# NIGERIA'S HEALTH CARE SECTOR: ITS HISTORY, AND CONTEMPORARY ISSUES, 1930 -2020

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#### **Abstract**

The health status of the citizens of any given nation has often been used as an index of its overall development. In Nigeria, the conventional or orthodox healthcare sector has a long history, dating back to the colonial era. This article attempts to trace that history, as well as bring to the fore some of the health challenges which had, over the years, confronted the healthcare sector. The research did not involve any field work. Rather, it adopts the qualitative research methodology and thus, involved mainly the analysis of such secondary documentary sources as books and journals. Newspaper and magazine articles, as well as internet sources were also consulted. The research found that there are a number of health challenges in Nigeria which, if left unattended to, would have very dire consequences for the country. It suggests that the federal and state governments should integrate traditional medical practices into the conventional or orthodox healthcare system in order to adopt a holistic approach to the country's contemporary healthcare issues.

## Keywords: Diseases; Healthcare; Infectious; Medical; Mortality

### Introduction

Nigeria has one of the worst health facilities in the world. The country's weak healthcare system has been described as the fourth worst in the whole world. On a yearly basis, it is estimated that about one million children die, and this translates to nearly 3,000 deaths daily, with about 292,000 newborn babies dying in the first month of their lives annually. Also, the country records about 34,000 maternal deaths every year. According to a World Health Organization (WHO) report, Nigeria recorded about 40,000 maternal deaths in 2013. In other words, for every 1,000 women that gave birth to babies in that year, eighty (80) of such babies died. The situation in respect of maternal death is not better. In 2013, there were 52,000 cases of maternal deaths in Nigeria, that is, about 142 deaths daily. <sup>1</sup>The situation is both deplorable and unacceptable for a country that is so richly endowed with human and natural resources. In Nigeria, healthcare delivery falls within the concurrent legislative list, and thus, the responsibility of the three tiers of government – federal, state and local. As a matter of fact, the private sector has, over the years, become a major contributor to the provision of healthcare. Indeed, affluent and educated Nigerians prefer the private health institutions to the governmentowned ones. The reason is the simple fact that public health institutions are underfunded and, by extension, poorly equipped and maintained.

However, since 1987 when the Bamako Initiative came on board, Nigeria has been trying to promote community-based healthcare services to millions of its citizens. This is especially so with respect to the poor rural dwellers who, unlike their urban-based counterparts, cannot afford to access private healthcare institutions if and where they exist in their communities. Yet, Nigeria's high maternal and child mortality rates, high malnutrition index, poor cancer treatment facilities, and incessant disease outbreaks, among others, are a reflection of the present state of the country's healthcare system. In fact, the country spends up to one

billion U.S. dollars annually on medical tourism.<sup>2</sup> Although there have been some publications on Nigeria's healthcare sector, these have focused more on specific cases than a holistic overview of that sector. It is the intention of this paper to ascertain both the causes and consequences of the neglect of the healthcare sector in Nigeria. To achieve this objective, it interrogates the role which corruption and policy somersaults by governments at all levels have had on the quality and accessibility of healthcare delivery in the country.

## A Historical Survey of Nigeria's Healthcare Delivery System

The Trans-Atlantic slave trade which lasted from the 15th century to the 19th century would appear to have been among the first instances when healthcare providers began to render services to European slave traders in what is today known as Nigeria. In those days, doctors were engaged by European slave traders to ascertain whether or not their cargoes would be fit enough to embark on the long and tortuous journey from Africa to the New World across the Atlantic Ocean. This was so because, as businessmen, they had to ensure that they minimized losses. Such doctors also catered for the personal medical needs of the slave dealers. As a result of the abolition of the slave trade by Britain in 1807, European explorers, such as Mungo Park and Richard Lander, began to show interest in visiting the interiors of Africa. Their efforts were often hampered by the prevalence of tropical diseases among the men and crew of such voyages. In particular, malaria took a heavy toll on early European explorers. It was not until the 1854 expedition that Dr. Baikie, the leader of that expedition, introduced the use of quinine to tackle the menace of the mosquitoes-borne malaria. This helped a lot in reducing both mortality and morbidity among the European explorers. In the words of Ajoyi Scott-Emuakpor, "... the use of quinine both as prophylaxis against and as therapy for malaria fever expanded exploration and trade". <sup>3</sup>Following on the heels of the explorers were Christian missionaries who, from the mid-19<sup>th</sup> century, initiated the establishment of dispensaries and hospitals in Nigeria <sup>4</sup>Among the earliest Christian missions to provide medical services in Nigeria in the 1840s and 1850s were the Methodist Baptist Mission and the Catholic Mission. In 1888, hospitals were built in Lagos and Asaba respectively, while the St. Magaret's hospital was established in Calabar in 1898. In Port Harcourt, the Braithwaite Nursing Home was founded in 1905. In Northern Nigeria, the Sudan Interior Mission and the Church Missionary Society (CMS) influenced the spread of medical services. Initially, political officers in the North had to play the role of medical personnel because there were no doctors then. Thus, the colonial administrative and political officers were made to undergo mandatory trainings on sanitation at the Imperial Institute in London (now known as the Commonwealth Institute). The Kano Nursing Home was opened in 1915.<sup>5</sup>

