

Chapter 12

Health and Diseases in Africa

Benjamin Anaemene

Introduction

One conspicuous development challenge in Africa is the health and disease burden. It is undeniable that Africa faces more health challenges when compared with other regions of the world. Of greater concern is the fact that African health indicators lag behind those of the rest of the world including the poor countries of South Asia and South East Asia that were lagging behind Africa when measured on these metrics a few decades ago (KPMG Africa 2012). According to the World Health Statistics (WHO 2015), life expectancy for the African region is 58 years, which is lower than the 68 years for the South East Asia region. Infant mortality and under-five mortality are 59.9 and 90.1 respectively (per 1000 live births) which are also higher than the figures for South East Asia – (37.3 and 46.9 respectively).

Much of this gap, which has widened since the 1980s, is the consequence of emerging and re-emerging diseases, such as HIV and Aids, tuberculosis, malaria, Ebola, hepatitis, meningitis, sleeping sickness, SARS and others. HIV and Aids, in particular, has affected Africa more than any other region on earth. Yet another concern is that Africa bears a significant proportion of the global burden of chronic diseases (Zondi 2010). The World Health Organization has projected that by 2020 the continent will experience the highest increase in death rates from cardiovascular disease, cancer, respiratory disease and diabetes (WHO 2005). This state of affairs has been exacerbated by recurring natural disasters, poor economic performance and military conflicts. All these problems have posed serious development challenges for Africa.

Health and disease are related concepts. Yet, health is not synonymous with disease. Disease refers to “any deviation from or interruption of the normal structure or function of any part, organ or system (or combination thereof) of the body that is

B. Anaemene (✉)
Redeemer's University, Ede, Nigeria
e-mail: anaemeneb@run.edu.ng

manifested by a characteristics set of symptoms and signs” (*Dorland’s Illustrated Medical Dictionary 1994*), whereas health refers to “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (WHO 1948, 1). Health is a more encompassing phenomenon, as it emphasizes the significance of social welfare of populations and not merely the medicalization of diseases and allows for the consideration of the complex set of cultural, social political and environmental factors as well as biological and genetic components that influence the health and well-being of populations. Since health is a state of complete, physical, mental and social well-being of an individual, it is important in the development of every society (US National Intelligence Council 2008). The importance of health as a developmental issue is better understood in terms of the components of good health. These include peace, freedom from violence, freedom from pain, discomfort, boredom and stress, absence of illness, infirmity and diseases, balanced nutrition, qualitative and quantitative housing, water supply; good working and living conditions, access to educational resources (Bircher and Kuravilla 2014). Health and wellbeing also require social justice, a stable ecosystem and sustainable resources.

Several scholars have argued that there is a strong and reciprocal relationship between health and development. The WHO has also attested to the linkage between health and development, when it stressed:

Any social and economic development program is primarily based on the availability and potential of human capital which is needed for developing various sectors of a country’s economy; its industry and its agriculture productivity depends to a considerable extent on the health and wellbeing of the labour force, because in order to mobilise human resources, there must exist the precondition that they are physically fit to be mobilised. Ill health, undernourishment, poor environmental conditions and debility affect the development process (WHO para doc: AS/EC/TR. 22).

Improved health has been one of the main benefits of development. Fogel (1991) argued that Britain’s early industrial breakthrough was largely due to the mastering of high mortality and morbidity as a result of improvements in nutritional status and the conquest of many contagious diseases from the late eighteenth century onwards. Similarly, it has been estimated that between 1965 and 1990, about 30 to 50% of overall economic growth was actually attributable to investments made in the health sector. Good health strengthens development because it increases productivity. It also strengthens people’s capabilities, increases savings and investments, and promotes positive behavior.

Conversely, economic development can also facilitate financing of environmental, health and sanitation campaigns for education, immunization and screening (Mills and Cult 2004). Moreover, social development, especially in the field of education, has been associated with improved health status through improved nutrition and reproductive health. However, it has been argued that macroeconomic changes may not filter down to benefit the whole population. Scholars have shown that many sound policies in economic terms, notably structural adjustment policies, have had devastating human effects in increasing poverty and maladministration of resources (Muiu 2002).

Despite the recognition of these health challenges in Africa, an understanding about what must be done to improve the health and wellbeing of Africans remains a largely unfinished agenda in today's development process. This chapter therefore analyses the health and disease trajectories in Africa with a view to demonstrating and documenting their development implications. It also examines the various global and regional health initiatives adopted over time for improved health in Africa, as well as interrogates the constraints for achieving health and development in Africa. The study also proffers solutions for improved performance.

Historicizing Health and Disease in Africa

Three important periods are discernible in the history of health and disease in Africa. First is the Paleolithic period, which began about 2 million years ago up to about 8000 BC (Adegbulu and Faseke 2014). During this period, African populations were hunter-gatherers; depending for their subsistence on hunting wild animals and birds, fishing and collecting wild fruits, nuts and berries. These hunting and gathering societies were known for their small size and their mobility. Available evidence suggests that these societies had few epidemic diseases largely because of their nomadic life (Mckeown 1988). Second, is the Neolithic period, which began with the invention of agriculture (Adegbulu and Faseke 2014). The domestication of animals and growing of crops were major steps in creating settled agricultural societies. Domestication meant more contact between humans and cattle, chickens and goats, resulting in increasing vulnerability to animal diseases. Viruses that previously affected by animals were given multiple opportunities to mutate and transition from being purely animal diseases to human ones. The practice of agriculture also changed the disease environment in Africa through the changes associated with the clearing of land and the cultivation of wild grains in a single area, creating places for vectors to breed and places for people to be exposed to those vectors (Mckeown 1988). Agriculture brought about the development of permanent shelters. Thus, with the gathering of people in a particular location it can be said that the agricultural societies experienced more endemic contagious diseases than the hunter-gathering societies.

Another way that the disease environment changed in Africa was through contact with the outside world. Africa has had a long history of intercontinental exchange with Europe and Asia including the exchange of disease. On the west coast of Africa, there was regular and sustained contact with Europeans from the 1500s for the purpose of trade. Similarly, the east coast was also a destination for traders and travelers from the Middle East, Oman and India. With this long-standing and continuous exchange in commodities and culture, no doubt diseases were transmitted as well. As Patterson (1981) states, "these early contacts almost certainly introduced some of the major infections of the Eurasian land mass, such as smallpox, measles and perhaps gonorrhoea and others in pre-European times." However, early epidemics were probably milder than those that came in the nineteenth and twentieth

centuries, as low population densities and limited mobility probably made most outbreaks local and sporadic.

