Trial by Virus: Colonial Medicine and the 1883 Cholera in Egypt

Christopher S Rose
Our Lady of the Lake University[1]

Introduction

On June 22, 1883, consular health authorities in the Egyptian port city of Damietta contacted the Maritime Health and Quarantine Board at Alexandria with the news that cases of severe gastritis ending in fatality had been reported.[2] These were telltale symptoms of cholera, a highly contagious and lethal disease whose appearance in one of the main ports serving ships transiting the Suez Canal would be a cause for concern. A multinational commission was dispatched and confirmed the grim news: cholera had returned to Egypt after an eighteen-year absence. Although the appearance of cholera was never welcome, it appeared at a particularly delicate time for Egypt; Great Britain had invaded the previous year to suppress an anti-government revolt and had restored the Khedive Tewfiq (whose government was indebted to British and French banks) to the throne. The 1883 epidemic was a trial by fire—nay, trial by virus—for the Anglo-Egyptian government, which had been established less than a year earlier. In this article, I show that the approach taken by the Anglo-Egyptian government's response to the cholera outbreak represented a shift in imperial attitudes toward the control of epidemic disease, layered upon imperial attitudes regarding health, hygiene and care of the body in a colonial setting. Over the course of the nineteenth century, the Egyptian state had invested substantially in health to boost the nation's economic and military strength, and to address European concerns about the potential for diseases to be transmitted along trade routes. In the process, a certain amount of negotiation was required with the Egyptian population as consumers of medical services, regarding how treatment would be delivered, by whom, and where. During the 1883 epidemic the new Anglo-Egyptian administration introduced new policies and attitudes about what constituted modern medical practice, the appropriate relationship between medical provider and consumer, and the ways in which the consumer was expected to behave. I argue that this is a key moment of transition in which public health in Egypt came to bear the hallmarks of the paradigm known as "colonial medicine," in which personal hygiene practices and the

acceptance of medical care were seen as necessary markers of modernity and progress—even when such restrictions came at the expense of nearly fifty thousand Egyptian lives.

Imperialism and health in Egypt

It is something of a cliché in Egyptian history to begin the narrative of the "modern" period with the three-year partial occupation by the French army under Bonaparte (1798-1801). While it is no longer universally accepted that the French incursion represents a definitive rupture from the Ottoman/Mamluk past, the multivolume *Description de l'Egypte* produced by the French expedition containing descriptions of health, medicine and pharmacology at the turn of the nineteenth century, albeit filtered through an imperial lens, remains a useful benchmark against which to gauge subsequent developments in public health over the course of the nineteenth century.[3] Laverne Kuhkne, whose *Lives at Risk* remains one of the key surveys of Egyptian public health prior to the British period, has observed that, Metropolitan French condescension aside, the level of health services available in Egypt in 1800 was probably comparable to that of contemporary rural France, in that both were fairly rudimentary and quality care was largely restricted to elites who could afford to travel to seek care or hire a private physician.[4] In the 1820s, Egypt's Ottoman viceroy Mehmet Ali (1805-1848) contracted a Frenchman, Antoine-Barthélémy Clot, to develop a military health service following a devastating outbreak of plague, and a high incidence of syphilis among enlisted men serving in Syria. Clot insisted that military and civilian health were intertwined, and oversaw the creation of medical corps intended to treat both populations, educated at two medical schools—one for women—whose graduates were sent to work in a network of hospitals, clinics and dispensaries throughout the Nile Valley.[5] However, Clot's rigid insistence on Europeanizing medical practice in Egypt ran into its first obstacle when the national medical corps, accompanied by military officers and sent into the countryside to engage in a nationwide smallpox vaccination campaign in the early 1840s, met resistance from villagers who suspected them of marking potential recruits for the dreaded national labor corvée.[6] Faced with this obstacle, Clot decided to incorporate local barber-surgeons, whom he had disparaged frequently in his writings, into the state system by giving them training in vaccination and first aid and having them accompany doctors sent by the state; by mid-century, Egypt boasted one of the highest vaccination rates outside of Europe. Clot also

mandated the creation of a nationwide network of hospitals; however, these were heavily underutilized as there was a strong cultural preference for healing, birth and death to take place at home in care of the family. In the 1840s and 1850s, the government opened a network of medical dispensaries in regional hubs throughout the Nile Valley. These combination outpatient clinics and pharmacies were supplied with medicines provided by the state and given free of charge to those who could not afford to pay for them.

This linear narrative of the development of public health in Egypt belies the fact that both Clot and the public health service that he implemented were situated at the nexus of complex social and educational transformations in both Egypt and Europe. Timothy Mitchell has argued that the period of state centralization under Mehmet Ali, which included Clot's medical program, can be seen as a form of colonization of Egypt's hinterland by the central state at Cairo, bringing rural areas under direct state control for arguably the first time.[7] At the same time, Khaled Fahmy and others, while agreeing with Mitchell's thesis, have questioned the degree to which the Egyptian central government can be seen as "colonial."[8] Fahmy has convincingly argued that Clot, as an employee of the Egyptian government, was not a colonial agent and that medicine in Egypt did not fit the paradigm of "colonial medicine" during the period prior to 1882. Hibba Abugideiri has suggested that a rapid shift occurred following the British invasion of 1882, in which new European colonial attitudes came to dominate Egyptian medical education (her specific interest is the education of female medical practitioners). I follow Abugidieri more broadly; the case study presented here demonstrates that the outbreak provided the Anglo-Egyptian administration the opportunity to restructure public health services and expectations in line with the "colonial medicine" paradigm.[9] Clot, following the agenda set by Mehmet Ali, aimed to bring European medical practices to Egypt by establishing medical schools that would be staffed as quickly as possible by Egyptian professionals, who enforced a system of health and sanitary policies nationwide that would serve as his legacy. Adaptation to local conditions and sensibilities was a key, if unexpected, part of this project which ultimately led to its success and this received praise even from formerly skeptical audiences in Europe. At the same time, Clot's work in Egypt cannot be completely separated from his nationality; it is also important to situate the narrative of Clot's project in Egypt within the context of developments in medical science more

broadly. Clot's academic background as a graduate of Montpelier, one of the first universities in France to teach anatomical-pathological medicine and to incorporate the dissection of cadavers into the curriculum, is significant because this was not universally the case among European institutions, and the teaching methods Clot utilized in his curriculum in Egypt continued to be the topic of much debate in Europe.[10] In this light, Clot's treatises to colleagues in France can be read not only as missives from a physician who had lost his university post in France and found success in Egypt, but also as his contributions to an ongoing debate among European scientists about the validity of both his chosen curriculum and his teaching methods. Despite the triumphalist narrative employed in Egyptian and other colonial and semi-colonial contexts in which they were successfully deployed (and the critical tone taken where they were not), what constituted "modern" medical knowledge and practice in Europe was still very much in flux during this period.[11]

