medical sciences forum

MDPI

Proceeding Paper

Connecting Public Health Disaster with the Environment in the Context of COVID-19 Pandemic Experience from an African Perspective †

John Mark Ogu

Mercy Hospital Springfield, Springfield, MO 65804, USA; johnmark.ogu@gmail.com

† Presented at the 3rd International Electronic Conference on Environmental Research and Public Health—Public Health Issues in the Context of the COVID-19 Pandemic, 11–25 January 2021; Available online: https://ecerph-3.sciforum.net/.

Abstract: Public health disaster is linked positively to security and socio-economic development because epidemics and pandemics threaten human health and hurt economic and socio-political life. The outbreak of COVID-19 is an excellent example. It caused anxiety, fear, and worry. It also disrupts the economic and socio-political life of people. Therefore, there is a connection between health, environment, and security. These three elements connect all human beings directly or indirectly. Africa and West Africa have witnessed some epidemics like Ebola and lesser fever that threatened the region and the global community in the recent past. Health, environment, disease, and divinity in Africa are linked because ill health is understood from religious and environmental backgrounds. Hence, this paper looks at the connection between public health disasters with the environment in the context of the COVID-19 pandemic from an African perspective. It focuses on infectious diseases as a menace to economic, security, and social life. It concludes that African countries have done well thus far in the fight against COVID-19 through solidarity and cooperation.

Keywords: Africa; COVID-19; pandemic; disaster; public health

check for updates

Citation: Ogu, J.M. Connecting Public Health Disaster with the Environment in the Context of COVID-19 Pandemic Experience from an African Perspective. *Med. Sci. Forum* **2021**, *4*, 48. https://doi.org/10.3390/ECERPH-3-08992

Academic Editor: Jon Øyvind Odland

Published: 11 January 2021

Copyright: © 2021 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Recently, many places have been threatened by public health disasters, such as earthquakes, hurricanes, tornados, epidemics, and the current COVID-19 pandemic. These disasters caused panic, sickness, death, infection, forced migration, and disrupted socio-economic activities. These public health disasters affect the global community and affect many facets of life, education, economics, health, and security. Amid the effects and problems these disasters brought, there is an underlining reality that the world is a community (interconnected and interrelated) because each disaster directly or indirectly affects the global community. It implies that human beings and other creatures have relationship and connection. Therefore, this paper looks at the connection between public health disasters with the environment in the context of the COVID-19 pandemic from an African perspective. It focuses on infectious diseases as a threat to global health, the economy, security, and social life.

1.1. The Global Health Community

A pandemic like COVID-19 briefly revives the understanding and sense that human beings are a global community, dwelling and working on the same planet, where an individual health problem may cause severe health concerns to the community. It makes us understand that no one is saved alone, and that humanity can only be saved together or as a community [1]. This is captured in African philosophy that says a person cannot exist individually but corporately. Hence in Africa, a person owns his/her existence to others and the universe (corporal and spiritual bodies) [2]. Therefore, if human beings

are interrelated and everything is connected, it is difficult to assume that COVID-19 is not related to our way of approaching reality and claims to be an expert in ourselves and the universe. It is not to say that the harm human beings are doing to nature is the cause of the pandemic; instead, the world is getting disintegrated and forgotten that we must live in solidarity and cooperation to achieve better things [1]. It also implies that each person's health is bound to others' health [3]. Hence, "a pandemic on the scale of COVID-19 brings home to the Western world an ancient truth that "we" are all in this planetary earth condition together, whether we are humans or others. But it is also high time for this heterogeneous and collective "we" to move beyond the Eurocentric humanistic representational habits that have formatted it" [4]. This pandemic (COVID-19) has exposed human vulnerability and made the global community understand how fragile we are amid technological, scientific, and medical developments [1]. However, COVID-19 is not the first pandemic experience. Since the 16th century, the world has experienced more than three pandemics per century, which occurred at various times with varied morbidity and mortality rates. For instance, the Spanish (1918–1919) infected about 20% of the world population, killing between 40–50 million people. Other major documented pandemics are Asian flu (1957–1958), Hong Kong flu (1968–1969), and Swine flu (2009–2000) [5]. Ebola first appeared in 1976 and has reoccurred fourteen times, peaking in 2014–2015 and COVID-19 in 2020 [6].