It must be emphasized that Africans in the pre-colonial period remained much more isolated in general compared to the colonial and postcolonial eras and as a corollary epidemics were likely less destructive in pre-colonial times and the human capacity to transmit these diseases across long distances was low due to poor transportation methods and generally low traffic between points (Heaton 2005). This trend changed with the expansion of roads and rail in the late nineteenth and early twentieth century with the attendant growth of urbanization. The development of urban areas and new modes of transportation contributed to the spread of European diseases into Africa.

There were pre-existing strategies and practices that Africans had adapted to guard against certain diseases. In the pre-colonial era, most communities had some form of organized social structure, an important component of which was the health care system. Attention for the provision of personal health usually centered on individuals with expertise in preventive, curative and rehabilitative medicine. Some of these traditional medicine practitioners specialized in midwifery (traditional birth attendants), treatment of psychiatric disorders, orthopedics among others. Others were generalists to whom clients turn for a variety of ailments ranging from infertility and impotence to persistent fever, loss of weight and chronic ulcers. The indigenous healers have adopted two major approaches to healing, namely, the pragmatic and the symbolic aspects (Barnett 2000). The pragmatic aspect involves examination of patients in order to diagnose, treat and prevent disease using their clinical judgment. On the other hand, the symbolic aspect is used when the healers attribute illness to societal imbalances rather than to biological causes. Although these pre-colonial communities were not conversant with modern germ theory of disease causation or the fundamental scientific basis of such complex issues like genetics and immunology, they established and were governed by set of rules and regulations (Health Reform Foundation of Nigeria 2006).

Unfortunately and inevitably, some of the socio-cultural practices and taboos were injurious to personal health – such as the practice of female circumcision and the use of non-sterile instruments. Uninformed postnatal care contributed to high maternal mortality while high infant mortality rates induced families to have more children to make up for the attendant wastages. The contact with Europeans led to the introduction of modern medicine in Africa. It delivered modern medicine via two main factors. Foremost is the role of Christian missionaries from Europe and North America, who took the gospel to Africa along with modern medicine. The missionaries used medical care both as a reward for acceptance of the new faith and as an incentive for the doubtful (Mburu 1981). Second, the colonization of Africa by European countries was an important factor in the emergence of and development of modern medicine in Africa.

The imposition of European colonial rule and African responses to it provoked important changes in the disease burdens of African peoples. It will be recalled that after the establishment of colonial rule, the Europeans extracted resources and labor to boost their metropolitan economies. In many of the new colonies, the Europeans

forced their subjects to gather wild rubber or to work on plantations or in mines. These working conditions as well as African flight from colonial labor demands heightened colonial subjects' exposure to infectious disease. In terms of health interventions, until the 1920s colonial authorities confined their health services to settler populations and combating epidemics of infectious and tropical disease that threatened native labor and economic productivity (Lyons 1992). Colonial administrations gave more attention after the First World War but were particularly concerned with the reproduction of a healthy workforce, because the greater exposure to disease and poor nutrition of populations under colonial rule became apparent in high mortality and low birth rates. In the late 1920s and in the 1930s, some progressive voices called for improvement in socioeconomic conditions and for a focus on African welfare. However, these initiatives were not sustained due to lack of political will. In the 1940s, particularly after the Second World War, the development of vaccinations and antibiotics as well as the increasing agitation of nationalist movements for better living standards and for political participation, led to efforts by colonial administrations to extend some health care services to broader populations (Packard 1997). However, interventions to improve living conditions remained patchy, unfinished and focused mainly on political vocal groups, such as the nationalist class and the urban wage laborers.

The attainment of independence by African countries coincided with the period when long-term planning and state direction was acknowledged as the most promising route to modernization and development. Frederick Cooper (2002) argues that "no word captures the hopes and ambitions of Africa's leaders, its educated populations and many of its farmers and workers in the post-war decades better than development." As a result, the first generation of African governments was committed to fostering a developmental state (Nkandiwire 2001). During this period, the African developmental state sought to intervene to accumulate surpluses from the agricultural sector and use them to fund import substitution-driven industrialization (Saul and Leys 1999). This accounted for the rapid annual growth rates experienced by African countries during this period. As Thandika Nkandiwire (2001) rightly argued, in the period between 1967 and 1980, no fewer than 10 African countries enjoyed annual growth rates of more than 6%, with Kenya and Nigeria, for example, outperforming Malaysia and Indonesia (Nkandiwire 2001).

Similarly, available evidence also indicates greater improvements in Africa's health during the first decades of independence, suggesting that African crises in health are of more recent origin. Interestingly, between 1960 and 1980, most African countries made significant advances in extending health care coverage. In addition, larger scale campaigns were launched against specific infectious diseases, health facilities were expanded and there was a significant increase in the number of trained health workers. For instance, in 1960 tropical Africa had one qualified doctor for every 50,000 people; by 1980, this has become one for every 20,000 (Illiffe 1995).

The period of the developmentalist state was ephemeral. The auspicious beginning in terms of health care delivery was halted by the global economic recession in the 1980s. It would be recalled that in the heyday of economic growth, most African countries obtained loans from Western commercial banks. Unfortunately, the economic

crisis in the 1980s made it virtually impossible for most African countries to redeem their debts. It was in the bid to contain the crisis in the economy that most African countries began to obtain loans from the international capital markets (World Bank and IMF). This led to the introduction of Structural Adjustment Programs (SAPs), formulated to ensure that the developing countries including Africa that were entangled in external indebtedness were able to save funds towards fulfilling their obligations.