The dread disease

Cholera was one of the most feared diseases in the nineteenth century colonial world. Its origins are murky: diseases with similar symptoms have been recorded as far back as antiquity in India and the Mediterranean, however, the first major outbreak that can be definitively identified as cholera occurred only in 1817. Whether the 1817 outbreak involved the introduction of a new virus into the human population, the mutation of a more virulent sub strain of an already endemic virus or the expansion of a virus heretofore localized within a small geographic region beyond its normal borders through contact with expanding global trade networks, remains a topic of fierce debate.[12] *Vibrio cholerae*, the bacterium that causes cholera, is a waterborne organism believed to have originated in the waters of the Ganges Delta and Bay of Bengal. The first global pandemic (1817-1824) began in Bengal near Kolkata and is linked to a rise in sea temperatures associated with the eruption of the Tambora volcano in 1816; the disease eventually worked its way *via* trade networks throughout Southeast and East Asia, and into the Mediterranean basin and East Africa. Subsequent pandemics saw the disease spread to northern Europe via Iran and Russia, and onward to the Americas; the outbreak in Egypt described here was part of the fifth cholera pandemic (1881-1896). All of the pandemics that occurred prior to World War II originated in India. Given its rapid spread, high fatality rates and dramatic symptomology, cholera was perhaps the most concerning of diseases encountered in India for colonial administrative officials.[13]

"[C]holera was important rather in terms of the dividing line it repeatedly drew between European rulers and their Indian subjects and the questions it posed about the terms on which the British held India."[14] Both cholera and plague were associated with the urban poor and the lower classes. As David Arnold observes: "[Cholera] made it possible, after the manner of Florence Nightingale, for Western observers to equate sanitation with civilization and find India woefully wanting in both."[15] These evaluative criteria would also be applied to Egypt with the same result.

The etiology of cholera and its transmission mechanisms, and how to best combat and treat it, were the subjects of heavily politicized debates in both India and England. By the mid-nineteenth century, scientists theorized that the development and encouragement of trade, irrigation and improved methods of communication and transportation throughout the Indian subcontinent had led to an increase in disease spread because what had formerly been local outbreaks found a means to spread effectively much further.[16] Sanitary officers in the colonial government were suspicious of large religious festivals as breeding grounds for disease. In India, local pilgrimage was almost always associated with Hindu practice; an annual population movement of between twenty and fifty million people participated in local pilgrimage rites. Horrifying episodes of cholera's dissemination from great festivals created an exaggerated medical pre-disposition to believe that most or all epidemics were incubated at fairs and then spread from this single nexus around a great swath of territory. Even when there were no major outbreaks at religious fairs, the advent of a widespread epidemic was frequently presumed to have been initiated by devotees travelling from them.[17] In the era of steam travel, the screening of pilgrims traveling to and from Mecca for the *hajj* for symptoms of cholera was also given priority by British and French officials from whose colonies pilgrims came.[18] Local officials in Egypt had long held similar suspicions about Sufi festivals; the annual *mulid* in the Nile Delta city of Tanta was linked to an outbreak in 1847, earning the city a global infamy reminiscent of that ascribed to Wuhan, China, following the outbreak of the SARS-Cov-2 pandemic in late 2019.[19]

British colonial officials in India were wary about whether restricting pilgrims' travel would re-inflame the religious tensions that had led to the 1857 Sepoy Rebellion. Colonial officials in the government of India (GOI) vigorously debated whether or how

to intervene to protect Indians and Europeans against major infectious diseases. The GOI debates were a mirror of those held in Parliament during the 1830s and 1840s when public health was first established in Britain, revolving around questions of local autonomy, the "infringement of individual liberties," and the raising of revenue for sanitary programs.[20] This latter was particularly important in a colonial context where maintaining a positive balance sheet was important justification for continuing the colonial mission. When cholera appeared after the 1867 Kumbh Melah festival, the Sanitary Commissioner of India intervened to divert returning pilgrims into military encampments; however, London balked at the unauthorized expenditure and suppressed his report even though the strategy had clearly prevented a larger scale outbreak.[21] The official report on the outbreak instead argued that "[n]o system of strict quarantine can be carried out without great suffering to those concerned."[22]

Equally pressing was the impending opening of the Suez Canal in 1869.[23] The Government of India's *volte-face* seems to have been predicated not only on the economic concerns of government spending, but the far greater outcry that would result if trade out of Indian ports bound for the UK were to be quarantined, and so they adopted a position more pleasing to British shareholders in Egyptian and Indian companies and shipping lines. Among the cornerstones of this new policy was the assertion that cholera was already endemic in Europe, having appeared in there in the 1830s. In an 1884 publication titled *Cholera: What can the government do about it?* the Government of India's Sanitary Commissioner, J.M. Cunningham insisted that there was no point in blockading ships or trade out of India:

> If it is so commonly present within a day or two's journey of every capital of Europe, what need is there for inventing the tale that it is brought all the way from the delta of the Ganges? Again, if it be true that there is no relation either in India or other countries between the progress of cholera and human traffic, either as regards its direction or the pace at which it travels, what connection can there be between the advance of an epidemic and the movements of man?[24]

Cunningham then suggested that sanitation—and sanitation alone—would suffice as a cure for the scourge of cholera.[25]