The experience of the COVID-19 pandemic and its effects calls on us to "rethink our styles of life, our relationship, the organization of our societies and above all, the meaning of human existence" [1]. Undoubtedly, the COVID-19 Pandemic explains the dynamism in social and healthy relationships in the global community because an epidemic or pandemic in one part of the world is a threat to the global community; examples include SARS, Ebola, and the ongoing COVID-19 [7]. These are threats to global security, the economy, and health. Ebola and COVID-19 have seriously affected the global economy because of the various restrictions during their outbreaks. The periods witnessed regulations at local and international levels as schools, businesses, and borders were closed. The airlines and cruise ship companies suffered the most as many countries stopped aircraft and cruise ships to their countries. Many lost their jobs because thousands of jobs went off in days [8]. The border closure and regulation were applied to prevent infection from spreading. It also supports the idea that everything in the universe is connected because human often transmits infectious diseases through environmental exposure.

Additionally, human beings are connected as brothers and sisters. We are also pilgrims journeying together in a world of uncertainties and infinitude. Each creature is connected with human beings and the heavenly and earthly bodies—sun, moon, river, and earth [9]. " . . . we are connected, that is to say ecologically interlinked through the multiple interconnections we share within the natural-culture continuum of our terrestrial milieu" [4]. Human relationships and connectedness are expressed in many ways, especially in health, because health is a common good, and an individual's health may pose a health challenge for all. Human relationship is fundamental in Ubuntu philosophy, expressed as I am because we are, and because we are, I am. Ubuntu acknowledges the I in the we and the we in the I of all human beings and respects unity in diversity in achieving the common good. According to Afolabi Michael, "the personal I exist synergistically within the mutually dependent relationship with the societal 'we' and is grounded within a web of cosmological contract. As such, the African notion of individualism inherently subsumes obligations to the community of humans and is other-oriented" [6].

There is a connection between human health and the environment because nature is both the cause and source of infectious and vector diseases, as well as medicine and antibiotics [10]. For example, Ebola is an infectious disease that belongs to the Filoviridae family. It is believed that wild animals can transmit it to humans [6]. Humans also transmit diseases from one place to another because the movement of people from an infectious region allows infections to move to noninfectious areas. For example, malaria plasmodium lives for about three years in the bloodstream. Human movement from a malaria region to

a nonmalaria area allows the transfer of the vector [11]. Human vector diseases flourish on the borders of society and spread as people seek to avoid material hardship by trading social risks for biomedical ones. Therefore, mobility, social status, and compromised health serve as the three ways to understand the human role in malaria and other infectious disease transmissions [11]. Again, the health and security effects of pollution and environmental degradation are many. The pollution of one end of the world threatens other parts because plants, seas, rivers, land, and other creatures are interrelated and interconnected.

Moreover, the environment is a primary determinant of health because a healthy environment promotes good health and development. People become sick because of exposure to pollution from smoke from fuel, transportation, industrial fumes, and other substances that acidifies the land and sea, such as fertilizers, insecticides, fungicides, herbicides, and agro toxins [9]. Additionally, a polluted and degraded environment causes illness and chaos. It is worth noting that the impacts of human actions on the environment are increasing the menace of infectious diseases in humans; over 60% of infectious diseases originate from animals, especially wild animals. If the human impact on the environment is reduced, it will reduce future epidemics and pandemics outbreaks [10]. Although the emergence of COVID-19 grips the global community with fear, uncertainty, anxiety, and loss of confidence in global health governance. The dread of this virus brought pervasive panic because of its contagion. However, amid these crises and the ugly situation brought on by COVID-19, the image of national and international solidarity and cooperation exists. Healthcare workers' tremendous efforts and commitment to tackling the virus despite all odds and risk is highly applaudable. Local communities organized welfare packages for the less privileged and vulnerable persons in their areas to alleviate their economic and social burden due to this pandemic. These were ways of encouraging the poor and vulnerable that "we are all in this together," which resonates with the Ubuntu principle; I am because we are, and because we are, I am." Governments of various nations stepped in with social, economic, and health service packages and assistance to support their citizens. It also brought international solidarity as countries exchanged knowledge, information, resources, and expertise to control this pandemic. In response to the virus and its menace, the WHO sets up the COVID-19 Solidarity Response Fund, which has generated over $70 million US Dollars. Some regional organizations have taken strong initiative-taking measures, shared information and receiving testing kits, medical supplies, and medical staff donations. However, some countries are complacent about the virus. The global community should maintain this spirit of solidarity and cooperation that the pandemic brought to promote future solidarity and support for the most vulnerable nations and individuals [12]. The solidarity was not a mere one, but countries understood that alone they could not handle and contain the pandemic. Therefore, there is a need for togetherness, cooperation, and relationship. In this situation, the I acknowledge the we, which implies relationality and solidarity. In other words, human beings live in a relationship of solidarity and mutual co-existence and do not live an individualistic and self-centered life. The positive aspect of the COVID-19 lockdown is that it brought in short-term cleaner air, reduced carbon emissions, and less noise because of restrictions and reduction in transport and economic activities [10].

