Connecting Human Dignity, Non-Violence, and Environment for Healthcare Ethics in Nigeria

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CONNECTING HUMAN DIGNITY, NON-VIOLENCE, AND ENVIRONMENT FOR
HEALTHCARE ETHICS IN NIGERIA

A Dissertation
Submitted to McAnulty College and Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

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December 2021
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ABSTRACT

Connecting Human Dignity, Non-violence, and Environment in Healthcare for Nigeria

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December 2021

Dissertation supervised by Peter Ikechukwu Osuji, Ph.D.

This dissertation presents a global public health ethical approach based on social justice that connects human dignity, non-violence, and the environment in Nigeria. Recently, different places globally have been witnessing uprisings and violence; some of these are linked to environmental scarcity. These are threats to global health, peace, development, and security because violence of any type or form is a global public health and security menace and an affront to human dignity. Environmental scarcity, especially the scarcity of renewable resources (arable land, freshwater, and forest) and lousy government policies, deepen preexisting ethnoreligious and political crises in a state, causing security and health threats to the citizens. The security issues are armed robbery, kidnapping, violence, conflicts, insurgencies, migration, displacement, and unemployment. The health consequences are hunger, food insecurity, disease burden, epidemic, and poverty. These security and health threats make life perilous, causing death, injuries, sicknesses, and mass migration. These are an affront to human dignity and the right to health. Before its independence in 1960, Nigeria had records of violent-conflicts that have maimed, killed, and damaged lives and properties; most of these violent-conflicts were caused by ethnoreligious, political, and economic situations.
However, in recent times, the country is witnessing another form of violent-conflict caused by the scarcity of renewable resources because of population growth, mineral exploration, global warming, and climate change. This form of violent-conflict has deepened the country's preexisting ethnoreligious and political crises, making a living in the country perilous and difficult. This dissertation undertakes a public health ethical and social justice analysis that connects human dignity, non-violence, and the environment to resolve these problems. This approach is consistent with global health policy in the *Universal Declaration on Bioethics and Human Rights* (UNESCO) articles 1-17 and *Sustainable Development Goals* (SDGs.) These problems may not be unique to Nigeria; however, a public health ethical approach based on social justice is adopted because violence, human dignity, and the environment are public health and social justice issues. The dissertation urges all human beings and Nigerians to embrace non-violence, respect for human dignity, human rights, and the environment. It concludes that the public health ethical approach based on social justice is an excellent tool to solve eco-violence in Nigeria and the global community. It recommends that the Nigerian government and all Nigerians embrace non-violence and implement eco-health policies that prevent violence.
DEDICATION

This dissertation is dedicated to my parents, Elder, and Mrs. Mark-Agatha Ogu, who nurtured discipline and respect for human beings and nature in me.
ACKNOWLEDGMENT

I thank God for His steadfast love and mercy to me throughout this program. I thank Fr. Peter Osuji, CSSP Ph.D., my dissertation director, for his constructive criticism and patience. Fr. Peter Osuji is not only my dissertation director; he is a friend and brother who has helped me in many ways in this program. I thank my committee members and lecturers, Gerald Magill Ph.D. and Joris Gielen Ph.D., for mentoring me all these years to attain this academic height. I thank Glory Smith, the academic advisor who helped me during the admission process and throughout the program.

I thank my Bishop Most Rev Martin Uzoukwu for permitting me to pursue this program. I also thank his auxiliary, Bishop Luka Sylvester Gopep and Minna Diocesan priests, for their support and encouragement during this program. I also thank Bishop David Allan Zubik and his Auxiliary William Watersheid of the diocese of Pittsburgh for providing me accommodation, which made the cost of the study manageable and convenient.

I thank my natural family, especially my eldest brother Fr. Emmanuel N. Ogu OP, Ph.D., my sisters Sr. Angela C. Ogu SSL, and Agatha Ijeoma Ogu-Ibeh Ph.D. Am highly indebted to my brothers, sisters-in-law, brother-in-law, nephews, nieces, and cousins for their support and encouragement

I also thank the parishioners and priests of the Lower Allegheny Valley, especially Fr. Michael Decewicz, who hosted me throughout this program. I also thank Fr. Dale DeNinno and Fr. Bill Siple for their encouragement and support. I am highly indebted to St. Juan Diego Parish Staff, especially Rosemarie Haas, MaryAnn Panza, Patricia Markelewicz, Rose Sacco, Henry Sacco, Jerry, and Scott Auen, Franco Ferraro, Marie Warrene, and Theresa Rudzki. To you all, I say
thank you, and God bless you for your support. I thank in special way Loretta Swierczynski and Rosanne Saunders for proofreading this work.

I thank my friends in the Commonwealth of Dominica for their financial support during this program, especially Mildred Foye, Crystalline Thomas, Justina Charles, Catharine Daniel, Cynthia Andrea, Lawrence Lennox, Pauline Andrea, Anthony John, and Debi John. I also thank Bishop Gabriel Malzaire of Roseau Diocese and his priests for their care during my mission there.

I thank the Spiritual Care Department of UPMC Presbyterian/ Montefiore Hospital for providing me an internship opportunity. My appreciation goes to the Staff of Canterbury Place for granting me the opportunity to exercise my priestly ministry in the skilled nursing home on weekends.

Finally, I thank my colleges and friends, especially Augustine Wayii, Kennett Oguzie, Theodore Mbaegbu, Ferdinand Okafor, Raymond Akor, Frank Almade, James Garvey, Alice Kulikowski, Chinenyi Mbam, Veronica Igbeli, and Rev Gaea Thompson.
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>ACOG</td>
<td>American Congress of Obstetricians and Gynecologists</td>
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<td>ART</td>
<td>Assisted reproductive technology</td>
</tr>
<tr>
<td>ASRM</td>
<td>American Society for Reproductive Medicine</td>
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<tr>
<td>CBCN</td>
<td>Catholic Bishops Conference of Nigeria</td>
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<tr>
<td>CCC</td>
<td>Catechism of the Catholic Church</td>
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<tr>
<td>CESCR</td>
<td>Committee on Economic, Social, and Cultural Rights</td>
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<td>CPCN</td>
<td>Center for Palliative Care, Nigeria</td>
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<tr>
<td>CPR</td>
<td>Cardiopulmonary Resuscitation</td>
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<tr>
<td>EoL</td>
<td>End of Life</td>
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<tr>
<td>FC</td>
<td>Female Circumcision</td>
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<tr>
<td>FGM</td>
<td>Female Genital Mutilation</td>
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<tr>
<td>HLA</td>
<td>Human Leukocyte Antigen</td>
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<td>HSCT</td>
<td>Hematopoietic Stem Cell Transplantation</td>
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<td>IDPs</td>
<td>Internally Displaced Persons</td>
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<td>ICU</td>
<td>Intensive Care Unit</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>---------</td>
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</tr>
<tr>
<td>IUI</td>
<td>Intrauterine Homologous Insemination</td>
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<tr>
<td>IVF</td>
<td>In Vitro Fertilization</td>
</tr>
<tr>
<td>MANH</td>
<td>Medically Assisted Nutrition and Hydration</td>
</tr>
<tr>
<td>NHIS</td>
<td>National Health Insurance Scheme</td>
</tr>
<tr>
<td>NICU</td>
<td>Neonatal Intensive Care Unit</td>
</tr>
<tr>
<td>PGD</td>
<td>Preimplantation Genetic Diagnosis</td>
</tr>
<tr>
<td>PGS</td>
<td>Pre-implantation Genetic Screening</td>
</tr>
<tr>
<td>PVS</td>
<td>Persistent Vegetative State</td>
</tr>
<tr>
<td>RCPCH</td>
<td>Royal College of Pediatrics and Child Health</td>
</tr>
<tr>
<td>SCBU</td>
<td>Special Care Baby Units</td>
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<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>UCH</td>
<td>University College Hospital</td>
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<tr>
<td>UDBHR</td>
<td>Universal Declaration on Bioethics and Human Rights</td>
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<tr>
<td>UDDA</td>
<td>Uniform Definition of Death</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>VVF</td>
<td>Vesicovaginal Fistula</td>
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WAEC  
West African Examination Council

WHO  
World Health Organization
CHAPTER ONE-INTRODUCTION

In recent times, many places globally are facing more problems with incessant violence and pollution. Violence and pollution have destroyed lives and properties. They have also maimed and sickened people. Pollution contaminates land, sea, and atmosphere, making the environment toxic and acidic for human life and other living things. It destroys the eco-system, which is vital to human health, making the environment unsafe. A healthy and safe environment is central to human growth because a healthy environment fosters health and productivity. In contrast, a dirty and polluted environment breeds chaos, poor health, poverty, and other socio-economic and health problems. Pollution in some regions of the globe is causing harm to the eco-system by creating scarcity of renewable resources. The effects are evident in the drying of rivers and lakes, rising sea and ocean levels, melting of glaciers, and desertification of arable lands. The scarcity of renewable resources like land, water, and forest by pollution causes chaos, violence, migration, poverty, hunger, and unemployment, mostly in developing countries that depend on them for sustenance and livelihood by deepening preexisting ethnoreligious and political crises.

The violent-conflict arising from the scarcity of renewable resources is known as eco-violence or environmental-induced violence. Eco-violence is a threat to the global health community. It threatens security and human development because it creates many social, economic, health, and political difficulties that affect human dignity in many ways, such as hunger, unemployment, insecurity, and exposure to many infectious diseases. These difficulties created by the scarcity of renewable resources affect human beings and other living creatures that depend on them for survival. The shortage of these essential human needs often creates tension and struggle for the few available ones. The struggle often results in the survival of the fittest or privileged. The poor, weak, and physically challenged persons are the most vulnerable. They sometimes die of
starvation or are forced to migrate as a result of hunger. Indeed, these are significant public health and environmental concerns. They are a slight to human dignity, the environment, and the right to health because, globally, both pollution and violence claim and maim thousands of lives daily. These are threats to human development and environmental safety. Violence has been a great social problem throughout the history of humankind. Human history has recorded many forms of violence that have adverse effects on both humans and the environment. The impact of violence on human beings and the environment can sometimes have short-term and long-term effects, as in the Hiroshima and Nagasaki experiences.

There was a prediction that leukemia cases would continue to occur in Hiroshima and Nagasaki for a prolonged 20-30 years. The toxicity of the bomb was estimated to last between 30-60 years. There is an expectation that other forms of cancer will continue to emerge at various times and seasons. Also, there are worries over the genetic consequences of the bomb on the offspring of survivors. However, no scientifically proven data gives specific effects on the survivors for both Hiroshima and Nagasaki.¹ The violence in Hiroshima and Nagasaki created environmental and health crises. Violence promotes ecological and health problems because weapons of war affect humans and affect the environment because of their poisonous content. The environmental effects of violence are often long-lasting and create scarcities of renewable resources, which results in a disturbance. The scarcity of renewable resources helps to deepen preexisting ethnoreligious and political crises in a country. The combination of scarce resources and preexisting ethnoreligious and political divisions cause violence and other socio-economic problems that affect access to health and human well-being.

Before independence in 1960, Nigeria had witnessed various forms of violence that affected both the citizens and the environment. However, the country’s present security situation is highly
problematic as citizens are afraid of traveling, engaging in social gatherings, and even going to farm and work. Some of the causes of this violence are environmental because of the scarcity of renewable resources. Environmental-induced violence is a problem not only in Nigeria. It is a global problem because many parts of the world face challenges with the scarcity of renewable resources. The shortage of renewable resources can create many economic, social, political, educational, and health problems, including war, famine, hunger, conflict, and chaos. It widens the disparity between the rich and the poor, among other issues, especially in developing countries, because of their dependence on natural resources for economic empowerment. The result of this dependence on ecological products and services in the short term will cause developing nations to experience frequent violence and crisis because of environmental insufficiency or scarcity. The violence is caused by ecological degradation due to population growth, industrial waste from factories, logging, and dam construction. It is also caused by ethnic conflict due to migration and shortage of social amenities, insurgency, and robbery that affects people's livelihood and social activities. The gap between the wealthy and poor creates difficulties for the government to manage, fueling the preexisting ethnoreligious and political crises in these countries. Globally, environmental scarcity may induce conflict between states, regions, and localities; for example, freshwater and arable land may create disputes between north and south, like Israel and Gaza. There may be violence over migration, compensation for industrial waste, menace, and destruction of biodiversity due to pollution and water contamination that affect water creatures. These factors are causing violence in Nigeria.

For example, the violence-conflict between the herdsmen and crop-farmers in north-central is driven by resource scarcity, chiefly arable land. Herders and farmers need it for livelihoods (pasturing and cropping.) The farmers need the land for cultivation, and the herdsmen need the
land for grazing. The desertification and drying of Lake Chad in the northern region are forcing herders to migrate from the northern part to other areas of the country. The migration of herders from the northern region in search of pasture is a threat to crop farmers in other parts of the country. These two activities cannot go on simultaneously because the livestock will destroy the crops of the farmer. The meeting of these two groups in the fields triggers violence-conflict. This type of violence-conflict will result in destruction, killing, and maiming of plants, livestock, human beings, and properties. It leads to forced migration, displacement, and food insecurity.

The ecological degradation caused by constant oil spillage and gas flaring is the primary cause of violence in the Niger-Delta region. The continuous oil spillage and gas flaring have destroyed the land and sea, causing illness and unemployment. Since 1990, the Niger-Delta region has experienced ongoing clashes between the various militant groups and the Nigerian Security Agencies. The militant groups are responsible for multiple violence-conflicts, the kidnapping of oil and industry workers, and the vandalization of oil pipelines. Insecurity has made the region a fragile and dangerous place to live and work. It has also affected the country's economy, which depends heavily on petroleum because the Niger-Delta is where the country's oil is abundant.

The northeast witness’s insurgency by Boko Haram; “Boko Haram” literally means western education is evil. The primary mission of this terrorist group is to establish an Islamic state in Nigeria. At its peak in 2014, the violence was with Boko Haram hoisting its flag in a territory as big as Belgium. The southwest and southeast witness armed robbery and kidnapping. The violence in Nigeria has an ecological, religious, political, and ethnic background. The thesis of this work expresses a need for a public health ethical framework based on social justice to address eco-violence and promote human dignity and the right to a safe environment in Nigeria. This dissertation focuses on the interrelationship between human dignity, nonviolence, and the
environment. It discusses how violence affects human dignity and the environment, creating insecurity and making the right to health and a safe environment challenging to achieve. It is impossible to separate the human person from the eco-system. Every harmful act on the environment slights human dignity and our right to health and employment. For the promotion of human dignity and health, a healthy environment is a sine qua non.

The Concept of Human Dignity in Cultures and Religious Traditions

Human dignity is commonly used in discussions within human society and many quarters of socio-economic and political activities. Its meaning and understanding are contestable and unclear because different cultures, traditions, and ideologies define it within their contextual background. It naturally follows that no doctrine, religion, field of study, or learning can claim an exclusive right of definition and origin of human dignity. Human dignity is a fundamental and absolute right of every person across cultures, ideologies, and religions. It has no particular cultural, political, social, religious, or economic orientation. It is the quality and value of every individual. For example, it is a central concept in all theistic religious traditions, such as Christianity, Judaism, and Islam. In Catholicism, the understanding of human dignity has its origin in the creation of the human being in the image and likeness of God (Imago Dei). Human beings are created in God's image and likeness, which implies that the image of Triune God is present in every human person. It is scripturally rooted in Judeo-Christian tradition (Gen 1:26-28).

To express the practical and theoretical application of human dignity in concrete reality, it designates and involves respectability of moral conscience in the Roman Catholic Faith. Furthermore, human dignity is a prominent theme in Islamic tradition and theology that often receives considerable attention. Muslims may use it to resolve ethical issues in bioethics and
health care. It is a central theme in ethics, morals, religion, and health care among Muslims. In Judaism, the value of human dignity in the Babylonian Talmud is highly emphasized, that it surpasses any negative injunction or commandment of the Torah. The concept of human dignity in these three religious traditions has a divine interpretation and understanding because human life has a divine origin and should have a blessed end because God is the source of life and death. Additionally, nobody has absolute control over his/her life; all life comes from God and goes back to God through conception and natural death.

In law, human dignity is defined and understood in the context of a legal right. It is understood as a rational or intellectual being in anthropology and ethics as a moral and responsible being. The General Assembly of the United Nations adopted The Universal Declaration of Human Rights (UDHR) on December 10, 1948. Article 1 of this Declaration explains the equality and freedom of all human beings irrespective of status, race, or color. It admits that human beings are equal and gifted with the act of reasoning and conscience. It encourages human beings to support and respect one another with the spirit of solidarity and brotherhood. Other international and regional assemblies will be discussed in the subsequent chapters; they also state the value of human dignity as an inalienable right of every person from cradle to death. Hence, autonomy is a sound ethical principle in health care.

The concept and understanding of human dignity are present in many Nigerian cultures. The idea of human dignity among the Igbo of south-eastern Nigeria signifies that life has dignity (ndu bu ugwu). Igbo people consider life supreme over everything. If human dignity is deemed the principal value for human life in other cultures and ethnicities, then Igbo people believe that human life (ndu madu) is more significant than dignity because it is the living who possesses dignity. This position may differ from the view of western countries on human dignity and
human life. In the ideology of the west, human dignity stands before life. It is the dignity of the human being that gives meaning to life and human existence. In contrast, in the Igbo worldview, life gives a sense of dignity. Hence the Igbo will say, “nnoro m ele uwa kariri onwu mma to live is better than to die.” To further state the value accorded to life and the human person, the Igbo will say Ndu bu isi (life is supreme).

A human being or person among the Igbo is called Mmadu. It is a class or generic name, which means a human being or a person (man or woman, boy or girl). The word Mmadu is derived from two words Mma and Ndu, which mean the beauty of life. However, some Igbo scholars like E.M.P Edeh and Raymond Arazu have different interpretations of the concept. For them, "Mmadu exemplifies the highest point of ethical beauty, goodness, and prosperity because Mmadu exists solely to manifest these values. It is a divine assignment for Mmadu to let mma-goodness, beauty, and prosperity be. It is an essential part of his divine program to let Ndu (life) flourish. It is an ethical commitment, just as it is social, anthropological, and religious." However, for this work, the former meaning is taken over the latter because of its connection to human dignity.