Britain's Plans for Egypt

The response of the Anglo-Egyptian government to the appearance of cholera in 1883 was based on these precedents; many of its officials had previously worked in British India. However, Egypt was not India, and Britain's position there was politically precarious. Having defaulted on its debts to British and French creditors in 1876, the Egyptian government agreed to allow its finances to be managed by the Anglo-French *Caisse de la Dette*, which proscribed severe austerity measures to prioritize debt repayment. In the winter of 1881, an Egyptian army uprising in protest over the degree of foreign influence on the Egyptian government led to a British military intervention that, in theory, was supposed to last only long enough put down the rebellion, ensure the security of the Khedivial government and restore the status quo. The French were suspicious of Britain's intentions toward Egypt; the latter had insisted on maintaining the territorial integrity of the Ottoman Empire, of which Egypt was nominally a province, while making little secret of their interest in protecting the Suez Canal and shipping lanes to India. Numerous Parliamentarians also objected to a lengthy British stay in Egypt, mostly on financial grounds. During the period under discussion here, what form British rule in Egypt would take was still nebulous and uncertain; Evelyn Baring, the first Earl of Cromer and British Consul-General at Cairo (1883-1907) whose "over-Baring" governing style would become the hallmark of the British occupation, did not arrive in Egypt until September 1883 as the outbreak was dying down.[26] The language utilized in both consular correspondence as well as in the British press suggests that both London and Cairo saw in the outbreak an opportunity to justify their intentions to remain in Egypt for the long term.

The groundwork had already been laid in February 1883 when Lord Dufferin, Britain's ambassador to the Ottoman Empire, filed a report detailing what would be needed to restructure the administration of Egyptian affairs "on a basis that would afford satisfactory guarantees for the maintenance of peace, order, and prosperity in Egypt, for the stability of the Khedive's authority, and for the judicious development of self-government and for the fulfillment of obligations toward the Powers."[27] Dufferin's report made clear his opinion that Egyptians were incapable of managing their own affairs and, until they could do so, the British would have to oversee extensive economic, social and administrative reforms. Dufferin opined that, Egyptians, like all

"Orientals," lacked technical abilities and suffered from an inherent corruption and laziness.[28] He recommended that, since Egypt was an agricultural country, investment in its industrial sector was superfluous as it would be unable to satisfactorily compete with that of Europe (that Egypt was a major supplier of cotton to English mills went unstated).[29] In just one report, several major projects in which the Egyptian government had invested for decades were voided and replaced by a new system that was set up for failure and virtually guaranteed to prolong the conditions that would predicate British oversight indefinitely.

This economic refocusing was accompanied by a stubborn refusal on the part of colonial administrators to acknowledge progress in health and sanitation, in some cases literally rewriting history to do so.[30] British officials who had been in Egypt prior to 1882 and previously been complementary toward native institutions of health and sanitation changed their publicly stated positions soon afterward. Writing in 1877, Dr. James Grant, a member of the International Quarantine Board in Alexandria (and later chief surgeon at the British consulate in Alexandria), stated optimistically that "The Public Health of Egypt was never better than it is now… The sanitary regulations have latterly been very strict and fairly carried out, so that no danger to the public health is now anticipated."[31] After the British occupation, however, the same public health officials on the same Board routinely denounced the "unsatisfactory" and "filthy" condition of Egypt and called for outside assistance in correcting it. Cromer's report to Parliament for 1884 asserted that "retrenchment" in the public health sector had set in almost immediately upon Clot's final departure from Egypt in 1858 and that the system had been largely derelict since the late 1870s, completely erasing the observations made by Grant and other English officials in Egypt prior to 1882.[32]

Course of the 1883 outbreak

The first cases of cholera appeared around 21 June 1883 in the port city of Damietta (Dumyāṭ), a frequent port of call for ships exiting the Suez Canal. Health representatives in the Swedish and Portuguese consular offices cabled the Maritime Health and Quarantine Board in Alexandria with news of the suspect cases on the twenty-second; a team was immediately dispatched and officially confirmed the outbreak as cholera on the twenty-sixth.[33] Even before the presence of cholera was officially confirmed, the Alexandrine newspaper *Le Bosphore Egyptien* reported it on

the front page of its issue on 25 June, describing dire conditions and panic in the city, and more cases were reported in Mansura, the next major city upriver, by the time the official diagnosis was made. As soon as reports that cholera had appeared in Egypt were transmitted by telegraph, European and Ottoman ports began to close both to Egyptian and British ships on the fear that the disease had been transmitted from India to Egypt through shipping lines.[34]

The sources on the outbreak are primarily in European languages. British consular officials exchanged voluminous correspondence with the Commercial Office that was later compiled into two Parliament Papers and assorted special reports.[35] The Egyptian *Conseil de Santé* (*majlis al-ṣiḥa al-ʿamūmiyya*) and the multinational Maritime Health and Quarantine Board cooperated in their investigation and handling of the outbreak, collectively referred to as the "Mixed Commission." The Quarantine Board's report was released in late 1883 in French, while the *Conseil*'s unofficial report would not be published until March 1884, after the body had been disbanded; it remains one of the few detailed Arabic language sources on the outbreak.[36] French and German scientific expeditions, the latter under the direction of Robert Koch, who would decisively identify the cholera bacillus during the outbreak, were also present in Egypt but, as they were not actively involved in attempts to handle the epidemic, are not discussed here. The Arabic daily newspaper *Al-Ahram* and the official government journal *al-Waqa'i' al-Masriyya*, covered the epidemic in some detail; otherwise, Arabic sources detailing the Egyptian perspective on the outbreak that are still extant remain scarce.

From the beginning of the outbreak, there were struggles to control the narrative. Before the Mixed Commission could issue its findings, British officials in both Cairo and Alexandria went on the defensive, claiming that the outbreak was not cholera, but rather typhoid, dysentery or "choleric fever." [37] The Mixed Commission's first team dispatched to Damietta had only been charged with determining whether the suspect cases were cholera; once this had been achieved, a second team under the joint leadership of Salvatore Ferrari and Ahmed Chaffey Bey was established to monitor the situation and determine the origin of the outbreak.[38] Even before the Mixed Commission's second team began its investigation, British consular officials were

insisting that the outbreak must have spontaneously originated in Egypt and that it could not have originated in India.[39]

Britain's desire to control the narrative of the outbreak's origin was prompted by wide skepticism in Europe; as early as 27 June, the Parisian newspaper *Les Temps* suggested a possible link between a cholera outbreak in Bombay in May and the outbreak a month later in Damietta.[40] The International Sanitary Commission at Istanbul had ordered the adoption of precautions—specifically the quarantine of the port of Bombay—"which, however, were not put in force on account of the English delegate to the Commission insisting that commercial interests were just as important as those of the public health."[41] As revenue from the Suez Canal tolls was a key source of income, Anglo-Egyptian officials proposed a workaround, suggesting that the pilots who guided ships through the canal could be quarantined and continue to do their jobs, with boats proceeding directly to Cyprus for refueling upon completing their transit, rather than stopping in Egypt.[42] This suggestion met with ridicule in the European press and was never implemented.