1.2. Infectious Diseases a Security Threat

Infectious diseases have long been considered a threat to public health and state security because the emergence of an infectious disease poses a security threat to individuals and the nation because it comes with anxiety and fear of bioterrorism and weaponization. In 1851 at First International Sanitary Conference, infectious disease was perceived as a threat to the population because of its effects on the economy, movement, and other human endeavors [13]. Again, in 2002, the RAND Corporation report, The Global Threat of New Reemerging Infectious Disease, "defines emerging infectious diseases as one of the new security threats that do not stem from the actions of clearly defined individual states but from diffused issues that transcend sovereign borders and bear directly on the effort

of increasing globalization that challenges extant framework for thinking about national and international security" [14]. Understanding infectious disease as a security threat is linked with medical culture and language. Medical words about contagious diseases are synonymous with security words and statements, such as fight, attack, and combat. We fight illness; we fight a war, arm ourselves with vaccines and medicines, and combat infections. These words are also used in a military expedition. Hence, the Economist says pandemic diseases and war are so similar to each other. However, in the case of a pandemic, the enemy is not a physical person; instead, it is a microscopic virus, making it an invisible battle. The fight against infectious diseases sometimes claims more lives than war and military combat [15]. For example, the Spanish Flu of 1918–1920 killed about 50 million people with a morbidity of 20% of the world population; the COVID-19 morbidity and mortality rate are increasing daily [5]. Again, some newly perceived health menace is bioterrorists, such as smallpox, and emerging contagious diseases like avian flu and COVID-19. These diseases and infections have placed much pressure on public health and national security departments, making them develop modalities to control and manage them and prepare for new threats that might arise [14].

Nevertheless, infectious diseases are very deadly and sometimes challenging to conquer. The impact of a pandemic may be comparable to war, violence, economic crisis, hurricane, and earthquake. For instance, COVID-19 is severely affecting the world in all aspects. It is causing the death and illness of thousands and millions of people. It compromises people's daily interactions and activities, as their economic and social lives suffer each day [15]. For instance, there was no vaccine to prevent Ebola during its outbreak, no treatment to cure it, and its morbidity and mortality increased daily. It appeared to be challenging to manage with sophisticated western medical and scientific technologies. The untamable nature of Ebola caused panic and compromised people's socio-economic activities. However, Ebola can easily be avoided; it is still terrifying and disturbing because of its existence. "Ebola was the red six spades, a painted clown in a darkened cellar: unexpected, unfathomable, terrifying" [8]. Also, there was no vaccine and treatment during the outbreak of COVID-19 in 2020; the mobility and mortality rates were high as healthcare workers were overwhelmed with COVID-19 patients. There was a global lockdown of movements, businesses, religious services, schools, and social gatherings. Therefore, infectious diseases pose a security threat to countries in three ways, military, socio-economic, and domestic life.

First, military, pandemics, and other infectious diseases threaten state security. It adversely affects military performance and effectiveness. Because during a military expedition, soldiers often engage in risky and immoral behaviors that expose them to contagion, such as rape, fornication, and adulterous behaviors, that increase infectious diseases. It may reduce their labor force and demoralize them, weakening their efficacy and performance due to infection and illness. There is a concern about the weaponization of disease by military and non-military groups. In the 2001 Anthrax attack against the USA, bioterrorism has been discussed as a major security threat and concern by the Western nations because of the willingness of some groups to use bioweapon in the past. For example, "Iraq against its Kurdish population in 1998, the attempt by the followers of Rajneesh Bhagwan to spread Salmonella in the US . . . the attack on the Tokyo subway using sarin by Aum Shinrikyo in1995 and the 2013 use of a chemical weapon by the Syrian government on its civil population" [16]. There is an allegation that HIV/AIDS has been used as a psychological or even biological weapon by some African soldiers [16]. There is also the fear that biosecurity and micro-organisms may be used as a bioweapon [7]. The emergence and rapid spread of HIV/AIDS in the 1980s and the re-emergence of more potent microbe-resistant bacteria and viruses that cause malaria, TB, meningitis, and dengue fever have raised the fear and anxiety that bioterrorists might use these deadly bacteria and viruses as weapons to cause more morbidity and mortality [7]. Hence, infectious diseases should not only be seen as a security threat that weakens a nation's military force and efficacy. It can also increase the chances of internal and ethnoreligious and political violence, like the #ENDSARS protest

in Nigeria. The #ENDSARS protest is connected with poor governance. The protest was a means the Nigerian youths expressed their grievances against the bad government, especially as the government failed to provide economic and social packages for the people during the COVID-19 lockdown. For instance, Lagos state witnessed a poor distribution of palliative materials meant to alleviate the suffering of the poor and vulnerable. Some of these materials were hijacked by politicians and some influential persons for their selfish interests [17]. Also, infectious diseases can be weaponized and used against soldiers and civilians [16].

