

Ebola, Poverty, Economic Inequity and Social Injustice in Sierra Leone

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ABSTRACT The recent Ebola virus disease (EVD) epidemic in the West African countries of Guinea, Liberia, and Sierra Leone claimed the lives of slightly over eleven thousand victims by June 2015. Focusing on Sierra Leone, this article argues that the Ebola outbreak cannot be divorced from larger and chronic issues of poverty, economic inequality, and social injustice that have been the bane of the country's stunted development in its postcolonial existence since 1961. Drawing on current historical literature on epidemiology in Africa, media reports, documents from the World Health Organization (WHO) and other international agencies such as Médecins Sans Frontières (MSF), and testimonies from Sierra Leoneans, the article aims to historicize and situate the Ebola epidemic in Sierra Leone within a wider context of poverty and related issues of economic inequity and social inequality.

RÉSUMÉ La récente épidémie de maladie à virus Ebola en Afrique de l'Ouest dans les pays de la Guinée, du Liberia et de la Sierra Leone a causé la mort de plus de onze milles victimes avant juin 2015. Cet article, qui se penche principalement sur la Sierra Leone, soutient que l'épidémie du virus Ebola ne peut être séparé des problèmes de pauvreté chronique, d'inégalité économique et d'injustice sociale qui ont freiné le développement du pays depuis son existence postcoloniale en 1961. Cet article s'appuie sur des rapports historiques actuels concernant l'épidémiologie en Afrique, sur des comptes rendus des médias, des documents

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de l'Organisation Mondiale de la Santé (OMS) et d'autres agences internationales telles que Médecins sans Frontières (MSF), ainsi que des témoignages de Sierra-léonais pour historiciser et positionner l'épidémie du virus Ebola en Sierra-Leone dans le contexte plus large de la pauvreté et des problèmes d'inégalité économique et sociale qui lui sont rattachés.

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Amongst those most unfortunately situated were those from out of town who lodged with others in [the capital] Freetown. In a number of cases these people, when they became sick, were simply turned out onto the streets. As the epidemic progressed it became apparent that a number of patients were suffering from want of attention and were dying from insufficient care and treatment, either because all the people in a house were sick or because the other residents had deserted the patients. In some cases the patients had been actually turned out to the street by the other occupants of the house.¹

Without any indication of the source from which the above extract was obtained, most readers would be tempted to think that it describes the recent Ebola virus disease (EVD) epidemic in Sierra Leone, one of three West African countries, including Guinea and Liberia, which experienced an outbreak that claimed the lives of 11,207 victims by the week of June 21, 2015, according to the World Health Organization (WHO).² Sierra Leone had 3,928 confirmed, probable, and suspected EVD-related deaths, slightly more than a third of the total number of recorded mortalities for all three countries. The above excerpt, however, is from a report by the British colonial administration in Sierra Leone on the 1918 influenza pandemic, describing its impact on residents of Freetown, a scenario that bears an uncanny resemblance to what some observers deemed the “new normal” in that country when the Ebola epidemic showed no sign of ending. Now named Ebola Makona by epidemiologists, the West African strain is genetically different from the prototype strain, Ebola Mayinga, which appeared in the former Zaire (now Democratic Republic of the Congo) in 1976.³ Indeed, the slow response of the Sierra Leonean government to the Ebola epidemic (just like the British colonial administration in 1918), the absence of an effective plan of action, and inadequate medical personnel and facilities, together with poor infrastructure, raised troubling questions about poverty, economic inequity, and social injustice in the country. Still recovering from a vicious civil war (1991–2002) that devoured over 50,000 Sierra Leonean lives, Sierra Leone's Ebola outbreak exacerbated its post-conflict reconstruction struggle, highlighting the failure of the country's leadership in tackling perennial problems of poverty, economic inequality, and social

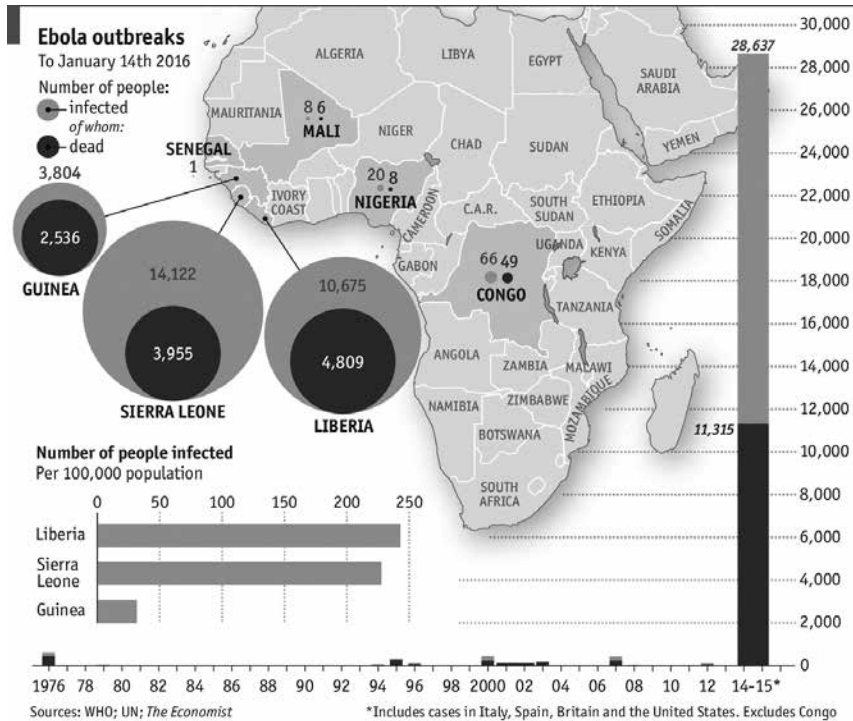


FIGURE 1.
Infected Peoples and Deaths from Ebola virus disease.⁵

injustice, all factors that had contributed to the outburst of the decade-long civil war.⁴

In this article, I argue that the Ebola epidemic and its dramatic spread in Sierra Leone cannot be divorced from the chronic issues of poverty, economic inequity, and social injustice that have been the bane of the country's lopsided development during its more than half a century of postcolonial existence.⁶ While poverty by itself does not explain the widespread nature of the Ebola epidemic in any of the three West African countries, the evidence, as Daniel Bausch and Lara Schwarz observe, suggests that "large hemorrhagic fever virus outbreaks almost invariably occur in areas in which the economy and public health system have been decimated from years of civil conflict or failed development."⁷ Accordingly, the article aims to demonstrate that Sierra Leone's endemic poverty, worsened by years of failed Structural Adjustment Programs (SAPs), financial mismanagement, a decade-long civil war, and broken infrastructure, made the country

an ideal setting for Ebola to cause havoc. In the absence of basic facilities such as toilets, clean water, and proper sanitation for a vast majority of Sierra Leoneans, the overall context of mass poverty made poor folks particularly vulnerable during the Ebola outbreak. As it turned out, besides frontline health workers (including doctors, nurses, and international medical personnel), most victims of the Ebola epidemic were people living in overcrowded houses, shantytowns, and impoverished rural communities.

The article draws on current historical literature on epidemiology in Africa, especially Sierra Leone and West Africa, documents from WHO and other international organizations such as *Médicins Sans Frontières* (MSF), information from local health agencies, including the National Ebola Response Center (NERC) and the Ministry of Health and Sanitation in Sierra Leone, local and international media reports, and testimonies from Sierra Leoneans to explore the intersection of diseases, poverty, and related issues of economic inequity and social deprivation. In doing so, I adopt a microhistorical approach to retrace Ebola's rampaging diffusion in the country by zooming in on its internal trajectories rather than its transnational excursions across the Mano-River Union (MRU) states of Guinea and Liberia.⁸ I am only tangentially concerned about international responses (action and inaction) to the epidemic to the extent that they help us understand its domestic dynamics.

The article takes its cue from contemporary studies on epidemiology in Africa, among them Brooke Gundfest Schoepf's 1991 study on HIV/AIDS in Central Africa and Adia Benton and Kim Yi Dionne's 2014 explanatory article on the West African Ebola outbreak, which advocate analyses through a social lens that recognizes the entwined link between political economy and culture.⁹ In addition, Myron Echenberg, in his study of cholera in Africa since the early nineteenth century, asserted, "Cholera may soon become the quintessential twenty-first century disease: a beneficiary of globalization, and sensitive to the complexities of biodiversity and climate change in ways that are only beginning to be understood."¹⁰ Yet, in a perplexing twist Echenberg hardly ever anticipated, Ebola, a disease hitherto unknown to the West African countries of Guinea, Liberia, and Sierra Leone, has now displaced cholera as the quintessential twenty-first century disease.¹¹

The extant body of knowledge on epidemiology in West Africa, produced mostly by British parasitologists since the early colonial period, reveals a fixation on tropical diseases, especially malaria and its pathogens, which influenced future studies by both European and African researchers.¹² Yet historical studies on infectious epidemics in Sierra Leone have been rare, a void this article strives to help fill.¹³ In what follows, therefore, I historicize the Ebola epidemic in Sierra Leone by tracking previous instances of disease outbreaks during the colonial period, including the influenza pandemic cited above, for a close scrutiny of their internal

footprints over time. To this end, I concur with Robert Dorit's recent analysis of the Ebola outbreak in West Africa emphasizing "geographical circumstances" that "only made matters worse," together with "the telling consequences of disrupted ecologies," which accelerated the diffusion of the virus.¹⁴ According to Dorit,

To understand what happened in West Africa, the medical community needs to bring an ecological perspective to our analysis of infectious disease. This outbreak is part of a story of breached boundaries—between bats and people, between Méliandou [the village in southeastern Guinea where the Ebola epidemic originated] and the forest that surrounded it, and between an intact forest and the fragmented landscape it had become.¹⁵

Dorit's view echoes a point Echenberg made a little over a decade ago in his study of the bubonic plague in colonial Senegal, stating that epidemics should not be understood purely in medical terms that ignore political and socioeconomic factors. In other words, it is pointless to isolate disease outbreaks from nonbiomedical considerations.¹⁶ In this context, I take a close look at the political economy, culture, and ecological factors in Sierra Leone as I situate the Ebola outbreak in a historical context.