Indigenous Nigerian doctors also played a vital role in the evolution of healthcare systems in the country. Among the earliest Nigerian medical doctors were S.A. Leigh; O.O. Sapara (founder of the Massey Street Maternity Centre in Lagos); James Africanus Beale-Horton (son of freed Igbo slaves who went ahead to earn the Doctor of Medicine Degree at Edinburg University in 1859); William Broughton Davies; Samuel Ajayi Crowther Junior (who later opened a dispensary at Abeokuta); and Obadiah Johnson who engaged in private practice in Lagos in 1888. These indigenous doctors worked mostly in hospitals meant for Nigerians. They were placed on a lower salary scale vis-à-vis their European counterparts, and were never to be bosses over European doctors. This is in spite of the fact that in 1893, there were only four Nigerian medical doctors and four European doctors, making a total of eight, for the whole country. But while Nigerian doctors earned two hundred pounds sterling (£200) per annum, their European counterparts were paid four hundred pounds sterling (£400) per annum. Though the British colonial government had built hospitals in Enugu, Jos, Aba, Ijebu-Ode, and Osogbo

prior to the outbreak of the Second World War in 1939, there was a yearning gap between the number of medical doctors available and the patients they had to attend to. It was as a result of this that the colonial government began to entertain the idea of establishing a medical school in Nigeria. Although there were quite a few auxiliary training schools which started off as dispensaries and veterinary schools, it was not until 1925 when, at the instance of the West African Senior Medical Officers, that a suggestion for medical assistant training institutions for Lagos and Katsina was made. Eventually, the Yaba Medical Training College was founded in 1930. It was recognized by the Royal College of Surgeons and Physicians in England in 1946. By this recognition, its graduates were awarded the conjoint Diploma of Member Royal College of Surgeons and Licentiate of Royal College of Physicians (MRCS, LRCP).<sup>6</sup>

Prior to the 1950s, medical services in Nigeria were centralized and controlled from the nation's capital, Lagos. However, following the regionalization of the country which the Richard's constitution of 1946 introduced and which the 1951 Macpherson Constitution sustained and expanded in terms of their powers<sup>7</sup>, the control of medical services in Nigeria was, like other services, transferred to the regions. In 1954, the government of the Eastern Region published a Report which was adopted as the benchmark for the overall national policy on healthcare services. The said Report titled, "Policy for Medical and Health Services", stated that the aim was to provide national health services to all Nigerians. It was a comprehensive report which contained details of the service envisaged, and emphasized the need to expand medical services in the rural areas. This was informed by the fact that such services were relatively better developed in the urban areas, and also because most Nigerians lived in the rural areas.

The University College, Ibadan, which was founded in 1948, had a Medical School, as did the University of Nigeria, Nsukka; the Ahmadu Bello University, Zaria; the University of Lagos; and the University of Ife (now Obafemi Awolowo University) in the 1960s. But the approach to healthcare delivery was not streamlined. For instance, the three regions (East, West and North) each had its own health policy. The coming of the military government after the 1967-1970 Nigeria-Biafra war, led to an attempt to practicalise the deep concern of the government for the healthcare of the citizens, especially the rural dwellers who had been consistently sidelined in the country's health development plans. In the period before 1970s for instance, emphasis was on curative healthcare instead of preventive healthcare. But in the 1970s, the situation changed.

To quote Omoleke:

The basic health services policy [of the 1970s] was intended to correct the... health imbalance between the rural and urban centers. It was entirely a new developmental approach to health care delivery services in Nigeria, with emphasis and thrust on preventive and community health services rather than the curative, and its target was the rural areas.<sup>8</sup>

This was the objective of the Basic Health Service Scheme which was introduced in 1977. Due to logistic problems as well as discernible shortage of human resources, the Basic Health Service Scheme was replaced with the National Health Policy in 1988. The idea behind the new policy was for Nigerians to be involved in the planning and implementation of their healthcare. This was reviewed in 2004. The first National Strategic Health Development Plan was formulated to last from 2010-2015, while the second one was launched in Kano to last between 2018 and 2022. Both Plans placed priority attention on the Sustainable Development Goals' objective of achieving quality healthcare as well as the Federal Government's economic recovery programme. Earlier in 1986, the Federal Government had launched the Primary Healthcare Plan. Among its objectives were: to improve the collection and monitoring of data on health issues; to encourage capacity-building for medical personnel; to ensure the provision

and availability of essential drugs; to improve on immunization programmes; to promote the treatment of epidemic diseases; to improve maternal and child care as well as family planning; to improve on the supply of food and nutrition; and to educate and enlighten citizens on prevailing health challenges as well as the methods of preventing and controlling them.<sup>9</sup>

Following the return to democratic rule in 1999, a new National Health Insurance Scheme (NHIS) was introduced. The new NHIS Act was an amendment of the Nigerian Health Insurance which was first introduced in 1962. The new NHIS became operational in 2005. 10 The country's first Five-Year Strategic Plan for healthcare was launched by the Federal Government to last from 2004 to 2008, while a new National Health Policy was adopted in 2006 and included a re-designed NHIS which sought to protect Nigerians against high costs of treatment and an equitable financing of health care providers. It is important to point out here that since pre-colonial times, traditional medicine has remained relevant in Nigeria's health delivery system. Admittedly, some elements of magic, witchcraft and sorcery, is associated with traditional medical practice. But this does not in any way diminish its importance and relevance as a component part of the medical system in Nigeria. Herbalists and traditional healers have proved invaluable in providing healthcare for Nigerians in the rural areas, many of who place more faith in the efficacy of local herbs, roots and leaves, than on orthodox medicines. Apart from preparing medicines for various ailments, traditional medical practitioners also perform surgeries. These include tooth extraction, circumcisions, and excisions. They possess knowledge of effective coagulants and anesthetics, as well as herbs and roots for orthopedic cases, birth attendance (obstetrics and gynecology), and mental illness. The level of hygiene and the sterilization techniques may be very low, vis-à-vis orthodox medical practice. 11Yet, because of the inadequacy of modern/orthodox health facilities to satisfy the increasing demand for healthcare and the fact that traditional medicine is both affordable and acceptable to many Nigerians, the Nigerian government has come to recognize the imperative of integrating traditional medicine into its orthodox healthcare policies and programmes.