Another way infectious disease threatens state security is through economic disruption. An outbreak of a pandemic like COVID-19 can cause much financial burden on the government. Many nations' governments adjusted and readjusted their budget to accommodate the impacts of the pandemic on their nation's economies and citizens' lives. As mentioned earlier, schools, businesses, airlines, and cruise ship companies suffered heavily. The pandemic reduced productivity and separated workers as some work from home, and others could not work for many reasons. The economic decline caused by COVID-19 may lead some countries into a great recession. "Although an economic decline in itself can be a threat to state security- according to a neo-realist perspective, state power is measured in terms of material capability including economic and military strength". Economic recession can translate into internal violence and conflict, which may scarlet ethnoreligious, socio-political, and domestic violence [16]. However, a pandemic's economic impact may not be the sole cause of violence and conflict. It may catalyze other preexisting unjust political structures and social differences to cause violence, conflict, and crisis. As nations dread war, violence, and conflict because of their adverse effects on their economic, social, political, health, and human development, so do nations dread an outbreak of infectious disease because it can quickly rack the nation's economy and social structure [15].

Infectious diseases can threaten the socio-domestic life by disrupting the internal societal structure, thereby threatening state security at the most fundamental level. As mentioned earlier, the panic, anxiety, and separation caused by COVID-19 at the domestic level, home, town, villages, and communities threaten the state's security because of mass exodus and lack of basic means of livelihood. Some people lack confidence in their government because it cannot provide good and affordable healthcare, especially in developing countries [16]. For instance, COVID-19 exposed the flawed healthcare system in Nigeria. Some Nigerians were happy with some government officials' deaths because of COVID-19. They were pleased because of the officials' inability to travel abroad for medical treatment. Infectious diseases adversely affect family life, as experienced during COVID-19. Families were separated, as some died in isolation without families and friends. It created depression and increased domestic violence, like incest, rape, and suicide, because of isolation, fear, hopelessness, and relapse. There is a connection between infectious diseases and security because contagious diseases threaten society at three levels military force, socio-economic and socio-domestic life. It is essential for government, medical, and mental institutes to address addiction, suicide, depression, and military and economic effects of a pandemic on society as part of their holistic approach to addressing infectious disease outbreaks like COVID-19.

However, as infectious diseases make their way into the USA, United Kingdom, and Australia's security agendas, some scholars have warned against such a move's downsides. For instance, Susan Peterson argues that placing infectious diseases on the security agenda may make public health advocates generate undesirable effects by appealing to "high-politics" [15]. It implies that human health will be compromised and can only be measured or justified by security impacts and threats. CoIin McInnes and Kelley Lee find it sarcastic that some public health officials may use the security implications of infectious diseases to push health higher on the policy agenda. It has increased concern, not for the shifting pattern of health and infection of the world, but for selected infectious diseases that threaten the advantaged few [15]. CoIin McInnes and Kelley Lee's view captures the Nigerian experience during the COVID-19 outbreak. The government enforced a total

and compulsory lockdown of all businesses and faced mask-wearing with security agents assigned to arrest and detain defaulters. At the same time, the country has been in an endless war with Boko-Harm and other security challenges over a decade that have maimed and destroyed the populace's lives and properties without serious and strict security measures to alleviate the situation. Hence, some Nigerians viewed the national lockdown of businesses during COVID-19 as a way the government officers protected themselves and their families and not the citizens because diseases are no respecter of persons.

Furthermore, despite the difficulty of reconciling health and security with pandemics and infectious diseases, Elbe observed that elevating pandemic influenza to the security agenda may attract priority political attention and a higher resource allocation for public health emergence-response measures [15]. Again, it may promote abuse and misappropriation of power by the government and security officials. Although it is understandable that human rights are not absolute and can be limited for the public good during an emergency; however, the Nigerian COVID-19 was an outrageous situation. The report from Lagos state shows that the distribution of palliative was poor regarding the fair allocation of resources and materials. "This led to conflicts, such as polemic revolts by some segment of the population who could not share from the palliative materials. This challenge with the process has also resulted in violent conduct and outright breaches of the lockdown by certain society members . . . " [17].