Furthermore, in the Yoruba traditional view, the concept of human dignity is rooted in the divine origin of all human beings. In Yoruba culture, the divine origin of human beings in Yoruba culture makes human beings a chosen and unique species among all created things seen and unseen in the universe. This Yoruba view considered all humankind as a divine entity participating and sharing in the divinity of the Ultimate Being. All human beings are God’s children, with inalienable rights intrinsic to their persons and inherently valuable. In Yoruba culture, the name for the human being is “èniyàn,” which has its etymological root from “eni-ti-a-yàn,” which means the special one. Besides these two ethnic groups, among the Tiv people of
north-central Nigeria, human dignity may be understood from the concept of *Or Umache*, which means that the human being is the focal point of all environmental activities. Human beings live and work in the environment; humanity beautifies the earth and gives it meaning. By implication, it is the activities of humankind that provide beauty to the environment and destroy it. The place of human beings on earth is indubitable because human life (*Uma*) has a unique and special position in traditional Tiv society.¹⁸ From the discussion, it is evident that ethnic groups in Nigeria give high prominence to human dignity. It is the fundamental value of every human being but not less important than human life. Thus, when put together with the concepts of human dignity discussed in this work, it is evident that the idea of human dignity varies from culture to culture as well as from discipline to discipline. Therefore, no culture, religion, or ideology has an absolute definition or knowledge of human dignity.

The underlying fact about human dignity is that it is a prime constituent of the human person irrespective of culture, color, race, tongue, status, and state; to put it in another way, it is the **Being** or **Humanness** of the human being. Therefore, for this work, “Human dignity denotes the special elevation of the human species, the special potentiality associated with rational humanity, or the basic entitlement of each individual.”¹⁹ Human dignity is, therefore, integral to the human person. It constitutes the humanness of every human person. On the other hand, the environment is the substratum on which the human person dwells; therefore, violence on the environment is violence on the human person and an affront to human dignity because human beings cannot live independently without the environment. Therefore, this work discusses the concept of human dignity with the environment. The first three chapters (2, 3, and 4) discuss the traditional-individual approach to human dignity at the beginning of life, end of life, and emerging genetic
science, and chapters (5, 6, and 7) engage in a new approach to human dignity that focuses on community and environment.

Chapter Two

The discussion in this chapter begins with human dignity at the beginning of life. It explores human dignity in the abortion debate. The debate centers primarily on abortion when the mother’s life is endangered. It uses three faith traditions (Catholic, Islam, and Judaism) to explore this issue. It uses ideas from some cultural groups in Nigeria and the Nigerian legal system (penal and criminal codes for the northern and southern states) to elucidate this issue. It further looks at human dignity in neo-natal care, discussing mainly respect for critically ill infants. It explores this under two headings: Ethical Decision Making and Ethics Consultation. The discussion also investigates neo-natal care development in Nigeria, from its beginning in the late 1960s with the introduction of incubators and Special Care Baby Units (SCBU) in some tertiary hospitals in Nigeria. It explores the cultural perspective of neo-natal care and respect for human dignity in Nigeria before Western /modern medicine. It then explores ethical decision-making and the role of an ethics consultant in such situations.

Chapter Three

This chapter discusses human dignity at the end of life, under these headings: Medical futility in the context of the dying, Criteria and demand for futile treatment, Faith traditions on the end of life treatment, Concepts of end of life (EoL) treatment, and death, and end of life (EoL) treatment in Buddhism and Catholicism. The discussion begins with respecting life in the futility debate and medical futility in the context of the dying. It explores hydration and nutrition in the context of the dying and wonders if hydration and nutrition are always required as palliative care
for the persistent vegetative state (PVS) and permanently comatose patients. Food and water administration is a warmhearted gesture to a dying patient, but must it always be offered? It examines the concept of human dignity in futile medical treatment. The discussion continues by analyzing the terms physicians use in determining futile treatment within health care practice and their counter-arguments. It explores two faith traditions (Catholicism and Hinduism) on the futility debate, including hydration and nutrition. The chapter ends by analyzing the concept of death and the criteria for its determination from some traditional-cultural groups in Nigeria, faith traditions, and medicine.

Chapter Four

This chapter concludes the first segment of the work that focused on the traditional-individual approach to human dignity. It explores some contemporary issues as they relate to human dignity in emerging genetic sciences. It closely analyzes the legal, ethical, and social implications of pre-implantation genetic diagnosis (PGD) intervention vis-à-vis human dignity and discusses human-animal chimera research in the context of the dignity of the human embryo. It defines chimera and its purpose and ethical implications and relates it to the Igbo worldview.

Chapter Five

This chapter introduces the new approach to human dignity that focuses on community and environment with Human Dignity, Non-violence, and Environment. The analysis opens with human dignity and the right to health in Declarations, such as the Committee on Economic, Social, and Cultural Rights (CESCR), Universal Declaration of Human Rights, Universal Declaration on Bioethics and Human Rights (UDBHR), The African Charter on Human and People’s Rights, The American Convention on Human Rights, The Constitution of the Federal
Republic of Nigeria, and the document of the World Health Organization (WHO). It examines human dignity in these declarations vis-à-vis the environment using the Universal Declaration of Human Rights and the Universal Declaration on Bioethics and Human Rights (UDBHR) as examples. Of particular note is the UDBHR article 2(c) “to promote respect for human dignity and protect human rights, by ensuring respect for human beings, and fundamental freedom, consistent with international human rights.” Its discussion centered on human dignity, the common good, and the right to health care. It explores the relationship and connectedness between human dignity and the right to health. Additionally, it explains that human dignity and health are connected to the common good and explores health and the environment as common goods. It emphasizes that the right to health care is fundamental and inalienable and that the common good connects individuals and society. Therefore, it sees the common good as a cord that joins the individual to the broader community. It is the individuals who make up the community, and individuals cannot live without society.

The second section of this chapter discusses common good, nonviolence, and environment under the following headings: the connection between the individual and public health, and nonviolence as a health and environmental concern. It explains the common good from the perspective of Catholic Social Teaching. It describes how everyone participates in the common good and how violence destroys the goal and purpose of the common good and is an affront to human dignity. It explains that the common good promotes human dignity, environmental protection, and health care. It looks at the relationship between individuals and public health, especially in applying public health policies during epidemics, influenzas, and pandemics. It concludes by discussing nonviolence as both a health and environmental concern with examples.
of environmental destruction and degradation globally, emphasizing Nigeria and how these affect human health.

The last section of this chapter discusses Eco-violence and public health. It explains the effects of eco-violence on public health concerning forced migration, displacement, killing, conflicts, chaos, and pollution. It uses Niger-Delta as an example in Nigeria. It looks at the effects of petroleum exploration in Niger-Delta and its adverse impact on Niger-Delta and Nigerian society. The constant oil spillage and gas flaring in the region create much degradation and destruction of the beauty and biodiversity of the area. Its beauty and biodiversity are gradually phasing away because of contamination. The rainforest in this zone is becoming a semi-desert. Millions of species are lost because of the pollution of the sea, land, and atmosphere. The chapter concludes by proposing some solutions to these problems. It suggests that implementing and applying the following documents and programs will reduce them. These documents and programs include; the 2014 Nigerian National Conference’s recommendation on petroleum mining and exploration and the curricula for teaching both Citizenship Education and Civic Education in tertiary, secondary, and primary schools to include environmental health and protection policies.

Chapter Six

This chapter focuses on violence and vulnerable population vis-à-vis human dignity. It analyzes violence against women, children, and health care workers in Nigeria. The chapter underscores the impact of violence on human dignity and how the vulnerable population is the primary group affected by violence.
The first section explores the concept of vulnerability focusing on the following: Violence and Vulnerable Population, Violence, Insecurity, and Vulnerability in northern Nigeria, and Violence against Health Workers, Women, and Children. It first discusses violence in a vulnerable population, especially in developing countries. Its emphasis is that violence is a significant cause of vulnerability in third-world countries and even globally. It maintains that exposure of human beings to violent situations creates inhuman conditions and vulnerability because human life on earth implies weakness, as every human being is occasionally exposed to a permanent or temporary risk of physical or mental injuries. Vulnerability has individual and group aspects. Individual susceptibility is associated with individuals considered under a systematic context. At the same time, group vulnerability is an aggregate view of a population.

On a local level, the section analyzes insecurity and vulnerable groups in northern Nigeria. The analysis underscores the different forms of violence triggering danger in northern Nigeria, such as the herders-farmers crisis in north-central Nigeria and the Boko Haram Insurgency in north-eastern and north-western Nigeria. Northern Nigeria has witnessed various forms of violence since the time of the Usman Dan Fodio Jihadist Movement. The violence in north-central Nigeria is driven by resource scarcity, especially land, which both herdsmen and farmers need for livelihoods. The farmers need the land for cultivation, while the herdsmen need the land for grazing. The grassland is the driving force of the violence in north-central Nigeria because of desertification in the northern region. Although political, religious, and ethnic undertones cannot be overemphasized, these factors contribute to the conflicts and tension in the area. In north-eastern Nigeria, the Boko Haram Insurgency has been the cause of violent conflicts in this region since 1999. The violence in both the north-central and north-east is a threat to human dignity and righty to health. It has made the zones unsafe for people to live and work.
There is a mass flight of people from the regions to other parts of the country and neighboring countries. The killing and destruction in these regions are increasing each day. The insecurity in north-central and north-eastern Nigeria has made access to health care and education, among other human activities, difficult. It has also increased the number of internally displaced persons, orphans, widows, and widowers. Additionally, violence and aggression against health care workers is another form of violent behavior growing in the world today. Health care institutions record higher workplace violence than other institutions globally. The insecurity in both the north-central and north-east has adverse effects on access to health care and other human activities. Many hospitals have closed in both areas, as health care providers fled in fear for their lives. Also, the violence in these localities has led to the burning of many hospitals and other health-care facilities. It has created unemployment and led to the maiming and death of many people.

Furthermore, it discusses female genital circumcision in south-eastern Nigeria as a custom that affects human dignity. It discusses the ethical dilemma of female circumcision (FC) and its eradication and agencies to help eliminate this cultural practice that is an affront to human dignity. Female genital circumcision is a cultural and religious practice worldwide, especially in Africa and Asia. In the recent past, this religious-cultural practice has received sweeping condemnation as a violent and cruel act against women and girls. This practice has been condemned by more than seven international, regional, and local conventions because it is both a violation of human body integrity and human dignity. Religious traditions, Islam, and Christian churches have also condemned this long-aged cultural heritage of many groups worldwide. In south-eastern Nigeria, female genital circumcision is a traditional practice performed on the eighth day of birth, like male circumcision. It is a long-time cultural practice among the people.
of south-eastern Nigeria. The people believe it is proper and cultural \( (omenala) \). However, it has received medical and ethical attention recently. It focuses on its effects on the reproductive health of women. This work looks at these ethical issues about female genital circumcision as violence against women and girls. It likens it to rape, trafficking, forced marriage, forced prostitution, physical and emotional abuse, and sexual harassment against women and girls.\(^{31}\) It proposes ways of eradicating female genital mutilation by referencing conventions, international, national, and local declarations that have condemned it. It also considers religious groups and non-government organizations appropriate to stop this violence against women and children. It acknowledges the tremendous efforts that have been made in cities across Nigeria, especially in south-eastern Nigeria, toward finding solutions to these practices. However, the practice is still occurring remotely in some rural communities.

Chapter Seven

The analysis in chapter seven discusses public health issues in Nigeria. It looks at mortality and morbidity rates and their causes in Nigeria and how public health can reduce them. The analysis further explores health disparities in Nigeria among the different geo-political zones, proffering cultural competence and public health ethics as solutions to these issues. The first section discusses public health, public health ethics, morbidity, mortality, and ethics in Nigeria. It gives a general overview of Nigeria's public health and its obligations to reduce and prevent morbidity and mortality rates. The section includes a synopsis of Nigeria's public health structure, its strengths, and limitations. It concludes by focusing on the significant causes of morbidity and mortality in Nigeria.

The second section discusses health care disparities, cultural competence, and public health ethics. There are disparities in many facets of life globally, such as economics, education, and
health. However, health care disparity is both inhuman and an affront to human dignity. It is a global ethical problem because health care is a fundamental human right and a common good that should be accessible by citizens of a country without much burden. The reasons for disparities in health care are complex. In Nigeria, the discrepancy in health care and education exists between the north and the south. The remote cause of health disparity in Nigeria has its root in the early colonization of the regions. It proposes cultural competency and public health ethics based on social justice and solidarity as excellent tools to bridge health disparities among different groups and regions. Social justice in the spirit of solidarity and cooperation can be achieved in Nigeria’s health care system by promoting the National Youth Service Corps and Citizenship Education programs taught in tertiary schools and its related subject, Civic Education in primary and secondary schools. These programs should stress respect for human dignity and the environment at these education and human development levels. Public health ethics is another tool to address violent and inhuman behaviors in Nigeria and its health care systems. The herdsmen-farmer crisis in the north-central region, the Boko Haram in the north-east, and the militant movement in the Niger-Delta and Biafra movement can be managed and reduced by applying public health ethics following the recommendation of the 2014 Nigerian National Conference. Furthermore, the Nigerian Health Care Policy should be respected, and the National Health Insurance Scheme should be given more comprehensive coverage through advertisement, awareness, and campaigns.

Therefore, this combined approach of traditional-individual understanding of human dignity discussed in chapters 2, 3, and 4 and a new paradigm to human dignity that focuses on community and environment addressed in chapters 5, 6, and 7, integrate the traditional focus on individual human dignity with an emphasis on community and environment. This combined
approach is consistent with global health policy in the *Universal Declaration on Bioethics and Human Rights* (UNESCO) articles 1-17\(^2\) and *Sustainable Development Goals*. (SDGs) This work concludes that the relationship and connection between the environment and human dignity are inseparable because human life suffers when the environment is toxic. Violence promotes human misery and affects human rights and access to a healthy life. Therefore, violence is an affront to human dignity and the environment because violence creates environmental (resources) scarcity and makes life difficult. This work considers Public Health Ethics based on Social Justice, an essential tool to reduce conflicts that threaten the environment, human dignity, and the right to good health in Nigeria and the global community. Therefore, the thesis of this dissertation expresses a need for a public health ethical framework to address eco-violence and promote human dignity and the right to a safe environment in Nigeria. This work considers Public Health Ethics based on Social Justice, an essential tool to reduce conflicts that threaten the environment, human dignity, and the right to good health in Nigeria and the global community.

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Chapter Two- Human Dignity at the Start of Life

The concept of human dignity understood from various cultures, religions, and ideologies provides a piece of useful knowledge about the value, respect, and protection given to human life at every developmental stage. The worth that each society, religion, culture, or tradition places on human dignity determines the value given to human life at every stage. It is equally helpful to state that human dignity is not lost or gained at any human developmental stage. Educational status or physical strength may offer human beings employment and status. However, they do not make anyone higher in dignity than the other. Socio-cultural, religious, economic, and political status does not determine human dignity because all human beings are equal in dignity.¹

The ethical, moral, social, economic, and cultural debate about the beginning of human life is centered most often on the issue of abortion. It sometimes progresses to the use of contraceptives and sexual intercourse. The argument is usually between two opposing groups, pro-life and pro-choice. These two groups have been the primary advocates on these issues throughout history. The issues often addressed or debated between the two groups are sexuality and morality, the beginning of life, reproductive rights and procreative choice, freedom, and responsibility. Included also is the respect and value that should be given to human beings at every developmental stage. The debate is sometimes intense in abortion cases when further advancement of the pregnancy endangers the mother's life. It is also tricky at the neonatal stage, with complicated medical and health issues requiring advanced medical treatment that presents multiple decision-making options. These situations bring ethical dilemmas to health care providers, families, insurances, and sometimes courts (government). Ethical decision-making at the neonatal stage can be difficult because infants lack decision-making capacity. In that case, the parents are the legitimate surrogate decision-makers, except when they prove incapacitated.
2. A. Sanctity of Life in Abortion Debate

Abortion (the termination of pregnancy before parturition) has always been a challenging ethical issue through the ages. The debate for the legalization of abortion often creates a dichotomy and tension in various spheres of life: religious, political, and traditional societies. The mention of abortion laws always raises an intense debate between pro-life and pro-choice groups. They make its discussion religiously contentious, even among theistic religious traditions that are strongly pro-life. Faith traditions often differ in the approach to resolve ethical and moral dilemmas on this issue. The extreme positions of pro-life and pro-choice groups on the abortion debate have seemed to be the only two options. The two possibilities have made these discussions very difficult to resolve the problems with pregnancy, sexuality, morality, and ethics. These positions make it nearly impossible to balance human dignity and the right of human embryos against human dignity and the reproductive rights and choice (freedom) of women. The two possibilities have placed abortion discussion primarily under the topic of sexual ethics. They seem to see abortion as a personal and private ethical problem for women. Separating these issues from the crucial socio-economic, religious, political, legal, and health aspects (the mother's well-being) proves detrimental. These positions never considered the ethical, political, economic, religious, and social issues involved. They failed to express the relationship between the mother and child and their connection to the common good. Thereby they ignored the interconnection and relationship between nuclear and extended families and the entire human society. Also, the father and other children are sometimes excluded from the whole debate. Abortion is a complicated matter because it is pastorally problematic and challenging to legislate. It is also ecumenically divisive because various religious traditions have deferring guidelines and rules in handling issues about abortion. Hence, it is constitutionally unsecured, religiously
conflict-ridden, and medically normless. Abortion is commonly performed in society because individuals often handle it as their reproductive rights and choices. The pro-choice group argues that freedom of choice is a fundamental human right. It is not the role of the government to regulate productive choices and rights.

Moreover, the woman who bears a pregnancy has reproductive freedom (right) to make a moral choice. She has the absolute right to choose for her body and the pregnancy she is carrying. It is her fundamental right to decide to keep a pregnancy or to abort it. On the other hand, pro-life advocates argue that freedom goes with responsibility and should support human life, which cannot be priced on freedom alone because human life is an absolute and fundamental good. Therefore, whether an embryo is considered pre-human or fully human, it has a right to life and should be given the necessary protection to actualize that life. In this case, the mother's reproductive rights should consider the fetus's right to life, which is an absolute right of every human being. The right to life comes before other human rights because all human rights are an integral aspect of the right to life.

The reference to abortion in most ancient world literature was very sparse; only a few works of literature discussed it. For example, Socrates advised on how the marriage between men and women should raise offspring. Socrates considered abortion of embryos conceived by adultery worthwhile. He maintained that children born of adultery should not be kept. Plato and Aristotle supported abortion. Aristotelian ethics and embryology were very influential in the abortion debate. Aristotle recommended the enactment of laws that would allow the killing of deformed infants. He believed that human life begins after the ensoulment or second trimester of pregnancy. Therefore, Aristotle thought that the fetus becomes a human person after ensoulment. However, the Hippocratic Oath condemned abortion, and Hippocratic physicians prohibited
women from procuring an abortion. According to this Oath, "I will not give a woman an abortifacient pessary." There was no clear explanation and interpretation of this aspect of the Hippocratic Oath in this era. Perhaps, it was the Pythagorean School of Medicine that promoted it because of its strong belief in respect and protection of life from conception to natural death. Roman physicians adopting the Hippocratic Oath and ethics used them to condemn both abortion and physicians involved in the procurement of abortion. Pieces of ancient literature recorded physicians that participated in the procurement of abortions. The procurement of abortion was unofficial at that era; however, physicians helped in procuring it.  

