

Health in African History

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1. Introduction

A population's health, the diseases from which people suffer, and the nature of social response to illness are profoundly revealing of the core characteristics of human societies. Human wellbeing is deeply influenced by economic conditions, accounting for 10 percent of global GDP (Gross Domestic Product) today. While it is common to focus on the scientific identification of disease causation and the technicalities of medical treatment, health is also considered a key factor influencing productivity, governmental expenditure, and aid flows. As this chapter will show, moreover, African societies have organized themselves to manage their disease environments, the diagnosis of illness has invariably been shaped by cultural preconceptions, and the costs of care have threatened the viability of individual households and indeed social stability.

This chapter explores the long history of health and disease in African history. First, it will begin by asking how health can be measured, and what the metrics used reveal about African societies. Second, attention will then turn to an evaluation of disease and healing in Africa's pre-colonial past, emphasizing the continent's unique disease burden, and how this both influenced indigenous cultures and external stereotypes. Such preconceptions of a sickly continent in need of Europe's "civilizing mission" helped propel colonial conquest, which, ironically, triggered several decades of population decline. Third, the chapter will discuss how a gradual expansion of colonial healthcare, and a marked improvement in the efficacy of western ("scientific") biomedicine in the 1940s and 1950s, saw African levels of disease and mortality fall as independence approached. The optimism of the first years of decolonization regarding health and healthcare were challenged by economic and political instability, structural adjustment, and HIV/AIDS. The chapter will close with an evaluation of the recent history of medical change across the continent, how concepts such as global health, health for all, and securitization created a situation where health indicators were improving, but the structures and sustainability of healthcare provision remained uncertain.

2. How do we measure and evaluate health?

Health and disease are complex phenomena affected by multiple factors. They are profoundly local in nature, shaped by cultural norms and disease ecologies. Understanding of what a disease is, or what terminology should be used, has changed over time. Yet, researchers feel

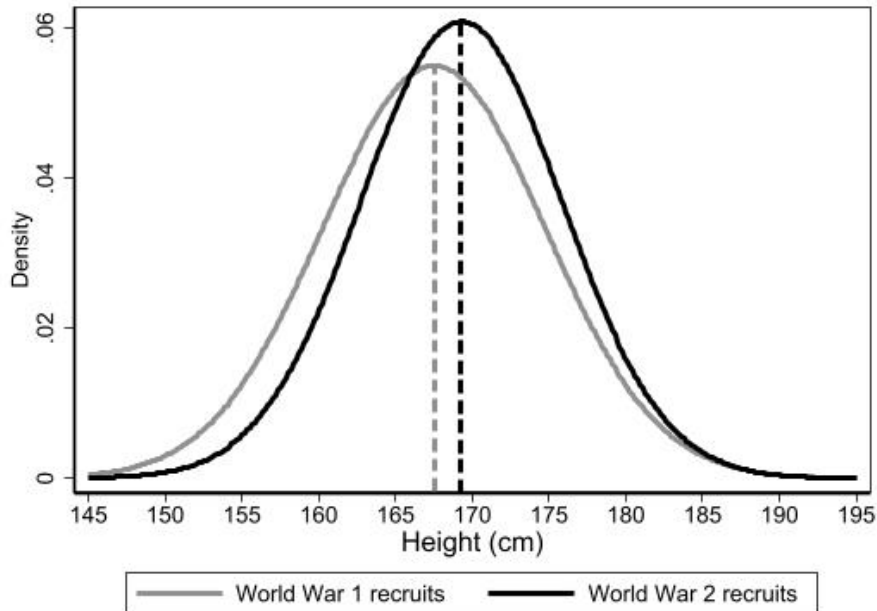
compelled to try to compare levels of illness in different regions and across different periods. It is necessary then to think about what can be measured, and what the measures mean. It is also worth keeping in mind that different disciplines prioritize different metrics. Demographers might emphasize population-level measures like the *infant mortality rate* (how many babies died in their first year of life per 1,000), or the *crude death rate* (how many people died during a year per 1,000). Health economists consider factors which have cost implications such as the *average length of stay for patients* in a hospital, while epidemiologists record disease-specific metrics such as the *disease prevalence rate*, which reflects the proportion of a population with a health condition at one moment. Some metrics, such as *life expectancy at birth*, are used in multiple disciplines. How long the average person lives for is of course central to demography and medicine, but is also used by the United Nations Development Programme to provide one third of the data that make up its *Human Development Index*.

These are all valuable measures, but need to be interpreted and used with care. For example, before the mid-20th century few people in Africa recorded dates of birth, so working out the duration of infancy involved a degree of guesswork. To ensure that interventions reflected the reality that many children in Africa died after infancy the Millennium and Sustainable Development Goals shifted away from infant to under-five mortality. Africa today has a lower crude death rate than Europe. But that is more because Africans are on average much younger than Europeans. It does not mean the average person in Africa is healthier. Historical evidence suggests that early in the 20th century people stayed in hospitals for a long time not only because, compared to today, patients were sicker when they were admitted and drugs were less effective, but also because Christian missionaries, who ran most hospitals in early colonial Africa, viewed inpatients as prime candidates for religious conversion. Changes in *average length of stay* then may not necessarily indicate improvements in treatment or underlying health conditions. Calculating a prevalence rate requires precise means of diagnosis of a disease, but accurate laboratory testing is not universally available even today, and was relatively rare during the colonial period. It is also difficult to test a representative sample of an entire population. Often in the past doctors overestimated the prevalence of a disease in an African society because they relied on the only data they had access to, for example, the frequency of a disease among people admitted to hospital or women attending maternity clinics. But patients are by definition sick, and pregnant women are particularly vulnerable to specific illnesses – this was not a representative sample.

So in the past, measurements of African health were not always accurate or representative. Historians have often been able to derive useful information by interpreting the available data with care. But they have also looked for alternative measures of health. For example, enlistment records have been analysed. Colonial armies required African soldiers to be reasonably tall. Because adult height is a good indicator of levels of nutrition and health during childhood, it has been possible to evaluate the impact of economic and social development on male living standards, over time. An analysis of changes in the average height of African recruits in Ghana indicates a steady increase in heights from the 1890s until the 1970s. Figure 1 shows the height distribution of Ghanaian recruits in the First and Second World Wars. It seems likely that the sharp rise in average incomes associated with expanding cocoa production stimulated a ca. 2

cm increase in Second World War recruits' average heights. However, the same is not true for the many African soldiers who grew up further away from the coast.