The first part of the article provides a brief survey of the historical literature on epidemics in Sierra Leone since the colonial period, which places the Ebola epidemic in the *longue durée* of disease occurrences in the country. Next, a discussion of poverty, economic inequity, and social injustice calls attention to the anomaly that epitomizes Sierra Leone's postcolonial reality: its rich natural resources, among them extensive deposits of diamonds, bauxite, gold, iron ore, and rutile, to name only a few, yet despite these resources, the country is beset by mass destitution, economic disparity, and social malaise. In the final section, the article looks at the Ebola outbreak itself, tracing it from Sierra Leone's first epicenter in the eastern districts of Kailahun and Kenema all the way to Freetown, in the westernmost part of the country, to demonstrate the close links between political economy, culture, and ecology, on one hand, and institutional capacity/incapacity and leadership (or its absence), on the other.

Disease Eruptions and Epidemiological Studies in Sierra Leone

In a talk delivered at the Liverpool Chamber of Commerce on October 3, 1910, Sir Robert W. Boyce (1863–1911), an English pathologist and hygienist, addressed yellow fever in West Africa, after returning from a trip to Sierra Leone, which by the early nineteenth century had gained infamy as the "Whiteman's Grave."¹⁷ In Sierra Leone, Boyce explained, yellow fever had been present since 1806, with

the indigenous people naming it “the disease of the newcomers,” an apparent reference to repatriated black ex-slaves and English officials who had arrived in Freetown, the would-be capital of Sierra Leone, since 1787.¹⁸ Boyce pointed out that those who died of yellow fever were often believed to have succumbed to malaria, a case of mistaken identity because little to nothing was known about the former disease. Nevertheless, he expressed optimism that with time the high mortality rate due to the disease would subside as knowledge about it increased and “people used mosquito nets and exercised greater care in living generally.”¹⁹ Boyce stressed, “Getting rid of the disease would be comparatively easy if they [the indigenous people] all co-operated, and did not live the matter entirely to the Government.”²⁰ The pathologist’s reference to the government underscores the leadership role expected of the British colonial administration in supervising disease prevention and control in Sierra Leone (as in its other African colonies). Yet, how effectively the colonial government performed that responsibility has been a topic of debate among scholars studying diseases in colonial Sierra Leone and West Africa in general.²¹

Leo Spitzer, for example, observes that although scientific knowledge about malaria had improved by the end of the nineteenth century, the colonial government in Sierra Leone was far more concerned about “health segregation” to save the lives of Europeans than public sanitation to improve the living conditions of the indigenous people. During that period, Spitzer remarks, “Freetown enjoyed a well-deserved notoriety for atrocious public sanitation practices. Neither drainage nor removal of night-soil existed; garbage-filled deep wells and rut abounded.”²² Spitzer’s view echoes that of Dr. Ronald Ross (1857–1932) of the Liverpool School of Tropical Medicine, who had visited Freetown together with other British scientists in 1899 to investigate malaria and similar tropical diseases. In his *Memoirs*, Ross remarked that government officials in Freetown saw no need to introduce public sanitation initiatives aimed at eradicating mosquitoes and their breeding grounds “until the native population was sufficiently educated.”²³ Yet, in hindsight, we know that British colonial education and governance were intertwined to the extent that there was no urgency on the part of the colonial authorities to educate the indigenous people en masse, possibly apprehensive that it might arouse political awareness that could threaten their hold on power. Anyhow, the colonial state’s apathy toward public sanitation meant residents of Freetown, not to mention those in the interior of the country, remained prone to disease outbreaks due to unsanitary conditions and inadequate medical facilities and personnel.

Indeed, Dr. Ross, whose main contribution to combating tropical diseases was his recognition that the anopheles mosquito (*Anopheles gambiae*, *Anopheles funestus*) was a vector of malaria, admitted the lethargic attitude toward eradicating the disease in British colonial West Africa. Aware of the health risks in

Freetown, Ross proposed health and residential segregation as “a mode of prophylaxis” to protect Europeans from malaria and similar diseases.²⁴ And supported by the Colonial Office in London and other British officials, Dr. Ross’s recommended segregation aimed at separating European residential areas from those occupied by the indigenous inhabitants of Freetown. In 1902, the colonial government initiated health and residential segregation involving the construction of new housing for Europeans in Hill Station, an area located in the west end of Freetown with an elevation of at least 750 feet above sea level.²⁵ With its higher altitude, Hill Station was considered an ideal residential space for Europeans given that mosquitoes were more common in the lower-lying and more populated areas of Freetown awash with unsanitary conditions. Even so, the Hill Station housing project was a costlier scheme than cleaning the whole of Freetown at that time.²⁶ Besides, Europeans had to work in downtown Freetown where they were exposed to malaria; and once infected, residing in Hill Station did not make much difference. In other words, residential segregation was not the most effective solution to the prevailing health predicament as British colonial officials thought, even as they preferred protecting their kinfolk to implementing public health plans for all residents of Freetown irrespective of “race”/skin color.

As Odile Goerg explains, “Residential Segregation in British Africa took its inspiration directly from India where summer locations, known as ‘Hill Station,’ were built in the mountains high above the hot and humid Ganges valley.”²⁷ The similarity between the situation in India and Sierra Leone suggests that designated separate spaces for Europeans and indigenous people was nothing new and recurred in different regions of the British Empire. In Freetown, though, Europeans were just a minute fraction of its inhabitants, accounting for only 1.6 percent of the city’s entire population, which the 1911 census put at 34,090.²⁸ Even so, the colonial authorities aimed to create a mosquito-free zone exclusively for European residents insofar as “the British masters imposed a more strictly divided vision of urban space, best symbolized by separate residential areas.”²⁹ All told, the colonial government’s rhetoric about hygiene and sanitation as a facet of its “civilizing mission” seldom showed compelling evidence of effective policy geared toward achieving that goal.

In his study of the smallpox and influenza epidemics of 1915–18 in Sierra Leone, Ismail Rashid casts light on the lapses in the colonial health system: “The colonial state only became aware of the gravity of the smallpox epidemic in October 1915, seven months after it had begun [in Karene District in northern Sierra Leone]. Even then, the state had limited medical personnel to deal with the epidemic.”³⁰ Despite the colonial state’s ambition of eradicating diseases such as malaria and yellow fever as part of its “medicalization project,” inadequate funds and personnel weakened its effort to fulfill its public health and sanitation responsibilities.³¹

In an attempt to contain an earlier outbreak of smallpox in 1905, for instance, the colonial administration launched an inoculation campaign for residents of Freetown and its environs. Yet the campaign was not as successful as the colonial authorities had anticipated. Hence, Freetown was not completely safe from the disease by the outbreak of World War I in 1914. Because funds for disease prevention and control fell short of meeting local needs, vast areas in the interior of Sierra Leone fared worse than Freetown, where most British colonial officials resided. By the time the smallpox epidemic receded in June 1916, it had claimed 62 lives in Karene District, where 1,351 cases were recorded.³² At the same time, Freetown experienced 20 deaths out of 110 cases recorded, indicating that the vaccination campaign in the capital did not guarantee a lower death-per-recorded-case ratio than Karene, the original epicenter of the smallpox epidemic.³³ Worse still, the influenza epidemic that occurred toward the end of World War I wreaked havoc in Karene District, where “over seventy-five percent of the population caught the disease and over two thousand people died.”³⁴

The colonial government's failure to deal efficiently with disease outbreaks had much to do with flawed policy initiatives. Festus Cole's analysis of British colonial policy concerning public health in Sierra Leone reveals that successive administrations did not perform their duties in an effective manner.³⁵ By the turn of the twentieth century, health services in the country catered much more to the needs of the white expatriate community than to those of the indigenous population. With no long-term public health policy primed, the smallpox epidemic of 1915–16 and the influenza pandemic of 1918 exposed the inadequacies of the colonial health system in Sierra Leone. The British colonial reports between 1895 and 1916 Cole drew on for his study reveal that ineffective policy failed to eradicate malaria before the smallpox outbreak and influenza pandemic hit the colony and its deficient health services.³⁶ In fact recommendations made by some colonial health officials to improve the deplorable sanitation in Freetown (and British West Africa in general) had been ignored continually even with mounting evidence of filth in the city, unclean water supply, poor drainage and recurrent disease outbreaks that afflicted both humans and domestic animals. By the early twentieth century, official efforts to rectify the poor sanitation in Freetown by improving its drainage system had been abandoned due to a shortage of funds.³⁷