There was a high rate of procured abortion in the United States of America after World War II, with about 600,000 cases of procured abortion during this period. In 1973, following the Supreme Court decision, abortion was legalized in the United States. Recently, the United States has witnessed a 25% decline in abortion between 2007 and 2016 among 47 states that consistently provided records of abortion within this period. According to the Centers for Disease Control, the States of California, Maryland, and New Hampshire are not included in this list because of a lack of documentation of cases of procured abortion. The legalization of abortion in the United States paved the way for other countries like Canada (although on-demand), Russia, Poland, and Greece, as well as some developing countries including India, Tunisia, Morocco, Cameroun, and Zambia, to legalize abortion as a method of birth control and regulation. Abortion is not legalized in either Nigeria or Ghana. These two countries have received much pressure from their citizens and some western countries to legalize abortion. Despite the pressure from both the citizens and some western countries, abortion in these two countries is prohibited and sanctioned by law. The Catholic Bishops Conference of Nigeria (CBCN) condemned it in these words; "We denounce the relentless efforts of many western
nations' development programs and the United Nations' agencies to pressurize and manipulate
countries in Africa, especially Nigeria, to embrace an anti-life culture and anti-life programs,
namely, artificial family planning, … abortion and contraception…"9 The Nigerian Constitution
has a strong respect for human life and dignity from conception to natural death. Abortion is
punishable by law in Nigeria. It is regulated by two codes of laws (Penal and Criminal Codes)
for its northern and southern states. The Penal Code section 232 regulates the procurement of
abortion for the northern zones. The procurement of willful abortion is punishable by fourteen
years of imprisonment or an option of a fine. The Penal Code states: "Whoever voluntarily
causes a woman with child to miscarry shall if such miscarriage is not caused in good faith to
save the life of the woman, be punished with imprisonment for a term of which may extend
fourteen years or with fine or both."10 The Criminal Code section 229 regulates the procurement
of abortion for the southern states. The Criminal Code states: "Any woman who, with intent to
procure her miscarriage, whether she is or is not with child, unlawfully administers to herself any
poison or other noxious thing, or uses the force of any kind, or uses any means whatever, or
permits any such thing or means to be administered or used to her, is guilty of a felony, and is
liable to imprisonment for seven years."11

Among the different ethnic groups in Nigeria, abortion is considered an abomination, desecration
of the land, and an offense against the Earth Goddess, the mother of fertility and production.
Abortion (ite ime in Igbo culture) requires cleansing and expiation in the Igbo culture. It is
considered an offense against human life. It defiles the land (Ala) because it involves the
shedding of blood. It is a taboo or abomination (Nso) and requires cleansing of the land. If the
land is not purified, the people will face the wrath of the Earth Goddess.12 The notion that
abortion is an offense against ala goddess and human life among the Igbo links violence to
human life, dignity to the environment. A human being in the Yoruba culture has three essential elements or parts: "Ara (body), emi (breath), and ori (personality soul). The Yoruba sees the fetus as atinuke (one who is shown affection from the womb)." The fetus possesses these three elements essential in human life for relation and interaction within society. "Ori (human destiny) suggests that there are life and individuality before birth that needs to be actualized; hence, the fetus has a right to live to actualize this destiny." The Yoruba strongly believes that human life begins at conception. Hence, a fetus is a potential life and needs to be cared for and protected in the womb.\textsuperscript{13}

The pro-choice groups have made several attempts in the recent past to legalize abortion both at the state and national Assemblies in Nigeria; these attempts have failed at both levels. For instance, in 2013, the Imo State women went on a protest on the street about abortion law that passed the first reading in the State House of Assembly. The government of the Imo State had no option than to discard the bill. The Senate at the national level would not allow this bill to pass the first reading.\textsuperscript{14} The \textit{Nigerian Code of Medical Ethics} prohibits abortion and sanctions any medical practitioner who procures an abortion. "A doctor who improperly procures or attempts to procure an abortion or a miscarriage is liable to be charged with infamous conduct as a professional."\textsuperscript{15} Human life is considered sacred in Nigeria from conception to natural death. The Penal Code and Criminal Code permit abortion to save the mother's life. The Penal Code only allows abortion to save the life of the mother. Section 235 of the same code reiterates this statement, as stated above. Section 297 of the Criminal Code says, "A person is not criminally responsible for performing in good faith and with reasonable care and skill a surgical operation upon any person for the benefit, or upon an unborn child for the preservation of the mother's life…."\textsuperscript{16}
Despite that abortion is regulated by law in Nigeria and cultural practices, indices of procured abortion are very high in the country. For example, about 610,000 abortions occurred in 1996, 760,000 in 2006, and 1.25 million in 2012. It is quite unfortunate that abortion is commonly procured and performed by unskilled providers under secrecy in Nigeria. Untrained health care providers have caused the loss of many lives and other medical complications that threaten the lives and health of women and young girls in the procurement of abortion.\textsuperscript{17}

Abortion is prohibited among the three Abrahamic religious traditions- Judaism, Islam, and Christianity. In many traditional religions and cultures in Nigeria, abortion is evil and ungodly. However, some differences exist in how each handles abortion when the mother's life is in danger if the pregnancy should continue. Abortion procured to prevent the death of a mother in both Yoruba and Igbo cultures is permissible. The Yoruba culture permits abortion when the pregnancy endangers the life of a mother. A mother's life has higher protection over the fetus's life in this case because the Yoruba believe that a mother will conceive and give birth to another child. Hence the Yoruba will say, "omi lo danu agbe o fo (it is the water that poured away, and the calabash is not fractured)."\textsuperscript{18} Also, abortion to save the mother's life in Igbo culture requires no purification of the land. "Intention (mens rea) at such a point overtakes the act done (actus reus), and so no criminal liability results."\textsuperscript{19} This statement implies that the mother's life takes precedence if the continuation of the pregnancy threatens her life. Like the Yoruba, the Igbo also believes that the mother will conceive and give another birth.

Abortion is prohibited, abhorred, and punishable in the Nigerian Legal Codes(Penal and Criminal Codes), the Nigerian Code of Medical Ethics, and different ethnic groups because human life comes first over anything. Human life is a subject and not an object. Therefore, no one has absolute control over his or her life, even the life of the unborn child. The Nigerian
Legal Codes, Nigerian Code of Medical Ethics, and different ethnic groups are cognizant of pregnancy complications. Perhaps that is why the permissibility of abortion when a pregnancy endangers the mother's life. The Penal and Criminal Codes, Code of Medical Ethics, and the two ethnic groups discussed align with Judaism and Islam, which differ from the Roman Catholic teaching that places the mother and fetus's life equal in rank and dignity.

The diversity of Nigeria is seen in ethnic groups, cultures, religions, and vegetations. For example, "the ecological zones in Nigeria based on Keay (1949) are defined from South to North as follows: Mangrove Swamp and Coastal Vegetation, Freshwater Swamp Forest, Lowland Rain Forest, Derived Savanna, Guinea Savanna, Sudan Savanna, and Sahel Savanna. In Jos Plateau, Adamawa, Taraba, and the Northern part of Cross River State are a few mountainous areas."20

The country's religious diversity is apparent in its tripartite prominent religious heritage of traditional religion, Islam, and Christianity, along the north and south geographic zones. These diversities create both unity and chaos. The northern part of Nigeria has a predominantly Muslim population that influenced its culture, making it difficult to distinguish its traditional culture from its religious practices. The Southern part of the country is predominantly Christian, with a higher Catholic and Anglican population amidst other Christian and Pentecostal churches. Although Christianity has also influenced the Southerners, their cultural heritage still lingers because of available literature. The Christian missionary approach in the zone had an educational dimension that helped preserve the cultures in written documents. The Indigenous religion exists within the two zones with a sparse population. The Middle belt, with six states, is populated by ethnic minorities where religion is very diverse.21

2. a.i. Sanctity of Life in Catholicism
The Roman Catholic Church has maintained her long teaching on abortion as a moral evil and unacceptable behavior. Both old and modern Catholic documents continue to support this teaching that stresses respect for life and human dignity as a fundamental and inalienable right. Abortion in the Catholic Church is an excommunicable case in the Code of Canon Laws of the Eastern and Western Church.\textsuperscript{22} The Bible, like most ancient pieces of literature, has no direct reference to abortion. These biblical passages serve as a guide for respecting human life at conception; they also serve as the basis for the prohibition of abortion in the Abrahamic religious faiths. The Book of Exodus (21:22-23) "If men are fighting and a pregnant woman is hit, so that the child is born prematurely, but she is not injured, the one who hurt her will pay the fine demanded by the husband and allowed by the court." The Gospel of Luke (1:41-44): "When Elizabeth heard Mary's greeting, the baby leaped in her womb"\textsuperscript{23} is a solid moral argument in Catholicism that life begins at conception as its sensory organs are active. The baby jumping in the womb of Elizabeth is consistent with the Yoruba notion of the fetus. For the Yoruba, as earlier mentioned, the fetus possesses the three elements, \textit{Ara, Emi,} and \textit{Ori} (body, breath, and personal soul), which are essential attributes of human beings to relate and interact within the society. The three elements are strong reasons the Yoruba believe that life begins at conception.

The Catholic Church always taught that human life and dignity begin from conception to natural death. The Didache is the most ancient church document that prohibits and condemns abortion as a moral evil and abominable act. "You shall not kill by abortion the fruit of the womb, and you shall not murder the infant already born."\textsuperscript{24} Athenagoras and Tertullian, with other Fathers, Pastors, and Doctors of the church, firmly maintained this teaching in the course of history. Various church councils have unanimously condemned abortion as a sinful act. For example, the Council of Mainz in 847 held a law that prescribes the most rigorous penance for women who
procure an abortion or kill their offspring. The Second Vatican Council, consistent with the church's teachings on abortion, maintains that human life and dignity begin from conception to natural death. It condemns abortion and infanticide as evil and an abomination. Also, various Popes throughout the history of the Catholic Church have consistently maintained this teaching. According to Benedict XVI, "abortion and embryonic research are a direct rejection of the attitude of reception of others, which is vital for creating a lasting harmonious bond of peace in society." The Second Vatican Council also listed abortion and murder, genocide, euthanasia, and willful suicide as sins against human life and dignity. It considers mutilation, physical and mental torture, and undue psychological pressure as violence on the integrity of the human body. These are human dignity violations: subhuman living, prostitution, slavery, deportation, violence against women and children, poor working conditions, human trafficking, and underpayment. Also included as crimes against human dignity are situations that promote the use of human beings as tools or a means to an end. In line with the Catholic Church, the Catholic Bishops of Nigeria condemned abortion, contraceptives, and sterilization in totality. In its communiqué on the "Wasteful Spending on Family Planning Commodities: Reaction of The Catholic Bishops Conference of Nigeria, the bishops maintained that artificial birth control and abortion are "anti-family and anti-people agenda." Likewise, the US Conference of Catholic Bishops condemns abortion as "a threat to life, an attack on human dignity, and life. It destroys the heart of the family and kills many innocent lives."

The Catholic Church is not unaware that pregnancy may endanger the lives of mother and child. The problem may be a socio-economic problem or a severe health problem of a mother. It may also be a burden that comes with an extra child, mainly when the child is to be born with abnormalities that demand care throughout life. It may also be a case of rape that may come with
shame and stigma. "But it must be clearly stated that none of these reasons can ever objectively confer the right to dispose of another life, even when life is only beginning." Human life is sacred and has a divine origin. It has a fundamental value inherent in it, such that both the life of the mother and fetus are equal at every moment, and none is priced over the other.\textsuperscript{31}

The debate on the legality or permissibility of abortion when a mother's life is in danger received more attention from theologians like Archbishop Antoninus of Florence and other church physicians. They expressed various views on permitting abortion to prevent a mother from dying from pregnancy-related complications. The argument is that the mother's life should have precedence over the fetus. For instance, Antoninus argued that a physician had the right to perform an abortion if the advancement of the pregnancy endangered the mother's life and provided the fetus is unformed. In such a situation, the mother's life takes precedence over the fetus, or the mother has a prior right over the fetus (\textit{jus potius}). He added that a formed fetus should not be aborted even if the mother should die of severe ill-health. Antoninus later supported innovations or suggestions to help save the mother from death, even when the fetus was fully developed. An abortion procured to save the mother's life is a medical treatment needed at that moment and not a willful abortion. Nineteenth-century theologians condoned abortion to save the mother's life. Some of the theologians allowed craniotomy, which is the direct destruction of the fetus. They considered the action as indirect killing, saying that it is like self-protection in a moral sense. Because the fetus whose life in the womb is a threat to the mother, it should be considered an "unjust aggressor." On May 31, 1884, the Vatican made this statement: "It may not be safely taught that a craniotomy is permissible when otherwise both the mother and fetus will perish, but with the operation, although the child will perish, the mother's life will be saved."
The debate did not end with this official Vatican statement. In 1930, Pope Pius XI "solemnly condemned all abortion for medical, eugenic, or social reasons. The Pope explicitly repudiated the unjust aggressor theory saying indignantly, who can call an innocent child an unjust aggressor." For Pope Pius XII, "Even the unborn child is a human being in the same degree and by the same title as its mother." Catholic physicians were taught that a medical procedure that directly attacks the fetus to terminate a pregnancy is a mortal sin. It results in expulsion from the church (ex-communication- *a latea sententiae*), be it craniotomy, embryotomy, or administration of abortifacient drugs. Instead, "they were advised to carry out certain procedures such as a hysterectomy or excision of a fallopian tube containing an ectopic fetus. These procedures were not directly intended to save the mother's life and only indirectly or unintentionally caused the death of the fetus." This procedure is known as the Principle of Double Effect.

The *Principle of Double Effect* is not a Catholic construct; it originated from Aristotle and was redefined by St. Thomas Aquinas in *Summa Theologiae*. This principle is articulated in many pieces of literature. The *Principle of Double Effect* serves as the ethical and moral principle in resolving ethical issues in abortion when the continuation of the pregnancy endangers the life of the mother in the Catholic tradition. For example, treating a life-threatening ectopic pregnancy to save the mother and the direct surgical opening of the fallopian tube to remove the fetus from it and separate the mother and fetus (salpingectomy) is judged illicit because the surgery is a direct attack on the fetus. Rather, suppose the surgical operation is to remove the entire fallopian tube (salpingectomy.) In that case, the surgery is judged morally right in the *Principle of Double Effect* because the proposed surgery is directed towards a good result (removing the ruptured tube to save the mother's life). The surgery tolerated the bad result, that is, the death of the fetus.
and the removal of the tube. In such a case, the surgeon acted on the fallopian tube, which is part of the mother's body and not directly on the fetus.\(^3^5\)

The *Principle of Double Effect* is a principle that seeks to answer some ethical questions such as: "Is it right to perform an action from which two or more effects result, some of which are good and may rightly be intended and some of which are bad and may not be rightly intended"?\(^3^6\) The *Principle of Double Effect* answers this ethical question by providing four necessary conditions before action is judged right or wrong. The following order is the most helpful, although conditions 2 and 3 are reversed: (1) the act must not be morally wrong or bad. (2) the bad or wrong effect must not cause the good effect. (3) the agent must not intend the wrong or bad effect (as an end to the means). (4) the bad result must not outweigh the good effect.\(^3^7\) The *Principle of Double Effect* is not only used to solve ethical issues in abortion. It is also applied in other ethical matters with two or more outcomes that some are moral and maybe rightly envisioned and some are wrong and perhaps unplanned. The *Principle of Double Effect* is also applied in ethical matters such as euthanasia, mutilation, and sterility testing.\(^3^8\)

2. a.ii. Sanctity of Life in Other Faiths - Judaism and Islam

Judaism, Islam, and Christianity are referred to as Abrahamic religious traditions. They are theistic religions because of their strong belief in the Oneness of God, although with different approaches and understandings. They share similarities and differences in worship, articles of faith, ethics, and organizational structure. Among the similarities they share are respect for human life and human dignity. Even though they are pro-life in theory and practice, the human embryo is different, especially with the Catholic tradition. In both Judaism and Islam, the fetus is seen as a pre-human life; this understanding of the fetus permits abortion to save the mother’s life when a pregnancy endangers her life. In contrast, the Catholic tradition sees the human
embryo as a full life with equal rights and privileges with already existing life. This understanding of the status of the fetus forbids the procurement of abortion to save the mother's life.39

Judaism strongly advocates the sanctity of life from conception to natural death. The Jewish religion does not support absolute autonomy over one's body, especially with the fetus. It strongly condemns arbitrary termination of life at the initial stage, thereby explaining the potential of the fetus and the need to protect and care for it from wanton termination and destruction.40 Some Rabbis consider abortion as the termination of potential life, obstruction of human development, and mingling in God's creative hand or divine motive. It is an insult to God and the human person.41 Although Judaism condemns wanton termination of pregnancy, there are situations where it permits the procurement of abortion. Like most ethical and moral issues in Judaism, many factors must be considered before making a legal decision. The termination of pregnancy in Judaism requires a case-by-case Rabbinic consultation, "because this issue may involve the taken of a life (or at the very least a potential life)," this is a crucial moral and ethical issue that needs careful and cautious handling.42

Thus, the fetus is considered a potential life with certain rights and privileges. It is generally inviolable and respected in Halacha (the laws of Jewish life).43 Although the fetus is considered a potential life, it does not mean it has equal status and rights with an already existing person. The Jewish law does not consider the fetus as a nephesh (a living human) until birth.44 For example, conservative Rabbis like Ben-Zion Bosker and Kassel Abelson observed that; "the fetus is in the process of development, and the decision to abort it should never be taking lightly." The embryo in recent scientific research has received a higher status that is almost equivalent to existing life. The higher status given to the embryo in the recent past has
challenged the traditional concept of the embryo. Research has also changed the status of the fetus among some Jewish Rabbis and their adherents. Abortion based on these recent scientific researches about the embryo is considered as human interference in divine motive.45

The fetus in Judaism is considered part of the woman's body until it comes out of the womb. The voluntary termination of an embryo is not considered murder or homicide (infanticide). Talmudic teaching explicitly says that "it is permissible to kill the unborn fetus." The understanding of the status of the fetus in major Talmudic and Rabbinical teachings against abortion allows saving the mother's life or for other crucial therapeutic reasons.46 "This permission is based on an interpretation of the halachic term rodef, meaning pursuer."47 This teaching gives several reasons for the prohibition of pregnancy termination. Abortion is compared to the expulsion of semen during sexual intercourse between a man and a woman. It is destruction and infliction of pain. Abortion terminates and prevents a potential life from coming into existence. It insults God, nature, and the human person, "but the principle reason arises from the fact that Mishnaic text on abortion, Oholot, deals with it in the context of a defense of maternal life, and the most subsequent commentary, from the Maimonides onward, interprets abortion solely within that light."48 The most quoted Mishnah text states that: "if a woman is suffering from dangerous labor and her life is threatened, the fetus must be cut up in her womb and brought out piecemeal, for her life takes precedence over its life." The Mishnah further states that; "once the fetus head or majority of its body have exited the womb, it must not be touched, for the claim of one life cannot supersede that of another life." This teaching prohibits abortion in Judaism except to save the mother's life when there is a complication with the pregnancy that endangers her life.49

Abortion in Judaism has varied opinions, which look complex and contradictory, "…While, according to the consensus of rabbinical opinion, (fetal) life is not protected by any legal
provision, the artificial termination of a pregnancy is strongly condemned on moral grounds, unless it can be justified for medical or other grave reasons. There are two primary reasons for therapeutic abortion in Judaism. The first reason suggests that the fetus may be terminated in some instances because it is considered the one who is pursuing the mother. The fetus understood as a pursuer (rodef) gives the one pursued the privilege to kill it. It is given the same consideration as anyone who kills a thief who breaks into his/her house. The house owner is privileged to kill because the thief may be armed to harm him/her. In this case, the thief is a threat to the other person's life, and the danger ought to be eliminated. "The fetus is thus seen as a ‘pursuer,’ which is threatening the mother. This threat has to stop, even if it means killing the pursuer."