Figure 1: Male heights in colonial Ghana by birth cohort

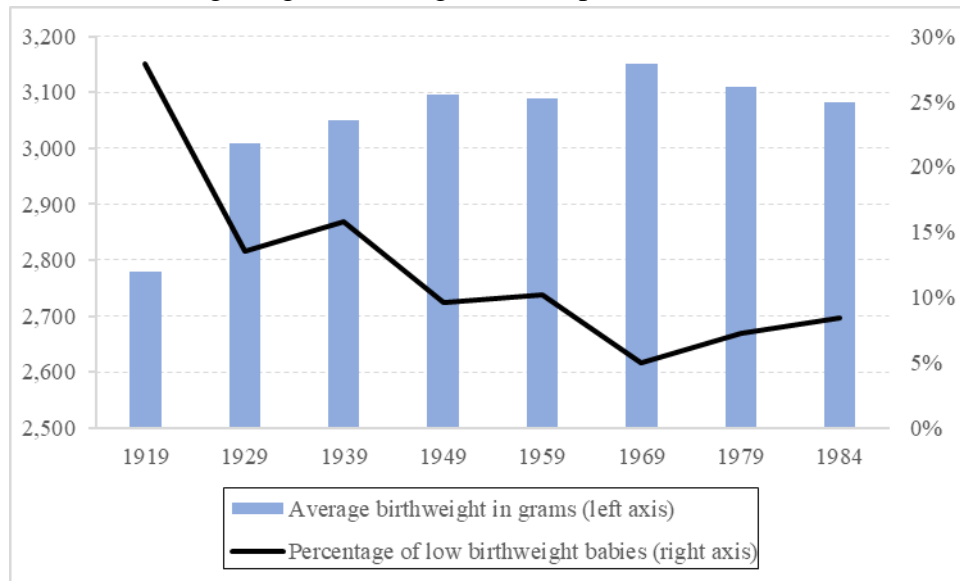


Source: Moradi, Austin and Baten (2013).

An alternative source are maternity registers recording the weight of babies born in hospitals. Figure 2 shows a substantial increase in the average birthweight of babies born in mission hospitals between the 1930s and 1950s in colonial Uganda's capital city Kampala. At the same time the share of low-birthweight (< 2,500g) babies was declining (black line). Birthweight is a good indicator of changes in maternal diet and disease exposure, and also a good predictor of future health and longevity. It is of course possible that women who came to the maternity clinic before the 1930s were significantly poorer than those who gave birth in medical settings in the later period, but there is no evidence indicating such a change. Overall, it seems safest to assume that the period of colonial rule was overall neither catastrophic nor hugely beneficial in terms of its impact on human growth.

As for the pre-colonial period – this was an era when very little usable quantitative data were generated or retained. Rather, historians have tended to rely on qualitative documentary records, typically produced by European observers, which describe African healing practices, standards of health and longevity. These tend to be more revealing of European prejudices than African realities. However, mid-19th century accounts by thoughtful, long-resident, medically-trained observers such as the famous missionary doctor, David Livingstone, suggest that while the causes of disease were often different in Africa, Africans were not substantially more likely to suffer illness or early death than European peasants and town-dwellers in a normal year. Normal years, however, were not so frequent during an era defined by the slave trade and imperial conquest.

Figure 2: Mean birthweights (grams) in Ugandan hospitals



Source: Doyle (2013, pp. 272-3).

3. Patterns of pre-colonial disease

In the broadest comparative terms, Africa appears to have possessed a uniquely hostile disease environment for two key reasons. First, the African continent was home to a particularly diverse and deadly set of tropical diseases. Some of these, such as sleeping sickness or human *trypanosomiasis*, a disease spread by the tsetse fly, were found only in Africa. Others, such as the mosquito-borne infection malaria, were common in many parts of the world, but were especially virulent in African settings. The form of malaria that was most common in Africa, *Plasmodium falciparum*, was more commonly fatal than *Plasmodium vivax*, the form found most frequently in Asia and the Americas. Even in 2020, 96 percent of malaria deaths globally occurred within the African continent, with most fatalities occurring before the age of five in children who have not yet built up immunity against the disease.

The severity of insect-borne disease partially explains the paradox that modern humans (*homo sapiens*) have lived in Africa for two to three times as long as any other continent, yet population densities in the African continent remained comparatively low until very recently. Table 1 places sub-Saharan Africa's population densities in comparative perspective with other world regions, showing that over the past 500 years Africa had the lowest population density. Low population densities also resulted from obstacles to the intensification of agriculture. Patterns of rainfall were often low and unpredictable; soils were relatively lacking in fertility. In addition, domesticated animals as well as humans suffered heavy disease burdens. For example, due to conditions such as *nagana*, the animal form of trypanosomiasis, and tick-borne East Coast Fever, using oxen or horses for transport or to pull ploughs to loosen or turn the soil before planting was, with few exceptions, impossible in infested regions.

Table 1: Average population densities per world region

	1500	1750	1900	1975
Sub-Saharan Africa	1.9	2.7	4.4	13.6
Japan	46.4	78.3	118.2	294.8
South Asia	15.2	24.1	38.2	100.3
Europe	13.7	26.9	62.9	99.9
China	13.4	22.2	45.6	91.1

Source: Frankema (2015, p. 276).

The second major factor was that Africa was connected to Eurasia by Egypt's Sinai land bridge, and later through maritime traffic, and so Africans suffered repeated infiltration of pandemic diseases which emerged in Asian or European cities and spread through these continents' dense networks of commercial trade. Perhaps the worst example was the Black Death, an exceptionally lethal form of plague spread by fleas which arrived in North Africa in 1348 and quickly reversed several centuries of sustained population growth. Africa then suffered disproportionately from the disadvantages of urbanism in an era when cities generated wealth but also facilitated the transmission of disease. However, the continent's long-term exposure to some of the illnesses circulating in Europe and Asia created a degree of immunity. This meant that conquest in Africa would have less devastating consequences than in more isolated populations in the Americas, Caribbean, and the islands of the South Pacific.

