

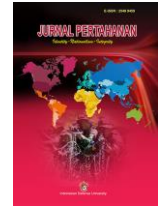


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### **HEALTH SECURITY AND THE CHALLENGE OF SOCIAL AND ENVIRONMENTAL VULNERABILITIES IN NIGERIA**

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#### **Abstract**

There is a growing recognition of the importance of health security to economic development globally. 'Health security' as a phenomenon continues to receive the attention of academics and policymakers in the course of ensuring a state of complete physical, mental and social well-being for all. Nigeria's health policy equally gives a premium to this. The aim of this study, hinging on archival and qualitative research design, is to explore health security in Nigeria vis-à-vis the constraining social and environmental vulnerabilities. The discourse took into account unfolding social challenges and various environmental problems coupled with the high level of poverty. This article indicates that social and environmental uncertainties interact with many parts of the health care system in a variety of ways. This hurts health security in Nigeria as a result of poor infrastructure development, insufficient government financing, the lack of an integrated system for disease prevention and monitoring, frequent policy reversals, security issues, and unimpressive health indicators. Because of this and considering the state of the Nigerian health care that is worsening on a global standard, it is obvious that health security is yet to have a strong footing. For health security to have a meaningful impact on people's wellbeing, appropriate health services should be made accessible to those who need them.

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## INTRODUCTION

The significance of healthcare to the human population and progress cannot be overstated. Health is essential to both communal well-being and personal well-being. Since health and development are inextricably linked, health is seen as both a precondition for and a precursor of development. Every country's development progress reflects in the health and socioeconomic well-being of its people. As a result, the health sector is the backbone of every economy's growth and development. It has a significant impact on people's economic potential and is also essential to people's ability to enjoy and appreciate all other parts of life. This explains why the growth of any region may fail to take root if several critical variables are not in place. Trade, enforced laws, effective governance, and, most significantly, the need to enhance people's health and education are among these aspects. Like any other basic need of man, health continues to occupy a central role as the major component that improves the quality of life as well as a prerequisite for high levels of productivity (Mugisha, Bocar, Dong, Chepng'eno, & Sauerborn, 2004). This undoubtedly confirms the World Health Organization's (1978) definition of health as a condition of the whole physical, mental, and social well-being, rather than the simple absence of sickness or infirmity. This is based on the services provided by medical and allied health professionals for the prevention, treatment, and management of illness, as well as the preservation of mental and physical well-being.

Kalipeni & Kamlongera (1996) noted that the incidence and prevalence of infectious and other killer diseases need to be eradicated or curtailed as a nation develops to exert positive control over infant and adult mortality and morbidity rates as well as improvement or increase life expectancy at birth. Thus, this article explores how social and environmental uncertainties interact with various aspects of the healthcare system and security in

Nigeria in several ways and the general implications of social and environmental vulnerabilities for health security in Nigeria.

Availability of and accessibility to, healthcare services enhance the quality of life. As a quality of life, health is a result of a person's functioning within his biological, physical, and social environment. The quality of a person's life is determined by the effectiveness of his level of living. The effectiveness of living is a product of a person's functioning in a variety of life's undertakings including physical, mental, and social experiences (Udoh, 2002). Because of this, health thus becomes a major priority in any society due to the central role it plays in the developmental process. However, in many countries, access to health care is as difficult as the battle for survival itself (Raheem, 2006). Several studies have shown a link between health and the 'quality' of 'human capital,' the primary resource for development.

Ruger, Jamison, Bloom, & Canning (2012) discovered, when looking at health and economic perspectives at the global level, that growth in health and other elements of development over the twentieth century undoubtedly constituted one of humanity's greatest achievements. Jamison, Lau, & Wang (2005) generated estimates of the contributions of health to economic growth by combining empirical estimates of the impact of adult survival rates on national income with country-specific estimates of increases in survival rates. Their findings imply that, on average, 11 percent of the growth rate in per capita income was attributable to health gains in the sample of 53 nations included in their analysis, while there is significant variance among countries. In one of its numerous reports, the World Bank emphasized the link between health and development, stating that no country has attained a high level of economic development with a population crippled by high infant and maternal mortality, widespread illness among its workforce, and low life

expectancy. Another revelation by Giwa (1999) appears to offer an explicit explanation for the underdevelopment of African states. In 1991, the average life expectancy in Africa was 51 years, 62 years in all low-income countries, and 77 years in industrialized countries. At the same time, infant mortality in low-income nations is ten times higher than in developed countries.