Abortion in this situation is not murder or homicide (infanticide); it is permitted. Therefore, abortion is justified to save the life of a mother threatened by the fetus. However, "once the child is born, we do not know who is chasing who- that is, if the mother's life is threatening that of the baby or vice versa- we must, therefore, treat both lives equally." The second reason is taken from a passage from the Sanhedrin that presents Midrash (creative exegesis) of Rabbi Ishmael on Genesis 9:6, understood to mean, "Whoever sheds the blood of man within another man, his blood shall be shed" (Gen 9:6). The Talmud interprets "a man within another man" as the fetus in the womb. This commandment was not directed to the Jews initially because it came before the formation of the Jews. Therefore, it was a command explicitly given to non-Jews because the Torah requires a lesser moral standard from non-Jews. This source serves as a biblical prohibition of abortion and the prohibition of abortion among the Jews.

In regulating abortion for whatever reason, Jewish bioethicists formulated four categories of illnesses to distinguish various needs—first, uneasiness or discomfort, such as minor coughs and
rashes. Second, slight sicknesses or minor ailments such as irritating coughs and headaches that are simple and do not need bed rest are under this category. Third, "patients who are severely but not fatally ill or whose limbs, but no lives are in danger," for example, illnesses that confine the patient to bed rest or preventive care. Fourth, it is a possibly terminal ailment. There are various limitations to each of these types of conditions. These decisions lie between permission, not a violation of the first group, to the prohibition of the fourth category.\textsuperscript{55}

Abortion is prohibited in Jewish law as a birth regulation method or control or for socio-economic reasons or other similar purposes. Abortion is considered under two prohibitions of the Torah and rabbinical teachings. It can be used to save the mother's life if the pregnancy is to be terminated. On the other hand, abortion is not considered murder but a wrong way of destroying potential life by rabbinical teaching. Rabbinical teaching is lenient in allowing abortion even when the mother's life is not in grave danger. For example, abortion is sometimes permitted for fetal reduction (a procedure that reduces the number of fetuses in a woman with multiple fetuses). It can be done for two reasons, either for the mother's health or to allow the viability of other fetuses. The permission for this situation depends on the gravity of the danger involved. When a fetus is diagnosed with anencephaly, hydrocephaly, or Tay-Sachs, an abortion may be permitted. Although, it is not all Jewish authorities that allow the procurement of abortion under these situations.\textsuperscript{56}

Genetic science is a fast-evolving discipline in medical and biomedical research to alleviate both health and environmental problems. Prenatal genetic testing is encouraged in Judaism, but caution must be exercised. The advice of genetic counselors and Rabbis is to be sought by individuals who want to undergo such testing to determine the many permissible conditions. If the purpose is purely therapeutic, it is permissible; however, "if the result of the testing will lead
to aborting an imperfect fetus, careful halachic guidance is essential." Abortion for non-therapeutic reasons is prohibited in Judaism. Abortion for pregnancy due to rape or incest is not permissible in Judaism because it is a non-life-threatening condition. However, it requires a "discussion with the mother about the impact on her carrying the child would be honestly pursued." 

Like most religious traditions, ethical, moral, and religious values are intertwined and difficult to separate in Islam. In most cases, religious values override ethical values in many countries. Imperatively, religion plays an essential role in a patient's ethical and moral formation in the procurement of an abortion (Ijhad in Arabic). The Qur'an and the traditions of Prophet Mohammad are the major sources of Islamic bioethical principles, responsibilities, and rights. Ethical decision-making and bioethical deliberation depend on the interpretation of the sources of Islamic bioethics. It also depends on religious loyalty and respect for continuities between the material and spiritual realms and between ethics and jurisprudence. The interpretation of sources of Islamic bioethics gives Islamic bioethics the flexibility to answer various ethical questions from emerging biomedical and genetic science. For Islam, abortion is considered man's mingling with the divine will because God is the source of life and death. The fetus is formed by God, who gave spirit to it and not the woman. The meaning is that a woman has no absolute right to abort a fetus wantonly; therefore, the explicit condemnation of abortion in Islam is without exception. The Qur'an and Hadith made no explicit prohibition on abortion, nor did the Sunna. "The prescription of abortion, particularly, the injunction against killing, is based on an analogy and an interpretation of Hadith applied to the Qur'anic verses, specifically the injunction against killing." For example, "Do not take a 'human' life- made sacred by God-except with a legal right" (17:33). In Islam, the acceptability of abortion is based on three ethical concepts:
1. The legal status of the fetus

2. Respect for human life

3. The right not to be born.\textsuperscript{63}

\textit{The legal status of the fetus}

As noted above, the Qur'an, Hadith, and Sunna never mentioned procured or intentional abortion. However, the prohibition and acceptability of abortion in Islam can be traced to the Islamic legal texts.\textsuperscript{64} Unlike the Roman Catholic tradition, there is no central authority or a single theological doctrine in Islamic religion that postulates and controls Islamic thoughts on ethical and moral issues. Prophet Muhammad gave a guideline on the case of a forced miscarriage on one occasion. It was a case where a woman killed a co-pregant wife. The Prophet said that the murderer's family should pay blood money (\textit{diya}) for the co-wife and make a payment (\textit{ghurra}) for the unborn child. There are two payments in such a situation; the mother and the other for the fetus.\textsuperscript{65} This case gives the proper legal understanding of the status of the fetus in the Islamic legal system. The \textit{ghurra} is usually one-twentieth of the \textit{diya}, which is paid for an adult. It is evident that a fetus has a legal right in Islam but is not equivalent to a full-fledged human being. \textit{Ghurra} paid for the death of a fetus in some ways resembles compensation paid for losing a body part. This notion has its roots in the interconnectedness and inseparable relationship between the mother and fetus. Therefore, a \textit{Ghurra} should be paid to the pregnant woman because the fetus is part of her body.\textsuperscript{66} The Qur'an gave a detailed explanation of the stages of development of the fetus. "And indeed, we created humankind from an extract of clay and then placed each human as a sperm-drop in a secure place. We developed the drop into a clinging clot of
blood, then developed the clot into a lump of flesh, then developed the lump into bones, then clothed the bones with flesh..." (23: 12-4).

The Qur'an explains the stage of gestation from conception to birth. At each gestation stage, the fetus has different moral and legal status (acquires a different moral and legal status). The four stages are *Nutfa* (sperm), which is conception to 40 days, when the sperm and ovum are gathering in the womb, *Alaqa* (blood clot) is conception between 40-80 days, the development into a clinging blood-like clot. The third stage is the *Mudgha* (embryo), the conception period between 80-120 days. At this stage, the clot forms into a clump of flesh. The fourth stage is *Khalqan Akhar* (spirit), the conception period from 120 days to birth. At this stage, the ensoulment takes place the fetus possesses a soul. At each stage of fetal development, abortion is either permitted or prohibited depending on the legal and ethical guidelines of the various schools of thought. However, abortion is forbidden by all schools of thought at the fourth stage *Khalqan Akhar* because the fetus at this stage is considered a child. Nevertheless, all schools of thought make an exception and allow abortion to save the mother's life when further advancement of the pregnancy endangers her life.67 "This is because abortion is a ḍarūra to save the mother's life, one of the five maqāṣid (the five fundamental goals of the sharia.) At this point, the mother's life is protected at the value of the potential life of the fetus."68

Otherwise, even in the case of an accidental killing, *Kaffara*, an expiation is required. If the person is unable to pay, he is required to fast for two months. "It is not lawful for a believer to kill another except by mistake. [Moreover], whoever kills a believer unintentionally must free a believing slave and pay blood-money to the victim's family- unless they waive it charitably..."(4:92). Abortion and wrongful termination of pregnancy are treated as quasi-accidental killing cases, and as an action against the fetus is not direct killing because its
existence is only possible in the mother's womb. It makes the life of a fetus imaginary until it is born. In this case, abortion of a fetus would be appeased by a Kaffara if the fetus is considered a human being in the real sense. Generally, the classical jurists of Islamic tradition consider the status of the fetus anomalous in two ways: One that the fetus has some legal protection and power accorded to already existing life, such as the right to inherit property, including the ghurra. Two, it does not mean that the fetus should be treated as a full-fledged human being.⁶⁹

**Respect for human life**

Human dignity and respect for life are fundamental in Islamic life and religious practice. Human life is highly respected because Islamic religion acknowledges the supremacy of God in all things, especially in the creation of new life. The respect for life in Islamic thought is discussed in two ways that center on Islamic law. The two views discuss individual importance and the care of the welfare of society. "Both of these principles sum up the long-established aims of Islamic jurisprudence, to guard the well-being of the individual, but also to care for community cohesion through attention to its moral standing."⁷⁰ The Qur'an extols the dignity of human beings as unique creatures different from other creatures. "Then He fashioned them. He had a spirit of His Own creation breathed into them. Moreover, He gave you hearing, sight, and intellect" (32:9). To kill a human being in the Islamic religion is not understood purely from a physical aspect. It extends to the spiritual because it is "equivalent to killing a divine soul and an attempt to destroy God's entity. The respect for life extends to the duty of preserving the potential life in a mother's womb, so preserving the life of the fetus has an ethical value. The potential life of the fetus is considered as an appearance of the divine predestination or predetermination of Allah's will that is called qadar or taqdir."⁷¹
Abortion damages the development of potential life and intervenes in the divine motive of procreation, which lies in the hand of God. The destruction of the gestation process by abortion makes it a fundamental argument for its objection even before ensoulment.\(^72\) An abortion to prevent the mother's death when further development of the pregnancy endangers her life does present an ethical dilemma on the hierarchy of life. There is an accord among all Islamic schools that the mother's life is supreme over the life of the fetus. The *Reproductive Health Issues in Nigeria: The Islamic Perspective* states that, following the consensus in Islamic teaching, abortion is permissible in serious situations such as saving the mother's life. It added, "even in such a situation, it is only allowed before life is breathed into the fetus, which is variously regarded as within the first 40, 80, or 120 days."\(^73\)

**The right not to be born**

The right not to be born is a critical area in the contemporary ethical discussion because a life worth living implies a life that maintains certain qualities and does not impose an unnecessary burden on the family and community responsible for it. In such a situation, if a fetus is impaired and does not meet these qualities, it may have to be considered a "wrongful birth." In this situation, the issue of the "right not to be born" arises. The possible solution is the termination of the pregnancy by abortion. The reproductive right empowers parents with the freedom to give birth or not to give birth.

Apart from wrongful birth, there is "wrongful life" where an impaired child or adult sues doctors for medical malpractice for allowing them to be born into a miserable existence. The law includes rights to child-space, abortion, and the use of contraceptives. The notion of human dignity and respect for human life are central human rights that cover the right and dignity of the unborn and the born. However, the right not to be born is missing in human rights articles. The
non-inclusion of the right not to be born obviously may be that the right not to be born depends on the timing of personhood ascribed to the fetus. It is worth mentioning that a fetus has no universal status because cultures, religions, and ideologies ascribe the status of a full-fledged human being to the fetus at different stages of development. For instance, "in the most western world today, personhood begins at conception. The whole dilemma of the right not to be born is rendered irrelevant in the face of the perception that fetuses are not persons."  

Fatwas are Islamic legal opinions on medical ethical matters formulated by renowned jurists (muftis). They are not binding and enforced by law, but they are very influential and make essential contributions to Sharia law. The most influential fatwas in the Islamic religion are published by influential scholars, like the Azhar Fatwa Committee (Lajnat al-Fatawa) in Egypt and the Supreme Scholar Form (Hay'at Kibar al-'Ulama). These Fatwas show no evidence of either wrongful birth or wrongful life. Abortion in Islamic tradition is a complicated matter, as discussed above. The Islamic position is straight and concrete on the abortion of a fetus conceived through rape. The abortion of a rape fetus is judged wrong and sinful in most Islamic schools because both the fetus and mother are considered innocent. Some Muslim scholars support this with a quotation from the Qur'an "…. Whoever takes a life -unless as a punishment for murder or mischief in the land it will be as if they kill all humanity..." (5:32). In recent times, Ulema from the countries of Algeria, Saudi Arabia, Egypt, and Iran issued fatwas that permit abortion in cases of rape or fetal disability. It is important to note that fatwas are not legally binding in Islamic tradition unless they are made official laws.

Abortion in most cultures and religions is generally condemned and considered evil. It is also considered as human mingling in the divine motive. Some African cultures and traditions consider it the defilement of mother earth, the Goddess of reproduction and fertility. However,
when pregnancy advancement endangers a mother's life, various cultures and religious traditions approach it differently. The Catholic Church differs in its approach to abortion to save the mother when further advancement of the pregnancy endangers her life. In the Catholic Church, life begins at conception, and there is no life that is greater than the other. The Catholic Church handles this situation with the principle of double effect. In both Judaism and Islam, the fetus is considered a pre-human being. It has a lesser status than the mother. Judaism handles the case of pregnancy that threatens the life of the mother with the principle of Rodef.

In contrast, Islam handles it with the principle of ḍarūra (abortion to save a mother's life.) The two Nigerian cultures Igbo and Yoruba, agree with Judaism and Islam and differ from Catholicism. The Nigerian government handles it with the penal and criminal codes and the Nigerian Code of Medical Ethics. The unique difference among Judaism, Islam, Igbo, and Yoruba cultures, the Nigerian legal code, Nigerian Code of Medical Ethics, and Catholicism is this statement by Pope Pius XII: "Even the unborn child is a human being in the same degree and by the same title as its mother." 77

2. B. Respecting Life in Neonatal Care

The care of a critically ill infant comes with many worries and challenges both for the family and health care providers. The challenges are more burdensome regarding the type of advanced medical treatment to use and when to discontinue it. The continuation or withdrawal of treatment in neonatal care raises many ethical issues among family members, health care providers, insurance companies, and sometimes government and religious groups. The problems surrounding decision-making in these circumstances are the uncertainties of medical treatment. There are many medical uncertainties surrounding treatment outcomes in critically ill infants than adults who may be critically ill with multiple organ failures. Besides, decision-making for a
critically ill infant is emotionally heavier than that of an adult. A child at this tender stage, a newborn, is a voiceless and vulnerable being. The child's life is at its beginning, with many future pathways to explore. The situation is tightly coupled with sympathetic and emotional trauma. It is also stressful because of the incapacity of the infant to make a decision. Parents, health care professionals, and ethics communities are always in a dilemma about deciding because they do not know the child's best interest.

In ancient times and many cultures, killing an infant at birth has a long ugly history to uncover. Infants born with deformities, too premature, too weak to survive, or unwanted are exposed to death daily. Physicians' involvement in childbirth in those early days did not help matters. Some physicians were accomplices in ending the life of weak and premature babies. At that time, too, some physicians did use their limited resources to save the lives of these babies. The development of the incubator by a French physician in the 1880s made available the first clinic for premature babies opened in La Maternite in Paris in 1893. The invention of these incubators and other medical equipment types has brought needed progress in ill infants' care globally. The development in the care of critically ill infants is also progressing in other related medical fields. It has grown to be a specialized unit different from general pediatric and obstetric medicine in many tertiary hospitals globally. The unit has specialized doctors and nurses trained in neonatology and perinatology. The growth in this medical field has saved many critically ill children who would have died in the past. Neonatal medicine in modern times has developed scientifically with much less guesswork. Medical scientists and researchers have found new answers for some neonatal diseases and their progression rates, as many more advances in research in neonatal diagnosis and early treatment. Biomedical devices have made the diagnosis of diseases in newborns more accurate. They have also helped in resuscitation and surgical
New technologies have given birth to promising therapies such as total parenteral nutrition, phototherapy for hyperbilirubinemia, and surfactant replacement therapy for respiratory difficulty. All these medical devices have helped health care providers treat and manage health crises in the newborn who would have died in the past.\textsuperscript{80}

Despite these advancements and innovations in this branch of medicine, decision-making remains a very challenging issue. An excellent example of such an issue is Baby Doe's case at Johns Hopkins Hospital that brought a radical change in decision-making in neonatal treatment situations with the US government legislating on the treatment of critically ill infants. The legislation states that all indicated medical provisions necessary for treatment are to be given except when "such treatment would only prolong dying, not be effective in alleviating or correcting all of the infant's life-threatening conditions, or otherwise be futile in terms of survival of the infant."\textsuperscript{81} Baby Doe legislation aims to prevent the non-treatment of newborns because of disabilities. It was incorporated into the \textit{Child-Abuse Law}.\textsuperscript{82}

Parents of infants are given the legitimate authority to decide the best medical treatment for their children. Their best interest must be in a way relevant to the health condition of the child. Decision-makers (parents) are to examine the treatment burden and benefits from the perspectives of the child. The neonatal care unit in the United States of America is called the Neonatal Intensive Care Unit (NICU). The first Neonatal Intensive Care Unit in the United States of America was established at Vanderbilt Medical Center in Nashville, Tennessee, between 1962-1963 as a special unit in medical care. Neonatal Care is not all that new in the Nigerian Health Care System. It is named Special Baby Care Unit (SBCU). Nigeria first established the Neonatal Care Unit as a Special Baby Care Unit in the late 1960s. Incubators and other medical machinery were introduced in the Special Care Baby units in some tertiary
hospitals. In the recent past, Nigeria has recorded tremendous increases in Special Baby Care Units. The number of hospitals that offer this special baby care in Nigeria had increased compared with the numbers in the late 1960s and 1970s when these units were introduced. In the early 1970s, only six centers offered specialized care to critically ill infants at birth in Nigeria; recently, many hospitals provide the services. The Neonatal Care Units have saved many infants who were severely sick at birth. With early detection and more advanced technology, some of these babies are well on their way to a complete recovery.