While much of the Anglo-Egyptian government's response was based on its experience dealing with cholera in India, they broke with established practice from India in one key—and somewhat puzzling—manner. While insisting that *international* quarantine efforts were futile to prevent the spread of the disease between nations, from the beginning of the outbreak British medical and consular authorities focused their efforts on attempts to control the disease's spread *within Egypt* by restricting population movement through quarantines and sanitary cordons. These same measures had been abandoned in India on the grounds that they were useless to prevent the spread of the disease; but in Egypt it was argued they were necessary to protect the inhabitants of Cairo and Alexandria, and to keep the Suez Canal operational. Immediately after officials confirmed the presence of cholera, much of the lower Delta was placed under military cordon, which was enforced so tightly that the food supply was cut off, and within weeks near-starvation conditions were reported. The suffering and grief in the cordoned cities became extreme; on 14 July the Arabic daily *Al-Ahram* published a heartfelt letter from a citizen from Damietta lamenting the extreme suffering endured by residents.[43] Dr. Grant also noted that a number of the government doctors sent to the Delta to deal with the outbreak were caught in the cordon and not allowed to leave,

eventually requiring additional doctors to be sent from England, India and Syria, delaying medical relief in other parts of the country for weeks.[44]

Cholera was a relatively new disease in Egypt, first appearing in the 1820s, and the most recent outbreak had been in 1865. The mortality rate was over ninety percent; contracting the disease was a death sentence. The legend of the outbreak's Patient Zero spread quickly throughout Egypt: he was identified as Ḥassan Nūr-al-Dīn, a mason in his forties who contracted the disease while on a weekend trip.[45] According to the oft-repeated and much embellished story, he had been in good health upon boarding his train at Mansura, but by the time he reached Damietta his illness had progressed to the point where he was unconscious and had to be carried home where he died the same evening. Even though the official reports in Arabic and French acknowledge that he could not have been Patient Zero, as fatalities had occurred the previous day, his story was so popular that both official reports included it. The story's popularity was in its simplicity: Nūr-al-Dīn was an Egyptian Everyman, a normal, working-class individual who, after experiencing high fever, cramping and rapid expulsions of bodily fluids, had died within a matter of hours—if it had happened to him, it could happen to anyone. The sense of imminent danger was reinforced by daily reports in the Arabic and European press detailing the disease's slow spread through the major towns of the Nile Delta toward the capitol, and they caused widespread panic; it is estimated that forty thousand people fled Cairo within the span of a week—this likely contributed to the spread of cholera into Upper Egypt.[46]

Given the general air of panic, quarantines were not just a nuisance obstacle but a barrier between life and death; some trapped inside would flee through fields in the middle of the night in the hopes that soldiers would not see them, while others attempted—quite often successfully—to bribe their way past the guards. The *Times of India* caustically reported that "no one has any confidence in Egyptian administration … A military cordon of Egyptian soldiers has been placed around Damietta and Mansoura, but anyone wishing to break it will only have to *backsheesh* [sic] the gallant soldier."[47] The *British Medical Journal* admitted that, "a few thoroughly authentic cases of villagers visiting Damietta and returning to die of cholera in their native villages shows the importance of the sanitary cordon, through which, however, some people still manage to escape."[48] Even as the epidemic still raged, the contradiction between the

abandonment of quarantine in India and the application of an "effete system of cordon and quarantine" that "utterly failed to prevent the extension of the disease" in Egypt was commented upon in British medical circles.[49] In any event, the quarantines failed to prevent their objective: cholera cases were reported in Cairo on 15 July and in Alexandria two days later.[50] In 1884 the Sanitary Department would amend its policy, recommending that quarantines and sanitary cordons be replaced with medical inspection stations on major routes and canals.[51]

One of the key areas in which new British policies clashed with established precedent during the outbreak was over who was responsible for dealing with it. The *Conseil de Santé*, a body made up of Egyptian physicians headed by Salīm Pasha, was administratively responsible for the oversight of public health in Egypt. The *Conseil* maintained good relations and routinely cooperated with the Maritime Health and Quarantine Board at Alexandria, which was comprised of representatives from each of the fourteen member nations. The *Conseil* issued recommendations to the Khedive on 9 July 1883 on measures to be carried out throughout Egypt to improve sanitation and slow the spread of the disease. Tension had long existed between British consular officials in Egypt and the *Conseil*, due in large part to its acceptance of the Quarantine Board's contagionist positions that called for the quarantine of ships leaving any port where cholera had appeared. Since the establishment of the *Caisse de la Dette*, the *Conseil* had been chronically underfunded, officially due to austerity measures, which left it unable to do much more than issue recommendations and order the placement of the *cordon sanitaire*, whose actual maintenance was under British military control.[52] The cholera outbreak thus provided an opportunity, taken up by Sir Geyer "Guy" Hunter, the British Surgeon-General and a noted anti-contagionist, who declared his intention to personally "investigate" the origin of the outbreak and departed for Egypt. According to several sources, he informed several attendees at a reception held at the Alexandria consulate on the evening of his arrival that he had already determined that the cause would be found locally and not in India.[53] Salīm Pasha attempted to withstand Hunter's interference and protect the independence of the *Conseil*'s work, but resigned in protest after Hunter's report, which not only upheld his own conclusions but lambasted the "ineffectiveness" of the *Conseil*.[54] For their part, Hunter and the British Consul-General, Sir Edward Malet, disregarded the *Conseil* entirely, establishing an separate Extraordinary Sanitation Committee (ESC) to deal with the crisis in a manner

more pleasing to British policy. Cromer disbanded the *Conseil* entirely the following February and replaced it with a Sanitary Department housed within the British-run Ministry of the Interior.[55] The ESC set up local boards in municipalities afflicted by the epidemic that were charged with enforcing these sanitation requirements. The boards were almost always comprised of local British or friendly European consular officials, western-trained medical officials of European or other nationalities and a token Egyptian whose presence was required to rubber-stamp the committee's decisions. ESC regulations allowed health officials to enter private homes (via force if necessary), to involuntarily evacuate residents, and to burn down homes or entire neighborhoods that were deemed a threat to public health (most notably the Bulaq district in Cairo). These measures were first enacted in Mansura, using techniques that would be enhanced and improved upon by mid-July in other districts.