In this regard, whereas herbalists normally rely on the collection of plants, roots and herbs from the wild, they are now being encouraged to establish medical gardens and farms to grow some of these plants. They are also encouraged to liaise with medical institutions and resources to increase the hygiene of their products and to register their medicines with the National Agency for Food and Drug Administration and Control (NAFDAC). As a matter of fact, the Federal Government established the Nigeria Natural Medicine Development Agency (NNMDA) in 2010 and gave it terms of reference which include to study, collate, document, develop, preserve and promote Nigerian traditional products and practices and to hasten the integration of traditional medicine into the country's mainstream modern healthcare system. The Government of Oyo State had set the ball rolling in this direction when in 1996, it established the Oyo State Advisory Board on Traditional Medicine by Edict No 1 of 1966 which was gazzetted on the 9th of January 1997, No 2, vol.22. The Board was charged with the responsibility of carrying out the directives of the state government on traditional medicine, including the criteria for registration of practitioners of the various aspects of traditional medicine. If

Even the World Health Organization (WHO) has recognized the importance of traditional medicine and the imperative of integrating it with orthodox medicine. It had acknowledged the fact that traditional healers are indeed, indispensable in the overall health care delivery system of developing countries like Nigeria. In these countries, the usual line of treatment of many sick persons, especially those with malaria, is the use of herbal medicine. In fact, there is a growing demand for traditional medicine even in the developed countries.

## **Major Contemporary Health Issues**

Despite the establishment of the National Health Insurance Scheme under Act 35 of the 1999 Constitution (as amended), the fact remains that healthcare services in the country are still embarrassingly low. According to a source, "One of the limitations to the full achievement of a universal health care delivery system is the limited coverage of Nigerians under the Social Health Insurance" <sup>15</sup>Although the Abuja Declaration by the African Union had, in 2001, agreed that member-states of the Union should pledge 15% of their annual budgets to the Health sector, the National Health Insurance Scheme, as at 2014, had only covered 3% (5million) <sup>16</sup>out of a population estimated at 200million. This section of the paper is devoted to examining some of the major contemporary health challenges in Nigeria. These include the following, maternal and infant mortality, infectious/communicable diseases, and mental and occupational health.

## Maternal and infant mortality

In no other aspect has the deplorable level of the healthcare system in Nigeria been made more manifest than in the area of maternal and infant mortality rate. Maternal mortality means the death of a female as a result of complications associated with pregnancy, while infant mortality refers to the death of a baby soon after birth up to the first twelve months. In 2010, the maternal rate per 100,000 births was 840, compared to 608.3 in 2008, and 473.4 in 1990. At the same time, the mortality rate for children within the 5-year bracket was 143 per 1000 births. The lifetime risk of death for pregnant women was 1 in 23. Between 2007 and 2012, the maternal mortality rate was 550 deaths per 100,000 live births. <sup>17</sup> It is also claimed that Nigeria's maternal mortality ratio as at 2013, was 630 per 100,000 births; 58% ANC coverage; 45% delivery by skilled birth attendants; very high under-five years mortality rate of 153 per 1,000 births in urban areas, and 243 per 1,000 births in urban areas and 243 per 1,000 births in rural communities. 18 in 2015, the rate for the country was 814 deaths per 1000 live births, while in 2019, it was about 74.2. In Nigeria, an average of about 2,300 under-five children and 145 women of child bearing age die every day. The country was ranked 187th out of a survey of 191 countries on maternal and infant mortality rates by the World Health Organization in 2013. 19

As a matter of fact, a society's level of development could be gleaned from the state of its maternal and infant health. This is so because, as Feyi-Waboso has observed:

Maternal mortality leads to decreased human capital, thus perpetuating a cycle of poverty, which in itself decreases health and access to health care, causing further maternal mortality. The distribution of maternal mortality is inversely proportional to development status. <sup>20</sup>

The causes of high maternal mortality in Nigeria include poverty, obstructed labour, unsafe abortion, haemorrhage, hypertension, and sepsis. Majority of these, it is asserted, are preventable. Statistics also show that mortality rate is higher in the Northern states of Nigeria which have consistently shown a rate of above 1,200 per 100,000 live births, unlike the Southern states whose rate is said to have frequently been below 500 per 100,000 live births <sup>21</sup>. In various Nigerian rural communities, high maternal mortality rates are caused by such factors as taboos and lack of modern infrastructure.