In ancient times, before the introduction of Special Baby Care Units in Nigerian hospitals, critically ill infants were often euthanized or thrown to the evil forest to die or be eaten by wild animals. For instance, in an ancient Yoruba culture, a critically ill infant was considered a burden to both the family and society. The Yoruba people of southwestern Nigeria would euthanize infants born with deformities. Premature babies, blind and deaf babies with faulty intelligence, and down-syndrome babies were considered worthless and a burden to the Yoruba family and society. In traditional Yoruba culture, the abovementioned ill children are euthanized because it is assumed that life is meaningless to them. It is better not to allow them to live life without dignity and respect. Twin babies were thrown away among the Igbo of southeastern Nigeria. The Igbo believed it was an abomination for a woman to give birth to two children at a single delivery. The throwing away of twins in Igbo culture stopped around the 1940s.

The availability and accessibility of Special Baby Care Units in Nigeria have saved the lives of many of these babies, especially those babies whose parents are wealthy and have easy access to these units. The units still face many challenges and continue to struggle with the country's slow development, both technologically and scientifically. Special Baby Care units in Nigerian hospitals have insufficient supplies of more modern medical machinery such as infant monitors,
pulse oximeters, arterial blood gas monitoring machines, and an unstable oxygen supply. The worst challenge facing Nigerian health care, especially in this unit, is an inadequate power supply. The power supply in Nigeria is so abysmal that doctors and nurses find it challenging to carry out their duties as their profession requires.

2.b.i. Ethical Decision-Making

The treatment of critically ill newborns, infants, and children is often an ethical problem because it involves deciding the intensity of treatment to use. Parents and clinicians are faced with decisions like resuscitation in the labor room, transfer of the newborn or infant to an intensive care unit (ICU), the level and nature of care while in the ICU, and transfer from the hospital to the home or vice versa. Clinicians and parents wonder about the best treatment for a newborn weighing the burden and result on the suffering and difficulties the newborn or infant must undergo. Deciding on the proper treatment is often difficult because the decision is made based on an unknown benefit. After all, its result may not be predicated. Disabilities influence the discussion on the treatment of neonates. Disabilities are emphasized because the newborn or infant cannot decide. It is challenging to determine the best interest of the neonates who are voiceless and vulnerable. In some circumstances continuing treatment to sustain the baby's life becomes ethically not obligatory because of his/her severity and suffering. The Nuffield Bioethical Organization coined the term intolerability to describe such a situation. "It would not be in the baby's best interest to insist on imposition or continuance of treatment to prolong the life of the baby when doing so imposes an intolerable burden upon him or her." To understand what intolerability means, the Royal College of Pediatrics and Child Health (RCPCH) clarifies it with three situations: "no chance,' no purpose,' and 'unbearable."

46
a. **No Chance**: In a situation where the treatment offers no cure or chance of survival beyond a short period, the infant's best interest will focus on the relief of suffering and a happy death. For an infant with a severe life-threatening condition that life-sustaining treatment only delays death without improving the child's suffering and pain, keeping them alive with such treatment is futile and unnecessary. It implies that the 'no chance' is straightforward to understand because, with life-sustaining treatment, the baby will still die. In some situations, the baby's condition is fatal and irreversible, so that using this treatment is more of a waste than help.

b. **No Purpose**: It is much more difficult with cases where medical indications show that prolonging life will have no purpose or brings unbearable suffering for the infant. The concept of no purpose, according to RCPCH, is a situation when treatment may save the newborn or infant, just for the infant to have an unreasonable poor quality of life difficult for him or her to bear. An example is when a clinical indication shows that "any future existence for the baby will be a life void of any of those features that give meaning and purpose to human life (for example, being aware of his or her surroundings or other people). Implementing burdensome treatment when faced with such a prospect may be imposing an intolerable existence even in the absence of evidence of great pain and distress." Even if the infant survives the treatment, the mental and physical damage will be severe for him or her to bear.

c. **Unbearable Situation**: the intolerable situation emphasizes a case where treatment may save the life of the newborn or infant, only for him or her to endure greater misery, pain, and suffering. In this case, the family may decide that further treatment may not be of great benefit for the newborn or infant, irrespective of medical opinions. Although the
recommendation of RCPCH is to seek a consensus, the unbearable situation case gives parents a higher opportunity to make a decision.\textsuperscript{95}

Intolerability and its use include the three situations described above and all severe degrees of suffering or disability present in the infant or which may develop in the future. In the application of the concept of intolerability, a case assessment of individual babies is necessary. The degree of pain and suffering a baby can endure is subject to the parents' joint decisions and health care professionals.\textsuperscript{96}

In deciding on a newborn or infant treatment, the ethical issue that arises is the standard or criteria to make medical decisions for the infant or newborn. In making a medical decision for an infant or newborn, these major standards are observed: best interest, medical indication standard, the relational value of life,\textsuperscript{97} the deliberate ending of life, and economic and social burden.\textsuperscript{98}

**The Best Interest:** The concept of best interest is a legal concept often applied in child custody, where the custodial arrangement will promote the healthy growth of the child. The best interest can adequately be understood by considering the interest which all human beings share alike in most and similar circumstances. Human beings generally desire to have a healthy life, to be able to communicate, understand, and express their feelings. They also like to be happy, to live free from pain and suffering above all, and to have maximum satisfaction in life. According to Albert R. Jonsen and Co, best interest is best understood as the "performance and enjoyment of social roles, physical health, intellectual functioning, emotional state, and life satisfaction or well-being."\textsuperscript{99} The concept of the best interest of a newborn or infant means that an individual infant has interests and rights different from their parents and society. Although the parent's decisions and participation in an infant's medical care most often influence the child's best interest.\textsuperscript{100}

However, the best interest principle is essential in medical practice, child protection, and disputes
about a child's custody. The best interest of an infant includes all the factors that affect the newborn's quality of life. These are both the duration and quality of life of the child. It is uncertain about predicting the quality of life of a newborn. It is unavoidable in deciding the best interest of a child.

The principle of best of interest focuses on the general welfare of the infant. It makes it possible to understand that there are limits at which treatment can be provided for the neonate, and other goods are just as vital as life itself. Despite that, the child's best interest is fundamental in treatment decisions; parents and family members also have interests and responsibilities about the infant that should be considered. The best interest of a neonate is often understood from the best interest of the parents and family because the parents are the legitimate persons to make medical decisions for an infant. Generally, the parents of the child have the paramount consideration in any treatment decision-making process.

**Medical Indication Standard:** Medical indications are facts and interpretations about a patient's physical and mental health conditions. They provide adequate information needed by the physician for clinical judgment for the provision of proper diagnosis. They also provide information about the treatment, therapy, or education that is appropriate with the sole objective of achieving the aims of medicine, which are preventive, cure, and care of diseases. In neonatal care, the medical indication standard discusses treatment decisions. It is based on the facts and interpretation of the physical and mental health conditions of the baby. The ethical standard of medical indication states that all newborns have equal dignity and inherent value, irrespective of their disabilities, incapacities, and developmental problems. Therefore, treatment decisions for newborns with disabilities are not to be made based on their disabilities or projected quality of life. However, they should be made based on the medical indication, such as
physiological well-being and clinical data, if a treatment decision is made based on disability, projected quality of life, or developmental problem. In that case, it creates the possibility for child abuse by those deciding for the newborn. The medical indication standard maintains that all medical treatment is given to the critically ill newborn unless such treatment is considered futile because the newborn is imminently dying. It is recommended that any medical treatment proven beneficial for improving a dying newborn's biological and physical functioning must be provided. Paul Ramsey, a Christian ethicist, is the major proponent of this idea.\textsuperscript{107}

**The Relational Quality of Life:** "Quality of life is the degree of satisfaction that people experience and value about their lives as a whole and in its particular aspects, such as physical and psychological health."\textsuperscript{108} In clinical medicine, the ethical decision must consider these three areas in its analysis; the appropriateness of treatment (beneficence), patient's preference (autonomy), and improvement of the quality of life. These considerations are essential to reduce ethical issues and dilemmas.\textsuperscript{109} Therefore, the relational quality of life of a neonate is based on the entire medical condition of the neonate and his/her ability to pursue life goals. These medical conditions are physical, psychological, emotional, intellectual, and spiritual values that are more than physical life. This is because human life is a fundamental good that needs protection and preservation, especially when it offers one an opportunity to pursue other goals of life. The relational quality of life proposes that treatment becomes mandatory and obligatory when it can improve the whole health condition of a severely ill child. It becomes crucial when it offers him/her opportunities to pursue other life goals. It is beneficial to the newborn and his/her best interest. But, if treatment can only improve the newborn's physical health, and his/her pursuit of life's goals becomes challenging and frustrating, it is futile. Additionally, if it cannot improve the
overall health condition of the newborn, then the treatment is not obligatory. Therefore, it is not beneficial to the infant and not in his or her best interest.\textsuperscript{110}

\textbf{The Deliberate Ending of Life}: The sole obligation of medicine is to save and preserve life as much as possible. Therefore, any intentional act or measure to take a newborn's life based on critical ill health violates medicinal goals and objectives. It is also a violation of the right to life and an affront to human dignity. The severe health of the newborn is not enough to intentionally terminate his/her life, even when the life of the baby is intolerable. The newborn needs the necessary care provided for him/her; to allow the physician to intentionally and actively terminate the life of a critically ill child based on intolerability is against the goal of medicine. It kills patient-physician trust and relationships.\textsuperscript{111}

\textbf{Economic and Social Burden}: Another significant ethical problem in treating critically ill newborns is the economic and social burden on both the family and society. Medical treatment of newborns is often expensive. The cost-effectiveness of neonates' treatment, especially those with a minimum survival rate or level, has raised questions; whether these resources can be used in more cost-effective ways. These include universal prenatal care, multidisciplinary research to reduce premature births, and infant diseases' epidemiology. These are areas to explore in pediatric medical care. The question is essential considering the following factors: first, the limitedness of health care resources and health services, as a fundamental good, in which every person should have equal access to basic health care services like preventive, primary, and emergency care.\textsuperscript{112} Second, the social factor, meaning the social burden placed on the family and social service agencies by resuscitating and treating a neonatal with severe disabilities? The burden placed on the family having a child that needs care all through life is daunting. It also creates more work for the family and social service agencies responsible for the baby's care.
Nevertheless, considering the value of life, wherein every life is precious and sacred, infants have equal rights with adults.\textsuperscript{113} Nuffield Council on Bioethics concludes that there is no difference between incapacitated and able-bodied children and adults. Therefore, parents, doctors, and all involved in decision-making should not allow babies to die just because of a disability. On the economic front, it is not acceptable to put a price on human life.\textsuperscript{114}

In addition, autonomy, a sound ethical principle for adult treatment, is less critical for infants and children's medical treatment because they have not reached the age of consent and decision-making. They are incapable of weighing the outcomes of medical treatment. As such, they cannot make an informed consent. In most cases, physicians have acted as the infant's advocate. However, many believe parents are to be fully involved in deciding on the treatment of their children.\textsuperscript{115} The inability of newborns and children to choose their medical treatment begs the question: who has the legitimate authority to make medical decisions for the newborn, infant, or child? There are four main decision-makers in pediatric ethical dilemmas: parents, health care workers, ethics committees, and courts (government).\textsuperscript{116}

**Parents (Family):** Parents have a legal and moral authority to decide what their child's best interests are in all life situations. In deciding, parents are not to treat the child as an object or extension of their bodies. The parents are privileged to know what his/her interest might be because of the closeness that bonds them from pregnancy to maturity. Decision-making at the end of life for either an infant or an adult can be mind-boggling for the immediate family. The immediate family may involve the medical team, community members, religious leader-chaplain, and some extended family members in decision-making.\textsuperscript{117} The parents' role in making medical decisions for their child is fundamental because they are the child's legal guardians. They bear the highest psychological stress and the most financial burden. Therefore, parents
must participate actively in deciding on the best medical treatment for their child. Parents sometimes face many ethical issues because of the advancements and complexities of treatment options in pediatrics today. The situation is most delicate where parents are to decide whether to continue treatment or withdraw treatment. In such circumstances, the parents' interests may conflict with the health care team's medical indications. Also, parents are sometimes confused, emotionally traumatized, and afraid to make a decision. They sometimes allow the medical team to decide not to be responsible for the child's death. Also, parents occasionally may not promote the baby's best interest because of several social and economic factors, such as expense, the shame of having a deformed child, and the burden to care for the child. Parents' problems at the end-of-life decision for their child become both complicated and ethically dilemmatic.

**Health Care Team:** The medical team includes all health care professionals involved in the newborn's care. They are doctors who offer prognosis and diagnosis based on their medical expertise and experience, the laboratory technicians who run the various tests as recommended by the doctors. It includes the nurses, midwives, social workers, and a host of other medical professionals involved in delivering care and managing a patient. The medical team should be actively involved in the decision-making of a critically ill newborn. They are to guide and promote the infant's best interests based on their medical expertise and experience. It is worth noting that sometimes, the medical team's medical expertise and experience do not make them able to predict the infant's future health. It does not also always allow them to make the final decision. The technological and scientific innovations in modern health care can influence health care providers to use more aggressive treatment options when mild and simpler ones can solve the problem. Also, health care teams are sometimes overdependent on the power of modern technology, forgetting that there is a limit to medicine capabilities.
**Ethics Committee:** Ethics committees have grown to become part of hospital services for over a decade as an individual unit in-hospital care service. Ethics committees often come into play when parents and health caregivers cannot reach a consensus regarding medical treatment. They act as an advisory board, not a decision-making body, along with lawyers, administrators, and religious leaders. The ethics committee has a broader viewpoint in ethical cases than both parents and health care providers. The committee can be more objective in handling critical ethical issues in health care. The problem with the ethics committee in decision-making is that sometimes it cannot address urgent ethical issues. Furthermore, the ethics committee may not be available each time to respond to emergency ethical issues.¹²²

**Courts (government):** The court (government) is consulted in extreme cases when the various decision-makers cannot resolve an ethical issue. Also, when there is an immediate threat to the life of the baby by decision-makers. In such a case, the court often follows legal procedures. Its judgment is most often objective and timely. The decision of the court must be made in the best interest of the child. They have similar problems to the ethics committee, such as not responding to an issue quickly and timely. Sometimes, court proceedings can take a long time.¹²³ The court also considers the available treatment options and their pros and cons for the baby's general well-being.

There are conflicts in ethical decision-making due to emotions, sentiments, cultural and religious differences, sympathy, and empathy. All those involved in decision-making strive to arrive at a fair conclusion or agreement. Despite their different interests and opinions, the decision-makers should try to secure consensus among them for the child's best interest. This consensus can be reached if all the parties involved can participate actively in the decision-making process and understand the seriousness of the illness. They should understand that decisions are made for the
infant's best interest and not any other person's interest. Decision-making in neonatal health care creates ethical problems because of the neonate's inability to consent, make a decision, provide advance medical directives, and uncertainties of the medical outcome. Despite these problems that families and physicians face in neonatal care, ethical decision-making, the best interest of the baby is paramount. Therefore, a collaborative process is crucial to arriving at a consensus among the parties to navigate this rocky ethical dilemma. The parties deciding the outcomes should collaborate actively and share their views for the neonate's best interest.

2. b.ii. Ethics Consultation

Ethics consultation is a novel idea in health care service and delivery; it became part of medical practice as a professional field in the 1980s. There are different configurations of ethics consultation in health care institutions. Some health care facilities have an ethics committee that comprises medical staff and trained health care ethics consultants. Their work is to report ethical issues to the hospital management board. A hospital without an outstanding ethics committee may go on contract with a trained health care ethicist. There are three approaches or models for clinical ethics consultation; ethics committee, ethics subcommittee, and individual ethics consultation. An ethics consultant is a member of the health care team in a medical institution.

*Nature and goals of ethics consultation:* Health care ethics consultation (HCE or ethics consultation) "is a set of services provided by an individual or group in response to questions from patients, families, surrogates, health care professionals, or other involved parties who seek to resolve uncertainty or conflict regarding value-laden concerns that merge in health care." It manages the day-to-day ethical issues medical professionals and families encounter, especially obtaining informed consent from patients before medical treatments are carried out. However,
ethics consultation is quite different from medical professionals' ethical decisions. The health care institution officially employs ethics consultants to provide exceptional and distinctive service. The consultant responds to specific ethical concerns and questions that arise in the health care service and delivery process. It is important to note that ethics consultation is a specialized discipline that handles ethical issues in health service and delivery. The health care ethics committee and consultation works include educating health care professionals, developing organizational policies, serving on organizational committees and management boards, handling ethical dilemmas, and writing academic works. \(^{130}\)

The general goal of ethics consultation is to improve caregiving in a health care institution. The goal is performed by identifying, analyzing, and working to resolve ethical dilemmas encountered by individual patients as they seek medical treatment for better health. \(^{131}\) It is achieved if the consultant can reach intermediary goals. The consultant can also identify and synthesize the nature and value of the controversies behind the ethical problem. Understanding these factors will facilitate resolving ethical conflicts and dilemmas in an amicable and respectful atmosphere. The ethics consultant should consider the interest, rights, responsibilities, and other socio-cultural and religious factors of the persons involved in the ethical conflict. Good ethics consultation fuels the goal of practicing medicine with high ethical standards and values. It also updates the institutional policy development, qualitative and quantitative improvement of the institution, and fair use of available resources by detecting the major causes of the ethical problem in the institution. An ethics consultant helps both individuals and institutions handle current ethical and future crises through ethics education. \(^{132}\)

Health ethics consultants may be saddled with a cross range of questions in health care ethics subspecialties in some health care institutions. Ethics consultants need to understand the different
specializations in health care ethics consultations. Ethics consultants are assigned duties based on their area of specialization, such as clinical ethics consultation, organizational ethics, professional ethics, business ethics, educational ethics, or research ethics; with the interconnectedness and overlapping nature of these subspecialties, a broader and more inclusive term or name is used in ethics consultation, which is health care ethics. Ethics consultation addresses typical ethical questions that arise within the scope of ethical dilemmas in health care delivery. The scope of ethical dilemmas and the practical ethical issues in health care service and delivery make ethics consultation work necessary within this scope or domain. The domains of ethics consultation include:

1. **Sharing decision-making with patients:** It looks at how a health care institution promotes and manages participatory and shared decision-making as patients decide their treatment options in conjunction with clinicians. In the case of an infant, parents should actively participate in decision-making with the whole health care team.