1.3. Infectious Disease in African Culture

In most African societies, health, illness, and diseases are connected with religious, physical, psychosocial, and biological spheres. It is also not easy to separate religion, culture, and health because most Africans strongly believe in the interconnectedness between the spiritual and physical life forces and human well-being. Hence, diseases, illnesses, and misfortunes are often given culture-religious interpretations. Usually, a culture-religious approach is used to contain and manage public health disasters and infectious diseases [18] because most illnesses are connected with witchcraft, sorcery, magical power, and gods' anger in most traditional African communities. The implication may be that "the sick person or his immediate environment may be regarded as magically contaminated and isolated from others" [19]. The cultural-religious approaches include ritual sacrifices, atonement, banishing people from the community, and the oracle's consultation. This supports the idea that cultural and social activities strongly influence health and understanding of disease and illness. Although cultural-religious understanding and interpretation of diseases and disasters are not peculiar to African people, many ethnic groups globally approached public health disasters and infectious disease outbreaks from this lens before the development of modern medicine. For instance, in the Dark Ages, "health problems were considered and dealt with in magical and religious terms. Both pagan and Christian sources provided the basis for the supernaturalism of the Western Middle Ages . . . . Christianity held that there was a fundamental connection between disease and sin" [20]. It demonstrates that globally, humans are concerned about resolving their health, social, natural, spiritual, and environmental problems with religious, scientific, and cultural means. The application of belief systems and scientific knowledge in solving human problems sometimes requires moving beyond medical practice to include philosophical and magical inquiries about the nature of the universe, moral issues, the concept of person, causation, and the nature of knowledge: this help to understand who is to blame and what has caused the problem, and the solution. Mostly, the answers are sought within the religious circle and cosmology, myth, and philosophy [21]. Moving beyond medical practice into philosophical and magical questions about diseases and illnesses is Africa's means of diagnosis as they consult the oracle through the native doctor.

However, Africans must have experienced infectious disease outbreaks before contact with Western countries. The question should be how the people managed and contained such episodes without Western/modern medicine. It is pertinent to understand that isolation, sanitary, and relocation are ancient public health measures most ethnic groups in

Africa employ to contain and manage infectious disease outbreaks. For instance, among the Yoruba, public health beings at the individual level of *imototo*—transliterated as personal hygiene and good sanitary habit [6].

Among the Igbo, too, personal hygiene and sanitary are high priced. People are often encouraged to clean their surroundings and streams. In addition, proper ventilation is not ignored. The Igbo society often relocates when confronted with any mystery death (epidemic). They often attribute such deaths to the gods' anger or the community's lousy behavior against the gods or goddesses. Moreover, community effort is required to contain such an infectious disease outbreak. Each community member cooperates physically and financially to solve the problem and offer their knowledge and talents. Community involvement in health promotion, especially during an infectious disease outbreak, resonates with the UNESCO declaration of solidarity and cooperation. Solidarity and cooperation are rooted in African society because individual life finds meaning in the community. Whatever affects an individual affects the community, and what affects the community affects the individual.

Like many other people worldwide, Africans are interested in treating and curing illness, relieving suffering and pains, comforting, and encouraging, and giving meaning to grief and life. It is a widespread practice that people seek and believe that their religion, science, and technology can help solve such a problem. They believe in human creativity and imagination in handling issues [21]. Hence everyone contributes to fighting and containing infectious diseases outbreak. Magical, supernatural, physical, and local herbs are used in treating and controlling infectious diseases. For example, during an episode of measles or smallpox, the Igbo encourages isolation; patients and family members are vaccinated with chalk (*nsu*) and other herbs. Treatment is sometimes given to the sick and the healthy to prevent the spread of the disease. Also, the Amhara ethnic group in Ethiopia classifies infection and filth in their etiology of skin diseases. At the same time, the Senufo in Cote-d'Ivoire, Mali, and Burkina Faso classify natural diseases as precipitated by some physical feature of the cosmos and differentiate them from diseases from God. Therefore, "what modern medical scientists might understand as contagion in the spread of micro-organisms of disease is, in fact, a relatively old idea that originated well before the biomedical theory of microbial vectors of disease" [21].