Colonizing Egyptian medicine

As noted above, prior to the British invasion in 1882 the practice of health in Egypt did not bear the hallmarks of what has come to be known as "colonial" or "imperial" medicine.[56] However, after 1882, medical policies and attitudes shifted rapidly in a direction that more closely reflect the colonial medical paradigm articulated by David Arnold and Gyan Prakash (among others) which was predicated on the assumption that Egyptians lacked knowledge and the ability to self-rule that Partha Chatterjee has described as "the rule of colonial difference."[57] A number of these shifts toward the colonial medicine paradigm can be traced during the outbreak; the first is that sites of medical care and treatment became contested and re-evaluated. In the 1840s and 1850s, the Egyptian health service had responded to low public demand for hospitals by increasing outpatient care and training local practitioners who could visit private homes; these services treated far more patients than hospitals or other public health services. By contrast, British officials saw the hospital as a marker of "civilization" and the willingness of patients to go to hospital as acceptance of the modernizing project. Colonial correspondence contains multiple complaints from British officials that poor Egyptians refused to go to hospital, which was offered as evidence that Egypt was not ready for self-governance. In the first weeks of the outbreak, a report from the Nile Delta bemoaned that:

> the *fellaheen* [agricultural peasant] class very rarely report themselves

> sick, and endeavor to conceal the fact of their being so… one of the twelve doctors recently sent out from England… had not been able to see a single patient before death for the same reason.[58]

By mid-July, the disease had reached Cairo, where similar mistrust was reported in the Bulaq quarter:

> The Egyptians absolutely refuse to avail themselves of the comfortable cholera hospitals which the 'Extraordinary Sanitary Commission' has provided for them. At no time will Egyptians willingly go to hospital, and now that the local authorities wish to force them to go, they absolutely refuse, and war between them and the authorities has been the result. They see their friends enter these hospitals and carried out dead a few hours after, poisoned, as many of them believe, by the doctors.[59]

The ESC's emergency powers allowing its staff to enter private homes uninvited and remove the sick to hospital caused widespread resentment, especially in poorer neighborhoods. By mid-July there were reports of tensions and a "near-rebellion" in the capital.[60] On 9 August, a riot took place in front of the hospital in the Fort Napoleon district of Alexandria, a mostly Egyptian working-class district adjacent to the port's warehouses. According to *al-Ahram*, a bereaved man whose brother had just expired from cholera had been ejected from the hospital, and afterward stood outside yelling accusations that hospital officials caused the death.[61] Over four hundred people gathered, throwing stones, breaking windows in the hospital, and destroying part of the ambulance. The Egyptian police, aided by a British military patrol, were required to disperse the riot and restore order.

Another shift toward the colonial medicine paradigm is in line with Gyan Prakash's argument that what made medicine "colonial" in India was the colonial government's mentality that Indians were unable to govern themselves, which was informed by the presentation of "Indians as diseased, unhealthy, unhygienic, superstitious, and unscientific."[62] In consular correspondence filed during the outbreak, a heavy emphasis emerged on the deplorable condition of Egypt, and the abundance of "filth," the British government's preferred source for the cholera "seed." Dr. Mackie,

consular surgeon at Cairo, wrote that Damietta, "like every Egyptian town, is reported to be abominable, and the inhabitants particularly uncleanly in their persons, their food, and their habits."[63] That he had to rely on the observation of others ("is reported to be") did not make his testimony any less authoritative; although in the same documentation, reports transmitted by local "Egyptian" or "Arab" contacts had to be qualified as "worthy of belief." Mackie despaired that, "[t]he Egyptian lower classes consider all precautions to be impious; 'God is great,' they cry, and all is predestined; hence they obstruct the very little sanitary work that has been carried into effect."[64] The British press propagated the notion that an inherent Egyptian laziness was responsible for the spread of the disease. The *London Spectator* reported an incident that was intended to convey the lack of order and discipline in Egypt in its sensational coverage of the outbreak:

> While a man stricken with cholera was on his way yesterday in a cart to the hospital the driver stopped opposite a café and gave the invalid a drink from a water bottle used by customers of the place. A few minutes afterward the sick man died opposite the largest café in Cairo. The only precaution taken in this case was to spring a little chloride of lime on the corpse. The cart then pursued its way.[65]

An editorial in the *Spectator* went so far as to suggest that the Egyptian lack of discipline and interest in controlling the disease were culturally ingrained because "the value for life is less vehement and potent in the Oriental, while the belief in a discernible destiny is stronger;… The Oriental is less terrified by the prospect of death and more profoundly impressed by the impossibility of escaping it when the time comes."[66] Nükhet Varlık has described these longstanding Orientalist tropes in some detail, in which "Orientals" lacked understanding and interest in disease causation, hygiene, and proper care of the body, and that these were concepts that both originated in and were limited to Europe.[67]

The *British Medical Journal* brought the discussion back to Egypt's inability to rule itself, laying the preliminary groundwork to justify continuation of the colonial mission:

> The Egyptians… are languid and lymphatic, wanting in energy and power of continued application… Their brain power is weakened from the same cause, though other causes, arising from the customs of Orientals, have their effect… Until they are taught by sanitary medicine to improve their health and raise healthy children, their brain-power will remain deficient and self-government for the Egyptians… is, in my humble opinion, a thing of the far future…[68]

At the conclusion of a similar report, Mackie officially stated his recommendation that lax Egyptian attitudes toward sanitation justified the British colonial presence in the country:

> …the Egyptian has no appreciation nor experience of good sanitary arrangements, which he has never seen and never learnt. The sympathy of class for class is too little developed, if it exists at all; their value of life is too low to stimulate them to energetic action. Fatalism also has its effect. The Egyptian in this respect is the Egyptian of a hundred years ago, and deserves help more than blame; but it must be help with authority.[69]