The implementation of the SAP with its harsh conditionality negatively affected the health sector and the health status of Africans (Loewenson 1993). This included a shift from direct provisioning by government, which essentially entails greater reliance on private voluntary services, instituting a number of financial measures like introduction of user fees and contracting out to the private sector as a way of improving efficiency and patient satisfaction. As a corollary, government expenditure on health in sub-Saharan Africa declined from an average of 6.2% of GDP in 1972, and 5.3% of GDP in 1982 to 1.6% in 1995 (World Bank 2000). Consequently, health care systems became dysfunctional across the continent creating near catastrophic conditions. More than 200 million Africans have no access to health services because of the near collapse of acute hospital services, characterized by frequent drug shortages, run-down physical structures and the efflux of highly skilled but demotivated medical specialists. This has left diseases to rage unchecked. The successes recorded during the early 1970s were followed after 1980 by a major slowdown in the decline of mortality rates. The past two decades have witnessed the emergence of new infectious diseases, Aids and Ebola, and the recrudescence of old scourges like tuberculosis and malaria as well as non-communicable diseases like diabetes, cancer, hypertension among others. Consequently, there has been an erosion of capacity in virtually all African states. State failure led to the externalization of responsibility for social services.

Exploring Global and Regional Initiatives for Addressing Africa's Health Development Challenges

This section examines the various policies and initiatives adopted over time, both at the global and international levels, geared towards addressing the health and disease burden in Africa. As shown in the discourse below the persistent health and disease burden may not be blamed on the dearth of policies or initiatives. Some selected policies and initiatives are presented in the following analysis.

Alma Ata Declaration 1978

The Alma Ata Declaration of 1978 is a health initiative developed through the efforts of the World Health Organization (WHO) and the United Nations Children Education Fund (UNICEF), which focused on primary health care. It had its

background in the problems associated with the health care systems of many developing countries, which emerged from the colonial medical services and emphasized costly high technology and curative care. It was also urban biased (Werner 1997). Another factor is the problem that arose from the implementation of the vertical health approach of international development agencies including the WHO (Magnussen et al. 2004).

In the 1950s and 1960s, vertical disease-oriented programs were the major form of cooperation targeted at eradicating specific diseases. A typical example was the WHO Global Malaria Eradication Program launched in 1955 and the Global Smallpox Eradication Program in 1959. Each disease eradication program operated autonomously with its own budget without any integration into the larger health system (Ehiri and Prowse 1999). It has been argued that although there were successes during this period, these short-term interventions were not addressing poor populations' overall disease burden. It was realized that despite the fact that one disease might be controlled or eliminated, recipients of that intervention might die of another disease or its complications (Gadomski et al. 1990). Consequently, between the late 1950s and early 1970s, the vertical health approach was subjected to serious criticism. Thus by the mid-1970s, international health agencies began to examine alternative approaches to health improvement in developing countries.

The Alma Ata Declaration called for strengthening health care infrastructure, health workers' training, redistribution of health resources to rural areas and building of existing community strengths such as traditional midwives. It also emphasized preventive health care through a focus on immunization, reproductive health, contraception, sanitation and the promotion of safe motherhood. It also encouraged community participation as the means through which public health efforts would be responsive to local needs.

It cannot be denied that some progress was made with the health services. For the first time, the needs of the larger rural population were being met and after a while people began to see the results particularly in immunization programs, diarrhea in children, malaria treatment and acute respiratory infection. In Nigeria, for instance, primary health care formed an integral part of Nigerian social and economic development. It became the first level of contact of the individual and community in the national health system thus bringing health care closer to the people and contributing the first element of a continuing health care process. However, the early advance lost momentum. The Alma Ata vision of primary health care (PHC) was criticized for being ambitious and expensive. Several forces disrupted the PHC strategy including the continuing economic recession in the 1980s, the rise of neoliberalism, market ideologies and structural adjustment policies and new epidemiological challenges like the emergence of HIV/ and Aids. It was replaced in the 1980s by selective PHC, which focused on a few cheap and effective interventions requiring little investment in infrastructure – such as oral dehydration therapy for diarrheal disease in children and growth monitoring, breast feeding and immunization programs.

Nevertheless, the Alma Ata declaration was remarkable as it was the first time the health care problems of the poorest countries were seriously taken into consideration, both health needs and development issues were strongly linked. It also marked

a paradigm shift, establishing the notion of international responsibility for health, the idea that rich countries should help poorer ones to achieve health goals.

Bamako Initiative

The Bamako Initiative (BI) was launched in 1987 in an attempt to meet the growing crisis of scarcity of drugs and reduced access to quality health care, as well as to counter the negative impact of the SAPs (WHO 1987). It was introduced against the background of the problem of financing health services experienced in the 1980s in many countries especially in Sub-Saharan Africa. Despite the fact that they accepted the core tenets of comprehensive primary health care, they were burdened by lack of resources and practical implementation strategies. In particular, many health facilities lacked the resources and supplies to function effectively. As a result, health workers were sometimes merely prescribing drugs to be bought from private outlets, usually unlicensed and unsupervised. Moreover, many patients lost confidence in the inefficient and underresourced public health facilities. All these developments, threatened to reverse the gains of the 1980s. The core challenges were to promote additional donor investment, and stop and reverse the decline of government expenditure on social spending in general and health in particular.

It was in recognition of this dismal situation that the WHO African Region in collaboration with UNICEF in September 1987 proposed measures at its annual meeting of African Ministers of Health in Bamako, Mali, for providing the necessary resources to deal decisively with the problem of health care delivery in many parts of Sub-Saharan Africa. These measures formed the basis of what has been described as the 'Bamako Initiative (BI).' The Bamako Initiative sought to accelerate and strengthen the implementation of comprehensive primary health care with the goal of achieving universal accessibility to these services. The Bamako Initiative was built on eight principles: improving PHC services for all; decentralizing management of PHC services to district level; decentralizing management of locally collected patient fees to community level; ensuring consistent fees are charged at all levels for health services, whether in hospitals, clinics or health centers; high commitment from governments to maintain and expand PHC services; national policy on essential drugs should be complementary to PHC; ensuring the poorest have access to PHC; and monitoring clear objectives for creative health services (WHO 1987).

In 1988, Nigeria adopted the Bamako Initiative as a strategy for strengthening PHC with five major components. These include community participation through a variety of local government, district and village level committees; improvement of maternal and child health (MCH) services; the provision of essential drugs, cost recovery and enhanced management, supervision and monitoring systems (Ogunbekun et al. 1996). In 1995, of the 589 local government areas in Nigeria, 53 were responding to the Bamako Initiative (Ehimwenma 1996), and by 1997 about

60 out of the 774 local governments in Nigeria covering approximately 10% of the population had adopted the Bamako Initiative (Shehu 1997).

