisfaction with the NHS and found that sixty percent were satisfied either with the NHS or its various component institutions. While this number may seem low at

¹² “Bevan and the Doctors,” *Tribune* (Blackpool, England, Dec. 12, 1947): 5.

¹³ Susan Cohen, *The NHS: Britain’s National Health Service, 1948-2020* (Oxford: Bloomsbury Publishing, 2020): 15.

first glance, only twenty five percent of people surveyed were dissatisfied. The following year, the number of satisfied respondents increased twelve percent.¹⁴

In addition to the foundation for the modern NHS, the work of nineteenth century MOH and medical reformers paved the way for another modern innovation, the concept of health literacy. The term first appeared in 1974 to describe how both media and medical information impacts the education system.¹⁵ The definition was expanded upon in the early 2000s and, according to health literacy expert Terri Ann Parnell, its focus has shifted to “the ability of an individual to apply basic reading and numeracy skills to a health care concept, as in the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”¹⁶ In other words, health literacy refers to an individual’s capacity to understand and sort medical information and to make informed decisions about care. Although a more recent concept, the seeds for health literacy were sown in the work of nineteenth century reformers who sought to teach the poor and working classes about preventive measures to fight disease. This, of course, is predicated on the conviction that humans, regardless of social or economic class, can understand the information and make informed decisions.

¹⁴ “Public Satisfaction with NHS Social Care,” *The Kings Fund, Public Opinion*, Last Updated April 2020, <https://www.kingsfund.org.uk/publications/public-satisfaction-nhs-social-care-2019>.

¹⁵ “Understanding Health Literacy.” 74.

¹⁶ “Health Literacy in Nursing.” 7.

Through the research presented in this study, three main findings emerge. The first was that the MOH were a key part of the health reforms responsible for decreasing mortality rates from diseases such as Typhoid and Cholera through the investigation and recommendations for sanitary improvement to the counties and communities that they oversaw. Through their role they were also able to compile information and share it amongst their fellow MOH and transmit reports directly to the Privy Council. The second finding was that the creation of societies by medical practitioners and the professionalization of old orders allowed for British Doctors to not only improve medical education but their reforms led to the creation of new medical systems such as Registered Nurses. The formation of the societies also allowed for practitioners to begin the process of “de-quackifying” the profession and allow for its members to become involved not only in their work as practitioners, but also push for social and medical reform. Finally, this research has found that the MOH took on the role of teachers through instructing the public either through free lectures, dissemination of information through publications like the journal *Public Health*, or through visitations by members of medical societies. The information was created to be easily accessible to lay-people, allowing for the public to form a type of proto-health literacy. The MOH and any medical practitioner or reformers faced significant challenges in bringing about reform, however they ultimately succeeded in reducing the mortality rate in some communities by as much as half from disease.

Why, then, should this thesis on the MOH and public health reform matter? The answer lay in its relevancy; in the last two years we have seen a global pandemic, which has affected an untold number of lives. This is a similar situation to the realities of the late-nineteenth century public health crisis. This thesis matters because we have seen

health professionals such as Dr. Anthony Fauci be intensely criticized and seemingly unable to convince much of the population about the deadly effects and the realities of disease. By showcasing the origins of public health policy and the role of physicians as intermediaries between the government and the public, located in the communities they served, we can hopefully combat future epidemics and strengthen our modern public-health systems. In Britain, the efforts of the MOH and the public health reform they participated in laid the groundwork for the formation of the National Health Service (NHS). In studying these individuals who were at the forefront of medical reform, prior to the articulation of germ theory, yet we can understand the changes in medical knowledge and reform in history. By studying public health in the Victorian Era historians can also examine more closely how the systems of public health tie into Imperialism, Nationalism, and Modernism.

As discussed in the introduction to this thesis, historians Christopher Hamlin and Sally Sheard wrote in 1998 that the government's duty to create public health policies that protect against disease is "obvious", but in recent years the backlash against government action during the COVID-19 pandemic suggests this may no longer be true.¹⁷ Criticism against major public health officials such as Dr. Anthony Fauci abound and have many have questioned the role of government in protecting the public.¹⁸ This

¹⁷ Christopher Hamlin and Sally Sheard, "Revolutions in Public Health: 1848 and 1998?" *The BMJ* 317, no. 7158 (Aug. 29, 1998): 587-91.