The period between the two world wars continued to yield a few studies on diseases in Sierra Leone that built on those carried out earlier in the twentieth century. Done mostly by British researchers, the investigations focused on malaria to not only get a better understanding of its breeding and transmission, but also to find practical ways of combatting it. In their survey of research on malaria in Sierra Leone since the early 1900s, M. J. Bockarie, A. A. Gbakima, and G. Barnish underscore the importance of Freetown as “the centre of malaria field research

in Africa up to and during the Second World War.³⁸ The Alfred Lewis Jones Laboratory, a facility set up in Freetown in 1920 for the Liverpool School of Tropical Medicine to conduct scientific research on malaria in Sierra Leone, sought a better “epidemiological picture of the disease and the most effective means of combatting it.”³⁹ Led by its first director Professor B. Blacklock, the lab attracted some of the most renowned epidemiologists from Britain, among them Ronald Ross, E. E. Austen, and Robert Boyce,⁴⁰ who at one time or the other visited Sierra Leone. Although the above effort demonstrates a genuine interest in acquiring more knowledge about malaria, however, anti-malarial efforts for the most part were confined to Freetown and its vicinity. In contrast, the interior of the country only witnessed “a few parasitological and entomological surveys.”⁴¹ Besides, as Bockarie et al. disclose, “Government anti-mosquito activities continued until 1930 when funds were no longer sufficient to allow such large undertakings;” that is, “the reconstruction of the stream beds crossing [Freetown] to prevent the formation of breeding places [for mosquitoes].”⁴² In the absence of a sustained effort by the colonial government to eradicate the hotbeds of mosquitoes in the city, its inhabitants remained exposed to malarial viruses.

As the Second World War continued in the early 1940s, Freetown’s seaport grew in importance, thanks to its strategic location on the West African coast. The city saw the arrival of more British service personnel to boost Britain’s war effort. On more than one occasion, both crews and troops arriving on board ships that anchored in the harbor of Freetown were infected with malaria. An investigative team led by Professor Blacklock found out that not only had ships brought mosquitoes to the port, but small boats from the city’s shore also carried mosquitoes to the ships.⁴³ The investigators’ report alerted the colonial administration to the use of pyrethrum insecticide for spraying public rooms in the ships as well as the boats that liaised with them from Freetown. This action recorded a dramatic reduction in the number of malaria cases. Henceforth, it was suggested in official circles that insecticidal spraying of coastal and nearby village houses would prevent the spread of mosquitoes from the shore to the ships. Still, the effectiveness of such a measure in the long term had yet to be assessed. Meanwhile, the end of the Second World War coincided with the closure of the Alfred Lewis Jones Lab, which a new Malaria Unit replaced to continue the task of malaria control.⁴⁴

Although historical studies on disease outbreaks in Sierra Leone in the immediate post-World War II period are rare, it is not farfetched to suggest that the country’s health system did not undergo any significant improvement in the period leading to independence. Considering the devastating economic impact of the war on Britain and the rest of Europe, investment in health systems across Africa was not a priority in the postwar reconstruction programs of European

countries. On balance, Britain was struggling with its war debt and rebuilding effort, which compelled it to depend on financial assistance from the United States to revive its domestic production and bankroll its international trade.⁴⁵ During that period, the Colonial Office sought to ensure that natural resources from British colonies assisted Britain's postwar recovery effort. In Sierra Leone, like other British colonies in Africa, concerns about poor infrastructure gained little to no attention despite evidence of the need for restoration and improvement. In truth, Sierra Leone's budget experienced a shortfall that forestalled any possibility of upgrading its health system. As such, by the time the country gained independence in 1961 common diseases that had afflicted the people in the past, among them malaria, yellow fever, cholera, measles, smallpox, chickenpox and tuberculosis, continued to do so, often with extremely high mortality rates.⁴⁶

As a spin-off of the recent 2013 Ebola outbreak, studies on diseases in West Africa have increased steadily as both homegrown and non-West African disease specialists and scholars seek a more profound understanding of the nature of Ebola Makona.⁴⁷ For some time, the international and local media, organizations such as WHO and MSF, and public health authorities shaped public and academic understanding of the Ebola epidemic in West Africa. In contrast, academic studies and the medical literature were slower in casting light on the outbreak. Still, several researchers, including clinicians and epidemiologists attached to the American Society of Tropical Medicine and Hygiene (ASTMH), among others, joined the fight against Ebola from an early stage of the epidemic. Some of the members of the society, at great personal risk, worked with the team of doctors, nurses, clinicians, and other health personnel at the frontline as the disease spread from Guinea to Sierra Leone and Liberia.⁴⁸

Some studies now emerging on Ebola have not only aimed at unraveling the "mystery" surrounding the virus itself, but also probing the political, social, economic, and cultural underpinnings of the unprecedented human toll the epidemic registered.⁴⁹ Mohammed Kanu, for example, identified several steps to be taken by the government and people of Sierra Leone in order to preempt the recurrence of yet another human catastrophe in the future: the development of rapid response strategies to disease outbreak, strengthening data collection processes, setting aside a fund for health emergencies, and increasing funding for the health sector in the national budget, among other suggestions.⁵⁰ Such concerns resonate with both academic and public debates on the Ebola epidemic in Sierra Leone, which, I argue, provides a window through which to observe the endemic poverty, economic inequality, and social injustice successive governments and political leaders, since independence, have failed to tackle with conviction.

Poverty, Economic Inequity, and Social Injustice in Postcolonial Sierra Leone

With a population of 7,092,113, according to its 2015 Population and Housing Census (PHC),⁵¹ Sierra Leone possesses vast natural resources including mineral deposits of bauxite, diamonds, gold, iron ore and rutile, in addition to extensive farmland and timber reserves.⁵² Since the 1930s, the country's diamond deposits have attracted foreign migrants from as far as Lebanon, Syria, and India, as well as neighboring Guinea and Liberia.⁵³ Although diamonds generated significant revenue for the state, the bulk of the earnings ended up in the coffers of foreign-dominated companies such as the Sierra Leone Selection Trust (SLST), a De Beers subsidiary, and, later on, the National Diamond Mining Company (NDMC).⁵⁴ In truth, even with nationalization, foreign multinational corporations continued to control the mining industry in Sierra Leone, especially as NDMC sold its gems directly to De Beers. Moreover, both indigenous and non-Sierra Leonean diamond dealers frequently engaged in smuggling activities, thereby depriving the government of much-needed revenue from mining. As its civil war revealed, Sierra Leone's postcolonial tenure has been plagued by financial mismanagement, embezzlement, nepotism, graft, and similar failings that set the stage for the decade-long armed conflict.

Barely a decade after independence in 1961, Sierra Leone began to exhibit signs of political instability that would not bode well for the country's future. Alfred Zack-Williams has described the trend as "the reinforcement of [an] oppressive state apparatus," which perpetuated a "network of client-patron relationships" for the disbursement of state revenue to "placate clients."⁵⁵ Especially during the government of Siaka Stevens (1905–1988) and his All Peoples' Congress party (APC), who rose to power after the inconclusive 1967 general elections, state offices and resources were "patrimonialized . . . along ethno-clientelist and personalist lines."⁵⁶ With Stevens's introduction of a *de facto* one-party system in 1978, opposition parties were forced to operate underground or live in exile, making it easier for government excesses to continue unchecked. This only bred mass social and political discontent among Sierra Leoneans with no affiliation to the ruling APC government. And the economic hardship triggered by the mismanagement of state resources affected rural farmers, urban workers, petty traders, and wholesale merchants, as well as middle-class professionals including university professors, lawyers, doctors, bankers and engineers. Indeed, most of the country's population experienced privation while the ruling elite and their party stalwarts amassed immense wealth stolen from government funds. The most publicized financial scandals in Sierra Leone involving high-profiled politicians and civil servants

dubbed “Vouchergate” and “Squandergate” aroused public indignation due to the huge sums of money pilfered by government officials entrusted with managing the country’s affairs.⁵⁷ Although several of those involved, including the country’s current vice president, Victor Foh, then a civil servant, were dismissed from the civil service, years later some of the culprits were able to hold public office despite embezzling government funds earlier. As Zack-Williams points out, “Apart from a short period when foreign capital entered the mining industry, the economy continued to decline right through the 1970s and 1980s.”⁵⁸

By the late 1980s, Sierra Leone, like many other African countries, was going through a period of reforms initiated by the International Monetary Fund (IMF) and the World Bank. The policies and mechanism for fiscal changes called the Structural Adjustment Program (SAP) centered on an “economic model,” the Washington Consensus, premised on the idea that less government bureaucratic interference and a free market economy constitute a recipe for economic growth and “development.”⁵⁹ For Sierra Leone, SAP meant not only selling state enterprises and floating the national currency, but also reducing public expenditure (on health services and education, for example) and dismissing thousands of state employees. And in an extra effort to cut down on state expenditure, the salaries of government workers not retrenched were frozen. By the early 1990s, the repercussions of the SAP program on Sierra Leoneans was all too obvious as the national currency plummeted in value and deprived families of their precious little earnings. The mass penury permeated the country’s social fabric. And civil servants and politicians who indulged in all forms of corruption often rationalized their fraudulent activities with platitudes about their responsibilities toward large extended families.⁶⁰