The Bamako Initiative was not without its limitations. The application of user fees to poor households and the principles of cost recovery drew strong criticism. In most African countries where the Bamako Initiative has been deemed a success, poor people viewed price as a barrier. Consequently, a large share did not use essential health services despite exemptions and subsidies. It also gave rise to multi-drug prescribing, some of which is irrational. The initiative was donor driven with limited coverage.

World Development Report 1993

The inability of the PHC and Bamako Initiative and other international initiatives to improve access and quality of healthcare in Sub-Saharan Africa led to the search for alternatives to health policymaking (Oluwole 2008). Viewed against this background, the interest began to shift from 'Health for All' towards what became known as 'Health Sector Reform'. Andrew Green and Ann Matthias (1997) reaffirmed this when they wrote, "if primary health care was the talking point in the early 1980s, health sector reform has replaced it a decade later as the major policy thrust occupying donors." The major precursor of health sector reforms was the World Bank through its several publications particularly the 1993 World Development Report (World Bank 1993). This report demonstrated that investing in health is a prerequisite for sustained development. Another publication 'Better Health in Africa' (World Bank 1994) set forth a vision of health improvement that was achievable through health sector reform.

The United Nations Millennium Development Goals/Sustainable Development Goals

Another global initiative was the United Nations Millennium Development Goals. These goals were first agreed at a summit by virtually all leaders at the UN in 2000. The MDGs were meant as a major motivational device to increase development efforts particularly in developing countries including Africa. Three of the eight MDGs were directly related to health. These include Goal 4: Reduce child mortality, Goal 5: Improve maternal health, and Goal 6: Combat HIV/AIDS, malaria and other diseases. Other MDGs indirectly relate to health. African countries made significant progress towards achievement of MDGs, although the progress was highly variable across goals and countries. Africa for instance witnessed a marked reduction in under-five mortality rates and the maternal mortality rate has halved during this same period. There was also increased life expectancy. The shortfall in

the attainment of health MDGs is attributable to operational failures that implicate many stakeholders in Africa and in the developed rich countries. Promises of official development assistance by rich countries for instance were not kept.

In September 2015, the world unanimously declared their support for the newly adopted Sustainable Development Goals at a summit of world leaders. The newly adopted goals are much broader and comprehensive than the MDGs they replaced. Health is covered under SDG-3: 'Ensure healthy lives and promote wellbeing for all at all age', and has nine proposed targets. It has been argued that the SDGs and their new targets are windows of opportunities to accelerate the development trajectory of Africa, because many of the challenges (including health and disease) that the new goals seek to address have a particular reference to Africa. It should be noted that the 2030 Agenda, among other things: "reaffirms the importance of supporting the African Union's Agenda 2063 and the program of the New Partnership for Africa's Development (NEPAD), which are both integral to the new Agenda."

US Global Health Initiatives

African countries have also benefitted from the US global health initiatives – US President's Emergency Fund for AIDS Relief (PEPFAR), and the US President's Malaria Initiative. Presidential Emergency Plan for HIV/AIDS Relief is a 5-year bilateral commitment by the United States Government to support HIV/AIDS prevention, care and treatment programs in developing countries (Sessions *n.d.*). Apart from providing the general policy framework, the law outlines PEPFAR funding priorities. The majority of the PEPFAR resources are dedicated to focus-country programs and 12 African countries are beneficiaries. In all 15 focus countries, PEPFAR supports a comprehensive program in HIV/AIDS prevention, care and treatment, as well as limited activities in health system strengthening as it relates to HIV/AIDS monitoring and evaluation and policy reform. An assessment of the progress of PEPFAR on HIV/AIDS indicates that it has achieved encouraging results and has also made significant contributions to Nigeria's HIV response. For instance, in 2014, PEPFAR supported the following achievements in Nigeria: life-saving antiretroviral treatment (ART) for 610,599 people; testing and counselling for more than 8.6 million people; care and support for 698,408 orphans and vulnerable children affected by HIV/AIDS; and antiretroviral treatment (ART) for 55,703 pregnant women living with HIV/AIDS to reduce the risk of mother-to-child transmission (PEPFAR 2014).

In May 2009, President Barrack Obama announced the Global Health Initiative (GHI), a multi-year comprehensive effort to reduce the burden of disease and promote healthy communities and families around the world. The President's Malaria Initiative (PMI) is a core component of the GHI. The PMI was launched in June 2005 as a 5-year, \$1.2 billion initiative to rapidly scale up malaria prevention and treatment interventions and reduce related mortality by 50% in 15 high burden countries in Sub-Saharan Africa (President Malaria Initiative Nigeria 2015). With the passage

of the Lantos-Hyde Act, funding for PMI was extended to 2014 and as part of the GHI, the PMI goal was adjusted to reduce malaria-related mortality by 70% in the original 15 countries by the end of 2015. While the US assistance has been beneficial in these areas, its performance in terms of overall health impact has been limited. This is attributable to several factors, namely, poor aid harmonization, limited support for general budget support, a vertical disease approach among others.

Regional Initiatives

The AU has since its inception developed several initiatives to address the health problems in the region. In April 2001, the AU Heads of state adopted the Abuja Declaration on HIV/AIDS, Tuberculosis and other Related Infectious Diseases, pledging to make fighting against HIV/AIDS their highest priority in respect to national development plans (African Union 2001). They also pledged to set a target of allocating at least 15% of their annual budget to the improvement of the health sector. They called for international resources and collaborations between the WHO, UNAIDS, other UN and regional organizations, and monitored the implementation of the outcome of the summit. In 2006, the AU adopted the Abuja Call for Accelerated Action towards Universal Access to HIV/AIDS, Tuberculosis and Malaria Services by 2010.

Another AU health initiative was the African Health Strategy (AHS) 2007–2015, which was recently revised as African Health Strategy 2016–2030 (African Union 2016). Against the backdrop of Africa's increasing disease burden, despite good plans, strategies and progress, the African Union developed the Africa Health Strategy (AHS) 2007–2015 endorsed by the 3rd Conference of African Ministers of Health in 2007 and the 11th Session of the Ordinary Executive Council in 2008. The goal of the strategy was to enrich and complement Member States' strategies by adding value in terms of health systems strengthening from the unique continental perspective. The AHS 2007–2015 provided strategic direction to Africa's efforts in creating better health for all and had recognized that Africa had previously established health goals in addition to the Millennium Development Goals (MDGs) to which it has committed.