Pre-colonial ideas of health and medical/cultural responses to disease

In many African societies, faced with high levels of day-to-day, endemic disease and occasional episodes of intense epidemic outbreaks, cultures of healing extended beyond the realm of the sick individual and the techniques of surgical or herbal medicine. European commentators often noted the technical skill of African surgeons and the range of roots and leaves used by herbalists to treat multiple illnesses. Herbal medicine was also employed to prevent illness and protect health, particularly during conception, pregnancy, childbirth, and breastfeeding. Such practices are illustrated by the sculpture from modern-day Democratic Republic of the Congo below, which depicts a breastfeeding mother with patterns of scars on her skin which were achieved by rubbing herbal medicine into small incisions. As historical anthropologists across the continent have observed, direct attempts to alleviate symptoms of disease formed only part of African healing practices. Instead, emphasis was placed on working out *why* an individual had become ill. These pragmatic African healing cultures then often involved both clinical and spiritual interventions. They also commonly required the engagement of kin or peers who formed therapy management groups who organized and evaluated treatment options. This understanding of healing as involving both spiritual and corporate elements shaped many societies' public cultures of political engagement. Rituals of healing the land or healing the state were understood as crucial for the achievement of collective prosperity and social integration, and also for the mitigation of the interpersonal tensions arising from disruptive forces such as the slave trade or long-distance commerce.



Scarification protecting women during conception, pregnancy, childbirth, and breastfeeding
Source: [Commons Wikimedia](#).

Integration into global markets, 15th-19th centuries

International trade, involving enslaved peoples and primary commodities, not only hastened Africa's integration into global markets from the late 15th century onward but also accelerated the continent's integration within a quickening process of biological globalization. Commerce brought new sources of infection to the continent's shores, and also facilitated the dispersal of long-established pathogens. During the second half of the 19th century, for example, as goods and people circulated faster and further across East Africa, epidemics became almost annual occurrences. Outbreaks of cholera, dysentery, influenza, measles, plague, smallpox, and a host of other diseases, brought devastation to the region. West Africa's suffering was more prolonged. With tragic irony, the perception that West Africans' acquired immunity to malaria heightened their advantage over other forms of labour in the Americas would propel the trans-Atlantic slave trade to new heights, with grim demographic consequences. It is estimated that 12.5 million people were exported as slaves, and that as many captives died of disease or violence before reaching the Americas, during capture, transfer to the coast, imprisonment there, and finally during the voyage.

4. Colonial conquest and early colonial rule

In the European imagination Africa was, by the late 19th century, categorized as a diseased continent in need of redemption, whose inhabitants' adaptation to seemingly hostile environments reinforced assumptions of their racial inferiority. For several centuries, Europeans' incredibly high levels of mortality in tropical Africa protected the continent from conquest. Half of the Christian missionaries who arrived in the Gold Coast before 1850 died within three years, reinforcing the idea that Africa was "the White man's grave". Imperial conquest was motivated by a growing sense of racial superiority within European powers, but it was enabled by a pragmatic willingness to exploit the disease resistance that Africans necessarily acquired if they survived childhood. Across the continent, European expansion was largely achieved through the employment of African soldiers. Conquests could then be consolidated because Europeans' life expectancy on the African continent rose to sustainable levels in the 1880s and 1890s due to crucial scientific discoveries. Drinking water was made safe by filtering and boiling, and European administrators and soldiers began to use the herbal medication, quinine, systematically to prevent as well as cure malaria.

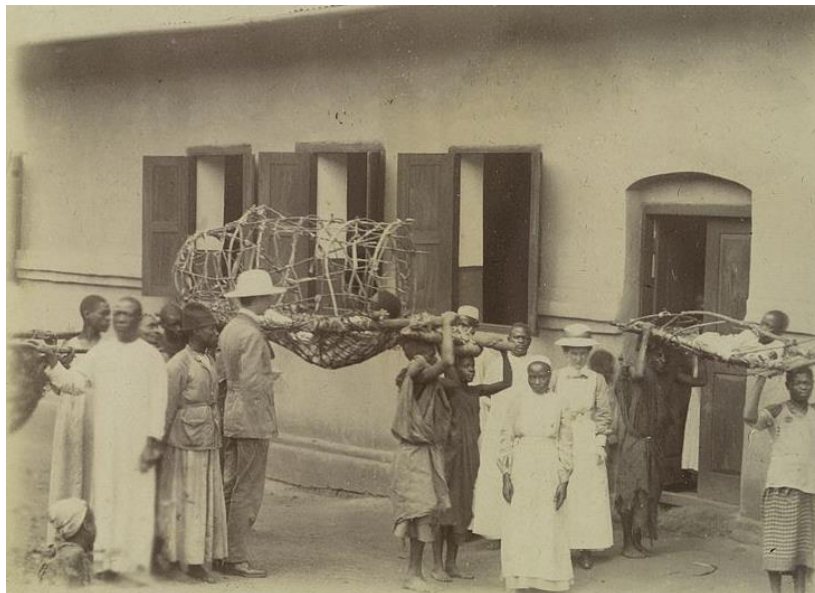
Early colonial medicine focused intently on the consolidation of white power, with outbreaks of plague legitimizing the racial segregation of urban space, and the devastating epidemics of sleeping sickness which accompanied the disruptive nature of conquest provoking a remodelling of rural societies. African populations defined as at risk of sleeping sickness were relocated by the colonial state in part at least to facilitate the extraction of tax and labour. Colonial governments were concerned that epidemics of communicable disease would reduce the size of the working and taxpaying population. But, in addition, sleeping sickness outbreaks often occurred on islands and lakeshores that were remote from colonial control.



Smallpox vaccination in colonial Kenya

Source: [Commons Wikimedia](#).