¹⁸ Sheryl Gay Stolberg, "Scores of Doctors and Scientists Sign a Statement Condemning Personal Attacks Against Fauci," *The New York Times* (January 13, 2022), last viewed July 16, 2022, <https://www.nytimes.com/2022/01/13/us/fauci-smear-campaign.html>.

was apparent as vaccines against the disease were being tested and offered for free, yet some challenged vaccine mandates. The question of wearing masks as a preventive measure was addressed in court when judge Katherine Kimball Mizelle struck down a mask-mandate in April, 2022, known as Title 42 (Originally part of the 1944 US Public Health Act).¹⁹ The judge took issue with the government's defining masks as a sanitation measure and she relied on a narrow definition of the term that excluded things like masks. This contemporary court decision reflected the discussions taking place among the MOH in nineteenth-century Britain as they defined sanitation measures that were key to fighting disease. In the challenging times that we find ourselves in, when we question how public health systems should work, or when another epidemic disease attacks our communities and ourselves. The current pandemic is challenging our modern notions of a public health system, and understanding better its history and the challenges it faced may provide us tools for meeting the challenges in our present day and in the future.

¹⁹ Joe Hernandez and Selena Simmons-Duffin, "The judge who tossed mask mandate misunderstood public health law, legal experts say," National Public Radio (April 19, 2022), last viewed July 20, 2022, <https://www.npr.org/sections/health-shots/2022/04/19/1093641691/mask-mandate-judge-public-health-sanitation>.

BIBLIOGRAPHY

Archives and Collections

Victorian England Collection. The British Library.

Simon, John, Sir 1816-1904. Wellcome Collection.

Nightingale, Florence. Wellcome Collection.

Division within MH. National Archives at Kew.

Primary Sources

“ART. VII. Medical Charity: It’s Extent and Abuses.” Chapman, John (ed.). *Westminster Review* 45, no. 1 (Jan 1874): 174-224.

“Bevan and the Doctors.” *Tribune* (Blackpool, England), December 12, 1947.

“British Medical Bill Splits Doctors and Health Minister: Public Opinion Poll Viewpoint of Doctors Protest by Bevan Room for Negotiation Age Question Raised Conservative Viewpoint,” *Christian Science Monitor* (Boston, Mass.) Dec. 20, 1946.

“Hospital Nurses as They are and as They Ought to be!” *Fraser’s Magazine for Town and Country* 37, no 221 (May 1848): 539-42.

“Nursing as a Profession for Ladies.” *Reformed Church Messenger* 38, no. 14 (Apr 3, 1872): 2.

“On Novel Reading.” *The Kaleidoscope*, 2, no. 60 (1821): 54-5.

“Phantom Houses and a Fagged Whip.” *The Graphic*, 100 no. 2612 (December 20th, 1919): 928.

“Public Charities and their Abuses.” *The St. James's Magazine; London* 1, no. 12 (Mar 1874): 665-673.

“Where to Find Nurses?” *Leader and Saturday Analyst* 7, no. 313 (Mar 22, 1856): 266.

Buchan, William. *Complete Domestic Medicine, or, a Treatise on the Cure and Prevention of Diseases, by Regime and Simple Medicine*. Otley: William Walker and Son, 1848.

Chadwick, Edwin. *Report on the Sanitary Condition of the Laboring Population of Great Britain; Sanitary Condition of the Laboring Population of Great Britain; a Supplementary Report on the Results of a Special Inquiry into the Practice of Interment in Towns: Made at the Request of Her Majesty's Principal Secretary of State for the Home Department*. London: W. Clowes and Sons, 1843.

Chambers, William and Robert Chambers. “The Public Health Act.” *Chamber's Edinburgh Journal*, no. 249 (October 7, 1848): 232-3.

Clarke, Fairlie. “The Use and Abuse of Hospitals,” *Macmillan's Magazine* 25, no. 150 (Apr 1872): 448-454.