The World Health Organization employs several indicators as evaluation tools in the course of analyzing and assessing the performance of health systems among its 191 members. These include disability adjustment life expectancy (DALE) and Equity of Child Survival (ECS). Furthermore, the health systems of member countries were assessed in terms of responsiveness, fairness, overall objective achievement, the quantity of health spending per capita, influence on health, and overall performance (United Nations Children Fund, 2001). As a result, Nigeria faces difficulty in living up to its image and standing on the continent and in the international community. This is since every state has a significant role to play in the distribution and administration of health care services; this is especially crucial given that a country's strong health statistics provide tremendous legitimization for political rule. As a result of the foregoing, there is a need for an examination of Nigeria's capacity as a state to ensure its citizens' health security (Akinrinde & Tar, 2021). When the effects of acute public health crises that risk the collective health of communities living across geographic areas and international boundaries are sufficiently mitigated, a citizen becomes health-secure (World Health Organisation, 2020).

In the words of Rushton & Youde (2014), this is accomplished when governments globally see to their tasks of protecting the health of their populations. This study, therefore, delves deeper into the broader implications of the country's prevalent social and environmental

vulnerabilities for health security. This is tied to the fact that without health security, there is no defense security. A country that is facing health insecurity is prone to internal and external attacks on its national defense.

## **METHODS**

This study is an archival and qualitative study that seeks to evaluate Nigerian health safety vis-à-vis the role of social and environmental vulnerabilities towards health insecurity in Nigeria. It adopts a systematic desktop review and content analysis for both data collection and analysis. The study also considers discourses on social concerns and the numerous environmental problems in conjunction with a high degree of poverty and their implications for health security.

### **Health Security and the Significance of the Study**

Although there is no universally accepted definition of health security, an examination of the literature and reports reveals that the concept's origins are linked to the widespread of infectious diseases that harm not only individuals but society as a whole (Rokvi and Jefti, 2015; Chiu et al., 2009; Aldis, 2008). The United Nations defined health security for the first time in 1994 (United Nations Development Programme, 1994). Following that, numerous researchers have adopted the term health security to describe health challenges that have a substantial impact on human general well-being (Chan, 2009; Aldis, 2008; Chiu, Huang, Hung, & Lee, 2009; Scharoun, Van Caulil, & Liberman, 2002). Public health security, global health security, international health security, and global public health security are all often used words (Wilson, McDougall, & Forster, 2009; Aldis, 2008; Wilson, Von Tigerstrom, & McDougall, 2008; Fukuda-Parr, 2003; Hardiman, 2003). Within this perspective, Rushton (2011) and Fidler (2003) emphasized the importance of health security in the context of the use of

pathogen microorganisms as biological weapons, as well as the fact that certain diseases, particularly HIV/AIDS, can have social, political, economic, and military implications that jeopardize a country's and region's stability and security. The creation and spread of novel microorganisms; globalization of travel and commerce; the increase of drug resistance; and the possible use of laboratories to create and release purposefully or unintentionally hazardous bacteria are all factors that contribute to health security (Mostafavi, 2017). As a result, the only goal of health security is to make the globe safer and more secure against infectious disease threats. It is seen as one of the most critical non-traditional security challenges (Collins, 2019; Davies, 2008; Booth, 2012; McInnes & Lee, 2006; Fidler, 2003).

An irrefutable fact is that the notion of human security with a focus on people forms part of the concerns of the United Nations. Nonetheless, the idea of security has been narrowed down, throughout time, to include the protection of territory from external assault or the defense of national interests in foreign policy (United Nations Development Programme, 1994). Human security is a seven-dimensional concept with the common purpose of protecting the important core of all human lives from significant widespread dangers in a way that is consistent with long-term human fulfillment (Alkire, 2003). These aspects, which comprised Economically, Food, Health, Personal, Political, Environmental, and Community (Rokvi and Jefti, 2015; United Nations Development Programme, 1994), demonstrate that debates on health security in the past were conducted within the context of human security discourse. Another argument in support of distinct recognition for health security is that disease remains the cause of 91% of deaths worldwide despite the perception of terrorism as being the biggest threat to security among the developed countries (Rokvić & Z., 2015). In 2013 alone, HIV/AIDS was reported to have

infected over 30 million people and claimed 1.5 million lives worldwide (The World Bank, 2013).