This forced the inhabitants of such environments to move to villages near major roads to ensure that they could be made to work for the colonial economy and pay taxes to sustain the administration. Coercion also characterized controls against plague infection, the provision of mass inoculation against diseases such as smallpox, as depicted in the photo above, and campaigns against syphilis, the most common sexually-transmitted infection of the period. The first decades of the 20th century featured population decline of such apparent severity that extreme measures appeared justified. It seems likely that basic sanitation and vaccinations had immediate beneficial effects on life expectancy. In the longer-term, medical interventions that were commonly punitive or unexplained appear to have contributed to doubts within indigenous society about whether the intent behind western biomedicine was benign. This early experience of aggressive western medicine may explain why medical authorities in later periods often complained of African societies' lack of trust in, and incomplete compliance with, health interventions.



Patients arriving at Mengo Missionary Hospital, Uganda.

Source: [Commons Wikimedia](#).

In the early colonial period, missionary medicine provided the bulk of African healthcare in hospitals and dispensaries. The photo above shows the arrival of patients, who had often been carried over long distances, at one of Uganda's first mission hospitals in Uganda. Indeed, Christian missionary societies invested substantially into African healthcare long before the colonial state. By 1925, Protestant missions alone ran 116 hospitals and 366 dispensaries, treating about 660,000 African patients. Medical missionaries viewed the hospital as an ideal opportunity to engage with a captive audience, a chance to demonstrate Christianity's caring, and occasionally miraculous, healing power. Christian symbolism in missionary medical activities, including blessing of the sick, sign of the cross, prayers and the social support available in missions may have aligned Christian mission practices more closely with African traditional therapeutic systems, which understood disease as signs of individual and community imbalance which could be most effectively treated by including the entire social body, as suggested by the Congolese sculpture above.

More broadly, missionary healthcare was a means of inculcating Christian morality within the household. In the early colonial period medical missionaries, convinced that population decline was due above all to Africans' sexual immorality, placed the prevention and treatment of sexually-transmitted infections at the heart of their endeavours. By the 1930s, belatedly recognizing the scale of the misdiagnosis on which previous campaigns against syphilis had rested, missionary medicine had turned towards a focus on maternal and infant health, which it would continue to dominate for decades.

5. Later-colonial rule

In the period between the First and Second World Wars a major change in medical provision occurred. Healthcare was gradually secularized, as the capacity and ambition of the colonial state expanded. From the 1930s onwards the colonial state increasingly invested into the provision of African mass healthcare. This involved both an expansion of curative provision, and a refocusing of preventive healthcare. While investment in sanitation and vaccination continued, new energy was devoted to efforts to affect popular understanding of disease transmission and avoidance. These would, however, have limited effect until healthcare systems were substantially Africanized in the later colonial period, as African personnel proved better able to translate medical concepts into local idioms.

In the 1940s and 1950s the curative power of colonial healthcare was transformed. The frequency with which Africans engaged with biomedical care increased enormously, partly because of major investment in medical training, institutions, and staffing, but also because the curative capacity of western biomedicine was transformed. The introduction in the 1940s of new antimalarials, like chloroquine, and antibiotics, such as penicillin, underpinned a substantial fall in mortality, particularly for infants and younger children, and a sharp reduction in the average length of stay in hospital, permitting a dramatic rise in the number of patients each unit could treat.

The impact of those medical advances can be best studied when observing disease patterns over time. Table 2 shows the frequencies of the most commonly diagnosed diseases at a mission hospital in rural Uganda during the early and mid-20th century. Diseases like syphilis and tropical ulcer had required very long periods of painful, and often unsuccessful, hospital treatment during the early decades of the 20th century. From the late 1940s, as penicillin was introduced, patients admitted with these conditions experienced almost miraculous cures. For many diseases, rapid cures meant they featured less prominently in hospital over time. Table 2 illustrates a pronounced relative decline in the hospitalisation of patients with skin and sexually-transmitted diseases between from 1940s that could be treated with antibiotics. For other diseases which were very common, but had previously been expensive or impossible to treat, such as malaria and tuberculosis, the introduction of effective and affordable medications stimulated a substantial rise in hospital admission (see Table 2). While colonial medicine improved over time in terms of its effectiveness, it is important to note that its early focus on communicable disease – conditions that could increase rapidly in prevalence and potentially

infect functionaries of the colonial state – was sustained through to independence. With few exceptions, non-communicable conditions such as cancer and heart disease, were given less attention than they merited.

Table 2: Disease incidence (%) among in-patients at Toro hospital in Uganda, 1908-70

Disease category	1908-19	1920-29	1930-39	1940-49	1964-70	Examples
Skin diseases	14.1	12.9	17.2	8.2	2.4	Ulcers, Sores, Abscesses
Sexually transmitted inf.	11.8	20.1	10.8	4.1	0.7	Syphilis, Gonorrhoea
Respiratory diseases	9.1	8.3	9.6	11.6	17.2	Pneumonia, Bronchitis
Infectious and parasitic	8.0	9.9	8.3	5.5	13.4	Influenza, Measles, TB
Malaria	6.8	5.8	6.5	14.3	11.2	Malaria
Digestive system	6.6	4.9	4.4	2.1	3.7	Constipation, Dyspepsia
Injury	5.6	5.9	3.8	2.0	1.9	Burns, Wounds, Fractures
Gastroenteritis	4.2	1.7	2.2	3.9	14.2	Gastroenteritis, Dysentery
Genitourinary system	3.6	3.8	3.4	4.2	9.2	Urinary infection, Cystitis
Maternity complications	3.5	4.9	8.0	12.2	3.1	Incomplete abortion
Worms	1.6	2.4	6.0	11.0	4.3	Tapeworms, Roundworms

Source: Doyle, Meier zu Selhausen & Weisdorf (2020).