The deteriorating conditions in Sierra Leone culminated in its civil war in 1991, a vicious conflict that devastated both the country’s population and its fragile health system. Not only were more than 50,000 Sierra Leoneans killed during the fighting, over a million were displaced internally while thousands fled to neighboring Guinea, The Gambia, Ghana, and other West African countries seeking refuge. The UNHCR’s refugee resettlement program allowed thousands of Sierra Leonean refugees to migrate to the United States, Canada, England, Germany, and Australia, among other countries. While large numbers of civilians fled the country, however, others did not escape the extreme violence unleashed by combatants of the rebel forces led by the Revolutionary United Front (RUF) as well as the Sierra Leone national army—and allied fighters such as the Kamajors, a civil defense force. In time, the RUF and its international proxies profited from smuggling and selling diamonds mined in areas under their control in the eastern part of the country, especially Kono, the heartland of diamond mining in Sierra Leone.⁶¹ Neighboring Liberia became the main conduit for trafficking “blood

diamonds.” And the income from the sale of the gems funded the purchase of AK-47 rifles, rocket-propelled grenade launchers (RPGs), and similar combat weapons, which entered Sierra Leone after passing through Libya, Burkina Faso, and Liberia. Hence, the rebel forces were able to sustain their supplies of arms and ammunitions, thereby prolonging the war for slightly over a decade. By the end of the war, Sierra Leone’s health system was in such shambles that international agencies had to refurbish hospitals, community health facilities, and rehabilitation centers to provide basic services for both civilians and combatants.⁶²

The war in Sierra Leone ruined the productive capacity of its economy, which relied mostly on the exportation of the country’s mineral resources. Thus, economic recovery, a major concern for the government in its postwar reconstruction effort, focused on rebuilding infrastructure damaged during the war to attract investors. No doubt, reliance on foreign multinational companies in the mining sector had exposed the fragility of the economy as both capital and business people fled during the civil war. And because it was difficult to predict when the war would end, foreign financiers held off from investing in the country pending tangible evidence of a stable government, sustainable peace and security, and infrastructural refurbishment. In the absence of foreign investment, jobs for ordinary people dwindled to a minimum. Likewise, the unequal distribution of income and wealth among Sierra Leoneans grew more disproportionate than ever before as the political and commercial elites exploited the fragile economy to their advantage. The dire economic situation meant an increasing number of Sierra Leoneans continued to live below the poverty line.⁶³

In the absence of the rule of law, contempt for civil liberties, and no serious attention to poverty alleviation, Sierra Leone’s endemic political and administrative corruption only made matters worse for ordinary folks, most of whom had felt the brunt of the civil war. Several international agencies, among them Transparency International, the IMF, and Human Rights Watch, now and again drew attention to the rampant theft of public funds evident at different strata of Sierra Leonean society.⁶⁴ Corruption has been a major constraint on the country’s economic performance insofar as it is rooted in “a perverted practice of natural resources exploitation,” most times overseen by political leaders and government officials aided by their foreign associates.⁶⁵ In its varied guises—bribery, grafting, embezzlement, nepotism, and so on—corruption has become a major obstacle to the redistribution of wealth, and this has condemned most Sierra Leoneans to living in abject poverty.⁶⁶ In this context, the suggestion by Jeffrey D. Sachs, P. Collier, and B. Goderis, among others, that greater transparency and accountability by those in positions of power in public offices stimulates proper management of resources for the common good of a country’s citizenry has not happened in

Sierra Leone.⁶⁷ To date, the country continues to manifest the paradox of abundant natural resources but uneven economic growth and productivity.

The ubiquity of diseases, poverty, and hunger allows for the juxtaposition of conditions in Sierra Leone with those of other fragile countries the world over. In his study of Haiti and its dysfunctional health system, Paul Farmer's ethnographic attention to the voices of the poor reminds us about global structures that create "structural violence" and its resultant suffering for impoverished communities.⁶⁸ Farmer, indeed, makes a compelling case:

Poverty is not some accident of nature but the result of historically given and economically driven forces. Human beings constitute the social world, and we will always shape it. Understanding poverty and inequality requires multiple disciplines: economics, law, sociology, anthropology, epidemiology, and so forth. Most of all, it requires listening to those most affected by poverty, which is to say the poor and otherwise marginalized.⁶⁹

Especially for the purposes of this study, in exploring the intertwined links between poverty, illness, and hunger, Farmer remains concerned with the voices and struggles of the poor and the need to pay more attention to them. This approach makes it possible to situate Sierra Leone in a wider milieu of indigent nations and botched development that generates conditions for underprivileged people to remain susceptible to disease outbreaks.

Although Paul Richards' *Ebola: How a People's Science Helped End an Epidemic* makes a compelling case for the efficacy of indigenous knowledge in helping to end the Ebola epidemic in Sierra Leone, his contention that "Ebola is less a disease of poverty than a disease of ignorance" is overstated and difficult to sustain to its logical conclusion.⁷⁰ Is it any coincidence that the EVD found fertile ground in unsanitary and overcrowded dwellings in urban areas and impoverished rural villages and towns in Sierra Leone? During his 2014 tour of duty in West Africa, Magdy Martínez-Solimán, Assistant Administrator and Director, Bureau for Policy and Programme Support, UNDP, made a poignant assessment of the situation:

Everywhere this disease strikes, it is the poorest, living their difficult and deprived lives in Africa's slums—often among animals, garbage and fumes—who are most vulnerable to this disease. Many of the political leaders I met during this trip cited poverty as the cause of the disease's spread, and economic recovery as the most pressing need for a long term solution, together with the emergency response to the epidemic.⁷¹

In hindsight, then, a more sustainable version of Richards' argument would have been that Ebola is as much a disease of poverty as it is a disease of ignorance.

To be sure, notwithstanding its rich natural resources, life expectancy in Sierra Leone today is only 49.3 years for men and 50.8 years for women (2015); the average of 50.1 years ranks the country among the lowest in the world.⁷² In contrast, neighboring Guinea's life expectancy is an average of 59.0 years (2015), whereas that of Liberia is 61.4 years (2012).⁷³ Before its civil war, Sierra Leone's health-care system depended largely on foreign aid from international organizations such as WHO and UNICEF and international NGOs like Save the Children to underwrite various health programs and facilities. And before the Ebola outbreak, "the proportion of the total government budget allocated to health increased from 7.4% in 2012 to 11.2% in 2014."⁷⁴ The increase, however, fell short of the goal set by the Abuja Declaration of April 2001, when the countries of the African Union (AU) pledged to allocate at least 15% of their annual budget to improve the health sector. Hampered by inadequately trained medical personnel mostly concentrated in Freetown and its suburbs, unsanitary conditions, lack of information, and mass illiteracy, Sierra Leone's health system remained mostly dysfunctional. Thus, across the country, common diseases such as cholera and malaria created a high-risk situation with high mortality among both children and adults. It is not surprising that well before the Ebola epidemic the WHO and UNICEF consistently ranked Sierra Leone among the countries with the top three highest infant mortality rates in the world.⁷⁵ With the prevailing conditions in the health system showing no signs of improvement over the years, Sierra Leone could not have been in a more vulnerable state than when the EVD struck.

Ebola's Deadly Journey: From Kailahun to Freetown

In late December 2013, the Ebola virus started its lethal journey from the village of Méliandou in southeastern Guinea, penetrating the porous Guinea-Sierra Leone border into Sierra Leone's easternmost district of Kailahun. Notwithstanding the proximity of the index case's village to the border area and the rising death toll from Ebola in Guinea, however, government officials in Sierra Leone foresaw no immediate national health threat and did nothing to limit its spread. Despite the potential danger of the virus mushrooming in Sierra Leone (and Liberia), President Ernest Bai Koroma of Sierra Leone and health officials ignored emergency measures such as stricter border control and monitoring of travelers from both Guinea and Liberia. In hindsight, this, at least, could have slowed down the pace at which the virus spread into the eastern countryside. Chernoh Bah sums up the inaction of the Sierra Leonean leadership, a factor that aided the infectivity of the Ebola virus: "The government's lack of response translated into a state of denial of the outbreak, while local journalists and civil society mounted a

sustained campaign of pressure calling for an all-out national response to stop the outbreak. Newspapers decried the government's inaction; it appeared the outbreak was not a priority on the national agenda."⁷⁶ In the absence of stricter control to restrict cross-border traveling, it was only a matter of time before Ebola would make incursions into Sierra Leone (and Liberia). Indeed, as Dorit observes,

The history and cultural practices of the region mattered far more than national borders: People traveled to and fro according to a carefully prescribed set of social arrangements. Many of the human movements that enabled the initial outbreak reflected established family and commercial ties within the Kissi-speaking peoples of the area, setting the stage for the early phases of the epidemic.⁷⁷

In May 2014, health officials in Sierra Leone confirmed the first Ebola case in the country.⁷⁸ Once the virus hit Kailahun District, it did not take long before spreading across the easternmost district, eventually arriving in the town of Kenema, in neighboring Kenema District, where a Lassa Fever Treatment Center and Laboratory headed by U.S. military personnel and researchers from Tulane University had existed since 2004.⁷⁹ Kailahun and Kenema districts would become Sierra Leone's first epicenter of the Ebola epidemic. In Kailahun, Médecins Sans Frontières (MSF) responded by launching an Ebola Treatment Center. The International Federation of Red Cross and the Red Crescent Societies (IFRC) also opened an Ebola Treatment Center in the outskirts of Kenema in September 2014.⁸⁰ By July, though, the Ebola ward at the Kenema Government Hospital was dealing with more than 100 Ebola-afflicted patients. Headed by Sierra Leone's leading virologist at the time, Dr. Sheikh Umarr Khan, the Kenema hospital became an overcrowded "combat zone," where a besieged number of doctors and nurses battled daily to save lives while putting their own at great risk. On July 29, Dr. Khan himself died of Ebola, having contracted the virus while caring for his numerous patients.⁸¹