According to the Center for Disease Control and Prevention (CDC), health security is part of a government's social contract with its people as well as its international social contract. As a result, the fundamental obligation of a government is to safeguard its inhabitants from health dangers by implementing required measures to assure clean food, water, and air, as well as the prevention of transmissible illnesses. The significance of this might be emphasized further by the fact that illnesses do not respect boundaries, as new viral and bacterial pathogens evolve; the disease can be transferred from an isolated rural community to any big metropolis in as little as 36 hours (Ijaz, 2018). This is evident in the Ebola epidemic and the most recent Coronavirus pandemic with little or no response preparedness from countries. The ease of global travel is an indication of better opportunities for disease spread. As the globe becomes increasingly urbanized, illnesses have a greater chance of spreading in highly populated places. As a result, effective and adaptable capacities in preparation are necessary (Centers for Disease Control and Prevention, 2020), necessitating quicker, more comprehensive, and more adaptive skills. Even if the illness is fast-moving and lethal, this will aid in the efficient control of outbreaks and save lives (Moon et al., 2015). Investments in fundamental areas of public health are also needed to make an impact, as was done to stop lethal epidemics such as Ebola in Nigeria, Polio in Mali, Yellow Fever in Angola, and Avian Flu in Cameroon (Centers for Disease Control and Prevention, 2020; Moon et al., 2015). Within this context, the implementation of the key capabilities of the International Health Regulations (2005) becomes both overdue and urgent. As a result, governments must strengthen their capacity to prevent, diagnose, and respond to

infectious disease threats at the source to reduce morbidity and mortality, as well as the economic burden on developing nations and the global community (World Health Organisation, 2005).

## **RESULT AND DISCUSSION**

### **Health Indicators and the need for Commitment to Health Security in Nigeria**

The three tiers of government in Nigeria are in charge of providing health care (the federal, state, and local governments). There are 774 Local Government Areas in Nigeria (LGA) (Akinrinde & Adebisi, 2021). These local governments are tasked with overseeing the primary health care system and its subsystems in each of the LGAs, villages, and districts, with assistance from their corresponding state departments of health and private medical consultants (Adeyeye, Pasquire, Bouchlaghem, & Chandler, 2006). The secondary health care system is managed at the state level by the ministry of health. Teaching and specialist hospitals provide tertiary health care. Patients are frequently referred from primary care to higher levels of care based on the severity of their disease. This is the initial level of specialty services, which are provided in various divisions of a state. At the state level, the most important health care services include laboratory testing, diagnostic services, and rehabilitation (Oseni, Robinson, & Fong, 2018). The federal government equally engages volunteer and nonprofit groups, as well as private practitioners, at the tertiary level (Ahmed & Gidado, 2008). Despite this, a healthcare provision in Nigeria is classified as poor.

According to Abel (2008), many Nigerians are at risk of death due to various health issues. Poor healthcare services have been blamed for the country's rising death rates (Oseni et al., 2018). International health data confirm that six decades after liberation, Nigeria is still far from achieving the minimum essential health level. According to the World Health

Organization, 466,000 Nigerian children (approximately 11.37 percent of the world total) die at birth, out of the 4.1 million newborn fatalities documented globally (World Health Organization, 2017). According to United States Agency for International Development (2021), Nigeria's health indices are among the lowest in Africa. The country has one of the fastest increasing populations in the world, with 5.5 live births per woman and a population growth rate of 3.2 percent per year; it is expected to reach 440 million by 2050. With its rapidly rising population and development issues, the country drags down the African continent's socioeconomic metrics.

Access to safe drinking water continues to deteriorate, while access to modern sewage systems in cities remains a tall order. In terms of sanitation, it has been noted that only Abuja and Lagos have centralized sewage systems. Although infrastructure exists in Lagos, Gandy (2006) stated that just 1% of Lagos residences were linked to common sewers. In 2016, the mortality rate due to unclean water, poor hygiene, and lack of hygiene were 68.6 fatalities per 100,000 people. If health security covers actions and methods that minimize public health incidents to protect population health, Nigeria is far from it when the few health indicators described above are taken into account.