Conclusion

By late August, cholera had spread throughout much of the Nile Valley and begun to burn itself out; the most heavily afflicted cities were Cairo, Damietta, Mansura and the Delta hub of Shibin el-Kom. The number of deaths attributed to cholera between 22 June and 21 August 1883 is estimated at around fifty thousand people. In his final report on the outbreak, Surgeon-General Hunter took the opportunity to condemn both native health practices as well as the report of Robert Koch, who had issued a preliminary statement regarding his discovery of the cholera bacillus *V. cholerae*: "they consequently always look for fresh cases of importation from India to account for any epidemic visiting a country, and refuse to accept evidence of the existence of the disease unless it can be so traced. A germ has never yet been proved to exist in connection with cholera."[70] The true cause of the epidemic, Hunter alleged, was the "deplorable" sanitary condition of Egypt, which was quantified in seven points: the density of the

population, polluted soil, impure air, impure water, eating of diseased meat, the prevalence of bowel disorders and endemic cholera and the state of health of the people, which "was such as to render them specially noxious to any epidemic influence; and, were it not for the out-door life which the fellaheen lead, it is probable the recent cholera-outbreak would not have been so long delayed."[71]

The 1883 cholera epidemic shows a clear shift in the way that public health was handled in Egypt, shifting primary responsibility from the Egyptian *Conseil de Santé* and its multinational collaborators to a more compliant Department housed in a Ministry overseen by the British. The outbreak provided more justification for a lengthy British stay in Egypt, on the basis that Egyptians were not ready to join the modern world and needed "assistance" in matters of health and hygiene, as was being demonstrated in so many other areas. The British and colonial officials, through their experience of dealing with the crisis, had firmly established that the Egyptians failed to meet their (not always specified) standards of medical and personal care. Rural areas and lower-class areas were filthy, and their inhabitants, strangely, seemed not to mind. The takeaway was that Egyptians clearly did not understand sanitation, nor the basics of hygiene, proof of their low status. The only possible solution in the eyes of the British was increased discipline over hygiene and sanitation at all levels of society: a new sanitary administration, a new sanitary code, and the institutions that supported it were all needed to bring Egypt into the modern era.

Despite the urgency that the 1883 epidemic brought to issues of public health and the recommendations made to address them by British, international and Egyptian officials, financial and administrative support for public health under the Anglo-Egyptian administration was nearly non-existent. The calls for reform made in the official correspondence during the 1883 epidemic would be repeated in public forums, the press and Parliamentary inquiries for the next two decades, even after the validity of Koch's findings on the transmissibility of cholera were upheld in both international and British scientific circles. In 1889, *The British Medical Journal* incredulously observed that there had been no real sanitary reform in Egypt nor advancement since the epidemic, and that the administration of Lord Cromer continued not only to underfund public health but called for further budget cuts. "This is nothing less than suicidal policy and should cholera or any other pestilence break out in Egypt next year

the consequences may be disastrous."[72] New projects and increased funding for public health would not be prioritized until the first decade of the twentieth century, with the levels of services, medical dispensaries and hospitals and numbers of patients seen only returning to pre-1882 levels by the beginning of World War I.[73] Even during the war, colonial and military officials would continue to complain about the level of sanitation and basic hygiene in Egypt without any recognition that the issue had received little more than lip service for the previous three and a half decades.

Notes

[1] For correspondence: csrose@ollusa.edu

[2] Hussein Muhammad Pasha, "Wabāʾ Al-Hayḍa Fī Sana 1883" (Alexandria: Al-Ṭabaʿa alʿĀmira al-Sharifiyya, March 24, 1884), 6.

[3] See discussion in: Peter Gran, *Islamic Roots of Capitalism: Egypt, 1760-1840* (Austin: University of Texas Press, 1979); also: F. Robert Hunter, *Egypt Under the Khedives, 1805-1879: From Household Government to Modern Bureaucracy* (Cairo: American University in Cairo Press, 1999).

[4] Laverne Kuhnke, *Lives at Risk: Public Health in Nineteenth-Century Egypt* (Berkeley: University of California Press, 1990), 29.

[5] See: Kuhnke, *Lives at Risk*; Khaled Fahmy, *In Quest of Justice: Islamic Law and Forensic Medicine in Modern Egypt* (Oakland: University of California Press, 2018), chapter 1; Hibba Abugideiri, *Gender and the Making of Modern Medicine in Colonial Egypt* (Surrey: Ashgate, 2013).

[6] Kuhnke, *Lives at Risk*, 117–119; Antoine Barthélémy Clot-Bey, *Introduction de la vaccination en Égypte en 1827: Organisation du service médico-hygiénique des provinces en 1840, instruction et règlements relatifs à ces deux services* (Paris: Victor Masson & Fils, 1860), 23; Fleming Mant Sandwith, *The Medical Diseases of Egypt* (London: Kimpton, 1905), 133.

[7] Timothy Mitchell, *Colonising Egypt* (Berkeley: University of California Press, 1991).

[8] Khaled Fahmy, *All the Pasha's Men: Mehmed Ali, his Army and the Making of Modern Egypt* (Cairo: American University in Cairo Press, 2010).

[9] Fahmy, *In Quest of Justice*, 19–20; Abugideiri, *Gender and the Making of Modern Medicine*; Christopher S. Rose, "Implications of the Spanish Influenza Pandemic (1918-1920) for the History of Early 20th Century Egypt," *Journal of World History* 32, no. 4 (2021): 660–662, https://doi.org/10.1353/jwh.2021.0044.

[10] I am grateful to Marta Kane, Ph.D, Research Associate at the Centre de Recherches Interdisciplinaires en Sciences Humains et Sociales (C.R.I.S.E.S) at Université Paul Valéry - Montpelier III for bringing this to my attention while workshopping some of this material at the Institute for Historical Studies, University of Texas at Austin.

[11] See discussions in: Christopher S. Rose, "The History of Public Health in the Modern Middle East: The Environmental-Medical Turn," *History Compass* 19, no. 5 (April 27, 2021): 14, https://doi.org/10.1111/hic3.12659; Hormoz Ebrahimnejad, *Medicine in Iran: Profession, Practice and Politics, 1800-1925* (Basingstoke: Palgrave Macmillan, 2015); Omar Al-Dewachi, *Ungovernable Life: Mandatory Medicine and Statecraft in Iraq* (Stanford: Stanford University Press, 2017).