Until Dr. Khan's death, about three months after the first reported Ebola case in the country, the Sierra Leone government had adopted no emergency measures to prevent the virus from spreading even with the rapidly rising number of casualties.⁸² A day after Dr. Khan passed, however, President Koroma declared a state of public health emergency in a televised broadcast. In his address, the president admitted: "Extraordinary challenges require extraordinary measures. The Ebola virus disease poses an extraordinary challenge to our nation. . . . I hereby proclaim a state of public emergency to enable us to take a more robust approach to deal with the Ebola outbreak."⁸³ Among the measures outlined in the health emergency were travel restrictions and a ban on public gatherings. Forcible quarantines and curfews also followed in the aftermath of the emergency. Meanwhile critics were quick to point out the length of time that had elapsed before the

emergency was declared even as EVD-related deaths had been rising exponentially since the country's first case in May.⁸⁴

In Kenema District, a peak number of confirmed Ebola cases among health-care workers was recorded in August 2014. The 65 cases of health-care workers, mostly at the Kenema Government Hospital, made up 12.9 percent of all confirmed Ebola cases in the district.⁸⁵ Realizing the gravity of the situation, the Ministry of Health and Sanitation, in consultation with the WHO and MSF, responded by “implementing infection prevention and control measures.”⁸⁶ Henceforth standard operating procedures were to include “patient isolation and safe burials; recruiting and training staff in infection prevention and control; procuring needed commodities and equipment, including personal protective equipment and vehicles for safe transport of Ebola patients and corpses; . . . [and] monitoring and evaluating infection prevention and control practices.”⁸⁷ By then, it was obvious that the Ebola epidemic in Sierra Leone (as well as in Guinea and Liberia) had to be treated with the utmost urgency before it could engulf the whole country (and, possibly, the subregion).

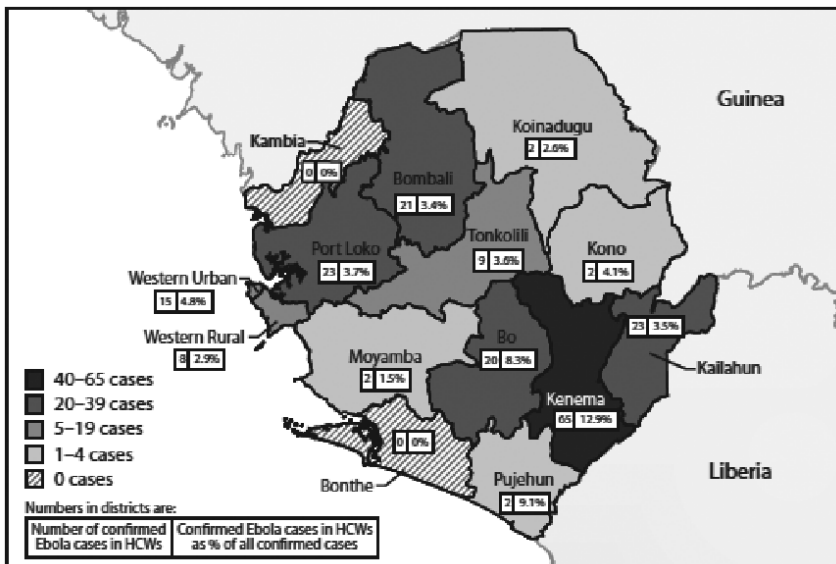


FIGURE 2.

Number of Laboratory-confirmed Ebola Virus Disease (Ebola) in Health-Care Workers (HCWs) and Confirmed Ebola Cases in HCWs as a Percentage of All Confirmed Cases, by District—Sierra Leone, May–October, 2014.⁸⁸

Amid all the chaos and frenetic efforts to bring the Ebola epidemic under control, however, nurses, auxiliary health-care workers, grave diggers, and burial teams had to resort to strike action in order to receive their weekly “hazard pay” of \$115.⁸⁹ In an interview in Freetown with an Ebola survivor who was a staff welfare nurse at the Kenema Government Hospital during the epidemic, Mary Massaquoi revealed that she contracted the virus after taking care of two other nurses who died of Ebola.⁹⁰ Yet she continued to work at the hospital even though her hazard pay was withheld for more than three months. And when the nurses went on strike for their salaries, they were threatened that they would lose their jobs. Mary informed me that after she fell sick, all her personal belongings had to be destroyed. However, the compensation she received did not cover the cost of her lost property. Moreover, after she recovered from the EVD and was declared Ebola-free by the Ebola Treatment Center, she was laid off and never employed again as a nurse. Today, Mary is still hoping to continue her nursing career if she could be employed.⁹¹

The WHO Ebola Response Team explained that the unprecedented scale of the EVD in West Africa was due to “the attributes of the affected populations and because control efforts [had] been insufficient to halt the spread of the infection.”⁹² Sharing a view similar to that of Dorit expressed above, the WHO team further observed: “The populations of Guinea, Liberia, and Sierra Leone are highly interconnected, with much cross-border traffic at the epicenter and relatively easy connections by road between rural towns and villages and between densely populated national capitals.”⁹³ Especially in Sierra Leone, the relative ease with which farmers, traders, merchants, diamond dealers/smugglers, security personnel and health-care workers, among others, travel daily by road from the east of the country to Freetown, the capital, in the west, showed all the hallmarks of an epidemic tragedy awaiting explosion. Even with countless checkpoints, where policemen often ask drivers and passengers for cash/bribe, traveling across the country does not come at great cost. Thus, the movement of people and goods tends to be constant even during the rainy season (June–November) when the condition of roads deteriorates.

By September 2014, the Ebola virus had arrived in the western area, where Freetown is located, about four months after crossing the border with Guinea in the east. When Freetown took over as the epicenter, areas such as Kroo Bay, the sprawling slum in the west-central part of Freetown, became a hot spot of Ebola. The massively congested and poverty-stricken shantytown, where people live in makeshift shacks without proper toilet facilities, tap water, electricity and basic knowledge of hygiene, was an ideal habitat for Ebola to fester and decimate its victims. Spaces like this were prone to the Ebola virus because of the unsanitary conditions that typify poor neighborhoods in the city. Similar ghetto-like

settlements exist along the waterfront in the east end of Freetown, where the city's quay and its neighborhood have long been notorious for poor housing, diseases, and all sorts of vices including drug and alcohol abuse, theft, and prostitution. Direct human contact is difficult to avoid as people walk in tight alleys strewn with excrement, urine, and garbage to go out daily in search of food and other necessities of life for their families.

Between September and December, the number of Ebola cases reported in the western area rose exponentially from 75 to 2,766, data that officials found troubling given Freetown's high population density and its inadequate health facilities.⁹⁵ The government opened new "holding centers" in the city, where Ebola tests were conducted and results verified. In the outskirts of Freetown, in Hastings, an Ebola Treatment Center became a zone of convergence for doctors, nurses, and other health-care personnel battling to contain the rapidly rising number of Ebola-infected patients. Likewise, the Kerry Town Ebola Treatment Center located on the Peninsula highway after Waterloo in the eastern outskirts of Freetown, which I visited while in Sierra Leone, was among the busiest facilities at the



FIGURE 3.

An Alley in Kroo Bay in West-central Freetown, Sierra Leone.⁹⁴

height of the Ebola outbreak.⁹⁶ Assessing Freetown's vulnerability to the Ebola epidemic, Amy Maxmen explains:

Like many developing world cities, Freetown—population 941,000, the largest city in Sierra Leone—lacks the infrastructure to support its impoverished populace, making it prone to tragedy, whether through pestilence, violence, or natural disaster. Despite its congestion, Freetown continues to attract people who come in search of work, school, and the mere promise of electricity [even with frequent power cuts]. It's no coincidence that typhoid and cholera regularly plague Freetown and that Sierra Leone's civil war climaxed in the city with horrific bloodshed.⁹⁷

Indeed, since the country's civil war ended in 2002 Freetown's population has been increasing rapidly, making the capital, especially its shantytowns, a fertile ground for infectious diseases. And when I visited Freetown between June 14 and August 13, 2016, to conduct interviews with Ebola survivors, I found a city that is not only overcrowded with houses and shacks built precariously on its hills, but also prone to massive soil erosion and mudslides whenever it rains. With no proper drainage system to channel the runoff water, low-lying areas such as Kroo Bay and King Jimmy continue to experience flooding with every torrential downpour. With the health system in Sierra Leone in shambles well before the Ebola outbreak, it was no surprise that ill-equipped hospitals in Freetown could not manage the epidemic. Indeed, ambulances were in short supply, but patients who managed to find their way to hospitals were often turned away.⁹⁸ Significantly, for the purposes of this article, among the twenty-eight Ebola survivors I interviewed in Freetown and Kambia (a town close to the northern border with Guinea), three were former health workers—a nurse, a nurse-aide, and a laboratory technician. The rest of the interviewees, like the majority of Ebola victims in the country, were low-income earners including hawkers, market women, farmers, and students, as well as unemployed men and women. Most of them live in overcrowded residential areas in Freetown and destitute rural communities in Kambia, where housing is no better than in poverty-stricken areas of the capital city.⁹⁹

Conclusion

A major concern of this article has been to situate the 2014 Ebola outbreak in Sierra Leone within a larger context of poverty, economic inequity, and social injustice. In so doing, I chose to historicize disease outbreaks in the country by taking into account antecedents since the colonial period. The historical literature on epidemiology in Sierra Leone and the rest of British colonial West Africa



FIGURE 4.