### **Plausibility of Health Security within Nigerian Turbulent Clime**

Population increase has been mentioned as a key contributor to environmental mismanagement on several occasions. Almost every facet of oil and gas exploration and extraction in Nigeria hurts the ecology and indigenous biodiversity (Nenibarini, 2004). This was validated in United Nations Environment Programme (UNEP) studies (1999 and 2011) on Ogoni land and Shell Petroleum Development Company's activities (SPDC). According to these accounts, the occurrence of an oil spill on land causes fire breakouts, resulting in

the loss of vegetation and the formation of crust across the whole terrain, making cleanup and re-vegetation extremely difficult (United Nations Environmental Programme, 2011). This has also resulted in the manifestation of the consequences of soil erosion, which Lekwa & Whiteside (1986) and Hemphill (1993) defined as a persistent loss of habitat quality by rendering areas barren and unsuitable for plants and animals native to that ecosystem. This resulted in a lack of agricultural land, the destruction of forests and wetlands, and poverty.

In Nigeria, the incidence of social and economic disparity continues to rise, causing rural residents to relocate to cities in quest of better pastures. As a result, fast expansion of accommodating towns occurs, resulting in urbanization. This, in turn, places further strain on the existing, but inadequate, infrastructure in these locations, resulting in the loss of more habitats for growth to meet the throngs of rural migrants (Onyenwe, Nnadozie, Ibedugha, & Ozoemena, 2017). As urbanization gets more evident, the environment becomes more vulnerable to events such as floods and pollution. Water flooding is one of the unfavorable results of environmental degradation in metropolitan areas in Nigeria, which is produced by permanent effects on some flora and wildlife species. Pollution from household and industrial wastes and emissions is a common occurrence that has been on the rise, producing massive environmental, health, and socioeconomic concerns. Urban pollution grows as a result of the congested nature of an area's industrial, commercial, and business operations. Pollution is also caused by unplanned growth, traffic congestion, insufficient infrastructure, and poor waste management strategies, particularly from activities that emit lead-acid batteries, fertilizer, pesticides, paints, pharmaceuticals, food processing, textiles, hospital and medical, beverages, and various waste streams (particularly harmful wastes) (Izah, Aigberua, & Nduka, 2018).

The extractive sector, like urbanization in Nigeria, contributes modestly to environmental degradation. The work of oil prospecting firms in the Niger Delta region is a good example (Nenibarini, 2004). Because of the destructive consequences on the ecology, oil leakage and gas flaring have been persistent causes of worry in the Niger Delta region (Ratcliffe, 2019). As the environment deteriorates, natural ecosystems become increasingly sensitive to extreme climatic conditions and high levels of greenhouse gases. As a result, biodiversity declines as the natural ecology becomes incapable of supporting life. This hurts water quality and resources, as well as increases the danger of floods and droughts, as well as a rise the incidence of vector-borne illnesses. Frustration increases with the loss of a source of income, resulting in a high incidence of unemployment and vulnerability to growing poverty levels, as well as negative health symptoms such as headaches, heart difficulties, irritability, dizziness, and gene or neuron abnormalities.

### **Manifesting Vulnerabilities and Health Security**

Scholars have ascribed Nigeria's violent uprisings (including the Boko Haram example) to grievances and corruption and their consequent social malaise of poverty and unemployment (Cook, 2011). Similarly, Ale (2009) observed that people became dissatisfied with the government and what it stood for as a result of persistent mass poverty; inequality in educational, political, and employment opportunities. Nigerians, according to Carson (2012), are eager for growth and betterment in their lives, with Northern Nigerians feeling this desire the most intensely (United Nations Children Fund, 2016; Campbell & Harwood, 2011). With these numerous problems, it becomes increasingly difficult for the people to make ends meet through farming, commerce, and formal work. The fight for political power, cultural and ethno-religious divides, disputes over