[12] Jacqueline Deen, Martin A. Mengel, and John D. Clemens, "Epidemiology of Cholera," *Vaccine, Cholera Control in Three Continents: Vaccines, Antibiotics and WASH*, 38 (February 29, 2020): A31–40, https://doi.org/10.1016/j.vaccine.2019.07.078; Guillaume Constantin de Magny and Rita R. Colwell, "Cholera and Climate: A Demonstrated Relationship," *Transactions of the American Clinical and Climatological Association* 120 (2009): 119–128; Shah M. Faruque and John J. Mekalanos, "Phage-Bacterial Interactions in the Evolution of Toxigenic Vibrio Cholerae," *Virulence* 3, no. 7 (November 15, 2012): 556–565, https://doi.org/10.4161/viru.22351.

[13] David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993), 159.

[14] Arnold, *Colonizing the Body*, 159.

[15] Arnold, *Colonizing the Body*, 199.

[16] Ira Klein, "Imperialism, Ecology and Disease: Cholera in India, 1850-1950," *The Indian Economic & Social History Review* 31, no. 4 (December 1994): 493–494, https://doi.org/10.1177/001946469403100403.

[17] Klein, "Imperialism, Ecology and Disease,"504.

[18] William R. Roff, "Sanitation and Security: The Imperial Powers and the Nineteenth Century Hajj," in *The Rise and Fall of Modern Empires*, vol. I, ed. Owen White,

(London: Routledge, 2013), 365–382, https://doi.org/10.4324/9781315237343-24; Michael Christopher Low, "Empire and the Hajj: Pilgrims, Plagues, and Pan-Islam under British Surveillance, 1865–1908," *International Journal of Middle East Studies* 40, no. 2 (May 2008): 269–290, https://doi.org/10.1017/S0020743808080549.

[19] Stephanie Anne Boyle, "Cholera, Colonialism, and Pilgrimage: Exploring Global/Local Exchange in the Central Egyptian Delta, 1848–1907," *Journal of World History* 26, no. 3 (2015): 581–604, https://doi.org/10.1353/jwh.2015.0039.

[20] Mark Harrison, *Public Health in British India: Anglo-Indian Preventative Medicine 1859-1914* (Cambridge: Cambridge University Press, 1994), 105, 272.

[21] Sheldon J. Watts, "From Rapid Change to Stasis: Official Responses to Cholera in British-Ruled India and Egypt: 1860 to c. 1921," *Journal of World History* 12, no. 2 (2001): 349.

[22] G.B. Malleson, *Report on the Cholera Epidemic of 1867, in Northern India* (Calcutta: Office of the Superintendent of Government Printing, 1868), 136, emphasis mine.

[23] Watts, "From Rapid Change to Stasis," 337.

[24] J.M. Cunningham, *Cholera: What Can the State Do to Prevent It?* (Calcutta: Printed by the Superintendant of Government Printing, 1884), 128.

[25] Cunningham, *Cholera*, 130.

[26] Credit here must go to Yosra Hussein of Columbia University, who eloquently articulated this point in her paper, "Escaping Quarantine: Practices of Resistance during the Cholera Epidemic in Egypt (1883-1896)," Middle East Studies Association, Denver, 2022.

[27] "Lord Dufferin to Earl Granville," 6 February 1883, FO 407/31/872, The National Archives of the UK (TNA).

[28] "Lord Dufferin to Earl Granville," 6 February 1883, FO 407/31/872, The National Archives of the UK (TNA).

[29] Michael Richard Van Vleck, "British Educational Policy in Egypt Relative to British Imperialism in Egypt, 1882-1922" (PhD diss., University of Wisconsin, 1990), 3, http://search.proquest.com/pqdtglobal/docview/303908534/abstract/DB44EC4E58064DDFPQ/1.

[30] Arnold, *Colonizing the Body*, 40–41.

[31] "Public Health in Egypt," *The British Medical Journal* 1, no. 836 (January 6, 1877): 19.

[32] Cromer, Evelyn Baring, Earl of, "Reports on the State of Egypt and the Progress of Administrative Reforms" (Cairo, February 10, 1885), 74–75.

[33] Muhammad Pasha, "Wabāʾ Al-Hayḍa Fī Sana 1883," 6–7.

[34] "The Cholera in Egypt," *The British Medical Journal* 1, no. 1174 (June 30, 1883): 1298.

[35] United Kingdom. Parliament, *Correspondence Respecting the Cholera Epidemic in Egypt: 1883*, Commercial. No. 34., C. 3783, 1883; United Kingdom. Parliament, *Further Correspondence Respecting the Cholera Epidemic in Egypt: 1883*, Commercial. No. 34. (Continuation)., C. 3788, 1883; United Kingdom. Parliament, *Circular Addressed to Her Majesty's Representatives in European Countries on the Subject of the Recent Outbreak of Cholera in Egypt*, Commercial. No. 27., C. 3729, 1883.

[36] Ahmet Chaffey Bey and Salvatore Ferrari, "Le Choléra de Damiette en 1883. Origine et développement" (Alexandria: Conseil Sanitaire, Maritime et Quarantenaire d'Égypte, 1883); Muhammad Pasha, "Wabāʾ Al-Hayḍa Fī Sana 1883."

[37] United Kingdom. Parliament. *Circular Addressed to Her Majesty's Representatives in European Countries on the Subject of the Recent Outbreak of Cholera in Egypt*. Commercial. No. 27., C. 3729, 1883.

[38] Muhammad Pasha, "Wabāʾ Al-Hayḍa Fī Sana 1883," 9–10.

[39] United Kingdom. Parliament. *Circular Addressed to Her Majesty's Representatives in European Countries on the Subject of the Recent Outbreak of Cholera in Egypt*. Commercial. No. 27., C. 3729, 1883.

[40] Antoine Fauvel, "Sur l'épidémie de choléra qui règne en Égypte et sur les chances que l'Europe a d'en être préservée : Note lue à l'Académie des Sciences, le 23 juillet 1883" (Paris: Gauthier-Villars, 1883), 4.

[41] "The Cholera in Egypt," *The Times*, June 28, 1883.