2. **Ethical practices in end-of-life care:** The ethics consultant evaluates how well a family handles end-of-life ethical issues about patients at the terminal stage of an illness. The consultant would view all the protocols concerning the care of the terminal patient and ensure that all the proper ethical steps are taken or considered.

3. **Patient privacy and confidentiality:** The consultant evaluates if the health care facility followed appropriate professional health procedures to protect patient privacy and maintain the rule of confidentiality.

4. **Ethical practices in resource allocation:** The ethics consultant looks at how fairly the institution distributes and allocates limited resources among patients and across the various
programs and services in the institution. In some cases, limited resource allocations and
distributions among patients and services in the health care institute create an ethical issue if not
properly managed. The ethics consultant's role in managing and allocating limited resources is
crucial to the patient and the institution. For example, as COVID-19 vaccination is about to
begin, there are questions in some quarters who receives it first and why. The ethics committee's
role is to explain and help the hospital allocate this vaccine in order of priority fairly.

5. **Ethical practice in business and management:** The consultant also assesses how the
institution promotes and encourages high ethical values in its professional and management
practices. The consultant assesses if ethical standards required in professional, business, and
management practices are appropriately followed and observed by the facility. For instance,
he/she helps to prevent and address unethical issues in professional, business, and management
practices. It also includes environmental safety and other safety protocols.

6. **Ethical practices in government service:** The consultant assesses if the facility employees
correctly follow the government rules and regulations in research and everyday work practices.
The consultant also sees if the facility respects government work policies, salaries, wages, and
work time. In many hospital facilities, ethical consultations focus more on clinical ethical
problems and leave the nonclinical ethical problems unattended or to the administrative
department. Ethics consultants should be involved in both.

Ethics consultation also has boundaries or limits of its services. An ethics consultant's role in a
health care institution is to resolve ethical dilemmas and conflicts involving patients and health
care professionals. Included in the list is to help resolve ethical issues between the health care
management team and evaluate government regulations that involve the health care facility and
the host community. Sometimes a client may make requests out of the domain of ethics consultation, such as sexual molestation, medical malpractice, medical opinion, legal advice, or spiritual support. Ethics consultants should know that these issues are outside the ethics consultation domain and should refer them to the appropriate authority. There are reasons an ethics consultant should not be involved in matters outside of his/her field: 1) the ethics consultant is not an expert in the area; therefore, the ethics consultant may not know how to resolve such issues since it is an issue that requires expert knowledge. 2) There may be a scarcity of resources in the ethics department. It is unethical not to use resources for the purpose they were allocated or. 3) The primary function and role of ethics consultation are to protect and avoid confusion, conflict and promote a mutual working relationship between the ethics consultant and other staff of the health care institution. The ethics consultant is not a police officer, policing the clients or staff. Also, the consultant is not there to conduct investigations on an allegation and other non-ethical matters. The primary role of an ethics consultant is to handle ethical conflicts within the facility.

**The Role of a Clinical Ethics Consultant:**

A clinical ethics consultant's duties and functions in pediatric and adult ethics consultations are primarily the same. The difference between pediatrics and adult ethics consultations is the peculiar nature and features of a pediatric setting, like the infant's inability to consent. The unique character and features make the difference between the two. They pose ethical challenges to ethical consultation in pediatric clinical ethical consultations and clinicians. The unique nature and features in infant ethics consultation are management of the child's autonomy, the best interest, the role and interest of the family (parents), decision-making capacity, and his/her legal rights. It is also challenging because of parental roles and rights in the decision-making
process. Infants legally and ethically are not judged competent enough to make decisions for their treatment plans. Their parents or surrogate guardians are the ones that decide for them. The role of the clinical ethics consultant is practical and professional. These are education, negotiation, advocacy, and case management. The ethics consultant is a professional and has other colleagues who collaborate with or whom he/she sought help. The consultant's ability to clinically judge and analyze a clinical ethical problem in different individual cases makes the consultant a professional. The consultant must apply his/her academic and working expertise to handle different ethical issues. The competency of the consultant adds much to the services provided. The knowledge of bioethics, the relevant professional codes of ethics, consultation, and practice are vital in the process. The consultant's knowledge of health care law and a good knowledge of medical practice is of high value in clinical ethics consultation services and roles.

The clinical ethics consultant has a role in teaching health care professionals and patients in the ethical decision-making process. This teaching role is crucial because ethical decision-making is the principal responsibility of a clinical ethics consultant. The consultant must identify the ethical challenges that confront both health care professionals and patients. The consultant should walk the parties through these challenges by way of educating and informing. In performing this role, the clinical ethics consultant should guard against undue influences because there is a difference between educating, persuasion and manipulation, and making-decisions for the patient. Clinical ethics consultants should be very careful about their personal views, cultural background, religious belief, moral values, and other values and not impose them on the parties or influence their services.
The role of negotiation in clinical ethics consultation requires an active interpersonal and communication skill in attending to the client-patient and health care worker. The consultant, in some cases, may act as a consensus builder. However, in some cases, this may not be easy to achieve, as some parties may not agree to some of the solutions offered by the consultant. The consultant, performing the role of negotiator, may act as a rational, clear-headed participant that seeks to reconcile or help two disagreeing parties. In some cases, patients and health care professionals disagree. Also, there may be disagreement among the patient's family members. If they have difficulty arriving at a morally and ethically permissible conclusion in a particular ethical dilemma, "the role of negotiation may include the use of persuasion because ethics consultations have a professional obligation to affect the morally permissible outcome." The consultant also needs to guide against bias and being influenced by any of the parties.

Again, some cases may have two ethically and legally accepted options consistent with moral, ethical, and legal standards in medical practice and services. In this case, the consultant should be more careful not to allow personal interest or sympathy to influence his/her role in negotiating for a consensus. The consultant should remember that the patient is the appropriate decision-maker ethically and legally unless the patient has appointed a surrogate. Therefore, the consultant should try to negotiate in line with the decision of the patient because the primary reason for ethics consultation is to clarify ethical dilemmas involved in decision-making, informed consent, and advance directives. It is also to help resolve ethical problems between family members themselves, family members and patients, family members and health care providers, and others involved in caregiving.

Additionally, the ethics consultant has the role of advocacy for the patient on medical issues. The consultant's advocacy role for the patient's welfare is between the patients and their families and
patients and physicians. "Dual loyalty can be risky for the consultant, especially if he/she opposes a patient's interests that seem threatened by planned treatment, financial constraints, legal proceedings, or an unreliable proxy. The consultant's obligation may extend to confronting the family or physician, applying economic constraints, and pursuing legal appeals."\(^\text{146}\)

Furthermore, an ethics consultant should help manage a patient's case, especially when the patient's life is threatened or when the family and the health professionals need the consultant's help.\(^\text{147}\)

In the performance of clinical ethics consultation, consultants do encounter some problems or difficulties. These problems include finance, legal liability, and intrusion into the patient-physician relationship. The financing of ethics consultation in many health care institutions has been problematic. The remuneration for ethics consultants has been a debate in many health care institutions, whether ethics consultants are to be paid like other health care professionals or not. Moreover, ethics consultants do not generate much revenue for the hospital; this makes financing even more difficult. Furthermore, ethics consultants are at the risk of legal liability. "In 1986, charges were brought against ethics committees in Southern California; the suit was dismissed in 1990, but reportedly has dissuaded the committee from reconvening."\(^\text{148}\)

Another problem that confronts clinical ethics consultation is the question of intrusion into the patient-physician relationship. The questions surrounding this include: "who has the authority to initiate an ethics consultation? For whom does the ethics consultant work? These questions are controversial." The answer is that the clinical ethics consultant works for the physician, the patient, and the health care institution. Any person in need of ethical advice is free to consult an ethics consultant. It is important to note that physicians and non-physicians are free to be ethics consultants because an ethical consultant is quite different from medical practice.\(^\text{149}\) In all ethics
consultation and decision-making processes, the ethics consultant must be neutral. It must not display bias in negotiating for consensus between parents and physicians where they seem to disagree.

In conclusion, decision-making and ethics consultation for a critically ill neonate can be ethically challenging. It is challenging because of the neonate's lack of decision-making capacity and autonomy. Besides, the quality of life, intolerability, and best interest are crucial points to address in deciding treatment plans for the neonate. On the part of the parents, it is traumatic, empathetic, sorrowful, and sometimes emotional. On the part of a medical professional, it is also complicated because of the treatment plan, including withdrawal or continuing treatments (artificial nutrition and hydration.) It can also involve sympathy and frustration in choosing the right treatment plans due to the uncertainties of the outcome. These scenarios constitute many ethical dilemmas like deciding the best interest of the baby, which may create disagreement between the various parties involved in the decision-making process that includes family members, healthcare workers, and sometimes even the insurance company. Other ethical dilemmas include managing a sense of loss, emotion, and psychological pain that the family may experience. An ethics consultant's role is to address and manage these situations by applying his knowledge of the case and reinforcing the ethics consultation's professional goals. The consultant may encounter some difficulties in the consultation process. It is the consultant's role to resolve the ethical issue. If it becomes challenging, the consultant may refer the case to the court.

The sanctity of life begins at the moment of conception. Despite the difference in the fetus/embryo's moral and legal status in various cultures, religions, states, and laws, taking human life is ethically, morally, and religiously wrong. Human life, at its different
developmental stages, demands both respect and a level of protection. Life at any stage has a limit because God is the creator of human beings. He is the one that takes life at His own time. Cultures and religions handle abortion to save a mother’s life when the pregnancy endangers her life differently. They are conscious of the sanctity and dignity of life at each stage of gestation. However, all cultures, religions, and legal codes considered here assert that neonates’ lives are equal in dignity and status with adults. A critically ill neonate receives all necessary medical treatment to save his/her life unless judged futile or not in his/her best interest. The most significant point is that some culture links sanctity of life to sanctity of the environment. The failure to maintain and cultivate a cordial friendship with one’s neighbor and those that are one’s responsibility to care for and guide ruins one’s relationship with God, oneself, others, and the earth.150

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Chapter 3- Human Dignity at the End of Life

The developmental stages in human life come with ethical challenges. At the beginning of life, some of the ethical issues are on the moral and legal status of the embryo, abortion, and contraception. At the end of life, the ethical problems are the withholding and the withdrawal of medical treatment. Ethical problems such as artificial nutrition and hydration, sedation, and palliative care are essential issues to consider. These ethical issues arise not because human beings are not subject to death but because of the sanctity and dignity of human life. In medical practice and research, human life is uniquely elevated among other creatures; human dignity is inseparable from the human person at any stage of life. This section examines human dignity at the end of life under the following headings: Respecting Life in the Futility Debate, Medical Futility in the Context of the Dying, Criteria, and Demand for Futile Treatment, Faith Traditions on End of Life Treatment, the Concepts of End of Life (E.O.L.) and End of Life (E.O.L.) in Buddhist and Catholic faith traditions.

3. A. Respecting Life in the Futility Debate

Futility in medical practice means that in the course of a terminal or fatal disease, a time comes when medicine can no longer offer anything useful to the patient. At this juncture, the physician, patient, and family have to accept and face the certainty of the human end.¹ It is on this note that Justice Shallow said: "Death has always been the expected and feared result of serious illness or severe injury, as well as the anticipated end of a long life. Human efforts to fend it off have been frail and futile."² When medical treatment and intervention offer no more help to a patient, comfort and pain relief are to continue. These are never futile; relief of pain and suffering is a moral and ethical obligation, while medical treatment and intervention may not be.³ The goal of medicine is to lessen the burden of suffering from illness. It is also the goal of medicine to
reduce the violence of diseases and infections. However, it is proper to refuse treatment to those overwhelmed by diseases and infections when medicine has nothing to offer them.\textsuperscript{4} Futile treatment is not unique to end-of-life situations; it arises in other medical treatment interventions; for example, "treating a viral infection with an antibiotic is futile."\textsuperscript{5} The term futility has been in use for over 3,000 years in the history of medical practice. The concept of futility serves as a standard for the withdrawal and withholding of medical treatment and therapy. The word futility was explained in the surgical papyrus of Edwin Smith 3,000 years ago. In this era, the Egyptian surgeon used the futility concept to distinguish among patients: those whose prognosis is promising, those whose prognosis is uncertain, and those whose prognosis is worthless or futile.\textsuperscript{6} In his work, Plato also acknowledged that medicine at a particular stage is worthless, and physicians are not obligated to continue treatment. "For those whose lives are always in a state of inner sickness, Asclepius [who was a legendary, indeed divine, physician] did not attempt to prescribe a regime to make their life a prolonged misery ..."\textsuperscript{7} The Hippocratic physician likewise held that a patient whose life is overpowered by disease and illness should not expect treatment. Physicians should know that medicine cannot do everything for the patient.\textsuperscript{8} Hippocrates stated that: "Whenever, therefore, a man suffers from an illness which is too strong for the means at the disposal of medicine, he surely must not expect that it can be overcome by medicine. For, if a man demands from an art a power over what does not belong to the art, or from nature, a power over what does not belong to nature, his ignorance is more madness than lack of knowledge."\textsuperscript{9} However, with advancements in medical practice, it is now possible to prolong the life of terminally ill patients. The prolongation of the patient's death with a life support machine made some medical professionals see such practices as lengthening the death, pain, and suffering and
reducing the quality of life of the patient. Again, considering the insufficiency of medical
apparatus and equipment and the financial burden of health care, such treatments are worthless,
unnecessary, and futile. Futility is used in modern medical practice to withdraw or discontinue
life-sustaining treatment for terminally ill patients. Based on these issues, serious discussion
about medical futility began in health care practice in the 1980s. The question that arose then
was: "Does one-sided" determination of a treatment procedure, determined as futile by a
physician, provide the condition to discontinue treatment? The ethical problem with a futility
debate in medical practice was that a physician does not have the sole authority to decide on
human life and treatment. It is necessary that the patients and families also participate in the
decision-making process because of the dignity of the human person. It was in the 1990s that
scientific debate on futility in medical practice and medical ethics began. The dichotomy
between physician authority and patient autonomy was the emerging force that brought the
concept of futility into medical practice. The allegation that the disagreement (authority and
autonomy) between the physician and patient made the Medical Society replace the physician-
patient paternalistic relationship with a participatory relationship. The development in medical
science has created an expectation of certainties and uncertainties from medical technology. It
has also promoted patient autonomy and authority so much that patients and families request a
treatment that physicians have professionally judged futile, unnecessary, worthless, or
unrealistic. Some people viewed the introduction of the term futility by the medical society as a
way to regain its earlier lost paternalistic authority. The futility term was introduced as an excuse
or weapon to reject a patient's medical request. Medical futility is highly debatable and
controversial ethically when it is improperly applied in clinical medicine. In a case, families or
patients may insist on further treatment when the physician wants to discontinue treatment, judging it as worthless and useless.\textsuperscript{12}

Although the word futile has been in use for ages, its exact meaning is not specified. Futility is often used in medical practice in the withholding of all treatments.\textsuperscript{13}“The term futility is in a perilous state suffering from vagueness in definition, clinically unpleasant connotations, and intense criticism by credible bioethicists.”\textsuperscript{14} The simplest definition of medical futility would be "a clinical action that is not performed for achieving a clear goal, and hence not useful for the intended patient.”\textsuperscript{15} On the other hand, Schneiderman and colleagues stated that the "medical act is futile (based on empirical data) when the desired outcome, although possible, is overwhelmingly improper.” This definition of futility by Schneiderman and colleagues regenerates the old categorization of futile that comprises two variables: the quantitative and qualitative.\textsuperscript{16} Medical futility has quantitative and qualitative parts that offer concrete processes in its definition and application. This notion of quantitative and qualitative aspects of medical futility goes back to Hippocrates and Plato.\textsuperscript{17} The quantitative assessment of futility is based on the numerical likelihood that treatment will produce the desired functional result.\textsuperscript{18} Quantitative medical futility is when physicians conclude either through personal experience and experiences shared with colleagues that a particular medical treatment has never produced a good result for many patients in the same condition. Quantitative futility is also when empirical data reports show that medical treatment has never worked in over 100 cases previously with the same health condition and never been beneficial. Such treatment should be regarded as futile. Technically, "it cannot be concluded that observing no successes in 100 trials means that the treatment never works. However, such an observation serves as a point of an estimate of the probability of treatment success.”\textsuperscript{19}
Furthermore, qualitative futility is any medical treatment that only preserves permanent unconsciousness and fails to end total dependence on intensive medical care; such treatment should be regarded as non-beneficial and, therefore, futile and not necessary. Poor qualitative results include constant monitoring and supervision. It also includes regular ventilator support, continuous dialysis, and intensive nursing or conditions associated with overwhelming suffering and pain for a predictably brief time. On the other hand, the qualitative constituent of medical futility is the numerical likelihood that the functional result of the treatment will not benefit the patient. Futility in medical practice is a product of the calculation of the quantitative and qualitative elements. "As either component approaches zero, the product approaches zero, and the act becomes futile."

Both quantitative and qualitative aspects of futility deal with a single underlying idea of medical futility: the result is not proportional to the labor and the medication offered. On the part of the agent, the effort is a repeated expenditure of energy, funds, and drugs that is consistently ineffective or unproductive: if productive, its outcome is far lower to the aim, goal, and nature of medicine.