While these broad trends were visible universally, medical systems varied in character across the continent. For example, probably the most intrusive healthcare system in colonial-era Africa was that of the Belgian Congo, distinctive for the government’s delegation of responsibility for healthcare to corporate and missionary providers until the 1950s. Meanwhile, the French imperial system was noteworthy for its dependence on military doctors and the persistent prominence of medical campaigns against particular diseases, most notably sleeping sickness, right through to decolonization. Rather than focus on receiving patients who chose to seek treatment for a range of maladies, French medical strategy instead focused on trying to cure a small number of illnesses at any one time. Medical teams moved around from village to village, testing and treating an entire community for one disease, and then leaving that area without medical provision for perhaps six months until it was time for a new campaign. This prioritization of mobile diagnosis and intense treatment of high-profile ailments reached a high point with the programme against sleeping sickness. In 1937 alone, almost 600,000 injections were given in French Equatorial Africa against sleeping sickness. While these kinds of vertical campaigns could also be found in British colonies, over time the trend was towards the development of a pyramidal referral system. With this approach the entire population should in theory have access to local, basic healthcare, often in the form of a dispensary. Complicated cases would be referred upwards to larger hospitals with more specialized staff and equipment.

During the era of segregation and Apartheid in South Africa medicine played a key role in sustaining an economy based on cheap black labour. In the mining industry, for example, cramped living conditions, inadequate food, and poor ventilation resulted in shockingly high levels of illness and mortality, particularly due to respiratory disease. When mine owners were informed of the costs of improving miners’ working and domestic environments, they chose instead to create a laboratory for the development of a pneumonia vaccine. This was 30 times

cheaper, albeit completely unsuccessful. Medical concerns that vaccine research would not address underlying issues were in turn effectively silenced by the categorization of the migrant labourer as ‘the tropical worker’. Mine owners established the South African Institute for Medical Research, funding research which stigmatised Central African migrants as being biologically weak. The worker, not the working environment, was to blame for death rates exceeding 10 percent per annum.

All medical systems involve a compromise between cost and efficacy, and between the breadth and depth of patient engagement, and those of colonial Africa were certainly no exception. That the medical institutions of the Belgian Congo were so frequently targeted during the conflicts of the 1960s is perhaps unsurprising given the striking slowness of the Africanization of the workforce within both mission and state healthcare systems as well as hospitals’ and dispensaries’ enduring association with the “civilizing mission” and extractive capital in the form of plantation and mining corporations. Medicine in the Congo had often been presented as an example of European technological superiority and moral generosity and guidance. Meanwhile, healthcare had been used to aggressively monitor and transform Africans’ lives, particularly through maternity clinics (see photo below) and within mining communities. The vertical French system disadvantaged those who fell ill with the ‘wrong’ diseases or at the wrong time – many communities had very limited access to local healthcare in the months between each visit by mobile clinics, and a system that prioritized some diseases inevitably under-resourced treatment for others.



Baby clinic Leopoldville, Belgian Congo

Source: [Manchester University Press Open Hive](#).

The British pyramidal system in theory ensured that most people could access basic, local healthcare, and that dispensary staff would refer complicated cases upwards, to health centres or hospitals. In practice, however, such a model relied heavily on the diagnostic capacity of the

least-qualified staff, and, perhaps unsurprisingly, saw its referral hospitals swamped with patients who sought direct access to the highest-quality care. South Africa's segregationist healthcare racially discriminated against African workers in ways which saved employers money in the short term, but at the cost of workers' health and long-term economic growth. Preferring to dismiss employees who fell sick instead of improving unhealthy working and living conditions, treating workers as disposable and replaceable, ultimately contributed to the low productivity and antagonistic labour relations that undermined Apartheid.

6. Early Independence

Across the continent in the age of decolonization nationalist politicians promised that independence would permit the removal of the gross health inequities which had characterized colonial rule. Given the prominence of doctors within many nationalist movements, it is perhaps unsurprising that substantial investment in healthcare did in fact ensue in most former colonies. In the first six years of independence in Ghana, for example, the number of health centres quadrupled and doctors and nurses (depicted in the photo below), often presented as highly-trained symbols of the new nation's progressivism, trebled.



Nurse Training in Ghana, 1957

Source: [Commons Wikimedia](#).

Yet within this broad trend, healthcare expansion took several distinct forms. Some newly-independent countries like Uganda sought to bring high-quality healthcare to all geographical regions, by ensuring that each district would have its own referral hospital. In others, such as Tanzania, policy sought to ensure that every village possessed effective basic healthcare provision. Such strategic or ideological variation did result in substantial structural divergence, yet in all cases the redistribution of investment and personnel towards rural communities was limited by the concentration of resources in the capitals of these new nations. The development

of medical schools, the establishment of research institutes, and the commitment to world-class provision created centralizing forces which deepened the advantages enjoyed by urban populations under colonial rule. Uganda's flagship national hospital, Mulago, received 60 percent of the health budget in 1964. Even in egalitarian Tanzania the doctor-to-patient ratio in 1967 was 150 times higher in urban centres compared to rural areas. In 1971, rural Tanzanian health centres received only 4 percent of the national health budget. Despite these divergent approaches, and structural imbalances, the first decade of independence typically brought substantial improvements in life expectancy. In part this simply reflected a major upwards shift in the numbers of patients treated, as new medical units were established and Africanization programmes improved nurse-to-patient and, more slowly, doctor-to-patient ratios. This broadening of access to treatment was typically matched by an expansion in preventive healthcare, particularly through vaccination programmes against common childhood diseases such as measles and polio.