Similarly, poverty, illiteracy, pre-natal, and ante-natal care, as well as hygiene, are some of the causes of infant mortality in Nigeria. The rate is also higher in the rural areas where most mothers are poor and illiterate and where medical facilities are hardly available to cater for the pregnant women and their new-born babies. Thus, diseases like diarrhea and fever have continued to take a heavy toll on newly-born babies. Nigeria's infant mortality rate, as at 2004, was about 96 per thousand live births in the rural areas as against 75 per 1,000 live births in the urban areas. In 2019, it was 60.662 deaths in 1,000 live births. This was a 2.38% decline from

the 2018 rate of 62.142 deaths per 1,000 live births, which was in its self a 3.97% decline from 2017. <sup>22</sup>Malnutrition, poor environment hygiene, low access to and utilization of quality health services by women and lack of access to safe water all contribute to Nigeria's high infant mortality. Therefore, adequate provisions should be made for cheap, available and accessible healthcare facilities, especially in the rural areas.

Maternal and infant mortality rates have many implications on the Nigerian economy and society. For instance, if a mother dies and the baby survives, the baby may become vulnerable to malnutrition occasioned by lack of breast-feeding. Even when such a baby grows, he/she will have to contend with the trauma of not enjoying maternal love. This may, in the long-run, affect the child's physical, psychological and economic well-being. Child labour, prostitution, human trafficking, and other forms of exploitative tendencies and inhuman treatment, may become the lot of such children. The community also suffers the challenges of having to deal with such children, some of who may become prone to social vices, including drug abuse, stealing, prostitution, and violent crimes.

As the Igbo say, "Onwu nne di njo" (a mother's death is bad). This is so because of the centrality of mothers in the household of a typical Nigerian community. A mother's death therefore, creates a big vacuum in the family, especially economically. The girl-child may have to sacrifice her education to fill the gap created by the mother's death. In the end, she may have to marry early and, in some cases, continue the circle of poverty and economic devastation which the mother's death had created.

## Infectious and communicable diseases

Any illness that is caused by either a specific infectious agent or its toxic product is referred to as a communicable disease. It occurs when an agent or the product of such a disease is transmitted from either an infected individual or animal, or even an inanimate reservoir to a susceptible host, either directly or indirectly. Causative agents of communicable diseases include bacteria, viruses and parasites and such micro-organisms as fungi. Pneumococcal pneumonia, gonorrhea, influenza, measles, Ebola, malaria, tuberculosis, schistosomiasis, diarrhea, cholera and meningitis are some of the communicable diseases that are caused by bacteria, viruses, parasites and micro-organisms.<sup>23</sup> These diseases manifest some general signs and symptoms, such as fever, fatigue, coughing, muscle aches, and diarrhea.

In Nigeria, communicable diseases result in thousands of deaths every year, especially in the rural areas. It is in these rural communities that personal hygiene is low, and medical facilities are not readily available and accessible. There too, humans and animals mix together, and were these animals are infected; they easily transfer the diseases to humans, especially children. Diseases can also be spread through physical contact with infected persons, such as sexual intercourse (in the case HIV/AIDS and other sexually transmitted diseases); contact with contaminated food, water or blood; or through fecal/oral transmission.

Malaria tops the list among the causes of deaths in Nigeria today. The deadliest form of malaria parasite in Africa is Plasmodium Falciparum. Malaria is endemic in Nigeria; that is to say, that the risk of getting the disease is present at all time. It occurs throughout the country's different ecological zones, though babies usually have a passive immunity for the first six months. But they become liable to severe malaria after the age of six. According to Lateef Salako:

Malaria is the commonest cause of out-patient hospital attendance in all age groups in all parts of Nigeria and is one of the commonest causes of death, next only to acute respiratory infections and diarrheal disease, in children under 3 years of age. <sup>24</sup>

He went further to argue that though malaria is a direct cause of death in its own right, it also contributes to death from such other childhood causes as acute respiratory tract infections and diarrheal diseases.<sup>25</sup> In particular, cerebral malaria results in high mortality rate in the country, especially in the rural areas where a mortality rate of 100 percent is possible if untreated.

Generally, the mosquito vectors that are mostly responsible for transmitting malaria in the country breed in clean and sunlit small collections of standing water. Standing water has, however, become contaminated due to urbanization and the attendant increase in human population density which has resulted in limited availability of open spaces. These mosquito vectors, especially Anopheles arabiensis, appear to have comfortably adapted to inner city conditions, and can now breed in wells, water cisterns, and water storage tanks. <sup>26</sup> But the risk of malaria infection and the extent of severe morbidity and death from it are also determined by social, cultural, behavioural, and economic factors. For instance, there are better healthcare facilities in the urban areas vis-à-vis the rural communities; parents in the rural areas are mostly illiterates who may not easily recognize the danger posed by mosquitoes; poor parents are often unable to afford anti-malaria drugs; and some parents may attribute their children's health conditions to witchcraft, among others. In the words of Wellington Oyibo:

One child dies every 30 seconds in sub-Saharan Africa from malaria. The disease is responsible for 30 percent of childhood mortality in Nigeria and more than 70 percent of outpatients' visit to the hospitals. Malaria is directly responsible for over one million deaths of children below school age yearly... malaria accounts for economic loss of №132 billion as cost of treatment and loss in man hours. <sup>27</sup>

Apart from malaria, cholera is another communicable and infectious disease that has continued to take a heavy toll on Nigerians. In 2015 alone, there were about one hundred deaths, while many people were hospitalized following outbreaks of cholera in some states, especially Anambra, Bayelsa, Ebonyi, Lagos, and Rivers. Caused by intestinal bacteria that causes diarrhea and vomiting and leading to dehydration, cholera is mainly transmitted through contaminated water and food. A major factor in the spread of the disease is dirty and unhygienic environment. Another is the indiscriminate dumping of refuse and waste in streams that also supply drinking water to rural people. Cholera could be spread directly through sneezing, coughing, and touching of secretions from the host which may find its way to someone else's internal body. It could also be transmitted indirectly through flies, rodents, and some inanimate objects.