Dickens, Charles. “A Healthy Year in London.” *Household Words/Conducted by Charles Dickens* 15, no. 388 (August 1857): 193-7.

Macauley, James. “State of the Public Health in the City of London.” *The Leisure Hour: a Family Journal of Instruction and Recreation; London Iss.* 315 (Jan 7, 1858): 14-16.

Marvin, Charles. “Our London Hospitals and Hospital Sunday.” *Time; London* 15, no. 19 (Jul 1886): 1-7.

- Nightingale, Florence. *Collected Works of Florence Nightingale: Florence Nightingale's Spiritual Journey - Biblical Annotations, Sermons and Journal Notes*, edited by Lynn McDonald. London: Wilfrid Laurier University Press, 2002.
- Nightingale, Florence. *Collected Works of Florence Nightingale: The Nightingale School*. Edited by Lynn McDonald. London: Wilfrid Laurier University Press, 2009.
- Nightingale, Florence. *Florence Nightingale on Health in India: Collected Works of Florence Nightingale*. London: Wilfrid Laurier University Press, 2006.
- Nightingale, Florence. Letter to *The Times*, April 14, 1876. In *Metropolitan and National Nursing Association for Providing Trained Nurses for the Sick Poor*. London: Cull & Son Publishing, 1876.
- Nightingale, Florence. *Notes on Matters Affecting the Health, Efficiency, and Hospital Administration of the British Army*. London: Harrison and Sons, 1858.
- Rumsey, Henry Wyldbore. *Essays on State Medicine*. London: John Churchill Publishing, 1856.
- Senior, Nassau and Edwin Chadwick. *Poor Law Commissioners' Report of 1834*. London: Her Majesty's Stationary Office, 1834.
- Simon, John Sir. *English Sanitary Institutions: Reviewed in their Course of Development, and in Some of their Political and Social Relations*. London: Cassel, 1890.
- Simon, John. *Preface to Reports Relating to the Sanitary Condition of the City of London*. London: John W. Parker and Son, 1854.
- Simon, John. *Report to the Local Board of Health, Croydon, with Regard to the Causes of Illness Recently Prevailing in that Town*. Croydon, U.K.: Local Board of Health, 1853.

Stanley, Edward Henry. *Speeches and Addresses*. London: Longmans, Green, and Co., 1894.

War Cabinet, Social Insurances and Allied Services: Summary of Report by Sir William Beveridge, W.P. 42-547, (1942): 155-7.

William, Empson. "Report of the General Board of Health on the Measures appointed for the Execution of the Nuisances-Removal and Diseases-Prevention Act, and the Public Health Act, up to July 1849." *The Edinburgh Review* 91, no. 183 (January 1850): 228.

Government Documents

United Kingdom Parliament, "Elementary Education Act 1870." 33 & 34 Vict. C. 75, 1870.

United Kingdom Parliament, House of Lords Papers (Miscellaneous Subjects). "Local Government Act, 1888 (Medical Officers of Health): Return of The Medical Officers of Health Appointed by County Councils under Section 17 of the Local Government Act, 1888, and the Councils Appointing them, and Return Showing the Representations, if Any, Made to the Local Government Board Under Section 19 of the Act, and the Results of Such Representations." 17, XVII, 1890-1.

United Kingdom Parliament. "Public Schools Act 1868." 31 & 32 Vict. C. 118, 1868.

United Kingdom Parliament. "Return of Appointments of Medical Officers of Health in England and Wales Under the General Sanitary or Local Acts." LXXXVI.121, August 12th, 1887.

United Kingdom Parliament. "The Borough Education Act." 33 Vict., 1870.

United Kingdom, Acts and Reports. "An Act for Promoting the Public Health." 11 & 12 Vict. c. s. 63. 31 August 1848.

United Kingdom, Acts and Reports. "An Act for Promoting the Public Health." 11 & 12 Vict. c. s. 63. 31 August 1848.