7. Later independence

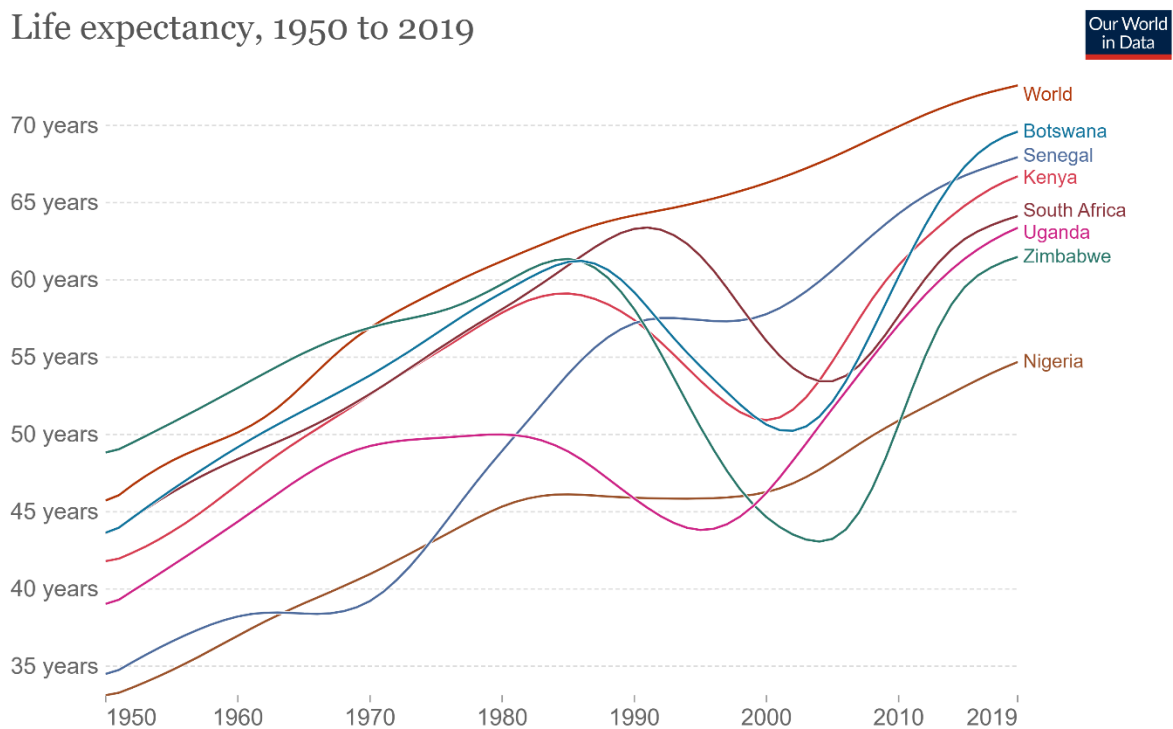
The progress that had characterized most early independence-era health programmes faltered during the 1970s. In reality, several countries had fallen behind during the 1960s. Often this was due to civil war, as state revenues reduced and were diverted from health and education increasingly to military ends. In addition, in such situations insecurity and underfunding refocused medical systems on emergency care and, generally unsuccessful, attempts to slow the emigration of healthcare personnel. For example, in the Democratic Republic of Congo, long-lasting president Mobutu Sese Seko's (1965-1997) mismanagement saw the number of hospital beds almost halve in the first decade of independence. In the decades that followed civil conflict grew more frequent and longer-lasting. Angola's civil war, which lasted from 1975 until 2002, saw one third of the population displaced, and two-thirds of medical facilities destroyed. The number of doctors per 1,000 people fell threefold from 0.12 in 1970 to 0.04 in 1990. In southern Sudan not one single doctor was practicing in 1983. In 2016 alone, 18 African countries experienced some form of civil war, with tragic health consequences, particularly for the continent's 12.4 million internally displaced persons.

Even more universal was a slowdown in economic growth and an increase in income inequality. Even Nigeria, which saw the value of its exports increase elevenfold between 1960 and 1990 due to the discovery of crude oil, experienced deepening poverty. However, oil production skewed the value of Nigeria's currency to such a degree that its agriculture and manufacturing sectors, the main source of income for the great majority of the population, became profoundly uncompetitive. As a result, official figures reported that the proportion of the population living in poverty rose from 15 percent in 1960 to 43 percent in 1992. State investment in Nigeria's health system was reduced, reaching a mere 1 percent of all government expenditure in 1990. Accordingly, Nigerian health indicators stagnated. Figure 3 shows that between 1980 and 2000, life expectancy only rose by one single year to 46 years while infant mortality fell marginally from 134 to 119 per 1,000.

The 1970s and 1980s were not lost decades everywhere. In Senegal, as shown in Figure 3 life expectancy during this period rose from 39 to 57 years, and infant mortality halved. To a large degree this reflected Senegal’s commitment to the principles of the *Alma Ata Declaration* of 1978. This declaration became so influential because the World Health Organization accepted its key principle, that the provision of universal basic healthcare was the approach which would lead to ‘Health For All’. Alma Ata discussed health in terms of wellbeing rather than the absence of disease, defined it as a human right and a socio-economic as well as a medical issue, and advocated the reorganization of medical systems around the principles of comprehensive primary healthcare. In Senegal, aligning with the WHO’s new strategy resulted in a gradual refocusing of rural medical provision around public health, and a shift in resources from hospitals to village health posts under the supervision of a health centre. By 1990 a third of the population benefited from an effective system of Universal Health Coverage.

For most African countries, lying somewhere between the extremes of Nigerian underperformance and Senegalese overperformance (Figure 3), the situation in the mid-1980s was one of faltering gains and weakening investment. At this point, two new factors profoundly reshaped the medical environment: AIDS and SAPs (structural adjustment programmes).

Figure 3: Life expectancy in select African countries 1950-2019



Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019) OurWorldInData.org/life-expectancy • CC BY
 Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

Source: Roser, Ortiz-Ospina & Ritchie (2013), [Our World in Data](https://ourworldindata.org).