Graves of Ebola Victims at Paloko Road Cemetery, Waterloo, in the Eastern Suburb of Freetown, Sierra Leone.¹⁰⁰

reveals that the poor state of the country's health system is anything but new. British colonial authorities in Sierra Leone, notwithstanding their medicalization project, did not run an efficient health system. Policies aimed at improving sanitation in Freetown most times were designed to cater to the needs of Europeans at the expense of the indigenous population. The smallpox epidemic of 1915 and the influenza pandemic of 1918 exposed the shortcomings of the country's health system and the policies of the British colonial authorities.

Even with occasional attempts to improve health facilities in Sierra Leone, the postindependence period continued to show signs of a fragile system unable to cope with the demands of an increasing population in spite of the country's valuable natural resources. Long before its brutal civil war in the 1990s, which only inflicted more damage on a deficient health system, the warning signs of a serious health crisis had surfaced now and again during the 1980s as a poor-performing economy struggled under a series of IMF structural adjustment programs deployed by the government. Bedeviled by indifferent political leadership, poor administrative planning, defective infrastructure, inadequate medical personnel,

and corruption, among other problems, the country's current health crisis mirrors its political economy, cultural practices, and ecological conditions in many ways. In hindsight, the devastating impact of the Ebola epidemic confirmed a trend—that is, the poor state of Sierra Leone's health system—with a long history dating back to the colonial period. It is significant that the Ebola outbreak opened a window through which to see years of endemic poverty, economic inequity, and social injustice in a country with precious mineral and other natural resources, yet plagued by rampant corruption and myopic leadership, a potent concoction for subverting efforts to redress the problems discussed in this article.

NOTES

1. British Colonial Government of Sierra Leone, West Africa, "Report on the Epidemic of Influenza in Sierra Leone, 1918." The source was part of the Document-based Question (DBQ) for the 2015 AP World History Exam. The author applauds the Educational Testing Service (ETS) board for encouraging the use of primary sources in its history exams for high school students.
2. World Health Organization (WHO), "Ebola Situation Report," June 24, 2015, 1–16. The number of confirmed deaths in Guinea was 2,473, whereas in Liberia it was 4,806 (see page 3 of the report).
3. Although some studies state that the Ebola virus that appeared in the DRC in 1976 is different from the strain in Guinea, Liberia, and Sierra Leone, others indicate that they are the same. See Andrea Marzi, et al., "Delayed Disease Progression in Cynomolgus Macques Infected with Ebola Virus Makona Strain," *Emerging Infectious Diseases* 21, no. 10 (October 2015), <http://dx.doi.org/10.3201/eid2110.150259>; Jeffrey R. Kugelman, et al., "Monitoring of Ebola Virus Makona Evolution through Establishment of Advanced Genomic Capability in Liberia," *Emerging Infectious Diseases* 21, no. 7 (July 2015): 1135–1143, www.cdc.gov/eid.
4. For more on the conflict in Sierra Leone, see, among others, Ibrahim Abdullah, "Bush Path to Destruction: The Origin and Character of the Revolutionary United Front (RUF/SL)," *African Development* 22, no. 3/4 (1997): 45–76; Ibrahim Abdullah, ed., *Between Democracy and Terror: The Sierra Leone Civil War* (Dakar, Senegal: Codesria, 2000); Paul Richards, *Fighting for the Rain Forest* (London: Heinemann, 1996); Stephen P. Riley, *Liberia and Sierra Leone: Anarchy or Peace in West Africa?* (London: Research Institute for the Study of Conflict and Terrorism, 1996); Lansana Gberie, *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone* (Bloomington: Indiana University Press, 2005); David Keen, *Conflict and Collusion in Sierra Leone* (Oxford: James Currey, 2005).
5. "Ebola in Africa: The End of a Tragedy?," *The Economist*, January 14, 2016, <http://www.economist.com/blogs/graphicdetail/2016/01/daily-chart-12>.
6. Sierra Leone gained independence from Britain on April 27, 1961.

7. Daniel G. Bausch and Lara Schwarz, "Outbreak of Ebola Virus Disease in Guinea: Where Ecology Meets Economy," in *Ebola's Message: Public Health and Medicine in the Twenty-First Century*, eds. Nicholas G. Evans, Tara C. Smith, and Maimuna S. Majumder (Cambridge, MA: The MIT Press, 2016), 65.
8. The Mano River Union (MRU) is a regional integration organization created on 3 October 1973 by the Malema Declaration, signed by President William Tolbert, Jr., of Liberia and President Siaka Stevens of Sierra Leone. With the inclusion of the Republic of Guinea and Côte d'Ivoire on October 25, 1980, and May 15, 2008, respectively, the organization expanded to its current four-member composition. Mano River comes from the name of a river that forms a boundary between Liberia and Sierra Leone.
9. Brooke Gundfest Schoepf, "Ethical, Methodological, and Political Issues of AIDS Research in Central Africa," *Social Science and Medicine* 33, no. 7 (1991): 749–63; Adia Benton and Kim Yi Dionne, "Commentary: International Political Economy and the 2014 West African Ebola Outbreak," *African Studies Review* 58, no. 1 (April 2015): 223–36. See also, Myron Echenberg, *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914–1945* (Oxford: Heinemann, 2002); Daniel Jordan Smith, *AIDS Doesn't Show its Face: Inequality, Morality, and Social Change in Nigeria* (Chicago: University of Chicago Press, 2014).
10. Myron Echenberg, *Africa in the Time of Cholera: A History of Pandemics from 1917 to the Present* (Cambridge: Cambridge University Press, 2011), 12.
11. Since Ebola first appeared in northern DRC (formerly Zaire) in 1976, other outbreaks of the disease had occurred in different parts of Africa such as Gabon, South Sudan, and Uganda. Yet, none had been as widespread as the West African Ebola epidemic. All previous outbreaks did not spread beyond their original epicenters and subsided before they could cause widespread deaths further afield. The 1976 outbreak in the DRC resulted in the death of 280 people out of 318 diagnosed cases. See World Health Organization, "Ebola Haemorrhagic Fever in Zaire, 1976: Report of an International Convention," *Bulletin of the World Health Organization* 56, no. 2 (1978): 271–93; Centers for Disease Control and Prevention, "Outbreaks Chronology: Ebola Virus Disease," <http://www.cdc.gov/vhf/ebola/outbreaks/history/chronology.html>.
12. See, for example, C. W. Duggan, "The Parasite of Malaria in the Fevers of Sierra Leone," *Medico-Chirurgical Transactions* 80 (1897): 213–37; R. Boyce, A. Evans, and H. H. Clarke, "Report on the Sanitation and Anti-malarial Measures in Practice in Bathurst, Conakry and Freetown," *Liverpool School of Tropical Medicine Memoir* 14 (1905): 1–40; B. Blacklock, "Breeding Places of Anopheline Mosquitoes in Freetown, Sierra Leone," *Annals of Tropical Medicine and Parasitology* 15 (1921): 463–71; Roland Ross, *Memoirs, with a Full Account of the Great Malaria Problem and its Solution* (London: John Murray, 1923); J. Storey, "A Review of Malaria Work in Sierra Leone 1900 to 1964," *West African Medical Journal* 11 (1972): 57–68; M. J.