United Kingdom, Bills and Acts. "Bill for Establishment in Metropolis of Asylums for Sick, Insane, and other Classes of Poor, and Dispensaries; and for Distribution over Metropolis of Portions of Charge for Poor Relief, and for other Purposes Relating to Poor Relief in Metropolis." Vict. 30 c.6. February 8, 1867.

United Kingdom, Command Papers, "Report of the General Board of Health on the Epidemic Cholera of 1848 & 1849: Presented to both Houses of Parliament by Command of Her Majesty," 1850.

United Kingdom, Command Papers. "Letter of President of General Board of Health to Secretary of State for Home Dept.; Report from Doctor Sutherland on Epidemic Cholera in the Metropolis." 45, XLV.69, 1854.

United Kingdom, House of Commons Papers. "Circular by Poor Law Board to Metropolitan Guardians, to Appoint Trained Nurses to Attend Sick in Workhouses of Metropolis." 61, LXI.457, May 1865.

United Kingdom, House of Commons. "Commons Sitting of Tuesday, July 12, 1853." Vict. 17. July 12, 1853.

United Kingdom, House of Lords Papers. "Cholera: To Report of the General Board of Health to her Majesty on the Epidemic Cholera of 1848 and 1849. Report by Mr. Granger." 1850.

United Kingdom, House of Lords Papers. "Registration of Nurses: Report from the Select Committee of the House of Commons on the Registration of Nurses; Together with the

Proceedings of the Committee, Minutes of Evidence, and APPENDIX.” Edw. 7. August 9, 1905.

United Kingdom. House of Lords. “Medical Act (1858) Amendment Bill: Special Report from the Select Committee of the House of Commons on the Medical Act (1858) Amendment (No. 3) Bill (H.L); Together with the Proceedings of the Committee, Minutes of Evidence, and Appendix. House of Lords Papers, Reports of Committees.” 198 VIII 1878.

United Kingdom. House of Lords. *Local Government Board: Fifth Annual Report to Her Majesty of the Local Government Board, 1875-76.* Vict. 39&40. 1876.

Periodicals

Bulletin of the Institute of the History of Medicine.

Epidemiology and Infection.

History.

Journal of the Workhouse Visiting Society.

Medical History.

Population Studies.

Proceedings of the Royal Society of Medicine.

Public Health.

The British Architect.

The British Medical Journal (BMJ).

The Contemporary Review.

The Examiner 1870-80, 1890-9.

The Lancet.

The Manchester Guardian 1860, 1875-85, 1890-1905.

The Observer 1848-55, 1860-5, 1875-8, 1888-1905.

The Scotsman 1848-50, 1860, 1888-1900.

Secondary Literature

Ahmed, F.U. "Defining Public Health," *Indian Journal of Public Health* 55 (2011): 241-5.

Baly, Monica. *Florence Nightingale and the Nursing Legacy: Building the Foundations of Modern Nursing and Midwifery*. London: Pitman Medical Publishing Company
Philadelphia: Trans-Atlantic Publications, 1998.

Ben Moore, Ben. *Benjamin Moore F.R.S. Biochemist, Doctor, and Medical Reformer*. Raleigh
NC: Lulu Enterprises Inc, 2010.

Benjamin Moore, Benjamin. *Dawn of a New Health Age*. (London: J.A. Churchill, 1911.

Brockington, Colin. *Public Health in the 19th Century*. London: E&S Livingston, 1965.

Chorley, Geoffrey. "Gladstone and the 1870 Education Act." *Journal of Liberal History* 101 50
(2018-19): 38-47.