The AHS 2007–2015 explored challenges and opportunities related to efforts that can decrease the continent's burden of disease, strengthen its health systems and enhance human capital by improving health. It highlighted strategic directions that can be helpful if approached in a multi-sectoral and multi-stakeholder fashion that adequately resourced, implemented and monitored Africa's efforts in creating better health for all, and recognized that Africa had previously established health goals in addition to the Millennium Development Goals (MDGs) to which it has committed.

The AHS 2016–2030 is similar to some extent to its predecessor in that it also seeks to provide strategic direction to Africa's efforts in creating better performing health sectors, recognizes existing continental commitments and addresses key

challenges to reducing the continent's burden of disease, while also drawing on lessons learned and existing opportunities. Its strategic directions require multi-sectoral collaboration, adequate resources and leadership to champion its implementation coupled with effective accountability frameworks. In this light, the AHS 2016–2030 seeks to complete the unfinished agenda, adjust the course based on lessons learned from implementing AHS 2007–2015 and build on member states' and RECs' achievements.

There is no doubt that a number of these initiatives are progressively being achieved. However, the challenges to progress on health include resource limitations and the non-implementation of health initiatives in member states.

Challenges of Sustainable Health Development in Africa

The above analysis has demonstrated that there is no dearth of initiatives or policies adopted both at the global and the regional levels to improve the parlous health situation in Africa. However, such policies and initiatives are stymied by several problems. One such problem is the weak and inappropriate health systems in Africa. The health systems as organized today are not adequately addressing the increasing burden of health and disease. New and emerging diseases have created a scenario in service delivery as many diseases have defied conventional medical technology. Health systems in most African countries are ill equipped to adequately address their health problems.

Improvement in health is also affected by the lack of access to health facilities in Africa. More than 50% of African populations do not have access to modern health facilities and 40% has no access to safe drinking water and sanitation. In Nigeria, for instance, the national accessibility to health facilities is about 54.1%, while the percentage of those who attended public health institutions in Nigeria was 59% in 2007 (Alabi 2007). The 54.1% accessibility to health facilities in Nigeria is below the 65% accessibility to health services estimated by UNICEF for African countries (UNICEF 2000).

Worse still, the health facilities in Africa have been concentrated in the urban areas. Thus, where the urban access to health facilities was 69.7%, the rural areas had a rate of 46.8%. The urban bias in health resources and facilities distribution in Africa has been noted by the WHO (2003). These inequalities in the distribution of health care resources may affect the pattern of its demand. Although there has been a marked improvement in health infrastructure since the 1990s, whenever medical facilities exist in the rural or urban areas, such facilities are usually short staffed, poorly maintained and inadequately supplied with drugs, especially those located in the rural areas. The equity implications of user fees have not been adequately addressed. A large share, particularly among the poor does not use essential health services because of the price barrier. There is also the lack of complementary infrastructure to health services delivery, such as access roads, constant electricity supply and so forth.

Most African countries are constrained by resource scarcity. In terms of allocation of scarce resources, the health sector is usually ranked very low in national development priorities. The average expenditure in the health sector in Africa rarely exceeds 5%, with most African countries spending less than US\$34 overall including financing from government and household sources. African countries have failed to fulfil Abuja pledge to commit 15% of their national budgets to health spending. According to a WHO report, only four countries (Rwanda, Botswana, Zambia and Togo) were compliant with the Abuja pledge (WHO 2011). Another 22 countries spent between 10% and 15% of their budgets on health, but 25 countries spent less than 10%, and five spent less than 5%. Today, a number of countries now allocate a lower portion of their budgets to health care than before Abuja.

The poor health status of the population is mirrored by the crisis in human resources for health. With 24% of the world's disease burden, Africa has only 3% of the world's health professionals, with massive shortages of physicians, nurses, technicians, health managers and administrators and planners. In addition to emigrating to better paying employment in the developed world, health professionals are being drawn from rural to urban areas, from the public to the private sector and from lower income to higher income countries within Africa.

Health improvement in Africa is largely constrained by corruption. Corruption is the misuse of entrusted power for private gain (Transparency International 2011). It occurs when public officials, who have been given the authority to carry out goals, which further the public good, instead use their position and power to benefit themselves and those close to them. Corruption is a pervasive problem affecting the Nigerian health sector. Evidence abounds on the negative impact of corruption on health and welfare of Nigerians.

There is no doubt that corruption remains an enormous drain on the resources needed for developmental programs including health. The Nigerian health sector is particularly vulnerable due to several factors. These include the uncertainty surrounding the demand for services; many dispersed actors including regulators, payers, providers, suppliers interacting in complex ways; and asymmetric information among the different actors making it difficult to identify and control for diverging interest. In addition, expensive hospital construction, high tech equipment and the increasing arsenal of drugs needed for treatment, combined with powerful vendors and pharmaceutical companies present risks of bribery and conflict of interest in the health sector. Government officials use discretion to license and accredit health facilities, providers, services and products, thereby opening the risk of abuse of power and use of resources. The resulting corruption problems include among others, inappropriate ordering of tests and procedures to increase financial gain, absenteeism and the use of government resources for private practice.

The implication of corruption problems is that not all the money appropriated for health programs in the country ends up being spent effectively. About half of the funds and materials provided for health efforts in the country never reached the lowest levels where they are needed most. For instance, the mosquito treated nets, which are meant to be given out free, are sold to the patients in some health institutions in the country. This has brought to the fore the issue of accountability and

transparency. There is no doubt that lack of accountability and transparency creates opportunity for corruption. There are three components of accountability, namely, a measurement of goals and results, the justification or explanation of those results to internal or external monitors and punishment or sanctions for non-performance or corrupt behavior (Vian 2008). Unfortunately, these components are either lacking or are not strictly adhered to in Africa's health sector. This can be attributed to the fact that several actors are involved in the provision of health care, which results in chaotic coordination, communication and poor accountability.