resource distribution and control, land allocation, citizenship issues, and the indigene/settler debate have become the order of the day. Contestations to overcome what seems to be 'inhumanity' have devolved into violent clashes in several sections of the country (Okoli, 2013; Egwemi, 2009; Hazen & Horner, 2007). As a result of this, every region of Nigeria adopted one social and political challenge to contend with. In the South-West and South-East, the sprouting issues included ritual and money-making, the exasperating struggle for economic and political survival (Salihu, Isiaka, & Abdulaziz, 2019; Usman, 2017; Usman, 2010; George & Ukpong, 2013). In the North-West, there are cattle rustling, banditry, and violent cases (Ahmadu & Ayuba, 2018; Ahmadu, 2019; Fasona et al., 2016; Olaniyan & Yahaya, 2016; (Bello, 2013). Communal crisis and hate crime predominate in the Middle Belt part of the country. In the South-South we have environmental challenges through oil spillage, a sense of deprivation, and kidnapping. As they struggle and conflicts become intense, the entire country becomes susceptible to all forms of havoc that continue to worsen the already appalling social and natural environmental enclaves.

As years of neglect and economic mismanagement transformed and confined several citizens to the poorest part of the economic ladder in Nigeria, the country thus becomes the theatre of the most fanatical uprisings. Typical in this case are the Maitatsine uprisings of 1980 in Kano, 1982 in Kaduna and Bulumkutu, 1984 in Yola and 1985 in Bauchi, the Kano metropolitan riot of October 1982, the Kafanchan/Kaduna/Zaria/Funtua religious riots of March 1987, the Kaduna Polytechnic riot of March 1988, the Bauchi/Katsina riots of March/April 1991, the Kano riot of October 1991, the Zangon-Kataf riot of May 1992, the Kano civil disturbance of December 1991 and the Jos crisis of April 1994, the recurrent Jos crises of 2001, 2002, 2004, 2008, January 2010 (Adesoji, 2010; Omipidan, 2009; Akaeze,

2009), Aguleri-Umuleri crisis (Nwobi, 2019; Obiakor, 2016; Onwuzuruigbo, 2011), Modakeke/Ife civil disturbances (Elugbaju, 2018; Folami & Olaiya, 2016), Niger Delta (Ajodo-Adebanjoko, 2016; Ajaero, Mozie, Okeke, Okpanachi, & Onyishi, 2015) out of the multitude of problems that continue to make people vulnerable. In the face of these crises, it is challenging to ensure that health systems are well-functioning and inclusive, ensuring health security. This has therefore offered insight into the Nigerian state's seeming incapacity to successfully manage any outbreak of disease pandemic at an early stage when the odds of quick containment are at best distant.

### **Gender Issues in Vulnerability and Health Security**

Women and children are the most vulnerable species on the planet, especially during disasters (Enarson, 2007; Enarson, Fothergill, & Peek, 2007; Enarson & Morrow, 1998; Bianchi & Spain, 1996). Women in Nigeria, according to Cutter, Emrich, Webb, & Morath (2009), are the most vulnerable to health and other forms of disasters due to their responsibilities as mothers and carers. Women played strategic roles in seeking safety in virtually all disasters that occurred in the country, from ethnic disturbances to religious riots, the Nigerian civil war, the Boko Haram imbroglio, and recent flood disasters, most notably in the course of protecting the very young and the very old, both of whom require help and supervision. Women and children are particularly vulnerable to the cycle of poverty. The processes connected with this cycle are felt beginning with conception when the mother suffers the repercussions of early childhood malnutrition, insufficient schooling (or none at all), and years of overwork and frequent sickness (United Nations Children Fund, 2001). A woman's slowed development may predispose her to the cephalo-pelvic disproportion and obstructed labor. She most likely had

limited, if any, access to family planning services. She is also less likely to seek prenatal care or have her baby delivered to a health facility, increasing the risk of maternal, perinatal, and neonatal death. As a result, millions of children and women confront unique challenges such as disadvantage, discrimination, abuse, and exploitation, often in horrible situations. This problem not only increases the danger of survival and creates tough barriers to the development of children and women, but it also poses significant challenges to their rights, necessitating particular safeguards. As a result, the altruistic efforts and crucial care they generally offer to support the health system, particularly at the family level, are hampered. The implications for this on health security might be unfathomable.