Cholera epidemics in Nigeria often occur through a feco-oral route by way of flies, faeces, food, fluid and formites (the so-called 5Fs). According to Yemi Amuda:

This medium could be contacted directly via food (improperly cooked meat, fish, vegetables), milk and water, especially water contaminated with unhygenically disposed human excreta or indirectly foods and drinks contaminated with such human waste products transmitted by flies, rodents, rats, among others. Some of the pathogens are airborne and may land directly to [sic] uncovered food and drinks or be inhaled directly. <sup>28</sup>

Caused by Vibro-cholera, the disease is endemic in Africa, the Middle East, parts of Asia and South and Central America. Its first outbreak in Nigeria was in 1972, and ever since, there have been a series of outbreaks in the country. More than two hundred and sixty (260) persons died of the disease in four Northern States in the last quarter of 2009. <sup>29</sup> The states of Jigawa, Bauchi, Gombe, Yobe, Borno, Adamawa, Taraba, Federal Capital Territory, Cross River, Kaduna, Osun, and Rivers were ravaged by a cholera outbreak in 2010. <sup>30</sup> Children are usually the most vulnerable victims of cholera epidemics in Nigeria which occur mostly during the rainy season

in the North. In the South, it occurs mostly during the dry season and subsists to the onset of the rainy season. <sup>31</sup>

As earlier stated, personal hygiene and environmental sanitation remain the best safeguards against the spread of cholera. Sanitation and clean water supply, as well as the restriction of the movement of infected persons could serve to reduce the incidence of infection. As a seasonal disease, it is also imperative for health promotion activities and enlightenment programmes to be encouraged by government at all levels. Influenza is one of the most contagious diseases. It is a viral respiratory tract infection which attacks people of all ages, though some people may not need to be hospitalized. Common symptoms associated with the disease include a sudden onset of fever, sore throat, muscle aches, and a non-productive cough. In extreme cases, influenza could lead to hospitalization, pneumonia, and even death. Like other communicable diseases, influenza is transmitted through contact with an infected person usually when such a person coughs or sneezes in the presence of other people. Occasionally, it could be spread through objects like door knobs, pencils, keyboards, and cooking or eating utensils. This means that the virus could live for a short time on such objects. When an infected person touches such objects, therefore, the virus can stick onto the hands, nose, eyes or mouth of such a person who has had contact with those objects. Among the other symptoms of influenza are: fatigue for several weeks and extreme exhaustion, as well as nasal congestion diarrhea, runny nose, nasal congestion, and vomiting. In a number of cases, the disease, as earlier stated, goes on its own without complications. The most vulnerable persons are children and persons who have weakened immune system.

Among the remedies for influenza is the patient getting plenty of rest to enable the immune system recovery. Also, the victim should drink plenty of fluids. However, it is advisable that an infected person whose temperature reaches 103°F or higher and who has had fever for more than three days, should consult a physician. People older than 65 years and children under five years, as well as pregnant women and persons with certain health challenges (such as heart disease, asthma, kidney disease, and diabetes) are at a greater risk of health complications from influenza, which could result in hospitalization or death. Emergency symptoms among children include: not waking up or not being fit enough to interact with other children; inability to drink water or other fluids; fast breathing or having trouble in trying to breathe; being irritable and not wanting to be touched or held, among others. Personal hygiene, especially washing hands on a regular basis, as well as annual vaccination for persons aged six and above, is recommended. In fact, vaccination remains the best option because those who are infected are less likely to develop severe symptoms if and when they are vaccinated.<sup>32</sup>

In Nigeria, the peak period for influenza between 2009 and 2010 was the month of November. As for its treatment, antiviral drugs are effective in treating influenza once the case is identified early and treatment given immediately. Most importantly, influenza epidemics spread rapidly and may be difficult to control. Decongestants, zinc lozenges, vitamin C, pain relievers, cough syrups and expectorants are among the popular remedies for cold and influenza. Staying hydrated, gargling with warm salt water, using a mentholated ointment like Vicks, and drinking lemons, are some home remedies. <sup>33</sup>

According to Wikipedia, "Meningitis is an acute inflammation of the protective membrane covering the brain and spinal cord, known collectively as the meninges". It is caused by a bacterium Neisseria meningitidis collectively known as meningococcal meningitis. Among its characteristic symptoms are fever, headache, and neck stiffness. These could result in such complications as deafness, epilepsy, and cognitive deficits. Meningitis could be prevented through vaccination, while antibiotics, antivirals and steroids are the recommended medications. Because of the inflammation's proximity to the brain and spinal cord, meningitis

could be life-threatening. It could also lead to serious long-term consequences if not quickly treated. Its occurrence in sub-Saharan Africa is usually between the months of December and June each year. Typically, meningitis is caused by an infection with micro-organisms, and most infections are due to viruses. It could be spread when there are droplets of respiratory secretions during close contact, either by kissing, sneezing or coughing on someone.