1.4. COVID-19 Vis-à-Vis Ebola in Africa: Experience and Lesson

As COVID-19 pandemic cases increase globally, Africa is expected to receive the highest hit because of poverty, corruption, inadequate healthcare facilities, malnutrition, and bad government. However, it seems that Africa has defied the COVID-19 expectative scenarios. Why is a poor and unequip continent doing tremendously well in managing the COVID-19 pandemic over developed countries? According to the Washington Post: "Ghana is doing much better than America. While so much about the virus and how it operates remains unclear, sub-Saharan Africa has dodged a deadly wave of coronavirus cases. Many factors have contributed to this. [Many] West African nations already had a pandemic response infrastructure from the Ebola outbreak of late 2013 to 2016" [22]. For instance, Liberia lost about 5000 people to Ebola six years ago; thus, at the beginning of 2020, Liberia quickly started screening for COVID-19 at the airports and quarantining visitors from countries with 200 confirmed cases [22]. Many African countries strengthened their preparedness against COVID-19 by improving airport surveillance and implementing temperature screening at entry ports. Nigeria and Ethiopia also interview visitors and passengers returning or visiting their countries. They further advised their nationals to avoid traveling to China. They also intensified public health awareness and campaigns within their countries [23]. After the Ebola pandemic, Senegal sets up an emergency operations center to handle public health crises. This prior arrangement made the COVID-19 testing and its result fast, as some results came out within 24 h. The country used aggressive contact tracing to get suspected patients. All COVID-19 patients in the country were hospitalized. Senegal, a country of about 16 million, has about 302 deaths from COVID-19.

Rwanda, a country with 12 million people, has recorded only 26 deaths from COVID-19 as the USA COVID-19 related death approaches 200,000, as of 22 September 2020 [22].

Rwanda has an early and aggressive response to the virus, using equipment and infrastructure kept in place for HIV/AIDS treatment in managing the pandemic, as both testing and treatment were free. The low COVID-19 death in Africa seems puzzling and mysterious to scientists. It raises a question: "Coronavirus in Africa: Could poverty explain the mystery of low death rate?" [22]. Another assumption "may be because COVID-19 has not settled on them [24]". However, African countries have coordinated themselves well in fighting COVID-19. This should not be surprising because solidarity, cooperation, and relationality are inherent in the principle of Ubuntu. A form of sociopolitical value of leadership that serves as the essence of human development for the common good. "With Ubuntu, damage to I damages the [We] [3]". According to the WHO African Region, as of 1 November 2020, Africa has recorded no more than 1,318,254 million cases of COVID-19 with 29,901 deaths: however, an additional 31,621 reported news cases and 406 deaths in the past seven days of this Report [25]. The COVID-19 pandemic occurs when a global movement challenges anti-Black racism and white supremacy, especially in Western countries. The management of the COVID-19 pandemic in Africa calls on media outlets to change the wrong notion that African countries are incapable of making effective and good governance. This pandemic is also a call on Western governments to learn from Africans' past experiences with previous pandemics and epidemics. At the moment, African countries have made a heroic effort to control and manage COVID-19, and citizen has overcome the terrifying predictions about their continent on the adverse effects of COVID-19. Many lives have been saved in Africa because of the diligent and dedicated efforts of many healthcare providers and the collective responsibilities and collaboration of the communities [22].

Some factors may explain African lower cases of COVID-19; these include different methods of recording death, the young demography of Africa, much use of outdoor space for events, and probably the possibility of higher levels of potentially protective antibodies gained from previous infectious diseases. Also, to be considered are the weather and the diet because the African diets consist of herbs and legumes that are rich in fiber and antioxidize. Also, in their institutional memory, African countries' infectious experiences like SARS, MERS, and Ebola are an added advantage [26]. As developed countries struggle to combat the virus, developing countries have shown remarkable success levels because of previous experience, early preparedness, and creativity in managing this pandemic. How African nations manage, COVID-19 has demonstrated that "experience is the best teacher" [26]. According to the World Health Organization's weekly bulletin, by the end of September 2020, Sub-Saharan African countries had dealt with about 116 ongoing infectious disease events, 104 outbreaks, and 12 humanitarian crises. The experience and knowledge gained from these contagious diseases made them proactive and willing to use their scarce resources judiciously to prevent and contain any outbreak. "Their mantra might best be summarized as act decisively, act together, and act now. When resources are limited, containment and prevention are the best strategies" [26]. The mantra emphasizes that community, togetherness, solidarity, unity, inclusiveness, and relationality are important in societal development and public health disaster management. The African COVID-19 mantra is consistent with the USA expression used during the COVID-19, "we are all in this together".