### **Environmental Degradation and Socio-religious Conflicts**

The centrality of environmental resources and their significance to the subsistence and economic mainstay of the people and the nations cannot be underplayed. Still, the environment continues to experience degradation with the increase in human population and when access to the utilization of these resources is not sustainable. The environment is adjudged to be experiencing degradation whenever its capacity to meet social and ecological objectives and needs decreases (United Nations International Strategy for Disaster Reduction, 2009). The surge in population and the attendant increase in human activities, the exploitation, and degradation of environmental resources have thus corroborated the hypothesis of Hardin (1968) on the roles of Africa's growing population in the degradation and pollution of most of the continent's lakes. The unsustainable exploitation of environmental resources continues to lead to extinction and facilitates fierce competition over the existing ones.

The emanating problems have both direct and indirect impacts on human well-being.

Buttressing this, Onuoha (2008) revealed that declining soil fertility leads to poor crop yields, rangeland depletion reduces animal productivity, and any deterioration in water quality adversely affects the fish fauna. Because of this, access to or control of the resources of an environment usually becomes a contentious issue, generating tensions and violent conflicts within, between, and among nations. For example, competing demands for freshwater by the four riparian states of Lake Chad (Niger, Nigeria, Cameroon, and Chad) according to Coe & Foley (2001) mostly through massive irrigation projects accounted for almost 30 percent of the observed decrease in lake area since the early 1960s. The lake, which had little influence on the region's hydrology through irrigation, has shrunk in size and surface area during the last 50 years. Great and unsustainable irrigation projects and reservoirs erected by Niger, Nigeria, Cameroon, and Chad that diverted significant water from the lake as well as the Chari and Longone rivers have largely contributed to the lake's shrinkage. Cameroon built the Yaguou-Tekele dike (on the Chari-Logone) and the Maga dam in 1979, while Nigeria built a series of dams including the Tiga Dam on the River Yobe, the Alau Dam on the River Ngadda, and the Yedersdam Dam on the River Yedersdam. Other examples are Nigeria's South Chad Irrigation Project (SCIP) and the Republic of Chad's MAMDI Polder Project.

As the human population continues to put a strain on the environment, the repercussions of deterioration of rangeland, deforestation, degradation of topsoil, incorrect waste disposal, depletion of freshwater, pollution of air and water systems, and animal extinction persist. The sum of these activities has effects, such as an increase in global average surface temperature caused by increased levels of carbon dioxide, methane, and other trace gases in the atmosphere. These gases are referred to collectively as greenhouse gases because they contribute to the warming of the Earth's surface and lower atmosphere, a



phenomenon known as the greenhouse effect (Encyclopædia Britannica, 2014). Like a vicious cycle, the effects of this impinge on the environment, and the more damaging this becomes the more the detrimental activities of the human populace that usually affect the climate disastrously. At this point, means of livelihood become out of reach to the multitude who have no other alternative than to migrate to the cities. Many of these with no feasible means of survival either team up with others to become miscreants or are forced to return to their base to foment troubles under the various guise. Participants in Boko Haram, Niger Delta, and related socio-religious conflicts were often cited as belonging to this category.

Climate variability caused by environmental deterioration, according to Thornton, Ericksen, Herrero, & Challinor (2014), has both direct and indirect effects on human health. Extreme heat, for example, hurts health, particularly among the elderly. The interplay of infectious and vector-borne illnesses with temperature and precipitation has the most direct influence. Changes in the seasonal distribution of precipitation, including flood and drought patterns, have an impact on the occurrence of malaria, dengue fever, and cholera (McMichael and Kovats, 2000). As a result of environmental deterioration, human relocation from extreme occurrences, particularly floods, may become more common. This frequently has serious effects on human health, not least a result of overcrowding and inadequate sanitation. Diarrhea is frequently an issue in such conditions (Haines, Kovats, Campbell-Lendrum, & Corvalan, 2006). Furthermore, lack of access to health care is already a major cause of poor health in poorer countries. Again, relocation and infrastructure damage caused by extreme disasters, particularly floods, can exacerbate this. Since clean water is less easily accessible, water scarcity equally has an impact on sanitation and health outcomes (Few, 2007). Nutrition is linked to better

health outcomes, and it is necessary to consume an adequate amount of calories as well as a variety of nutrients and proteins. The indirect relationship stems from the fact that total food availability is tied to environmental changes. According to Lloyd, Kovats, & Chalabi (2011), climate change and increased climate variability will have a detrimental influence on the incidence of undernutrition through increasing severe stunting through their impact on food production. In Nigeria, while environmental deterioration has had both direct and indirect effects on human health and, as a result, people's health security, the influence of socio-religious conflicts on health security has been largely indirect. For example, most conflicts have resulted in human displacement and interruptions to the health-care system, leading to the establishment of Internally Displaced Person camps with poor sanitation, inadequate health-care facilities, and limited access to clean water. This results in health insecurity for a substantial proportion of the afflicted population.