In Nigeria, the first outbreak of epidemic meningitis occurred in the Northern town of Zungeru in 1905. It was probably introduced into Zungeru by West African pilgrims who had embarked on the pilgrimage to Mecca across Sudan, en route Saudi Arabia. 35 It is reported that there were epidemics in Northern Nigeria in 1949-1950; 1960-1962, and 1969-1970.<sup>36</sup> For years, Nigeria has witnessed increasing cases of meningitis in many Northern states, where it is asserted that between 10% to 20% of the population carries the Neisseria meningitidis in their throat at any given time, though this could be higher in epidemic situations. <sup>37</sup>In 2017, nearly 500 persons died in a meningitis out-break out of 4,637 reported cases. Nigeria is one of the 25 countries in sub-Saharan Africa that falls within the so-called "meningitis belt". Here, large epidemics occur, usually in the dry season as a result of the low humidity and dusty conditions which characterize the season. Even when the disease is diagnosed early and immediate and adequate treatment is undertaken, it has been asserted that between five and ten percent of patients die within a day or two after the symptoms have manifested. <sup>38</sup>Vision loss, problems with memory and concentration, learning difficulties, kidney problems, hearing loss, problems of coordinating movement and balance, as well as bone and joint problems are some of the complications associated with meningitis.

Meningitis could be prevented by taking antibiotics thrice a day for between seven to twenty-one days. Also, close contact with a victim should be avoided and personal items should not be shared, especially things like drinking glasses, toothbrushes, cigarettes, water bottles, silver wares as well as other items where secretions from an infected person could stick on. As for its treatment, this varies, depending on the causative agent. However, early antibiotic therapy is recommended once the infection has been diagnosed. This could be done intravenously. In addition, vaccines are available for the disease. Therefore, vaccination is of utmost importance in containing the disease. Tuberculosis is an infectious disease usually causes by the mycobaterium tuberclosis bacteria. It usually affects the lungs, and is considered the second biggest killer globally, after cancer. In 2016, it killed 1.3 million persons, <sup>39</sup> a slight drop from the 2015 figure of 1.8 million. <sup>40</sup>It could be spread through the air from an infected person to a new victim. It affects all age groups and all parts of the world.

Among the early warnings of TB are loss of appetite, chills, fever and night sweats, feeling weak, chest pain, weight loss and a severe cough that lasts for three or more weeks. These are also its symptoms and if not adequately handled, it can affect other parts of the body through the bloodstream. If it gets to the brain, it could lead to meningitis; if it gets to the heart, it could affect the ability of the heart to pump blood, resulting in cardiac tamponade; if it gets to the liver and kidneys, it could result in blood in the urine due to the effect on the waste filtration functions of these organs; finally, if it gets to the bones, there may be spinal pain and joint destruction. <sup>41</sup> Measures that could be adopted to prevent the spread of T.B are: the wearing of a mask; covering the mouth; ventilating the rooms and avoiding contact with infected persons. Vaccination is recommended for children. But antibiotic medication is usually preferred, depending on a number of factors, such as age, overall health, the location of infection as well as whether the tuberculosis is latent or active. Whereas victims with latent TB may need just one kind of antibiotics, those with active TB will normally require a prescription of several drugs.

Nigeria is one of the countries with the highest incidence of tuberculosis in the world, with about 407,000 persons having the disease each year. In Africa, it is ranked second. Along with India and Indonesia, Nigeria accounts for almost half of the total gap of the ten countries

that account for 64% global TB cases. 42 There is a huge gap in TB case findings in Nigeria which is especially higher among children from zero to fourteen years. Although over 11,500 cases were detected through active house-to-house case searching in 2017, the number of cases detected is just a small percentage of the 300,000 missing TB cases in the country. 43

One major factors that has increased the prevalence of TB in Nigeria is poverty. Many of the victims of the disease are poor and live in the rural areas where access to healthcare is severely limited. Those at greater risk of getting infected are infants, women, and people living with HIV/ AIDS, while HIV (Human Immunodeficiency virus) is a lentivirus that causes HIV infection, AIDS (Acquired Immunodeficiency Syndrome) is a condition which weakens the human immune system such that it creates the enabling environment for life-threatening opportunistic infections and cancers to thrive. Unless it is treated, the most any person who has been infected by AIDS can last is between nine and eleven years. The virus is sexually transmitted, though non-sexual transmission can occur from an infected mother to her infant either during pregnancy, childbirth or through breast milk. 44 AIDS has several strains.

Many carriers of AIDS (or HIV-Positive people) are unaware of their status until tests are carried out on them. Modern testing of the virus varies, depending on the phase or stage of the infection. But most victims develop a flu-like illness within a month or two after contracting the virus. This may last for a few weeks with symptoms such as fever, headache, sore throat and painful mouth sore, muscle aches and joint pain, swollen lymph glands on the neck, as well as rashes. <sup>45</sup> The HIV remains in the body and may last for about ten years, multiplying in the body and destroying the immune system. Weight loss, fever, fatigue and diarrhea, are symptomatic of HIV infection at this stage. Complications associated with HIV infection include tuberculosis, herpes virus, candidiasis, cryptococcal meningitis, severe weight loss, as well as neurological complications, kidney disease, et cetera. Apart from sexual intercourse, HIV could also be transmitted through sharing needles and the use of unsterilized objects during circumcision. Since there is no cure yet for HIV, abstinence from sexual intercourse, or the use of condoms, is recommended.