In medical practice, apart from treatments judged clinically futile, some treatments are unproductive. These treatments are extraordinary. A treatment is extraordinary “even if the treatment itself may be inexpensive and not cause any great discomfort, it is extraordinary and therefore optional if the benefits it promises are slight or nonexistent when seen in the context of the patient overall condition.” They are also optional and not mandatory treatments. Some patients consider them useless, while some patients agree to receive such treatments; for instance, "chemotherapy-associated with a 25% chance of a two-year remission." However, this type of treatment was never considered fruitless in the sense that it may prolong life. Another example is when hydration and nutrition for a permanently unconscious patient are considered
medically worthless. It is something contrary to the standard goal and objective of medical practice and care. The term futility is used in principle with forgoing treatment, and it seems to refer generally to treatments that doctors need not offer or administer any other medications. For any treatment judged futile, there is no obligation on doctors to continue treatment despite the request and wishes of the patient or surrogate. It is a medical decision and not an ethical decision or view. The decision is subject to the proper application of medical knowledge and expertise. The determination of medical futility is not only controlled by the scientific conclusion. Moreover, states that allow medical facilities not to provide futile treatment in their own accord only permit the determination of futility to be made by the ethics committee in consultation with the patient if responsive, the family, or surrogate decision-maker. The ethical, legal, and medical agreement on the need for ineffective treatment is that if a patient's underlying health has so declined to the extent that either resuscitation would be ineffective or if it was helpful, it ought to be repetitive always within a short interval. Therefore, futility in medical practice implies those treatments that physicians are not obliged to offer or have the right not to offer because it is contrary to the principle and standard of medical practice.

3. a.i. Medical Futility in the Context of the Dying

Modern medical science and technology have changed dying and death because of technology and equipment that prolong the dying process. Terminally ill patients are now kept alive with some life-sustaining machines and other therapeutic practices. Moreover, people in modern times die more in hospitals and nursing facilities than in the past when most people died at home surrounded by family and friends. Patients whose health conditions require life-sustaining treatments always demand it. Sometimes, these treatments offer little or no benefit to dying persons. It will be advisable to forego these treatments at such a juncture. The ethical dilemmas
in judging a treatment futile arise from withholding and withdrawal of treatments, nutrition and hydration, and palliative sedation. At what stage are treatments or feeding and hydration discontinued so that palliative care can begin? The moral act of feeding and hydrating a dying patient is morally acceptable, but they are life-sustaining treatments. Are hydration and nutrition always required as palliative care for a persistent vegetative state (PVS) and permanently comatose patients? Administration of food and water to a dying patient is a warmhearted gesture; must it always be offered?

a. Artificial Nutrition and Hydration

The concept of medically assisted nutrition and hydration (MANH) involves using tubes implanted through the nose or directly into the stomach. Artificial nutrition is used to supply the body with food-like material through a nasogastric tube. In contrast, artificial hydration is defined as supplying fluid or drink to the body through intravenous access. Medically assisted hydration and nutrition are used to provide food and water to the body. These are treatments for hunger and dehydration when the patient is unable to eat or drink normally. They may or may not relieve the hunger and thirst of the patient. Hunger and thirst, however, can be treated without necessarily using medically assisted nutrition and hydration procedures. For example, to hydrate patients to relieve their thirst, ice chips or lubricants are applied when necessary. Moreover, some patients impetuously or intentionally lessen food and water intake during the last days before death without being hungry or thirsty. Indeed, medical experience shows that dehydration may offer an advantage to some terminal patients during their last days when secretion and excretion are reduced by nutrition and dehydration because a thirsty and hungry person has not much to secrete or excrete. It also reduces breathing problems, vomiting, and lack
of voluntary control over urination or defecation. Dehydration sometimes calms the brain, thereby making the dying process more tolerable and less painful.\textsuperscript{36}

Nutrition and hydration, food, and water are significant to the symbolic meaning of human life. They symbolize social relations, active and living. They also have religious undertones (the Eucharist).\textsuperscript{37} Besides, food and drink have cultural, religious, and social meaning; food and drink are essential in these circumstances throughout life history; eating and drinking are associated with energy, good health, existence, communality, and general well-being.\textsuperscript{38} They also bring physiological and psychological changes during the dying process; some vital physiological and psychological change occurrences give meaning to nutrition and hydration. For example, compelling a terminal patient to eat and drink may impose physical problems which may harmfully affect palliative care. It may also lower the quality of life of the patient.\textsuperscript{39}

Food and water should be provided for patients who accept them. Although it is good to offer food and water to dying patients, they need not be forced in some situations.\textsuperscript{40} Health care providers are not morally obliged to force food and water on patients who can physically eat and drink by mouth but refuse to eat or drink. Food and water intake may be morally extraordinary for terminally ill persons and some patients, even when the methods are reasonable and not artificial. In 1980, the Vatican declared "a correct judgment can be made regarding means, if the type of treatment, its degree of difficulty and danger, its expense, and the possibility of applying it is weighed against the results that can be expected, all this in the light of the sick person's condition and resources of the body and spirit."\textsuperscript{41} Pope John Paul II, in his last days, refused ANH at some point. The Pontiff unconvincingly delayed using artificial nutrition as the only possible means to alleviate his health despite been informed of its danger and the consequences
of his decision, and refusing such a procedure was allegedly understood by the Pope John Paul II himself as aggressive medical treatment.\textsuperscript{42}

Some people propose that artificial feeding and hydration must always be used no matter the recovery stages of ill health. Because food and water are fundamental human rights and needs, they must not be denied to any person irrespective of their health condition. The proponent of this position often allows that an adult capable of decision-making can refuse any medical procedure, treatment, drugs, and medically assisted feeding and hydration. Those proposing using a feeding tube under all situations often classify the act of not providing hydration and nutrition artificially as starvation and dehydration (euthanasia). Indeed, anyone who does not receive food and water for a specific period will die.\textsuperscript{43}

In contrast, some consider using nasogastric feeding, in some cases, as an excessive liability. It is not compulsory for patients during their final days. Many people say that nasogastric feeding, which forces food on terminally ill persons or those in an irreversible coma, is more dangerous than useful. Even though food and water are vital for human existence and nourishment, MANH must not replace the natural eating and drinking method by mouth. People who propose the removal of nasogastric tubes in some situations see the inability of the patient to take food and water by mouth as a terminal medical condition and medically futile state.\textsuperscript{44} Both artificial nutrition and hydration are life-sustaining mechanisms.\textsuperscript{45} The ethical issues surrounding food and water are complex and controversial, as food and water have psychological, spiritual, and physiological functions. Food and water are also vital for patient care, management, and recovery process. Food and water have emotional and symbolic meanings because they provide natural and physiological strength to the patient. They also have religious, cultural, and social values.\textsuperscript{46}
b. Starvation and Dehydration

A patient in an irreversibly unconscious condition hardly experiences any effects of malnutrition or dehydration. However, the ethical issue of forgoing hydration and nutrition is not only applicable to those in this state. It can be morally extraordinary to use artificial means to feed and hydrate a patient who is not in a coma. Thus, the question is hydration and nutrition always required as a comfort measure for irreversibly unconscious patients? The act of feeding and hydrating critically ill and dying patients is always benign. The patient's loss of appetite is likely to make the family fearful about the consequences of not eating. Commonly, families worry that the patient will starve to death. Starvation is a denial of food to a patient who is willing to eat. That is when a patient dies because of the non-provision of food. Death caused by starvation is a long progression that results in severe weight loss and weakening of the body. In the course of starvation, the body organ functions cease to function, and white cells are no longer produced. The immune system of the body is compromised, thereby exposing the body to infections. Unlike starvation, death caused by dehydration is relatively fast and trouble-free. Patients who stop eating and drinking gently go into unconsciousness for some days and calmly die before a long time. When food and drink are stopped, patients die of dehydration, not starvation. Tube feeding (MANH) does not provide relief and comfort to a dying patient; neither does it meaningfully extend the life of a patient. It may be right to forgo it for patients with advanced dementia or at the terminal stage. If hydration and nutrition are vital for the patient's comfort, they must continuously be provided. However, in cases like these, they are not essential for the relief of pain. Alternatively, they only help prolong the patient's dying process and may add discomfort to the patient. Medically assisted nutrition and hydration are morally extraordinary and may rightly be terminated in such a situation.
3. a.ii. Criteria and Demand for Futile Treatment

There are many ethical issues about medically futile treatment, especially at the end of life. These include the criteria for determining that a treatment is ineffective, and who decides that treatment is useless, the patient or physician? These are some of the ethical questions surrounding medical futility both at the end of life and in other cases. Nevertheless, some medical, ethical, legal, and societal criteria exist for determining that treatment is worthless or futile. When treatment is considered ineffective, physicians do not need to offer further treatment to the patient. Instead, the patient should continue to receive the necessary care, such as pain relief, hospice, and palliative care. The most fundamental component of medical futility is the goal of medicine; determining if a treatment is ineffective, futile, useless, or worthless necessitates weighing it against the intended goal. These are some of the criteria for determining medical futility:

a. Physiological Worthlessness

One of the criteria for determining medical futility is its functional or bodily benefits or effects on the patient. If the treatment is not going to offer any physical or biological benefits or effects to the patient, in that case, it may be wasteful and useless. Such treatment is inappropriate and worthless, as pointed out in the quantitative and qualitative components of medical futility. It goes against the goal of medicine. As earlier stated, medical futility produces two criteria that consist of independent features: a quantitative and qualitative analysis. The quantitative part is the numerical likelihood that an act or a treatment will produce the desired functional or physical effect. The qualitative component is the numerical likelihood that the physiological effects will be advantageous to the patient. "As either part becomes zero, the product becomes zero, and the act becomes worthless." For instance, dialysis will not clear blood, cardiopulmonary
resuscitation (CPR) will not start the heart, the vasopressor will not increase the blood pressure, electric cardioversion will not start the heart, and arrhythmia control will not stop the fibrillation. Perhaps, these procedures were tried and failed. In such cases, physicians are free not to carry out the procedures again regardless of the patients' or surrogates' requests because the procedures are not producing any physiological quantitative or qualitative benefit to the patient.\(^5^4\)

\textbf{b. Irrelevant to the Real Condition of the Dying Patient}

The second criterion for determining medical futility is the worthlessness of the treatment to the condition of the dying patient. For instance, treatment is worthless, although it may work in a conventional or small functional sense. This treatment does not delay death in a dying patient for even a brief period or cure the aliment for a short period. Cardioversion is used to restart the heart. However, whenever it is used on a patient, the heart stops beating instantly; this happens continuously each time CPR (cardiopulmonary resuscitation) is repeated.\(^5^5\) A determination of medical futility is similar to a distinctive calculation in clinical decision investigation. The treatment decision is a product of two variables: "the numerical probability of its success and its outcome. Therefore, a determination of medical futility can be made either in the presence of a vanishingly small probability of physiological effect or exceedingly poor quality of the outcome."\(^5^6\)

\textbf{c. Poor Quality of Life}

Quality of life is the level of fulfillment people experience regarding the worth of their lives in totality and its particular parts, such as physiological and psychological health.\(^5^7\) The effect or benefit of the treatment results from attainable physiological and functional goals set for the treatment. On the other hand, utility or the result points to the quality of the benefit. Futile
treatment may have significant benefits on the patients' biological make-up; however, the essential point here is that the benefits are not useful to the patient because they did not improve the quality of the patient's life. It does not achieve any reasonable goal. Therefore, utility is a primary factor in medical futility debates. What if a treatment does not prolong the physical life of the patient for a shorter or longer time and does not lead to the patient's recovery? Again, what about a patient in a persistent vegetative state maintained for many years with a feeding tube? The utility can be objective or subjective, universal, or individual, physiological, or psychological. The meaning of utility in medical futility deals with the direct and indirect effects of the treatments for patients. The decision on the usefulness or worthlessness of a particular treatment is sometimes made based on the benefits of the treatment for other people (such as family members or other patients). The patient may be sustained for a short while to harvest the organs, which shall be beneficial to other people or, to appease and support family members. An excellent example in this context is caring for a brain-dead patient for an extended period in the ICU (intensive care unit). Also, the continuation of other life-sustaining treatments may be utterly worthless because medical science has offered all it can at this point.

**d. Low Probability of Success**

The likelihood of attaining the intended aim is among the most vital points of the notion of medical futility. The aims may include successful treatment, total recovery, going to normal life activities, gaining autonomy, and interacting with people and the surrounding environment. Again, the goal may include attaining the physiological outcome, not considering the quality of their results. It may also be saving lives, and preventing death, or improving survival and delaying death. A treatment is worthless if it has a low possibility of success. "What if the physician estimates that treatment is 75% likely not to postpone dying or 20% likely to do so,
though not until discharge, and only 5% likely to lead to discharge? In these cases, who makes the decision? Is this still the kind of futility that can properly be called medical futility so that the physician may make a unilateral decision to forgo treatment?" As earlier stated, medical futility is highly disputed. However, the determination of futility should not be based on the probability of success and societal benefits, no matter the literature that supports it. Physicians are not to make futility decisions unilaterally on these bases. Patients and families are to decide to forgo treatment with a small probability of success or with poor quality of life outcomes.

e. Value

In evaluating the worthiness of treatment, not only the likelihood of attaining the aim but the amount of its benefit should be considered. The benefit can be assessed by using the "benefit-harm ratio." In other words, does attaining the aim involve many expenses, unnecessary pain, suffering, and agony? Does it damage the value of the benefit because of a dubious advantage? Also, in making valued judgments, patients' and family members' value preferences should be considered paramount. Above all, a value judgment is to be made on a case-by-case analysis. For instance, lengthening the life of a patient with end-stage pancreatic cancer for only three weeks by using and administering expensive and possibly harmful chemotherapy agents may be considered futile and worthless by many physicians, nurses, hospital managers, and insurance companies. These are the main criteria for determining medical futility; they are sometimes contested in many places and circumstances; as earlier said, medical futility is a controversial ethical issue.

Factors Affecting the Perception of Medical Futility
It is imperative to mention that some factors affect the determination of medical futility with the factors mentioned earlier. These factors include the condition of the patient or disease, medical goals (therapeutic or palliative), and the value system of the patient, family members, insurance policies, and health care providers.65

- *The condition of the patient or disease*: a patient's health condition is always in constant change; thus, causes are both known and unknown. It is also the result of a patient's unique body mechanism, personal values, choice, and preference. Therefore, based on these assumptions and theories, there is no agreement on these criteria or factors as futility determination standards.66 The determination of ineffective treatment varies from patient to patient, based on each patient's medical condition. In their book, Kelly, Magill, and Henk argued, "shallow quality of life after a successful procedure, or a very low probability of success, should mean that the treatment is medically futile."67 The condition or nature of the disease is not an excellent standard to conclude that a treatment is medically futile. The criterion fails to consider the uncertainties of human sciences and the fickleness of the future. It also fails to acknowledge the limitedness of human knowledge and the possibility of making mistakes and errors before concluding that medical diagnoses or defining prognoses. Quality of life differs in people's culture and religion. Individuals' cultures and religions have different perceptions of futility. This will likely affect the judgment of futile treatment. However, there may be a likelihood of discovering a treatment or therapy in the shortest possible time.68

- *Medical goals (therapeutic or palliative)*: medical futility is inherently dependent on the aim, nature, ethics, and standard of medicine. In other words, it is directly dependent on the medical goals. These aims play a vital role in defining medical futility, mainly qualitative futility. The main concerns here are: what is the purpose? Who decides the goal and the period and means to
realize the goal? "Goals can range from completely objective (i.e., physiologic) to completely subjective (qualitative and value-dependent)." However, qualitative goals are to be made based on the interest of the patient and their family member. At the same time, it is the responsibility of the physician to make quantitative futility decisions. In this case, it is the physician who decides to continue treatment or to discontinue.

- The value system of the patient, family members, insurance policies, and health care providers: socio-cultural, socio-economic, religious, and personal values of patients, their family, insurance policy, and health care providers often affect the goal and benefits of medical treatment and the means of achieving them. Moreover, the health condition of the patient, socio-cultural and religious beliefs, as well as patient personal preferences, priorities, and values, may change or affect futility decisions. Considering the importance of benefits of medical treatments and considering a patient's values and preferences may result in a medical decision that is impractical or even a subjective result or outcome. In other words, giving excessive importance to the patient's values and preferences may lead to a medical decision that is subjective and unattainable.

Reducing Demand for Medical Futility Treatment

As earlier stated, futility is not only an end-of-life or terminal illness issue. For example, using an antibiotic to treat viral illness is fruitless, such as Ebola and HIV/AIDS. However, the most problematic futility disagreement debate arises in the cases of life-sustaining treatments and end-of-life scenarios for a comatose terminally ill person. There are options to apply to reduce demand for futile treatments, such as payment and cost of treatment, patient autonomy, and family autonomy.
a. Payment and cost of treatment in relation to taxpayers and premium autonomy

The medical cost has always been controversial in medical ethics in making a clinical decision. However, money should not be valued over human life. The question is, should a physician consider cost in making treatment decisions, or should he/she do what is best for the patient without regard to cost? The money to pay for the treatment must come from somewhere. The problem arises when the patient is responsible for paying the bill and does not have money, or the patient has money but considers the treatment not commensurate with the payment or bill. In the case of medical futility, any national health insurance could rightly refuse to pay for such medical bills. Any national health care insurance system should specifically tell health providers that they should not give such treatments to patients who cannot afford the payment. It would be better that such conditions were included in the insurance policy. If the patient or family is paying the total bill of the treatment directly (out-of-pocket), the issue of providing futile treatment can be accessed from a market standpoint. A "buyer who wants a futile treatment must find a seller who is willing to provide it." However, the health care business is not a free market without regulations. Society has established some rules and regulations that govern the market (buying and selling) of health care services and provisions. The rules and regulations are meant to protect the patients from harm and excesses of health care providers, such as unsafe drugs and other abuses by health care providers. The rules are also made to protect health care providers from unnecessary demands from patients and families, as well as abuses and violence. The problem with this situation (futile treatment) is that the seller (health care provider) is not willing to sell to the buyer (patient or family.) The health care provider's (seller's) refusal is that the treatment is not useful. It is also against the goal and ethics of medical practice. This situation may be understood as a struggle between the wishes or decisions (power struggle) of two parties-
buyer and the seller (patient and physician.) In this situation, one party must prevail by applying societal rulers. Some may see it from the physician's authority (paternalism).

The issue is different when the patient is not paying the total medical bill. The medical bill payment has to come from private or government funds, such as an insurance scheme/plan like the National Health Insurance Scheme (NHIS), Medicare, Medicaid, or Salus Trust (a Nigerian health insurance scheme.) Ethical physicians can limit beneficial care (ration) for funding, even in a terminal health situation. In this case, the autonomy of the people who created this fund through the payment of taxes and premiums needs consideration. The fund was generated for an agreed purpose, which is the future health care needs of the members. An individual member has no legal or moral right to demand unlimited funds to achieve their personal goals.

Health care providers and management boards of the scheme are the custodians of the fund. They are responsible for making proper use of the fund entrusted to them. They are to use the fund according to their principles and rules. Any attempt to use the fund against the rules and principles of the organization violates the rights and autonomy of other members. In bioethics, this is considered an ethical conflict between individual interest against group interest. It is also a conflict between the individual interest and the community or societal interest. They own an ethical obligation to their patient to cooperate with just and sensible rationing rules and management of money and drugs.