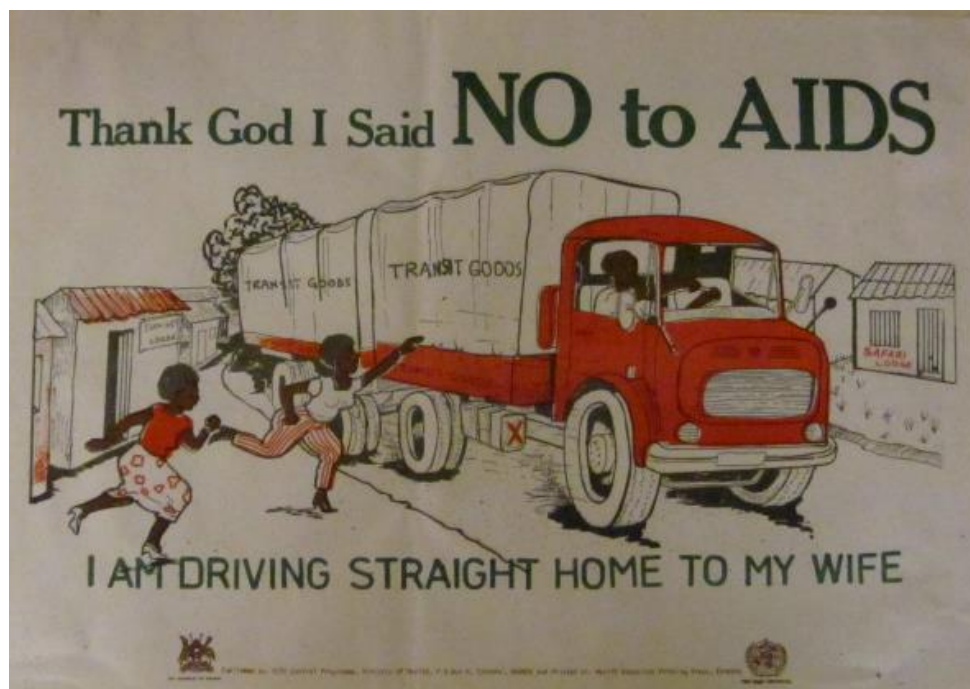
In 1983, the first cases of AIDS were recognized in Uganda. AIDS is a disease which is almost always fatal without treatment, and is spread when people are exposed to bodily fluids containing the HIV virus, through for example sex or blood transfusion. By the mid-1980s a third of pregnant women in Uganda's capital Kampala tested positive for HIV. By the early 1990s the epicentre of the pandemic shifted southwards. In 2002, it was estimated that 36 percent of sexually-active adults in Botswana were infected with HIV. At that time a 15 year old boy in that country had an 80 percent chance that his eventual cause of death would be AIDS. As can be seen from Figure 3, across southern Africa (Botswana, South Africa, Zimbabwe), all the hard-won gains in life expectancy achieved since 1960 were lost within a few years. AIDS was a particularly devastating disease because it primarily affected young adults in their peak productive and reproductive years. Affected families often fell into deep poverty as they not only lost a prime income-earner, but also took on long-term costs to care for the sick and the orphaned children left behind. Across the continent, AIDS was estimated to have killed well over 20 million people by 2020, but the impact of the pandemic was very uneven. North and West Africa were affected only to a limited degree – in Niger 48,000 people carried the virus in 2017, a prevalence rate of 0.4 percent. In that same year, by contrast, 7.5 million people in South Africa were HIV positive.

South Africa suffered so severely in part because of the legacies of Apartheid. A sexual culture reshaped by labour migration and gender and racial inequalities facilitated the rapid spread of HIV. Africans' rural economies had been structurally undermined to force male labourers to accept underpaid urban employment, while Apartheid rules aimed to prevent men from bringing their families to the cities with them. This fracturing of family life underpinned the world's worst AIDS epidemic. The National Party ignored AIDS as a disease of immorality and Nelson Mandela balked at the scale of HIV control, fearing that addressing AIDS adequately would mean the ANC would be unable to deliver its commitments to racial justice; his successor, Thabo Mbeki, was repelled by analyses of HIV causation which seemed to reinforce tropes of African hypersexuality, and attributed AIDS to structural inequities rather than HIV infection.

This approach was particularly unfortunate given that effective antiretroviral treatments became affordable during Mbeki's presidency. Antiretrovirals are not a cure for AIDS, but they stop the virus from replicating in a person's body, enabling their immune system to repair itself, greatly increasing an infected person's life expectancy. In 1996 trials established that a combination of three drugs dramatically reduced the amount of virus in people's bodies, but the cost was prohibitive for people living in the developing world. Popular protest challenged the moral basis for pharmaceutical companies' profit-making from AIDS, and led to a huge reduction in the cost of drugs. Beginning in 2002, South Africa gradually developed the largest antiretroviral treatment (ART) programme in the world. By 2017, it was costing the government \$1.5 billion annually. The economic and social benefits of the programme were clear, however, as only 0.9 percent of HIV positive South Africans died of AIDS in 2020.

Many African countries had struggled to confront a disease which required their governments to discuss topics typically excluded from public discourse. One early exception was Uganda,

whose new government in 1986 regarded AIDS as a national emergency and worked closely with civil society organizations to engender sexual behavioural change. In Uganda, HIV featured prominently in presidential speeches, religious sermons, civil society activism, and above all in public health information posters, as shown below. HIV prevalence rates quickly fell as Ugandans' use of condoms outside marriage doubled between 1995 and 2000, and girls' reported age of first sexual contact rose from 15 to 17.3 years during the 1990s. Senegal, meanwhile, rapidly integrated HIV prevention into its effective primary healthcare system, building on an already well-established sexually-transmitted infections programme and investing heavily in public education and coordination with community leaders. While Uganda's achievement was in bringing an explosive epidemic to manageable levels, Senegal's was to prevent AIDS from ever getting out of control.



AIDS prevention poster from Uganda

Source: [Commons Wikimedia](#).

In the same year that Africa's HIV epidemic was first detected, Ghana entered into Structural Adjustment. SAPs were developed by major global lenders (the International Monetary Fund and World Bank) in the early 1980s with the intention of increasing developing economies' competitiveness, and ensuring that their exports would cover the cost of their imports. In order to reduce the enormous debts that had been accumulated by governments across the developing world, the lenders offered additional loans, with strict conditions. Governments were required to accept the privatization of state-owned industries, facilitate international investment and competition, and reduce expenditure on the civil service and public services. Initially confined to countries like Ghana and Uganda whose economies were in a state of collapse, SAPs were rolled out across the continent in the later 1990s. Typically SAPs involved an immediate shift in the funding models which underpinned Africa's healthcare systems. Gone was the nationalist-era commitment to free healthcare as a right of citizenship. Instead, patients were

required to shoulder some or all of the direct costs of their treatment in the form of user fees that patients had to pay for medical consultations and drugs. Where the state's provision of healthcare had effectively broken down, as in Ghana, where collapsing budgets meant that staff were unpaid and medications became unavailable, user fees could facilitate a gradual recovery in public healthcare. But in many countries the poor were disadvantaged by a shift from a semi-functioning free system to a user fee model. In Zambia, user fees in urban health centres saw attendances fall by four-fifths. SAPs, by requiring governments to reduce their expenditure, also contributed to a relative decline in medical training.