- Bockarie, et al., "Malaria in a Rural Area of Sierra Leone. III. Vector Ecology and Disease Transmission," *Annals of Tropical Medicine and Parasitology* 88 (1994): 251–62; M. J. Bockarie, A. A. Gbakima, and G. Barnish, "It All Began with Ronald Ross: 100 Years of Malaria Research and Control in Sierra Leone (1899–1999)," *Annals of Tropical Medicine and Parasitology* 93, no. 3 (1999): 213–24.
13. Notable exceptions are Leo Spitzer, "The Mosquito and Segregation in Sierra Leone," *Canadian Journal of African Studies* 2, no. 1 (1968): 49–61; Stephen Frenkel and John Western, "Pretext or Prophylaxis? Racial Segregation and Malarial Mosquitoes in a British Tropical Colony: Sierra Leone," *Annals of the Association of American Geographers* 78, no. 2 (1988): 213–28; Ismail Rashid, "Epidemics and Resistance in Colonial Sierra Leone during the First World War," *Canadian Journal of African Studies* 45, no. 3 (2011): 415–39; Festus Cole, "Sanitation, Disease, and Public Health in Sierra Leone, West Africa, 1895–1922: Case Failure of British Colonial Health Policy," *Journal of Imperial and Commonwealth History* (December 2014): 1–29.
 14. Robert L. Dorit, "Breached Ecological Barriers and the Ebola Outbreak," *American Scientist* 103 (July–August 2015): 256–59; quote, 256.
 15. *Ibid.*, 257.
 16. Echenberg, *Black Death*.
 17. The name "White Man's Grave" was a reference to the fact that Europeans who traveled to Sierra Leone and other countries in West Africa died of tropical diseases, especially malaria (but also yellow fever), at an alarming rate. Before the extensive use of quinine as a prophylaxis against malaria in the 1840s, few Europeans stayed in West Africa for a long period without succumbing to the disease. Thus, West Africa generally came to be known as the "White Man's Grave." For more on this issue, see F. Harrison Rankin, *The White Man's Grave: A Visit to Sierra Leone, in 1834.*, vol. 1 (London: Richard Bentley, 1836); G. A. Lethbridge Banbury, *Sierra Leone: Or, The White Man's Grave* (London: Swan Sonnenschein & Co., 1890); Philip D. Curtin, "'The White Man's Grave': Image and Reality, 1780–1850," *Journal of British Studies* 1, no. 1 (November 1961): 94–110; Philip D. Curtin, "The End of the White Man's Grave': Nineteenth-Century Mortality in West Africa," *Journal of Interdisciplinary History* 21, no. 1 (Summer 1990): 63–88; Richard Phillips, "Dystopian Space in Colonial Representations and Interventions: Sierra Leone as 'The White Man's Grave,'" *Geografiska Annaler* 84B, nos. 3–4 (2002): 189–200; Cole, "Sanitation, Disease, and Public Health."
 18. The history of the early settlement of Freetown is well documented. See, among others, Gibril R. Cole, *The Krio of West Africa: Islam, Culture, Creolization and Colonialism in the Nineteenth Century* (Athens: Ohio University Press, 2013); Christopher Fyfe, *A History of Sierra Leone* (London: Oxford University Press, 1962); Sylvia Ojukutu-Macauley and Ismail Rashid, eds., *Paradoxes of History and Memory in Post-colonial Sierra Leone* (Lanham, MD: Lexington Books, 2013); John Peterson, *Province of Freedom: A History of Sierra Leone, 1787–1870* (Evanston, IL: Northwestern University Press, 1969); Arthur Porter, *Creoleodom: A*

- Study of the Development of Freetown Society* (Oxford: Oxford University Press, 1963); Akintola Wyse, *The Krio of Sierra Leone: An Interpretative History* (London: C. Hurst & Co., 1989).
19. Helen C. F. Maguire and David L. Heymann, "Yellow Fever in West Africa," *The British Medical Journal* no. 2597 (October 8, 1910): 1085–86.
 20. *Ibid.*
 21. See, for example, Cole, "Sanitation, Disease, and Public Health"; Rashid, "Epidemics and Resistance"; Leo Spitzer, "The Mosquito and Segregation in Sierra Leone," *Canadian Journal of African Studies* 2, no. 1 (1968): 49–61; Frenkel and Western, "Pretext or Prophylaxis?"
 22. Spitzer, "Mosquito and Segregation," 53.
 23. Ronald Ross, *Liverpool School of Tropical Medicine, Memoir II*, "Report of the Malaria Expedition of the Liverpool School of Tropical Medicine and Medical Parasitology" (Liverpool, 1900), 490, cited in Spitzer, "Mosquito and Segregation," 53.
 24. Frenkel and Western, "Pretext or Prophylaxis?"
 25. Bockarie, Gbakima, and Barnish, "It All Began with Ronald Ross," 215.
 26. Spitzer, "Mosquito and Segregation"; Frenkel and Western, "Pretext or Prophylaxis?"
 27. Odile Goerg, "From Hill Station (Freetown) to Downtown Conakry (First Ward): Comparing French and British Approaches to Segregation in Colonial Cities at the Beginning of the Twentieth Century," *Canadian Journal of African Studies* 32, no. 1 (1998): 1–31; quote, 7–8.
 28. *Ibid.*, 3.
 29. *Ibid.*, 2.
 30. Rashid, "Epidemics and Resistance," 424.
 31. For more on the European colonial medicalization project elsewhere in Africa, see Nancy Rose Hunt, *A Colonial Lexicon: Of Birth Ritual, Medicalization, and Mobility in the Congo* (Durham, NC: Duke University Press, 1999).
 32. Rashid, "Epidemics and Resistance," 425.
 33. *Ibid.*
 34. *Ibid.*, 426.
 35. Cole, "Sanitation, Disease, and Public Health."
 36. *Ibid.*
 37. Sanitary Report of Freetown, CO 267/575/42910, The National Archives, Kew, cited in Cole, "Sanitation, Disease, and Public Health in Sierra Leone," 3.
 38. Bockarie, Gbakima, and Barnish, "It All Began with Ronald Ross," 213.
 39. *Ibid.*
 40. During this period, Dr. Robert Boyce was the dean of the Liverpool School of Tropical Medicine.
 41. Bockarie, Gbakima, and Barnish, "It All Began with Ronald Ross," 215.
 42. *Ibid.*
 43. *Ibid.*, 15–16.

44. *Ibid.*, 17.
45. Michael Havinden and David Meredith, *Colonialism and Development: Britain and Its Tropical Colonies, 1850–1960* (New York: Routledge, 1993): 206–34; Cheikh Anta Babou, “Decolonization or National Liberation: Debating the End of British Colonial Rule in Africa,” *Annals of the American Academy of Political and Social Science* 632, Perspectives on Africa and the World (November 2010): 41–54.
46. Robert W. Snow, Jean-Francois Trape, and Kevin Marsh, “The Past, Present and Future of Childhood Malaria Mortality in Africa,” *TRENDS in Parasitology* 17, no. 12 (December 2001): 593–97; Lisa Denney, Richard Mallett, and Ramatu Jalloh, “After Ebola: Why and How Capacity Support to Sierra Leone’s Health Sector Needs to Change,” Report 7 (June 2015), *Researching Livelihoods and Services Affected by Conflict*, www.securelivelihoods.org.
47. See, among others, Margaret Chan, “Ebola Virus Disease in West Africa: No Early End to the Outbreak,” *New England Journal of Medicine* 371, no. 13 (September 25, 2014): 1183–85; Desmond Davies, “Ebola and the Failure of Governance,” *New African* (October 2014): 32–35; WHO, “One Year into the Ebola Epidemic: A Deadly, Tenacious and Unforgiving Virus” (January 2015): 1–52; WHO Response Team, “Ebola Virus in West Africa: The First 9 Months of the Epidemic and Forward Projections,” *New England Journal of Medicine* 371, no. 16 (October 16, 2014): 1481–95.
48. Philip J. Rosenthal and Daniel G. Bausch, “Perspectives on Ebola,” *American Journal of Tropical Medicine and Hygiene* 92, no. 2 (2015): 219–20; Will Pooley, “Ebola: Perspectives from a Nurse and Patient,” *American Journal of Tropical Medicine and Hygiene* 92, no. 2 (2015): 223–24.
49. Mohamed Kanu, “The Ebola Tragedy in West Africa: An Examination of the Sierra Leone Experience and Recommendations for the Future,” *Research in Sierra Leone Studies (RISLS): Weave* 2, no. 2 (2014): 1–14.
50. *Ibid.*, 7–10.
51. Statistics Sierra Leone, *2015 Population and Housing Census: Summary of Final Results* (Freetown: Statistics Sierra Leone, 2016), <https://www.statistics.sl>.
52. Sigismond A. Wilson, “Company–Community Conflicts over Diamond Resources in Kono District, Sierra Leone,” *Society and Natural Resources* 26, no. 3 (2013): 254–69. DOI: 10.10180/08941920.2012.684849.
53. H. L. Van der Laan, *The Lebanese Traders in Sierra Leone (Change and Continuity in Africa)* (The Hague, The Netherlands: Mouton, 1975).
54. Ian Smillie, Lansana Gberie, and Ralph Hazleton, *The Heart of the Matter: Sierra Leone, Diamonds, and Human Security* (Ottawa, Canada: Partnership Africa Canada, 2000); Lansana Gberie, *War and Peace in Sierra Leone: Diamonds, Corruption and the Lebanese Connection* (Ottawa: Partnership Africa Canada, 2002); Wilson, “Company–Community Conflicts.”
55. Alfred B. Zack-Williams, “Sierra Leone: The Political Economy of Civil War, 1991–98,” *Third World Quarterly* 20, no. 1 (1999): 143–62; quote, 144.