Another serious challenge is the proliferation of external actors in Africa's health sector. The growing number of external actors has been accompanied by an increasingly fragmented aid architecture and diversity of governance arrangements at the country level that is challenging national systems and management capacity in African states (USAID 2008). In addition, many of the initiatives also lack mechanisms of accountability, transparency and evaluation in the way they operate in African countries. There is a disjuncture between the issues that external actors and African recipients prioritize. While attention to priority diseases has initiated much needed increases in external assistance for health, these priorities are not necessarily in line with the recipient country government's overall plan for the health sector. In Rwanda, for instance, donors earmarked \$46 million for HIV/AIDS in 2005, when the country had a 3% prevalence rate, and only \$18.3 million for malaria, which was the biggest cause of mortality (Ntawukulirayayo 2006). Likewise, a significant portion of health aid is tied in many cases to short-term numerical targets such as increasing the number of people receiving specific drugs, decreasing the number of pregnant women diagnosed with HIV, or increasing the quantity of bed nets handed out to children to block disease-carrying mosquitoes. They tend to be 'top down' in nature and are largely driven by donor agendas rather than the country's own needs and priorities.

Another problem is attributable to the web of global institutional arrangements, which perpetuates massive poverty in African countries. The introduction of the SAP, the World Bank ideological framework based on neoliberal policies, affected and has continued to affect health care delivery in most African states (Loewenson 1993). While the SAP affected the delivery of health care directly through budget cuts and privatization, it also made an impact indirectly by contributing to poverty. The macroeconomic changes from the SAP resulted in reduced incomes and unemployment. Another significant example is the activities of powerful transnational economic forces that have stymied national revenue generation and delivery of services essential for the protection of health. In Sierra Leone, for instance, structural adjustments imposed by the International Monetary Fund to reduce fiscal deficits and cut government spending since 1990s reduced civil service wages (Kentikelenis et al. 2015). Consequently, by 2004, the country spent about 1.2% of its GDP or less on civil service wages. The country also loses about US\$244 million in annual revenue through tax waivers for transnational corporations and organizations that it cannot afford (O'Hare 2015). Likewise, the WTO Agreements, particularly the General Agreement on Trade and Services (GATS) since 1995, have further undermined the already precarious health sector in most African countries resulting in the migration of African health professionals to the West (Aginam 2007).

The Ebola crisis in 2014 revealed the challenge of neglected diseases concentrated among the poor. Since 1976, more than 20 Ebola outbreaks have occurred in Sub-Saharan Africa, yet so little has been done to combat the virus, especially as it relates to drug and vaccine development, until now. There are two reasons for this neglect. First, past outbreaks were usually confined to rural areas in some of the world's least developed countries. Indeed, such diseases concentrated among the poor, no matter how widespread and severe, are not attractive targets for pharmaceutical research. This is so because the demand for such a medicine drops off sharply. Moreover, there is the further risk that a successful effort will be greeted with high demands to make the medicine available at marginal cost or even for free, which will force the innovator to write off its initial investment as a loss. In view of such prospects, biotechnology and pharmaceutical companies would prefer even the trivial ailments of the affluent. This problem of neglected diseases is also known as 10/90 gap – alluding to only 10% of all pharmaceutical research being focused on disease that account for 90% of the global burden of diseases. Second, international donors devoted their aid to disease with larger burdens (Global Forum for Health Research 2013).

The net result of all these challenges is the inability of Africa to sustain the laudable health initiatives, as manifested by its unsatisfactory performance in essential health indicators. In the final analysis, these factors have combined to foreclose the attainment of optimal benefits from the various health sector initiatives.

Conclusion and Policy Recommendations

This chapter has analyzed the health and disease trajectories in Africa. It found that health and disease are major obstacles to Africa's development for several decades. Nevertheless, the parlous health situation in Africa can be salvaged if the following policy recommendations can be adhered to. One potential way to enhance the health status of African populations would be for future global actions to address the global political and economic determinants of health inequities, which cannot be addressed in isolation through technical solutions, the health sector or national governments alone but need global level solutions with an emphasis on reducing global inequalities. Future global health initiatives should concentrate on mitigating the problem of neglected diseases concentrated among the poor by supplementing the patent regime with a complementary source of incentives and rewards for developing new medicines. The proposal for a Health Impact Fund—a global agency financed mainly by governments—that would give pharmaceutical innovators the option to register any new product is instructive (Hollis and Pogge 2011).

African countries should implement programs that are geared towards the attainment of universal health coverage. Health sector reforms should be explicit about reducing inequality in access to health services and ensuring that public health systems mitigate the impact of socioeconomic inequalities. Experience has shown that prioritizing for-profit private healthcare delivery is extremely unlikely to deliver

better health outcomes for poor people thereby frustrating the attainment of universal health care. Private health systems have been shown to be highly regressive, serving the rich far more than the poor. Several studies have also demonstrated higher levels of exclusion of poor people from treatment and care while the wealthy receive the best available medical care. The poor are excluded from most privately funded health insurance schemes. Many poor people are forced to rely on low quality health care administered by unqualified staff and make out-of-pocket payments for treatments or 'simply do without' and this has had significant access implications particularly in developing countries.

Notwithstanding their numerous challenges, publicly financed and delivered health care services offer higher performing, more equitable health systems. For instance, research conducted in Asia found that no low or middle-income country in the region has achieved universal or near universal access to health care without relying predominantly on tax-funded public sector delivery. A case in point is Nepal, where significant improvements in access to health care were achieved after user fees were removed for primary health care services in public services in 2008 (Witter 2011). There is no doubt that universal public services are critical in the fight against inequality. They mitigate the impact of skewed income distribution and redistributive wealth by putting virtual income into the pockets of the poor. Thus, in the face of the growing inequality in low and medium income countries, urgent and dedicated action is needed to strengthen public health systems. The international community, realizing that African countries have been the victim of the highly uneven global income and wealth, should not merely help more, but also harm less. They should focus, in subsequent years, on supporting governments in African countries to expand publicly provided health care—a proven way to save millions of lives worldwide and drive down inequality. They should also assist them to abolish user fees and strengthen their capacities to regulate the private sector.