By 2004, Africa made up a seventh of the global population and accounted for a quarter of the world's disease burden, but only one healthcare worker in 77 was based on the continent. And of these, an ever-growing proportion worked in the private sector, catering primarily for Africa's small middle class. Structural Adjustment, by accelerating the marketization of healthcare, prompted a shift of personnel from state to private practice. In Kenya, the number of private hospitals, which had grown steadily since the 1960s, doubled between 1993 and 1994. For the African poor the impact of liberalization was a return to traditional healers and an epidemic of self-medication, dependent on a mushrooming number of untrained pharmaceutical retailers.

8. The new millennium: successes and emerging challenges

The history of health in Africa since 2000 has to some degree been shaped by a reaction against the twin crises of AIDS and SAPs. Inequitable access to AIDS treatments brought a renewed moral commitment to affordable healthcare for the developing world. Awareness of the marginalization of the poor within marketized economies influenced the development of the Millennium and then the Sustainable Development Goals set by the United Nations, which highlighted the weakening of public health within Africa in particular. The evolving, imprecise concept of Global Health, of a shared responsibility for a basic standard of wellbeing for all, inspired an enormous uptick in health-related aid transfers to the African continent. Most significantly, the Global Fund, instituted in 2002 by a coalition of the UN, donor nations, and charities to focus on HIV, malaria, and tuberculosis, had by 2019 committed to a total expenditure of US\$31 billion. In addition, the American government's PEPFAR invested US\$90 billion in AIDS prevention and treatment campaigns between 2003 and 2019. These targeted health commitments have achieved impressive results. Malaria mortality, for example, fell by 45 percent in countries in which the Global Fund operates (shown in photo action below), and recent successes with vaccine trials hold out the hope that further improvements lie ahead. Meanwhile childhood immunization was re-energized, resulting in the eradication of polio and enormous declines in cases of measles and meningitis across the continent.



Donor-funded malaria control in Uganda

Source: [Commons Wikimedia](#).

There are, inevitably, concerns about the imbalances which such transformative funding created. In a number of African countries the combined budgets of the Global Fund and PEPFAR exceeded those of national Ministries of Health. The shift towards ‘projectification’ brought a healthcare arena dominated by fixed-term interventions, focused on specific medical conditions within narrow geographical boundaries, and displacing personnel from governmental institutions. The intense focus on infectious disease to some degree reflected Northern governments’ concerns about the biosecurity of their national borders, and has hampered recognition of the reality that Africans suffer a double burden of communicable *and* non-communicable diseases. Across the continent, increased longevity and dietary change has brought increased incidence of conditions such as diabetes, heart disease, and hypertension, which in 2019 were responsible for almost as many deaths as AIDS, malaria, and tuberculosis combined (14.9 percent of total deaths compared to 15.5 percent). In that year non-communicable diseases such as these accounted for 36 percent of all deaths in sub-Saharan Africa, up from 24 percent in 2000. Of course, this redistribution in cause of death was not only because diseases like diabetes were becoming more common in Africa, but also because of improved prevention and treatment for conditions like AIDS and malaria.

Moreover, for countries such as Ghana inward aid has enabled the reconstruction of entire public health systems, and a very substantial expansion of specialist training. Uganda in particular has drawn on international recognition of its success in combating AIDS to influence the development of global health policies. In addition, the era of ‘projectification’ has coincided with a new interest in ‘health for all’. Pioneered by countries such as Ghana and Rwanda, community-based health insurance has revived the goal of Universal Health Coverage. By 2012, 92 percent of Rwandans had joined its contributory insurance scheme, which promised to eradicate the impoverishment which out-of-pocket user fees always risked, and reduced the marginalization of the poor through subsidized subscription rates. Other, similar experiments have struggled to retain members and limit demand. The ambition that marked the first years

of independence has been partially renewed, but the fragility of healthcare systems to shocks such as Ebola and the prioritization of national self-interest over Global Health during the COVID-19 pandemic must temper optimism.

9. Conclusion

The centrality of health within African history is clear. In economic terms, precolonial African societies typically managed the risks involved in agriculture and trade through healing rituals. European empires' medical policies were intimately connected to core concerns relating to the colonial economy, such as productivity, labour supply, and tax revenue. The ebb and flow of postcolonial governments' attitude to public investment can be traced through their fluctuating health strategies. Concerns about disease have also been at the heart of religious life – from pre-colonial drums of affliction, through missionary medicine, to contemporary healing churches – and politics. Epidemics have long been viewed on the continent as both a threat to stability and an opportunity for empowerment.

This was seen clearly during COVID when the pandemic was used as a justification to close down opposition politics in several countries. COVID has also reinforced global health inequities, most clearly in regards to access to vaccinations, is likely to have heightened mortality due to worsening poverty and interrupted access to medical treatment for other conditions. Many African countries appear to have outperformed richer nations in terms of the development of a coherent strategy against coronavirus and popular acceptance of necessary restrictions. But data are so far lacking on whether such achievements translated into substantially lower excess mortality. Nonetheless, there are many other positives on which to focus, with the recent introduction of an effective vaccine against childhood malaria, the rapid recovery of life expectancies due to AIDS drugs, as shown in Figure 3, and substantial increases in health expenditure across the continent since 2000. How the continent will adapt economically to the population growth and ageing that are anticipated in decades to come is a fascinating question. It can be hoped that the history of resilience and adaptation to new challenges will provide a legacy on which African states can draw.

Study questions

1. Why did Africa, the cradle of humanity, have lower population density than other continents in recent millennia?
2. How did the health priorities of pre-colonial African communities differ from those of colonial states?
3. How have health policies been affected by economic strategies over the past century?
4. Which factors were most significant in reducing African mortality during the colonial period?
5. How do patterns of disease and mortality differ in Africa today compared to the global north?

Suggested readings

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