56. *Ibid.* Immediately after the 1967 election, which Siaka Stevens and the APC party appeared to have won, a military coup headed by the force commander, Brigadier David Lansana, forced Stevens into exile in neighboring Guinea. A year or so later, another coup d'état by junior military officers got rid of the senior officers. And Major Andrew Juxon-Smith, who was out of the country at the time, received an invitation from the junior cadre to head the military government. Juxon-Smith and his National Reformation Council (NRC) took over power until they were also overthrown by a group of noncommissioned officers, the Anti-Corruption Revolutionary Movement (ACRM). The ACRM then invited Stevens from Guinea to return and head the country as prime minister.
57. David Harris, *Sierra Leone: A Political History* (New York: Oxford University Press, 2014), 63–80.
58. Zack-Williams, “Political Economy of Civil War,” 144–45.
59. *Ibid.*
60. Harris, *A Political History*.
61. There is an extensive literature on the Sierra Leone civil war. See, for example, Ibrahim Abdullah, “Bush Path to Destruction: The Origin and Character of the Revolutionary United Front/Sierra Leone,” *Journal of Modern African Studies* 36, no. 2 (1998): 203–35; Paul Richards, *Fighting for the Rain Forest: War, Youth and Society in Sierra Leone* (London: James Currey, 1996); Zack-Williams, “Political Economy of Civil War”; Gberie, *War and Peace in Sierra Leone*; Krijn Peters, *War and the Crisis of Youth in Sierra Leone* (New York: Cambridge University Press, 2011).
62. Abu Bakarr Bah, “The Contours of New Humanitarianism: War and Peace Building in Sierra Leone,” *Africa Today* 60, no. 1 (2013–14): 3–26.
63. In 2005, for example, an estimated 70 percent of Sierra Leone’s population lived below the poverty line. Economists speculated that the country’s economy needed a sustained growth of at least 4.7 percent per year to prevent the number of impoverished people from increasing. See World Bank, “International Development Association Program Document for a Proposed Fourth Economic Rehabilitation and Recovery Grant to Sierra Leone” (May 3, 2005), 7.
64. See, for example, David Tam-Baryoh, “Corruption in Sierra Leone: Who Will Guard the Guards?,” January 15, 2002, <http://www.worldpress.org/Africa/352.cfm>; Transparency International, “Corruption and Anti-corruption in Sierra Leone,” http://www.transparency.org/files/content/corruptionqas/256_Corruption_and_anti_corruption_in_Sierra_Leone.pdf.
65. The situation in Sierra Leone is similar to other African countries, such as Angola, which depend on the exploitation of natural resources that often see African leaders and their European, American, or Chinese bankrollers collaborating to amass wealth at the expense of the African countries. José Leon García-Rodríguez, Francisco J. García-Rodríguez, Carlos Castilla-Gutiérrez, and Silvério Adriano Major, “Oil, Power, and Poverty in Angola,” *African Studies Review* 15, no. 1 (April 2015): 159–76; quote, 164.

66. Coralie Pring (Transparency International), *People and Corruption: Africa Survey 2015/Global Corruption Barometer* (Berlin: Transparency International Secretariat, 2015).
67. Jeffrey D. Sachs, "How to Handle the Microeconomics of Oil Wealth," in *Escaping the Resource Curse*, eds. M. Humphreys, J. D. Sachs, and J. E. Stiglitz (New York: Columbia University Press, 2007): 193–213; P. Collier and B. Goderis, "Commodity Prices, Growth, and the Natural Resource Curse: Reconciling a Conundrum." Paper 274. The Centre for the Study of African Economies Working Papers Series (Oxford: Oxford University Centre for the Study of African Economies, 2008).
68. Paul Farmer employs the concept of structural violence as an explanatory framework to discuss inequality that seems to be "nobody's fault" since that is just "the way things are." Thus, addressing the conditions that give rise to unequal outcomes for the rich and the poor becomes an elusive or unattainable objective. Paul Farmer, "Reimagining Accompaniment: A Doctor's Tribute to Gustavo Gutiérrez," in *In the Company of the Poor; Conversations with Dr. Paul Farmer and Fr. Gustavo Gutiérrez*, eds. Michael Griffin and Jennie Weiss Block (Maryknoll, NY: Orbis Books, 2013), 17.
69. *Ibid.*, 20.
70. Paul Richards, *Ebola: How a People's Science Helped End an Epidemic* (London: Zed Books, 2016), 7.
71. Magdy Martínez-Solimán, "Ebola—A Disease of Poverty," Our Perspectives, United Nations Development Programme (18 November 2014). <http://www.undp.org/content/undp/en/home/blog/2014/11/18/Ebola-a-disease-of-poverty.html>.
72. WHO, *World Health Statistics: Monitoring Health for SDGs* (Sustainable Development Goals) (Geneva, Switzerland: WHO Press, 2015), 8, 10.
73. *Ibid.*, 8.
74. Sowo A. Lebbie, et al., "Using Evidence to Strengthen Accountability for Health Financing in Sierra Leone," *International Journal of Gynecology and Obstetrics* 135, no. 3 (December 2016): 380–84; quote, 380. <http://dx.doi.org/10.1016/j.ijgo.2016.10.001>.
75. See, for example, UNICEF, *Levels & Trends in Child Mortality, Report 2014* (New York: United Nations Children's Fund), 22.
76. Chernoh Alpha M. Bah, *The Ebola Outbreak in West Africa: Corporate Gangsters, Multinationals and Rogue Politicians* (Philadelphia: Africanist Press, 2015), 87.
77. Dorit, "Breached Ecological Barriers," 257.
78. Bah, *Ebola Outbreak in West Africa*, 1–12. Bah reckons that as early as February 2014 there was already an Ebola case in Kailahun. In contrast to the official narrative about the origin of the Ebola outbreak, he suggests that the Ebola victim, a lady, Sia Wanda Koniono, sought medical treatment in Guinea. And some people who had contact with her later died of EVD, according to Bah. To the best of my knowledge, I have not come across other sources that corroborate this version of events.
79. Researchers from Tulane University, the primary implementing partner of the Mano River Union Lassa Fever Network program (MRU-LFN), supervise

the Lassa Fever Program at the Kenema Government Hospital (KGH). MRU-LFN comprises a diverse group of organizations collaborating to not only advance national and regional prevention and control strategies for Lassa Fever, but also build the capacity of the laboratory at the hospital. New lines of research and public health surveillance are part of the work Tulane and its partners at KGH have carried out.

80. Lucy Draper, "Frontline Health Workers were Sidelined in \$3.3bn Fight Against Ebola," *Newsweek* May 19, 2015, <http://www.newsweek.com/ebolasierra-leoneliberiaguineawest-africawhoworld-health-organisation-604666>; Amy Maxmen, "In Fight Against Ebola, Frontline Health Workers Risked Their Lives And Never Got Paid," *Newsweek*, May 19, 2015, <http://www.newsweek.com/2015/06/05/fight-against-ebola-front-line-health-workers-were-sidelined-funding-333436.html>.
81. Bah, *Ebola Virus in West Africa*, 47–50.
82. *Ibid.*, 89; Draper, "Frontline Health Workers;" Maxmen, "In Fight Against Ebola."
83. Cited in Bah, *Ebola Outbreak in West Africa*, 49.
84. Although mid-2014 reports in Sierra Leone were giving a clear indication of the increasing death toll from Ebola, the ruling APC party and President Koroma were busy politicking for a constitutional amendment to allow him to contest the next presidential election in 2018 and serve a third five-year term as president. (The Sierra Leone Constitution allows a president to serve for only two five-year terms). Critics point out that this preoccupation did not allow the president and his advisers to pay attention to the Ebola crisis until Dr. Khan's death served as a wakeup call for immediate action. See Ibrahim Abdullah, "From Overt to 'Covert' Claim-Making: Counter-power, Neoliberal Ebola and the Struggle for Autonomous Space in Sierra Leone," in *Recent Political Developments in West Africa*, ed. Ndongo Samba Sylla (Dakar: Daraja Press, Rosa Luxemburg Foundation, 2014), 100–118; Bah, *Ebola Outbreak in West Africa*.
85. Peter H. Kilmarx et al., "Ebola Virus Disease in Health Care Workers—Sierra Leone, 2014," *Morbidity and Mortality Weekly Report* 63, no. 49 (December 12, 2014): 1168–71.
86. *Ibid.*, 1168.
87. *Ibid.*
88. *Morbidity and Mortality Weekly Report* 63, 49 (December 12, 2014), p. 1170.
89. Draper, "Frontline Health Workers;" Maxmen, "In Fight Against Ebola."
90. I have changed the name of my interviewee to protect her privacy. Mary is a forty-year-old mother of five and lives with her husband and children. Now residing in the outskirts of eastern Freetown where I conducted the interview, Mary had to change her previous residence because her landlord evicted her family from the house they had rented after he found out that she had contracted Ebola. (Interview with Mary Massaquoi, July 17, 2016, Freetown, Sierra Leone).
91. *Ibid.*; Draper, "Frontline Health Workers;" Maxmen, "In Fight Against Ebola."

92. WHO Ebola Response Team, "Ebola Virus Disease in West Africa: The First 9 Months of the Epidemic and Forward Projections," *New England Journal of Medicine* 371, no. 16 (October 16, 2014): 1487.
93. *Ibid.*, 1488.
94. Photo taken by author, August 3, 2016.
95. Amy Maxmen, "An Epidemic Evolves: How Ebola Found Fertile Ground in Sierra Leone's Chaotic Capital," *National Geographic*, January 27, 2015.
96. Most Sierra Leoneans I spoke with while in Freetown expressed disappointment that the government failed to transform the makeshift structure at the Kerry Town Ebola Center into a permanent hospital that could have continued to serve nearby communities. Today, the dilapidated facility is home of stray goats and other animals.
97. Maxmen, "An Epidemic Evolves." Most people in Freetown think that the population of greater Freetown (the city and its suburbs) could now be around 2 million, if not more.
98. Interviews with several Ebola survivors at the office of the Sierra Leone Association of Ebola Survivors (SLAES) in Jui, Freetown, July–August 2016.
99. *Ibid.*; see also Richards, *Ebola: How a People's Science Helped End an Epidemic*.
100. Photo taken by author, August 3, 2016.

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