Primary health care should be revitalized as a strategy for health improvement and the struggle for social justice. There should be the steady rolling out of primary health care to remote areas, providing vaccinations, clean water, midwife assistance and basic health advice to larger numbers of people. There should be efforts to establish complementary infrastructure to health services delivery, such as access roads and electricity, among others. This is imperative, as available health centers are too far away from vulnerable people and those who actually need Medicare.

In proposing a sustainable African health system, it is important to appreciate the fact that a human resources issue is both a quantitative (appropriate numbers) and qualitative (appropriate skill, mix, motivation) issue. Focusing on such issues as the shortage of the right people, in the right place, with the right attitudes and skills mix must be addressed in order to produce professionals with skills that are not only technical but also managerial and relational. Health professionals in Africa should be able to see beyond the direct causes of ill health to indirect and proximate determinants of health such as poverty, disparity, ignorance and marginalization. They should be able to facilitate, mobilize, organize, discuss, work and provide feedback with people as partners.

Furthermore, there is need to emphasize disease prevention in Africa. Capacity building for disease prevention should be a major concern of the government. Therefore, greater consideration should be given to developing capacity to report, detect and investigate suspected infectious disease outbreaks and prevent sporadic cases, especially of known disease, from escalating to epidemics, and more resources for training, supplies, funds and foreign expertise should be provided for establishing and maintaining a sustainable disease surveillance system in Africa.

African states can maximize their gains from external assistance for health if they take leadership in coordinating health activities in their countries within the context of a comprehensive national health plan. Experience to date in Rwanda lends credence to this view. The Rwanda health sector is dominated by donor project support, with donors contributing 43% of all health sector funding and government 32%. Unlike, many African countries, where such donor assistance has contributed to the verticalization and fragmentation of services, the Rwandan Ministry of Health has managed to direct donors to align their contributions with national policies through a donor mapping study and a systematic costing of the health sector strategic plan. Each year all donors meet with government to evaluate progress made and plan for future activities. As a result, Rwanda has become the only African country with near universal health coverage. Immunization rates at 95% are among the highest in Sub-Saharan Africa. The proliferation of new aid mechanisms should not detract from African governments' commitment to finance health care for their citizens. This is because a population's health is principally a national responsibility. African countries owe their citizens a comprehensive package of essential health goods and services under its obligations to respect, protect and fulfill the human right to health.

It must be emphasized, however, that all these measures are destined to fail if the issue of corruption in the health sector is not tackled. The government should institute reforms to address endemic corruption in Africa's health sector. This is imperative to ensure transparency and accountability in the disbursement of funds meant for the health sector.

References

- Adegbulu, F., & Faseke, B. (2014). Origins and early centres of civilization in Africa. In J. Osuntokun (Ed.), *African peoples, cultures and civilization* (pp. 13–26). Ede: Redeemer's University.
- African Union. (2001). *Abuja declaration on HIV/AIDS, Tuberculosis and other related infectious diseases* (OAU/SPS/ABUJA/3).
- African Union, African Health Strategy. (2016–2030). <http://www.au.int/en/document/africa-health-strategy-2016-%E2%80%932030>. Accessed 20 May 2016.
- Aginam, O. (2007). Predatory globalisation? The World Trade Organization, GATS, and migration of African health professionals to the west. In T. Falola & N. Afolabi (Eds.), *The human cost of African migrations* (pp. 65–67). New York: Routledge.
- Alabi, R. (2007). Estimating the cost in urban and rural area of Edo state. *Journal of Human Ecology*, 2(2), 15–32.

- Barnett, W. (2000). Medicine, science and technology. In T. Falola (Ed.), *African cultures and societies before 1885* (pp. 189–215). Durham: Carolina Academic Press.
- Bircher, J., & Kuravilla, S. (2014). Defining health by addressing individual social and environmental determinants: New opportunities for health care and public health. *Journal of Public Health Policy*, 35(3), 363–386.
- Copper, F. (2002). *Africa since 1940: The past of the present*. Cambridge: Cambridge University Press.
- Dorland's Illustrated Medical Dictionary. 1994. 28th edition. Philadelphia: Saunders.
- Ehimwenma, P. (1996). Drug power to the people. *World Forum*, 17, 386–388.
- Ehiri, J., & Prowse, J. (1999). Child health promotion in developing countries: The case for integration of environmental and social interventions. *Health Policy and Planning*, 14(1), 1–10.
- Fogel, R. (1991). The conquest of high mortality and hunger in Europe and America: Timing and mechanisms. In H. Patrice, D. Landes, & H. Rosovsky (Eds.), *Favourites of fortune: Technology, growth and economic development since the industrial revolution*. Cambridge, MA: Harvard University Press.
- Gadomski, A., Black, R., & Mosley, M. (1990). Constraints to the potential impact of child survival in developing countries. *Health Policy and Planning*, 5(3), 235–245.
- Global Forum for Health Research. (2013). *The 10/90 report on health research 2003–2004*. http://announcementsfiles.cohred.org/gfhr_pub/assoc/s14789e/s14789e.pdf. Accessed 13 May 2016.
- Green, A., & Matthias, A. (1997). *Non-governmental organisations and health in developing countries*. London: Macmillan.
- Health Reform Foundation of Nigeria. (2006). *Nigerian health review 2006*. Lagos: Health Reform Foundation of Nigeria.
- Heaton, M. (2005). African cities and the globalisation of disease: The influenza pandemic of 1918–1919. In T. Falola & S. Salm (Eds.), *Urbanisation and African cultures* (pp. 433–450). Durham: Carolina Academic Press.
- Hollis, A., & Pogge, T. (2011). *The health impact fund: Making new medicines accessible for all*. http://healthimpactfund.org/wp-content/uploads/2012/11/hif_book.pdf. Accessed 20 Apr 2016.
- Illiffe, J. (1995). *Africans: The history of a continent*. Cambridge: Cambridge University Press.
- Kentikelenis, A., King, L., Mckee, M., & Stuckler, D. (2015). The international monetary fund and the Ebola outbreak. *Lancet Global Health*, 3, 69–70.
- KPMG Africa. (2012). *The state of healthcare in Africa*. KPMG.
- Loewenson, R. (1993). Structural adjustment and health policy in Africa. *International Journal of Health Services*, 23(4), 717–730.
- Lyons, M. (1992). *The colonial disease: A social history of sleeping sickness in northern Zaire*. Cambridge: Cambridge University Press.
- Magnussen, L., Ehiri, J., & Jolly, P. (2004). Comprehensive versus selective primary health care: Lessons for global health policy. *Health Affairs*, 23(3), 167–176.
- Mburu, T. (1981). Sociopolitical imperative in the history of health development in Kenya. *Social Science Medicine*, 15A, 521–527.
- Mckeown, T. (1988). *The origin of human diseases*. Oxford: Basil Blackwell.
- Mills, A., & Cult, S. (2004). Communicable diseases. In B. Lomburg (Ed.), *Global crisis, global solutions* (p. 62). Cambridge: Cambridge University Press.
- Muiu, M. (2002). Globalization and hegemony: Which way Africa? *The Journal of African Policy Studies*, 8(1), 68–88.
- Nkandwire, T. (2001). Thinking about development states in Africa. *Cambridge Journal of Economics*, 25(3), 289–314.
- Ntawukuliryayo, J. (2006, June). *Scaling up to reach the health MDGs in Rwanda*. Presentation delivered at the follow-on meeting to the post-high-level meeting on the health MDGs. Tunis, Tunisia.
- O'Hare, B. (2015). Weak health systems and Ebola. *Lancet Global Health*, 3, e71–e72.