Furthermore, African leaders have demonstrated an ardent desire to work as a team based on the 2013–2016 West Africa Ebola outbreak. In West Africa, the Ebola outbreak outlines that infectious disease respects no broader. The experience made the African Union set up an African Center for Disease Control and Prevention (CDC). In April 2020, the Africa CDC went to work, launching its partnership to accelerate COVID-19 testing to increase the region's testing capacity. It trained and deployed healthcare workers across the continent and sent laboratory equipment and reagents to Nigeria. It also deployed public health workers from the African Health Volunteers Corps across the continent to combat the

pandemic, using previous knowledge and experience against Ebola. In addition, the African Union established the African Medical supplies Platform (AMSP) for the procurement of laboratory and medical supplies. "If there's anything to be learned from a big Ebola outbreak that might be applied to our current [COVID-19] predicament, it's that material constraint, more than cultural differences will shape the COVID-19 pandemic" [24].

"The continent's behavior as one indivisible unit in fighting the virus, with leaders working together to impose lockdowns, enforce mask requirements and collaborating with continental officials to improve testing and treatment" [27]. Made it possible for Africa to defy the COVID-19 predictions. According to Dr. John Nkengasong, the director of African Centers for Disease Control and Prevention "the key, unifying the leadership of the continent very early in February has been a very critical factor in moderating the spread of the virus on the continent" [27]. The solidarity and cooperation among African leaders are Ubuntu's spirit, an indigenous African philosophical concept and practice that provides a normative model that controls and regulates interpersonal human conduct and relationship. It demonstrates that individual existence is meaningful only in a mutual interdependence with the community. It explains the African cultural and traditional way of life, practice, and institutional framework. It also embeds the spirit of cooperation and solidarity and the promotion of the common good [6]. The cooperation and solidarity among African leaders understood from Ubuntu's African philosophy resonated with the *Igwebuike*, or umunnawuike, among the Igbo ethnic group. *Igwebuike*, which means community, is strength. The Igbo adage *a gbako nyuo mmamiri, o gbaa ofufu* (when people gather together and urinate, it fumes) captures it well. The coming together in mutual interdependence in solidarity and cooperation has saved African countries from the predicted hit of the COVID-19 pandemic. The principle of solidarity and cooperation is the 13th article of the Universal Declaration on Bioethics and human rights. In addition, Ubuntu and Igwebuike's philosophies stress the importance of human interconnectedness and relationships. They also provide a model on which mutual trust, peace, cooperation, inclusiveness, and solidarity may flourish among countries and cooperate bodies before, during, and after an outbreak of infectious diseases or pandemic, by promoting compliance with public health directives and measures [6].