- Dickins, Charles. *The Life and Adventures of Martin Chuzzlewit*. London: Penguin Books, 1999.
- Elizabeth Fee, Elizabeth and Theodore Brown., “The Public Health Act of 1848.,” *Bulletin of The World Health Organization* 83, no 11 (2005): 866-7.
- Engineer, Maugeri Society of Medical Officers of Health: It’s History and It’s Archive.” *Medical History* 45, no. 1, January 2001, 98-100.
- Ervin, Susan M. “History of Nursing Education in the United States,” in *Curriculum Development and Evaluation in Nursing Education*, eds. Sarah B. Keating and Stephanie S. DeBoor. 4th edition. New York: Springer Publishing Company, 2017.
- Hamlin, Christopher. *Public Health and Social Justice in the Age of Chadwick: 1800-1854*. Cambridge: Cambridge University Press, 1998.
- Hardy, Anne. *The Epidemic Streets. Infectious Diseases and the Rise of Preventive Medicine, 1856-1900*. Oxford: Clarendon Press, 1993.
- Hopkins, Donald R. *The Greatest Killer: Smallpox in History.*, (Chicago: University of Chicago Press; 2002.), 87-91.
- Ian Morley, Ian. “City Chaos, Contagion, Chadwick, and Social Justice.,” *Yale Journal of Biology and Medicine* 80 (2007): 619-720.
- John Mauger, “To the Committee on Irregular Practice of the Provincial Medical and Surgical Association,” *Provincial Medical Surgical Journal* 15, no. 19 (1851): 531-2.
- Lund, Brian. *Understanding State Welfare: Social Justice or Social Exclusion?* London: Sage Publishing, 2002.

Lupton, Deborah. *The Imperative of Health: Public Health and the Regulated Body*. London: SAGE Publications, 1995.

Nutting, Mary and Lavinia Dock. *A History of Nursing: The Evolution of Nursing Systems from the Earliest Times to the Foundation of the First English and American Training Schools for Nurses*. New York: The Knickerbocker Press, 1907.

Olga Krylova, Olga and David J.D. Earn., “Patterns of smallpox mortality in London, England, over three centuries.,” *PLOS Biology* 18, no. 12 (2020): e3000506.

Pooley, Colin G. “Housing for the poorest poor: slum-clearance and rehousing in Liverpool, 1890-1918.,” *Journal of Historical Geography* 11, no. 1 (1985): 70-881.

Poovey, Mary. *Making a Social Body: British Cultural Formation, 1830-1864*. Chicago: University of Chicago Press, 1995.

Porter, Roy. *Disease, Medicine, and Society in England, 1550–1860*. Cambridge: Cambridge University Press, 1995.

Porter, Roy. *The Cambridge History of Medicine*. Cambridge: Cambridge University Press, 2006.

Porter, Roy. *The Greatest Benefit to Mankind: A Medical History of Humanity*. New York: W.W. Norton and Company, 1999.

R.S. Davies, Wrigley, Oeppen, J.E. Oeppen, and Schofield, R.S Schofield. *English Population History from Family Reconstitution 1580-1837*. Cambridge: Cambridge University Press, 1997.

- Robin Agnew, Robin. "Benjamin Moore FRS (1867-1922)," *Ulster Medical Journal* 82, no. 1 (2013): 31-4.
- Rosemary Weir, Rosemary. "Medical and Nursing Education in the Nineteenth Century: Comparisons and Comments.," *International History of Nursing Journal* 5, no. 2 (2000): 42-7.
- Rosen, George. *A History of Public Health Revised edition*. Baltimore: Johns Hopkins University Press, 2015.
- Seymer, Lucy. *Florence Nightingale's Nurses and the Nightingale Training School*. London: Pitman Medical Publishing Company, 1960.
- Sheryl Gay Stolberg, "Scores of Doctors and Scientists Sign a Statement Condemning Personal Attacks Against Fauci," *The New York Times* (January 13, 2022), last viewed July 16, 2022, <https://www.nytimes.com/2022/01/13/us/fauci-smear-campaign.html>.
- Simon Szreter, Simon. "The Importance of Social Intervention in Britain's Mortality Decline c.1850-1914: A re-interpretation of the Role of Public Health.," *Social History Med* 11, no. 1 (1988): 1-38.
- Stewart, Isla. "The State Registration of Nurses.," *A Monthly Review* 55, no. 328, (Jun 1904): 991-995.
- Susan Cohen, Susan. *The NHS: Britain's National Health Service, 1948-2020*. (Oxford: Bloomsbury Publishing, 2020.): 15.
- Sydney William Frederick Holloway, Sydney William Frederick. "Medical Education in England, 1830-1858: A Sociological Analysis.," *History* 49, no. 167 (1964): 1-5299-324.