- Ogunbekun, I., Adey, O., Wouters, A., & Morrow, R. (1996). Cost and financing of improvements in the quality of material health services through the Bamako initiative in Nigeria. *Health Policy and Planning*, 11, 369–384.
- Oluwole, D. (2008). Health policy developments in Sub-Saharan Africa: National and international perspectives. <http://www.transparency.org>. Accessed 20 Sept 2011.
- Packard, R. (1997). Visions of postwar health and development and their impact on public health interventions in the developing world. In F. Cooper & R. Packard (Eds.), *International development and the social sciences: Essays on the history and politics of knowledge* (pp. 93–115). Berkeley: University of California.
- Partnering to Achieve Epidemic Control in Nigeria (PEPFAR). (2014). <http://www.pepfar.gov/countries/nigeria/>. Accessed 20 July 2016.
- Patterson, D. (1981). *Health in colonial Ghana: Disease, medicine and socio-economic change*. Waltham: Crossroads Press.
- President's Malaria Initiative, Nigeria Malaria Operational Plan. (2015). <http://www.pmi.gov/docs/default-source/default-document-library/malaria-operational-plans/fy-15/fy-2015-nigeria-malaria-operational-plan.pdf?sfvrsn=6>. Accessed 6 Sept 2015.
- Saul, J., & Leys, C. (1999, July/August). Sub-Saharan Africa in global capitalism. *Monthly review*.
- Sessions, M. (n.d.). *Overview of the President's emergency plan for HIV/AIDS relief (PEPFAR)*. Center for Global Development, <http://www.cgdev.org/page/overview-president%E2%80%99s-emergency-plan-aids-relief-pepfar>. Accessed 20 Aug 2015.
- Shehu, M. (1997). Overview of the Bamako initiative programs in Nigeria: Progress made and problems encountered. Conference paper on Bamako Initiative, Federal Ministry of Health, Abuja.
- The Abuja Declaration: Ten years on. (2001). http://www.who.int/healthsystems/publications/abuja_report_aug_2011.pdf?ua=1. Accessed 20 July 2016.
- Transparency International. (2011). <http://www.transparency.org/cp2011/indetail>. Accessed 10 June 2015.
- UNICEF. (2000). *Annual report*. Lagos: UNICEF country office.
- US National Intelligence Council. (2008). *Strategic implications of global health*. http://www.dni.gov/nic/NIC/_specialproducts.html
- USAID. (2008). *Health financing in Africa today: Challenges and opportunities*. Washington, DC: USAID.
- Vian, T. (2008). Review of corruption in the health sector: Theory, methods and interventions. *Health Policy and Planning*, 28, 83–94.
- Werner, D. (1997). *Questioning the solution: The politics of primary health care and child survival*. Palo Alto: Health Wrights.
- Witter, S. (2011). The national free delivery policy in Nepal: Early evidence of its effects on health facilities. *Health Policy and Planning*, 26(2), 1184–1191.
- World Bank. (1993). *The world bank report*. New York: Oxford University Press.
- World Bank. (1994). *Better health in Africa: Experience and lessons learned*. Washington, DC: World Bank.
- World Bank. (2000). *World development report*. Washington, DC: World Bank.
- World Health Organization (WHO). (1948). Constitution of the world health organization. Geneva: WHO.
- World Health Organization (WHO). (1987). *Women and children's health through funding and management of essential drugs at community level: The Bamako initiative* (WHO /AFR/R37/4). Brazzaville: WHO.
- World Health Organization (WHO). (2003). *The African malaria report 2003* (WHO/CDS/MAL-Report). Geneva: WHO.
- World Health Organization (WHO). (2005). *Chronic disease: A vertical investment*. Geneva: WHO.
- World Health Organization (WHO). (2011). *The Abuja declaration: Ten years on*. http://www.who.int/healthsystems/publications/abuja_report_aug_2011.pdf?ua=1. Accessed 28 May 2016.

World Health Organization (WHO). (2015). *World health statistics 2015*. Geneva: WHO.
Zondi, S. (2010). *Overcoming Africa's health burden: Challenges and prospects*. Pretoria: Africa Institute of South Africa.

Benjamin Anaemene holds a Ph.D in diplomatic history from the Department of History and Strategic Studies, University of Lagos, Nigeria. He is currently a Postdoctoral Fellow at the United Nations University International Institute for Global Health, as part of the Governance for Global Health programme. Prior to joining the UNU-IIGH, he has been teaching and conducting research in diplomatic history, global health governance and health diplomacy at both Redeemer's University and the University of Lagos, Nigeria. He spent some time at the WHO headquarters, Geneva conducting research on the role of the WHO in the development of Nigeria's health sector. Dr. Anaemene has carried out several studies, which include the impact of health diplomacy on regional integration particularly in West Africa and the influence of health diplomacy on public policy in Nigeria. His research interests are mainly on global health governance, health diplomacy and health policy. He has published several articles in peer reviewed journals. Email: benjaminanaemene@gmail.com or anaemene@unu.edu.