As at 2007, there were 3.1 million Nigerians living with HIV; there was a 2.8% HIV prevalence for persons aged 15-49; there were 210,000 new HIV infections, and 150,000 AIDS-related deaths. Also, the percentage of adults on antiretroviral treatment was 34%, while 26% of children were on antiretroviral treatment. In addition, Nigeria is said to have the second largest HIV epidemic in the world and records the highest rates of new infections in sub-Saharan Africa, with many AID-related deaths. 46 Apart from unprotected hetero-sex, commercial sex workers also transmit the disease, as do homosexual men, and people who inject drugs and share needles and syringes. In 2016, Nigeria accounted for nearly 60% of all new HIV infections in West and Central Africa. During this period, 41% of people living with HIV came from the six states of Kaduna, Akwa-Ibom, Benue, Lagos, Kano, and Oyo. The prevalence was higher in the South-South geopolitical zone (Akwa-Ibom, Bayelsa, Cross River, Delta, and Rivers State), and stood at 5.5%. The South-East geopolitical zone (Abia, Anambra, Ebonyi, Enugu, and Imo) with 1.8%, had the lowest prevalence rate in 2016. The rate of HIV is higher in the rural areas (4%) than in the urban areas (3%). 47 Unfortunately, Nigeria has fallen far short of meeting the global target of ensuring that 90% of people diagnosed with HIV are on antiretroviral treatment. As at 2017, only about 33% of such persons were receiving the treatment. The poor treatment coverage has increased the number of deaths from the disease. This has been compounded by weaknesses in the healthcare system. Both the Federal Ministry of Health and the World Health Organization have, however, been raising awareness and providing drugs for victims.

In late 2019, at Wuhan in Hubei Province, China, a viral disease that later became a pandemic made its first appearance. By January 2020, the coronavirus or COVID-19, had taken the world unawares and unprepared. From Europe to North America; Africa to Asia; and South America to Central America and the Caribbean Islands, the disease took a heavy toll on human lives and national economies. Oil prices plummeted, and lockdowns and self-isolation, as well as personal hygiene, became the refrain all over the world. Covid-19 spares neither the rich nor the poor; everyone is a possible victim, irrespective of age, race, nationality, or religion. The global economy literally ground to a very painful halt because of lockdowns. Nigeria's first confirmed case was on February 27, 2020 and the victim was an Italian man who was a staff of a foreign company in Ogun state.

Covid-19 is an infectious viral disease whose symptoms include; pneumonia, mild fever, and moderate respiratory or breathing problems. It spreads primarily through droplets of liquids (saliva or mucus) from either the mouth or nose. When an infected person sneezes or coughs, the virus is released and spreads accordingly. The WHO declared the pandemic a Public Health Emergency of International Concern because of its upsurge. The disease is deadlier than the flu, and the people who are more at risk of having it or dying from it are said to be older people and those who have such underlying health issues as heart disease, hypertension, and diabetes. Fortunately, by late 2020, a number of pharmaceutical companies such as Pfizer, Johnson and Johnson, Moderna, as well as universities like Oxford, had started producing Covid-19 vaccines. Nigeria received her first set of about 4 million Oxford-AstraZeneca vaccines under the International Covid-19 Vaccine Global Access (COVAX) Scheme on March 2, 2021.

The state of well-being of any individual which enables him/her to realize and optimize his/her own potentials and cope with the normal stresses of life, work productively, and contribute meaningfully to his community, is what mental health means. The World Health (WHO) defines health generally to mean "... a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." <sup>48</sup> Specifically, however, mental health includes the emotional, psychological and social well-being of the member of any given human community. On the other hand, occupational health, according to the National Institute of Environmental Health Service of the United States, refers to "...the identification and control of risks arising from physical, chemical and other workplace hazards in order to establish and maintain a safe and healthy working environment". 49 If there is one fact that is not in doubt, it is that the environment of a workplace affects the mental health of the employee. For a workplace to impact positively on the employees, there must be openness, communication, basic line management relationships, involvement of employees in decisionmaking, as well as clear health policies. Workers' grievances should be addressed, and mental health specialists should be routinely engaged to assess employees' mental health status. This is very important because poor mental health of individual employees invariably impact on their productivity, and by extension, the viability of the organization.

According to a source, the country loses nearly one billion Naira annually to mental health problems. Depression and anxiety disorders in Nigeria are not only prevalent, but they are hardly recognized and treated on time. In the workplace, mental conditions commonly associated with employment issues include illicit drug use and misuse of prescribed psychotropic medications. This could be due to bullying, frustration, and stress which could themselves be as a result of occupational hazards like chemical, biological, psychosocial or physical hazards. It is estimated that sooner or later, more Nigerians will be disabled by common mental disorders like depression, anxiety and substance abuse-related disorders, than by complications arising from AIDS, heart disease, accidents, and wars combined. Furthermore, it has been observed that between 20% to 30% of the population of the country currently suffer from mental disorders. Unfortunately, Nigeria has less than 200 psychiatrists,

while primary health care workers are ill-equipped professionally to handle mental health disorders. Government has not given the desired attention to mental health disorders.