### **Flood Disaster and Environmental Degradation**

Humanity's reliance on the environment is becoming clear, but global biodiversity loss is becoming increasingly well-documented (Bishop, Kapila. Sachin, Hicks, Mitchell, & Vorhies, 2008). As humans continue to develop land for farming, forestry, cattle grazing, and other uses, biodiversity loss has resulted in fast diminishing habitat. According to the Millennium Ecosystem Assessment (MA), the present rate of species loss is up to 1,000 times greater than the background rates seen throughout Earth's history (Onyenwe et al., 2017; Odiugo, 2010). Overconsumption of these resources degrades the environment, lowering the efficiency of key ecosystem services such as flood and landslide prevention.

Overgrazing and deforestation in Nigeria have robbed most reserves of their natural flora over time. This is expected to continue

as livestock and human populations grow. This raises the risk of disasters, and as a result, natural disasters damage and worsen the environment. The UN Office for the Coordination of Humanitarian Affairs (OCHA) has requested US\$38 million to handle Nigeria's dire flood situation. As highlighted by OCHA, this was prompted by the risk of sickness outbreaks and food scarcity among flood-affected communities. According to the UN Office, over two million people have been displaced from their homes as a result of rising River Niger waters, and they require assistance in a variety of humanitarian sectors, including water and sanitation, food, shelter materials, and non-food items such as mosquito nets and kitchen sets.

Climate change has the potential to significantly and continuously increase the risk of flooding over time. CO<sub>2</sub> emissions from the combustion of fossil fuels contribute to greenhouse gas emissions into the atmosphere. Several studies have also looked at the likelihood of long-term rising amounts of atmospheric carbon dioxide causing increases in ocean acidity, as well as the repercussions for marine ecosystems.

This can also lead to sea-level rise and flooding (Bradshaw, Sodhi, Peh, & Brook, 2007). The economy is not immune to the flood's devastation, as firms may lose stock, patronage, data, and productivity, and disruptions to utilities and transportation infrastructure may have far-reaching consequences. A disaster of this magnitude has no regard for social and economic-related activities like tourism, farming, and livestock (Bariweni, Tawari, & Abowei, 2012). Taking a cue from the past experiences, Adeloje & Rustum (2015) noted the usual effect of flood ruins as including damages and disruption of vital infrastructures like communications networks, disruption of electricity and gas supplies, blockade of road links, railways, canals, etc, thereby severely disrupting the broader transport system and availability, especially amongst the residents that are considered most vulnerable.

### **Social and Environmental Vulnerabilities Nexus in Health Security in Nigeria**

A person's physical, mental, and social well-being must be balanced for his or her health to be recognized as complete. The reason for this is that when an individual's mental condition is poor, his or her physical health suffers. This will have an impact on the individual's social well-being, and if the social well-being deteriorates, it will have an impact on the individual's mental and physical health. Efforts by nations to maintain citizens' excellent health and well-being to achieve sustainable development and a thriving society result in what is known as health security. As a concept, health security comprises the measures necessary to reduce the risk and effect of acute public health crises that imperil the collective health of communities living across geographical areas and international borders.

In the light of this, all states are therefore inclined to safeguard the health and wellbeing of their people. Only after this is done can an individual's health be considered to be guaranteed. Can one say that health in Nigeria is in line with the Alma Ata proclamation of 1978 based on the World Health Organisation (1978) definition of health? As a result, a clear investigation of health security within the context of health as a whole and its management in Nigeria is required.