2. Conclusions

There is a connection between public health disasters with the environment. Infectious like epidemics and pandemics are linked environments that impact people's social and economic life. Infectious diseases, especially epidemics and pandemics, are also health, security, and financial threats. They create panic, tension, and fear and hurt economic and social activities, as experienced during the COVID-19 pandemic. They threaten state security on three levels, military, economic and socio-domestic life. African management of the COVID-19 pandemic is based on experience, cooperation, and solidarity because Africans have previous experiences from past epidemics that have ravaged the continent. The cooperation and solidarity among African leaders were positive in managing the COVID-19 pandemic in the region. Infectious diseases are connected to the environment in origin, mobility (movement of people), and socio-economic status.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Francis. *Encyclical Letter: Fratelli Tutti (on Fraternity and Social Friendship)*; Libreria Editrice Vaticana: Vatican City, Italy, 2020; pp. 32–34.
2. Isiguzo, A.I.; Ukagba, G.; Otakpor, N. *The Igbo Concept of a Person; Africa: Rivista Trimestrale di Studi e Documentazione Dell'Istituto Italiano per l'Africa e l'Oriente*; IsIAO: Rome, Italy, 2004; pp. 231–243. Available online: http://www.jstor.org/stable/40761740 (accessed on 15 December 2020).
3. Yimer, B.; Ashebir, W.; Wolde, A.; Teshome, M. COVID-19 and Global Health Security: Overview of the Global Health Security Alliance, COVID-19 Response, African Countries' Approaches, and Ethics. *Disaster Med. Public Health Prep.* **2022**, *16*, 426–430. [CrossRef]
4. Braidotti, R. "We" Are In This Together, but We Are Not One and the Same. *J. Bioeth. Inq.* **2020**, *17*, 465–469. [CrossRef] [PubMed]
5. Donaldson, L.; Rutter, P.D. *Donaldsons' Essential Public Health*, 4th ed.; CRC Press: New York, NY, USA, 2018; pp. 108–109.
6. Afolabi, M.O. *Public Health Disaster: A Global Ethical Framework*; Springer: Cham, Switzerland, 2018; pp. 30–47.
7. Hank, T.H. *Global Bioethics An Introduction*; Routledge: London, UK, 2016; pp. 148–149.
8. Shah, S. *Pandemic Tracking Contagions from Cholera to Ebola and Beyond*; Picador Paperback: New York, NY, USA, 2016; pp. 203–208.
9. Francis. *Encyclical Letter Laudato si'(on Care for Our Common Home)*; Libreria Editrice Vaticana: Vatican City, Italy, 2015; pp. 15–92.
10. World Health Organization's Regional Office Europe. Protecting Nature Protects Health—Lessons for the Future from COVID-19. Available online: https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/6/protecting-nature-protects-health-lessons-for-the-future-from-covid-19 (accessed on 25 November 2020).
11. County, B. Migration, Mortality, and Measurement: A Reassessment of the Historiographical Use of Relocation Cost with Attention to the Office du Niger, Soudan Francais (Mail) 1925–1945. In *Health Knowledge and Belief System in Africa*; Matthew, M., Ed.; Carolina Academic Press: Durham, NC, USA, 2008; pp. 225–238.
12. The Lancet Editorial: COVID-19: Learning from Experience. 28 March 2020. Available online: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30686-3/fulltext (accessed on 15 November 2020).
13. Davis, S.E. *Global Politics of Health*; Polity Press: Cambridge, UK, 2009; pp. 137–139.
14. Collier, S.J.; Lakoff, A. The Problem of Securing Health. In *Global Health and Security in Question*; Lakoff, A., Collier, S.J., Eds.; Columbia University Press: New York, NY, USA, 2008; pp. 7–28.
15. Enemark, C. Is Pandemic Flu a Security Threat? *Survival* **2009**, *51*, 191–214. [CrossRef]
16. Jegat, J. Global Pandemics: A Security Threat, University Leeds. 2015. Available online: https://www.e-ir.info/2015/11/17/global-pandemics-a-security-threat/ (accessed on 27 November 2020).
17. Ufua, D.E.; Osabuohien, E.; Ogbari, M.E.; Falola, H.O.; Okoh, E.E.; Lakhani, A. Re-Strategising Government Palliative Support Systems in Tackling the Challenges of COVID-19 Lockdown in Lagos State, Nigeria. *Glob. J. Flex. Syst. Manag.* **2021**, *22*, 19–32. [CrossRef]
18. Osuji, P.I. *African Traditional Medicine: Autonomy and Informed Consent*; Springer: New York, NY, USA, 2014; pp. 99–100.
19. Duru, E.J.; Nwagbos, C.I. The problems and prospects of public health care development in Nigeria's local government system. *Glob. J. Soc. Sci.* **2007**, *6*, 51–56. [CrossRef]
20. Rosen, G. *A History of Public Health Revised Expanded Edition*; John Hopkins University Press: Baltimore, MD, USA, 2015.
21. Rasmussen, S. Health Knowledge and Belief System in Africa in Falola Toyin and Heaton. In *Health Knowledge and Belief System in Africa*; Matthew, M., Ed.; Carolina Academic Press: Durham, NC, USA, 2008; pp. 3–33.
22. Keren, A. Africa Has Defied the COVID-19 Nightmare Scenarios: We Shouldn't Be Surprised. The Washington Post. Available online: https://www.washingtonpost.com/people/karen-attiah/ (accessed on 22 November 2020).
23. Gilbert, M. Preparedness and Vulnerability of African Countries against Importations of COVID-19: A Modeling Study. Available online: https://www.thelancet.com/journals/lancet/home (accessed on 27 November 2020).
24. Farmer, P. *Fever, Feuds, and Diamonds: Ebola and The Ravages of History*; Picador: New York, NY, USA, 2021; pp. 51–518.
25. WHO African Region. COVID-19 Response in the World Health Organization African Region, February to July 2020. Available online: https://www.afro.who.int/publications/covid-19-response-world-health-organization-african-region-february-july-2020 (accessed on 29 November 2020).
26. Mormina, M.; Nsofor, I.M. What Developing Countries Can Teach Rich Countries about How to Respond to a Pandemic. Available online: https://theconversation.com/what-developing-countries-can-teach-rich-countries-about-how-to-respond-to-a-pandemic-146784 (accessed on 22 November 2020).
27. Why Africa Defied COVID-19 Predictions—Disease Control Centre. Premium Times 17 November 2020. Available online: https://www.premiumtimesng.com/health/health-news/426630-why-africa-defied-covid-19-predictions-disease-control-centre.html (accessed on 22 November 2020).

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.