[42] United Kingdom. Parliament. "Consul Miéville to Consul Cookson, Alexandria, June 29, 1883." In *Correspondence Respecting the Cholera Epidemic in Egypt: 1883*. Commercial. No. 34., C. 3783, 1883.

[43] "Al-Amayl wa-al-Ahmāl fī Dumyāṭ," *Al-Ahrām*. July 14, 1883.

[44] James A.S. Grant-Bey, “The History of Hygiene in Modern Egypt, with Critical Remarks and Practical Suggestions,” in *Transactions of the International Medical Congress. Ninth Session* (Washington, 1887), 439–440, https://play.google.com/books/reader?id=ivufAAAAMAAJ&printsec=frontcover&output=reader&hl=en&pg=GBS.PA436.

[45] This story is documented in Chaffey Bey and Ferrari, “Le Choléra de Damiette en 1883,” 7.

[46] “Cholera in Egypt from a French Point of View,” *The Lancet* 147, no. 3782 (February 22, 1896): 497–498, https://doi.org/10.1016/S0140-6736(01)93229-5.

[47] “The Cholera Epidemic in Egypt. (From Our Own Correspondent),” *The Times of India*, July 11, 1883; “Egypt. (By Eastern Company’s Cables),” *The Times*, June 26, 1883.

[48] “The Cholera in Egypt,” *The British Medical Journal* 2, no. 1175 (July 7, 1883): 30.

[49] “Cholera, Common Sense, and Cleanliness,” *The British Medical Journal* 2, no. 1181 (August 18, 1883): 344–345.

[50] United Kingdom. Parliament, “J. Mackie to Earl Granville, Alexandria, July 17, 1883,” in *Correspondence Respecting the Cholera Epidemic in Egypt: 1883*, Commercial. No. 34., C. 3783, 1883, 37–39.

[51] “Egypt,” *The Lancet* 124, no. 3178 (July 26, 1884): 171. https://doi.org/10.1016/S0140-6736(02)25225-3.

[52] Robert L. Tignor, “Public Health Administration in Egypt under British Rule, 1882-1914” (PhD diss., Yale University, 1960), 63.

[53] Grant-Bey, “The History of Hygiene,” 440: “...he declared on the first evening of his arrival in Egypt, and in the presence of a mixed multitude of ministers of State, army officers, lawyers, doctors, etc., that the British Government had sent him to tell them that the cholera had taken its origin in Egypt, and had not been imported, and he challenged any one to contradict him... one could easily guess in what groove his investigations would run. It was but natural to suppose, therefore, that he would influence the newly-arrived English doctors to adopt his theory without any more investigation than he had carried out himself.”

[54] Grant-Bey, “The History of Hygiene,” 440. Grant spares no words in upholding Salim’s position as morally correct, and states outright that Salim’s successor was

appointed on the sole basis that he loudly supported Hunter's theory about the origin of the outbreak.

[55] Grant-Bey, "The History of Hygiene," 440; "The New Egyptian Sanitary Law," *The Lancet*. Originally published as Volume 1, Issue 3161, 123, no. 3161 (March 29, 1884): 572, https://doi.org/10.1016/S0140-6736(02)22529-5.

[56] Fahmy, *In Quest of Justice*, 20.

[57] Arnold, *Colonizing the Body*; Gyan Prakash, "Body Politic in Colonial India," in *Questions of Modernity*, ed. Timothy Mitchell (Minneapolis: University of Minnesota Press, 2000), 189–222; Partha Chatterjee, *The Nation and Its Fragments: Colonial and Postcolonial Histories* (Princeton: Princeton University Press, 1993), 18.

[58] United Kingdom. Parliament. "Major MacDonald to Sir Edward Malet, Cairo, August 13, 1883," in *Further Correspondence Respecting the Cholera Epidemic in Egypt: 1883*, 15. Commercial. No. 34. (Continuation)., C. 3788, 1883.

[59] J. Mackie, "Cholera in Egypt," *The British Medical Journal* 2, no. 1178 (July 28, 1883): 179–180.

[60] United Kingdom. Parliament. "J. Mackie to Earl Granville, Alexandria, July 7, 1883," in *Correspondence Respecting the Cholera Epidemic in Egypt: 1883*, 27. Commercial. No. 34., C. 3783, 1883.

[61] "Akhbār Maḥālī," *Al-Ahrām*, August 12, 1883.

[62] Prakash, "Body Politic in Colonial India," 193.

[63] Mackie to Granville, July 7, 1883, 21.

[64] Mackie, "Cholera in Egypt," 179.

[65] "Plague-Ridden Egypt. The Cholera Still Spreading-Sanitary Measures Sadly Neglected," *The New York Times*, July 21, 1883.

[66] "Plague and Panic: How the Europeans and the Orientals Face Death. From the London Spectator," *The New York Times*, July 23, 1883.

[67] Nükhet Varlık, "New Science and Old Sources: Why the Ottoman Experience of Plague Still Matters," *The Medieval Globe* 1, no. 1 (2014): 193–228.

[68] "Cholera in Egypt," *The British Medical Journal* 2, no. 1185 (September 15, 1883): 541.

[69] Mackie to Granville, July 7, 1883, 23.

[70] Guyer Hunter, “Cholera in Egypt. The Mission of Surgeon-General Hunter. Final Report,” *The British Medical Journal* 1, no. 1206 (February 9, 1884): 285–287.

[71] Hunter, “Cholera in Egypt," 286; It is worth noting that even publications like *The Lancet* and the *British Medical Journal*, normally quite sympathetic (if not sycophantic) toward Government policies took issue with Hunter’s conclusions. See Tignor, “Public Health Administration,” 64; and A.C.C. De Renzy, “Criticisms on Sir W. Guyer Hunter’s Views with Regard to the Outbreak of Cholera in Egypt,” *The Medical Times and Gazette.*, no. 1738 (March 8, 1884): 317–318.

[72] “Egypt,” *The British Medical Journal* 2, no. 1504 (October 26, 1889): 948.

[73] Christopher S. Rose, “Food, Hunger, and Rebellion: Egypt in World War I and its Aftermath,” in *The Provisions of War: Expanding Boundaries in Food and Warfare, 1840-1990*, ed. Justin Nordstrom (Fayetteville: University of Arkansas Press, 2021), 161–76, http://dx.doi.org/10.2307/j.ctv1p2grb2.14.