Tombs, Robert. *The English and their History*. New York: Vintage Books, 2014.

Tulchinsky, Theodore H. “John Snow, Cholera, the Broad Street Pump: Waterborne Diseases Then and Now.,” *Case Studies in Public Health* (New York: Academic Press, 2018), 77-99.

Tulchinsky, Theodore H. and Varavikova, Elena A. “A History of Public Health,” in *The New Public Health*. Leiden: Elsevier Inc., 2014.

Vries, Jan de. *European Urbanization, 1500-1800*. London: Routledge, 2013.

W.H.R. Curtler, W.H.R. *A Short History of English Agriculture.*, (Oxford: Clarendon Press, 1909), 356.

Walford, Nigel Stephen, Walford. “Demographic and social context of deaths during the 1854 cholera outbreak in Soho, London: a reappraisal of Dr. John Snow’s investigation,” *Health Place* 65 (2020): 102402.

William Jerdan, William. “On Medical Reform.,” *The Literary Gazette* 11, no. 904 (18934): 337-9.

Wood, Robert. *The Demography of Victorian England and Wales*. Cambridge: Cambridge University Press, 2000.

Websites

“Public Satisfaction with NHS Social Care.,” The Kings Fund, Public Opinion., Last Updated April 2020., [Hhttps://www.kingsfund.org.uk/publications/public-satisfaction-nhs-social-care-2019](https://www.kingsfund.org.uk/publications/public-satisfaction-nhs-social-care-2019).

“Registration Data Reports.” Nursing and Midwifery Council. Last edited September 30, 2021.

<https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/>.

“The Golden Age?” Events of 1901, The National Archives., Last accessed July 20th 2022.,

<https://www.nationalarchives.gov.uk/pathways/census/events/polecon3.htm#:~:text=Average%20income%20per%20head%2C%20which,one%2Dninth%20of%20its%20population.>

“The Metropolitan Poor Act.” Policy Navigator, The Health Foundation. Last accessed March

23, 2022. <https://navigator.health.org.uk/theme/metropolitan-poor-act>.

Flint, Kate. “Victorian Readers.” British Library. Published May 15, 2014.

<https://www.bl.uk/romantics-and-victorians/articles/victorian-readers>.

Joe Hernandez, Joe and Selena Simmons-Duffin., “The Judge who Tossed Mask Mandate

Misunderstood Public Health Law, Legal Experts Say,” National Public Radio.

(April 19, 2022), Last viewed July 20, 2022., <https://www.npr.org/sections/health-shots/2022/04/19/1093641691/mask-mandate-judge-public-health-sanitation>.

Higginbotham, Peter. “The Metropolitan Asylums Board.” The Workhouse, Workhouses. Last

Accessed June 5, 2022. <https://www.workhouses.org.uk/MAB/>.

Lloyd, Amy. “Education, Literacy, and the Reading Public.” Gale, University of Cambridge.

Last accessed June 20, 2022. <https://www.gale.com/intl/essays/amy-j-lloyd-education-literacy-reading-public>.

Susan McGann, Susan. “Fenwick, Ethel Gordon,” Oxford Dictionary of National Biography,

Oxford University., Last Updated 12 November, 2020,

<https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-33106?rskey=56LUvq&result=1#odnb-9780198614128-e-33106-div1-d495303e135>.

Dai Smith, Dai. "Bevan, Aneurin (Nye).," Oxford Dictionary of National Biography., Last Updated January 6, 2011., [Hhttps://www-oxforddnb-com.vortex3.uco.edu/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-30740?rskey=q4W1Ys&result=2#odnb-9780198614128-e-30740-div1-d135446e1054](https://www-oxforddnb-com.vortex3.uco.edu/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-30740?rskey=q4W1Ys&result=2#odnb-9780198614128-e-30740-div1-d135446e1054).

Stolberg, Sheryl Gay. "Scores of Doctors and Scientists Sign a Statement Condemning Personal Attacks Against Fauci." The New York Times, January 13, 2022. Last viewed July 16, 2022. <https://www.nytimes.com/2022/01/13/us/fauci-smear-campaign.html>.