Nigeria, despite its strategic location in Africa, is grossly underserved in the healthcare industry. Nigeria's health situation is poor compared to most other developing countries, and health improvements are occurring at a far slower rate than in other countries. Not only that, the health sector is marked by large regional variations in health status, health service utilization, and health resource availability. The populace of Nigeria's southern states is significantly better off than those of the north. Even when the sum of Nigeria's Federal, State, and Local Government expenditures are taken into account, per

capita government health expenditure in Nigeria is lower than in the majority of other African countries (Akinrinde, 2020). The meager amounts spent on non-staff recurring inputs further erode the quality of public services, and the use of government health facilities is extremely low by worldwide standards (Odumosu, 1996).

As a result, the Nigerian health-care system remains underdeveloped, as shown by a lack of coordination, fragmentation of services, scarcity of resources, including drugs and supplies, inadequate and worsening infrastructure, inequity in resource distribution and access to care, and extremely poor quality of care (Nnamuchi, 2007). Various reforms proposed by the government to address widespread problems in Nigeria's healthcare system have yet to be implemented at the state and local government levels (Onwujekwe et al., 2010). In Nigeria, the quality of life, which is defined as a general feeling of contentment and satisfaction with one's existence, is constantly declining. As healthcare resources have shrunk, so have service quality and availability. As a result, many people and families have chosen to avoid the public health system.

During the years of the Structural Adjustment Programme (SAP) in Nigeria, an inflationary spiral, as documented by Odumosu (1996), reduced wage earners to the most basic 'hand-to-mouth' life. The decline in living standards has prompted many households to seek more revenue by working several jobs, leaving little or no time for healthy living and enjoyment (Akinrinde & Oyewole, 2021). Due to dread of the unknown and uncertainty about the future, many people labor around the clock without offering opportunities for leisure and enjoyment (Akande, 2018). Individuals have been disillusioned with the challenge of seeing the logic in whatever policy emanates from the government. This is shown in how the government handled the Ebola and Coronavirus pandemics. Using the most recent coronavirus as an example, the country has 61,558 confirmed

instances of illness as of 20th October 2020, with 56,697 discharged and 1,125 fatalities, yet many individuals still talk among themselves as if the epidemic is a farce. Nigeria faced health, societal, and economic issues as a result of the COVID-19 pandemic. In terms of health, it interrupted ordinary health services, particularly at the secondary level, and resulted in an unexpected financial burden for the creation of Isolation Centres, care for patients, and testing of suspected cases. The general lockdown of the economy targeted at limiting the transmission of the disease also created social disruptions and weak production and revenue base for the country. By the revelation of Mostafavi (2017) that health security is defined by the emergence and spread of new microbes of which COVID-19 is a typical example, it is obvious that health security in the country is faulty. This is because occurrences in the country indicate that nothing is being done to ensure that the country is safe and secure from infectious diseases such as Ebola, COVID-19, and other unanticipated dangers pragmatically and proactively.

## **CONCLUSIONS, RECOMMENDATION AND LIMITATION**

The occurrence of health disasters adequately proved that Nigeria as a nation is not yet able to manage disasters and, as a result, create a secure environment for citizens to achieve physical, social, and mental well-being. The situation also reflects current weak governance and insufficient empowerment of civil society actors, who are required to mobilize governmental agencies and communities whenever disasters and crises erupt. The population is exposed to a variety of mishaps due to a lack of sufficient preparedness for diverse dangers and limited mitigation strategies. The percolating implications of this abysmal performance have expanded to other areas notably, the health sector, hence creating

the difficulty of placing Nigeria among countries where health security is best assured. Nigeria's weak performance in health security, despite its human resources and intellectual capital with enormous natural resources, is a reason for concern when her performance is compared to most other African countries. The high levels of morbidity and mortality, the limited or, in many cases, complete lack of progress toward international health and survival goals, and inequities in health resource distribution are all evidence that the Nigerian health system has so far failed to contribute meaningfully to the stated national development goals of a just and egalitarian society (Akinrinde, Osuwa, Olawoyin, & Morakinyo, 2021) and the achievement of health for all.

If poor health is reducing people's energy and creativity and also incapacitating human enterprise, it is therefore not surprising that the country is having developmental challenges. This is because good health and effective health care are essential conditions for development in all realms of human activity. Anything that jeopardizes the quality of healthcare services will thus continue to lower demand for them and act as a symbol of a failed policy and a lack of healthcare security. To influence people's health, health services must be suitable, accessible, and used by all individuals who require them.

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