As a matter of fact, the level of awareness of mental health issues by the Nigerian public is very low. Also, the misconceptions regarding mental health have not helped matters. Many victims of mental health disorders are believed to either suffer from witchcraft or are said to be paying for their previous evil deeds. More often than not, therefore, many mental health victims are taken to traditional healers. The upsurge in cases of incest, suicide and homicide in Nigeria cannot be divorced from mental health disorders. The downturn in the economy since 2016 has exacerbated poverty, hopelessness, insecurity and high levels of stress. These have, in turn, resulted in more cases of mental disorders. The situation has been worsened by the general ignorance of the public who is yet to see mental health illness as a disease and therefore, avoid stigmatization and render support to victims.

#### Conclusion

Nigeria became an independent country in 1960, after a hundred years of British colonial rule. Surprisingly, the country's healthcare delivery system has performed below expectations since 1960. Part of the explanation is government's failure to adequately fund the health sector. There is also the question of corruption which has resulted in the misappropriation of funds meant for the health sector. For instance, in 2017, the Executive Secretary of the National Health Insurance Scheme (NHIS), Usman Yusuf, was embroiled in a protracted corruption case. Though he allegedly embezzled nearly one billion U.S. dollars, for which he was suspended by the Governing Board of the agency, the intervention of President Buhari vitiated his prosecution. <sup>53</sup>In its more than 18 years of existence, the NHIS has only attained a universal coverage of 2 to 3%. Millions of Nigerians are, therefore, not covered by the scheme. Yet, health is generally regarded as synonymous with wealth.

As has been rightly observed:

Undoubtedly, there have been some significant developments in Nigeria's health sector. These gains and progressive developments notwithstanding, the reality and hard fact is that when placed on the balance, the story of Nigeria's healthcare delivery system is still preeminently an unpleasant one laced with unattractive health status indicators that fly in the face of local, national and global expectations.

Apart from poor funding and pervasive corruption in the health sector, the citizens themselves are very ignorant of their rights to subsidized healthcare. Also, health workers often embark on industrial actions due to poor remuneration and working conditions. These affect their productivity, and impact negatively on the patients under their care. Frustration has forced many medical doctors, nurses, and other health professionals to leave in droves to the United States, Europe, the Middle East, and other parts of the world, in search of better opportunities.

One way of tackling the problems of the health sector is adequate funding by governments at all levels. The Primary Healthcare Centres (PHCs) which are supposed to contain the spread and debilitating effects of communicable diseases in the rural areas, have failed to do so due to inadequate funding. Even the secondary healthcare institutions are beset with all manners of official neglect. Apart from the perennial shortage of drugs and personnel, state governments have failed to fund them and have, ironically, dabbled into tertiary healthcare. The Federal Government, on its part, has been busy building Primary Healthcare Centres across the country without taking into account the peculiarities of the rural

communities. Both communicable and non-communicable diseases are still ravaging the country. Among the most prevalent non-communicable diseases are diabetes mellitus, cancer, chronic respiratory diseases, cardiovascular diseases and musculoskeletal disorders. Globally, seven in ten deaths in Nigeria are caused by non-communicable diseases, according to the WHO.<sup>55</sup>In Nigeria, more persons are now living with non-communicable diseases, while many infectious diseases are on the decline. Globalization and widespread internet usage has resulted in the sharing of information and the adoption of foreign lifestyles and food habits. Some of these may have contributed to the risk of non-communicable diseases due to behavioural changes. Globalization has opened up Nigeria's market to foreign goods which not only affect local production of those goods, but also affect the citizens' traditional diets. <sup>56</sup> For instance, there has been an increase in the number of fast food restaurants and the availability of all sorts of bottled drinks. The consumption pattern of patrons of this foreign food culture has increased cases of obesity and the attendant health challenges and worsened the burden of the health sector.

Thus, governments at all level should not only fund the health sector adequately by increasing budgetary allocations to that sector, but should also embark on enlightenment programmes to educate the public on the need to patronize local delicacies and avoid foreign foods that could, in the long run, lead to non-communicable diseases. More importantly, there should be improvements in the working conditions of health professionals as well as in their remunerations. Also, governments should provide adequate social and financial protection schemes for poor and vulnerable citizens suffering from communicable and non-communicable diseases and those suffering from mental health illness. For instance, a new bill should be enacted to make it mandatory for the government to provide basic healthcare for the poor and vulnerable. The 2014 National Health Act (NHA), like many other Federal government policies, has not been implemented.

The Nigerian Health Research Ethics Committee (NHREC) should, in conjunction with the National Agency for the Control of AIDS (NACA), the Nigeria Centre for Disease Control (NCDC) and the Federal Ministry of Health, consider a critical and scientific evaluation of the claims of Nigerian researchers and scientists about their vaccines for the treatment of infectious diseases like HIV/AIDS. For instance, in 2000, Dr. Jeremiah O. A. Abalaka, a surgeon turned immunologist, asserted that he has produced a vaccine for the cure for AIDS. Similarly, in 2017 and 2020, Prof. Maduike Ezeibe, a Professor of Veterinary Medicine claimed to have found a cure for HIV/AIDS and Coronavirus, while Professor Maurice Iwu, a Pharmacologist claimed in 2020, to have produced a vaccine for Coronavirus. The need to verify these claims and encourage local scientists cannot be over-emphasized. After all, in 1971, a Nigerian Professor of Virology at the University of Nigeria, Nsukka, Augustine Nwaneri Uzoma Njoku-Obi and his colleagues, produced a cholera vaccine that was approved for use globally by the WHO. Finally, the international politics involved in drug research and manufacturing should not be allowed to stifle the efforts of Nigerian scientists and technologists.

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