**b. Respect for a patient's autonomy**

In treatment decision-making, a patient's autonomy is very vital. The autonomy principle is an article in the UNESCO Universal Declaration on Bioethics and Human Rights (UDBHR.) Article 5 of UDBHR states that the autonomy of an individual in making a decision and taking
responsibility for the decision should be respected, and those incapable of making a decision should be given special measures to protect their rights and interests.\textsuperscript{78} The practical application of patient autonomous decision-making is informed consent, consisting of five elements: competence, disclosure, understanding, voluntariness, and consent.\textsuperscript{79} Disclosure of information is essential in medical treatment. According to the 2014 \textit{Nigerian Health Act}, a health provider must give patients relevant information about their health and possible treatment options. The user's right to reject health services and explain the consequences, dangers, and responsibilities of such rejection.\textsuperscript{80} The provider is to use the language the patient understands well, as well as taking into account the patient's level of education.\textsuperscript{81} For any preventive, diagnosis, or therapeutic intervention to be performed on a person, it can only be carried out with only the person's prior, free, and informed consent. There should be detailed and precise information about the procedure well explained to the patient.\textsuperscript{82}

The introduction of Bioethics as a field of study brought a radical change in the medical practice with a paradigm shift from medical paternalism to respect for individual autonomy as a fundamental value in the physician-patient relationship. The change has a substantial impact on decision-making, especially at the end of life. A patient has moral and legal rights to accept or refuse treatment. However, these rights are limited.\textsuperscript{83} If the patient is incompetent or unresponsive, the family or surrogate is consulted. In this regard, the living will and durable power of attorney may help families follow the expressed will of the dying patients to forgo assist hydration and nutrition or any other treatment option. These documents are crucial to subdue the guilt that families may feel in making a decision. Instead of the family deciding for the patient, they may follow the patient's will or directives.\textsuperscript{84}
However, the ethical problem occurs when the patient is demanding a futile intervention. In the decisions to forgo treatment, autonomy is fundamental. Patients should acknowledge that though they have some legal and moral rights to health services and provision, these rights are not unlimited. They should understand that health care providers and insurance companies have their rights and autonomy, which also needs to be respected by the patient for a functional working relationship. Health care providers and insurance schemes have guiding rules and ethical guidelines that govern their activities, which must be respected. If a situation of this nature arises in futility treatment as it often happens to families, patients, and hospitals, the assistance of an ethicist or the law may be consulted. On the other hand, it is always proper for a physician or other health care provider to withdraw or withhold a treatment demand that is against his/her conscience. If the treatment does not correspond with the standards, goals, and ethics of medicine, the provider can refer the patient to another health care provider who will agree to care for the patient, which is very difficult in this type of situation.

c. Family autonomy

Family members have duties and responsibilities to a dying patient. Their duties and responsibilities include financial, legal, and decision-making, especially for those patients incapable of making decisions. In carrying out their roles, families should acknowledge that there are boundaries and not overstep their bounds. They are not making decisions for the patient as an extended part of their body. Also, families should understand that medicine has limits; sometimes, it can sustain and maintain human life. However, it cannot give life or maintain it forever. Therefore, when all possible medical options are accessed, families should know that the ill-health may be beyond the power of medicine. Additionally, a patient's medical request may impose a substantial financial and material burden on the family, especially when there is no or
little insurance coverage. It may involve much energy and time, as well as causing psychological and emotional trauma on the family. Moreover, the family should understand and acknowledge the boundaries of their moral and legal rights as well as their responsibilities. If all effort is focusing precisely on the patient's autonomy, in that case, the family members may likely make unreasonable sacrifices that may hurt them in the future. The family should apply some caution with the freedom to shape their lives.  

\textit{e. Health care team autonomy}

The autonomy of health care providers is always referred to in futile medical treatment when a patient or family member may demand such treatment on behalf of an unconscious patient. In a futile treatment situation, the provider's refusal of a given treatment is always based on the absence of benefits in that particular case. Some people understand this situation as a power struggle between the patients or family members and the health care team. They invoke allegations that the medical association developed futility treatment to regain physician paternalistic authority over patients. So, they conclude that when physicians impose their opinions and values on the patient without dialogue, they do not respect their autonomy.

In situations like these, health care providers or individual physicians are free to seek legal advice or employ a surrogate that will agree to forgo the futile treatment. The judgment of the court may not always be in favor of the health care team. When it is evident enough that the surrogate is unfit to decide or the treatment is not just futile but also harmful to the patient, legal expertise is needed.  

When considering respect for physician autonomy, it implies paternalism and authority over patient autonomy; one should differentiate between the values of an individual physician and the values of medicine as a profession as well as the goal of medicine.
In other words, respecting physician autonomy does not mean that a physician must be allowed to carry out a personal, ideological view of appropriateness. Instead, the physician must work within the professional code and the appropriate use of resources within medicine. The physician needs to inform the sick person about the choices that are relevant and consistent with prevailing medical ethical practices and goals.\textsuperscript{91}

The futility debate is a long-standing ethical issue. It is difficult because its meaning and definition are unclear; its application is controversial and challenging. However, there is a limit to which medical treatment can sustain human life; when medical treatment reaches this stage, any further treatment may be futile or worthless. When medicine has nothing to offer a patient, basic human care should continue. Because the patient, irrespective of his/her health condition, is human with all the dignity and privilege attributed to a healthy person. Moreover, illness does not determine or decrease human dignity.

3. B. Faith Traditions on End of Life Treatment

Human life starts at conception and ends at death in many cultures and faiths. However, the question of when human dignity begins is a matter of disagreement between the conservative and liberal groups. Within the intervals between the two events (life and death), every human being has full dignity and respect regardless of illness, poverty, age, psycho-physical development attained, or mental capacity.\textsuperscript{92} Treatment at the end of life comes with many ethical challenges, and various faith traditions have guiding rules and regulations at the end of life matters. However, the invention of life-sustaining treatment during World War II has made decisions and treatment difficult at end-of-life cases both in the secular and religious circles. Life-sustaining treatment is "any medical intervention, technology, procedure, or medication that forestalls the
moment of death, whether or not the treatment affects the underlying life-threatening diseases or biological processes."93 Human life is not only governed by civil laws; it is also regulated by faith for those who embrace a faith tradition. Although medicine is a different branch of knowledge, it is intertwined with religion. Hence religion makes contributions to the ethics and practice of medicine.

3. b.i. The Concepts of End of Life (EoL) Treatment and Death

When a physician declares a treatment futile at the end of life, and both family and patient agree to forgo all treatments, the patient is not to die without proper care and necessary support. At this stage, the goal of medicine is to relieve pain, which includes comfort measures and insistence on the patient having a peaceful death. The provision of care and comfort (palliative care) for a dying patient brings some ethical questions. Palliative care medicine helps to bridge the gap between aggressive treatment and ineffective treatment. It offers relief of pain, more comfort, and improves the quality and length of life of the dying patient.94

Vegetative State

The person in a vegetative state shows no evident sign of self-consciousness or responsiveness to the environment. The patient seems unable to communicate with other persons or to respond to specific impetuses. The problem of forgoing nutrition and hydration often raises ethical issues in persistent vegetative state patients. Besides, hydration and nutrition are not limited to persons in the persistent vegetative state (PVS). However, since PVS patients can live for many years with a feeding tube, this condition has given rise to much debate in medical and ethical fields.95 A vegetative state is when a patient has lost the use of the cerebral cortex while the brain stem keeps functioning. The "lower brain or the brain stem controls certain bodily activities such as
breathing, while the "higher brain," or cerebral cortex, controls the functions we usually think of when we think of the human activity, such as thinking, emotion, and awareness of self and others. A vegetative state is like, but technically different, from a coma. Both comatose persons and persons in PVS are wholly unconscious and unaware of anything happening in their environment and hardly respond to stimuli.

A coma victim is asleep. The eyes are closed, but a person in PVS has a sleep-wake cycle and is, therefore, at times biologically awake with eyes open. Comas do not last as long as the vegetative state does; comatose persons die faster, become vegetative, or recover. The word "persistent vegetative state" means a medical condition from which there is no rational anticipation of recovery to a state of even minimal awareness and consciousness. However, this is not always the meaning of "persistent." Sometimes a distinction is made between a persistent vegetative state and a permanent vegetative state. If the distinction is made, a persistent vegetative state refers to "the original diagnosis that a person is indeed in such a state and that it has persisted for a time, but this diagnosis does not imply that the patient can never recover from it. Then a permanent vegetative state becomes a prognosis that no recovery is likely." This prognosis requires further investigation and assessments, or both. The American Academy of Neurology supports the withdraw of nutrition and hydration from a PVS Patient. Although PVS patients breathe, open, close, and move their eyes, they are unconscious and do not experience hunger, pain, or suffering. Therefore, the non-supply of food and hydration to them does not cause either dehydration or starvation.

Palliative Care
Palliative seduction uses drugs to alleviate a dying patient's pain, suffering, and agony, rendering the patient unconscious until death comes. Palliative care is considered chiefly end-of-life care. However, if palliative care is performed well, it improves the health of some terminally ill patients, sometimes helping in their recovery. The primary aim is not to terminate the life of the patient. It is compassionate, specialized care for the patient to reduce agony, pain, and suffering. The roots of modern hospice and palliative care have been religious and spiritual. St Vincent's in Dublin (1834), St Rose's (1899), and Calvary (1899) in New York, which are the earliest hospice centers in modern time, were built and run by religious sisters. They provided comfort and relief for the sick indigent. At present, the WHO is developing various activities related to palliative care services. It has broadened the horizon of palliative care through instructive publications for a global sphere. Although a patient’s pain relief is still the primary focus, family health and well-being are considered. Palliative care also considers grief and loss. It is working hard for the recognition of palliative care as a global public health problem. The WHO defines palliative care as "an approach that improves the quality of life of patients and their families facing the problem associated with a life-threatening illness, through the prevention and relief of suffering employing early identification and impeccable assessment and treatment of pain and other problems, physical, psycho-social and spiritual." Palliative care does this work by preventing and relieving pain and suffering by employing early identification and evaluation and managing pain and other aspects of illness and loss.

The primary purpose of palliative care is to relieve pain, suffering, and other distressing symptoms. It maintains the body and sees death as a normal human process. It is not aimed at hastening or delaying death. Palliative care combines psychological and spiritual aspects of patient care, providing holistic care to patients and families. It helps patients to be as active and
functional as possible with their support system until death. It also uses support and a team approach to manage and address other needs of patients and their families, such as grief and counseling, that promote quality of life.\textsuperscript{105} Palliative care is already articulated as a human right within the \textit{International Bill of Human Rights}. The international palliative care community has made "[several] significant statements, including the \textit{Cape Town Declaration (2002)}, the \textit{Korea Declaration (2005)}, and the \textit{Budapest Commitments (2007)}. In some countries, palliative care has been enshrined as part of health rights in their official documents. For example, in 2000, A \textit{Standing Committee of the Canadian Senate} declared that end-of-life care was a fundamental right of every citizen. In 2003, \textit{The European Committee of Ministers Recommendation} stated, in part, that "palliative care is … an inalienable element of citizen's right to health care."\textsuperscript{106} \textit{The South African Department of Health and Patients' Rights Charter} has access to health that contains "provision for special needs in the case of …patients in pain, persons living with HIV or AIDS patients; palliative care that is affordable and effective in case of an incurable or terminal illness."\textsuperscript{107}

The medical discipline of palliative care is novel in the Nigerian Health Care System, despite its introduction in 1993 by Mrs. Fatunmbi and Dr. Anne Merriman. In 2003, palliative care was officially launched and integrated into the Nigerian Health Care System by government policymakers and the general public. It is called the \textit{Center for Palliative Care Nigeria (CPCN)}, situated first at the University College Hospital (UCH), Ibadan. In 2007, the CPCN opened its day-care hospice within the UCH. The following year in 2008, another center for pain and palliative care was opened at the multidisciplinary oncology center of the University of Nigeria in Enugu. The first hospital-based palliative care center in Nigeria is the Federal Medical Centre Abeokuta. The hospital combined chronic pain management, palliative, and end-of-life care into
a critical care base hospital. Palliative care centers are growing as Nigeria can boast of over 15 palliative centers across the country. Although there is tremendous growth in this branch of medicine, it faces the following challenges: poor awareness, knowledge, skills, insufficiently trained professionals, insufficient resources, problems associated with the availability of medications, oral opioids, and poor government policy/priority.  

In the past, family members provided twenty-four hours of palliative care and services for severely demented persons and terminally ill relatives in their own homes. At the same time, physicians stopped by at intervals to visit and provide medical care. Diseases would then run their natural course. Death was accepted as a natural and ultimate phase of human life, an essential human nature element. Today, death tends to be rejected by many as a conquerable evil that must be resisted. Now, with the widespread use of MANH, life can be sustained in a vegetative or near-vegetative state for months and years. However, death remains the end of all human beings. In recent times palliative medicine is a specialized branch of medicine; most terminal patients are cared for by palliative doctors and nurses.

**Determination and Concept of Death**

The determination of death in ancient times was quite simple. One is confirmed dead with the cessation of heartbeat and breath. However, medical advancement has brought changes in medical practice, such as artificial respiration that can pump oxygen to the lungs and cardiopulmonary resuscitation (CPR) to restore heartbeat and maintain blood flow to the heart. These interventions can make the determination of death complex and challenging. Death is traditionally defined as the cessation of heartbeat and respiratory function. Once the vital organs stop functioning, other organs immediately start to disintegrate. The traditional definition of death is challenged in recent times by machines that can artificially sustain bodily
function.\textsuperscript{111} The Uniform Definition of Death Act (UDDA) defines death as "an individual who has sustained either (1) irreversible cessation of circulatory and respiratory function (2) irreversible cessation of all functions of the entire brain, including the brain stem, and is declared dead."\textsuperscript{112} Brain-dead is not a different form of death; it is death clear and straightforward. "Brain-death" serves as the standard for determining that a person is dead. It is used when the usual criteria for determining death are not available (cessation of breathing and heartbeat.) It implies the death of the higher brain, neocortex, lower brain, and brain stem. When accurately diagnosed, the person is dead. The continuing treatment of the person is like treating a corpse or cadaver.\textsuperscript{113}

The neurological definition of death faces objections in some cultures and religious traditions. The Orthodox Jewish community is among the faith traditions that object to the neurological definition of death. It firmly holds the traditional view of identifying life with the continuation of heartbeat and breath, even when supported artificially. "One whose heart still beats still lives, despite the irreversible cessation of brain function, it would be an act of murder to disconnect such an individual from a respirator…" There are different opinions among the Orthodox Jews holding this theological thought. The Japanese who hold religious and cultural views about death object to the neurological definition of death; they consider it unnatural and premature. The group believes that it is equivalent to destroying the harmony between the mind and body as a unit and a wholly integrated entity. It also objects to performing some crucial dying ceremonies and rituals to a person at that stage. The neurological definition of death may also violate the cultural and religious traditions of some Native Americans.\textsuperscript{114} Several scientists have criticized the neurological definition of death on the basis that a brain-dead patient, unlike a cadaver, may
show many life-integrative functions, such as the ability to assimilate nutrients to excreting waste and the ability to undergo physical and sexual development.\textsuperscript{115}

In Nigeria, the traditional definition of death is prominently used among many ethnic groups. For example, among the Tiv of North-Central Nigeria, "Death (\textit{Ku}) is a human condition in which an individual ceases or stops breathing and feeling, touch, heat, coldness, pain, injury, cut, burn and decay." There is a total cessation of feeling or emotion, such as seeing, smelling, and hearing. The entire sensory organs cease to function, namely, the eyes, ears, nose, tongue, and skin, because the heart that pumps the oxygenated-blood with nutritional food to other organs and parts of the body has stopped functioning.\textsuperscript{116} Moreover, in Tiv culture, a person is pronounced dead with the cessation of heartbeat, which is said in Tiv language \textit{ishima na kera ngi tenger ga}, which means the heart has ceased breathing. The human heart has a vital role in the lives of Tiv people. The heart and mind are interchangeable in Tiv culture, and it is the center of all human activities.\textsuperscript{117} Additionally, the Igbo of South-Eastern Nigeria would accept the traditional definition of death as the lasting stopping of the link between body and spirit (mind).\textsuperscript{118} Among the Igbo, one is confirmed dead with the cessation of heartbeat and breath, and the Igbo will say \textit{O kubiele} (he/she has stopped breathing), meaning he/she is dead.

Furthermore, in Yoruba culture, "\textit{Emi} is invisible and incorporeal; it is closely linked with the breath. It is thought to exist in the mouth and nose. However, breath is not \textit{emir}, which in Yoruba is \textit{elemi}. \textit{Emi} is that which gives breathes in [human being], and it can best be described through its fundamental functions as that which gives life to the human body."\textsuperscript{119} The non-functioning or cessation of \textit{emi}'s function implies death, and the body ceases to function. It becomes stiff and lifeless. Thus, the Yoruba would say \textit{emir re ti bo} “his \textit{emi} has left,” which means the person has died.\textsuperscript{120} The determination and concept of death, as well as its definition, is not primarily a
medical issue that rests solely on the biological composition of the human person. It also has cultural and religious value judgment and moral conviction.\textsuperscript{121}

3. b.ii. End of life (EoL) Treatment in Buddhism & Catholicism

The determination and concept of death from a religious perspective are centered mostly on the physical (body) and spiritual/ intangible (soul) dichotomy. That is the separation of the material from the spiritual. Death in most religious traditions is considered a metaphysical reality that surpasses human power and knowledge. Death understood from this metaphysical reality makes a paradigm shift from the science and medical understanding of death. Most religious traditions see the dying process as preparation for the beatific vision and a peaceful eternity. The suffering and agony one goes through during the dying process do not make one less human; instead, these are ways of purification. Therefore, dying patients need care and comfort. Dying patients are human beings with full dignity and should be respected. The intentional shortening or hastening of their death is a moral evil. It is condemned in most religious traditions. It is better to allow nature and God to take control of the process.

Buddhism

Buddhism is a body of religious teaching attributed to a historical person who lived in North-East India in the fifth century BC. The founder of Buddhism had a spiritual conversation at the age of thirty-five and became known as Buddha, which means An Enlightened One. The English name Buddhism gives an accurate description of the religion, indicating worship or devotion to Buddha, Buddhas, or Buddhahood. The name Buddha is a descriptive title, which means the Awakened One or Enlightened One. Its meaning is that many people are seen in the spiritual realm as being asleep- unconscious of the reality of things or unaware of how things are in
Buddhism, like many world religions, has some sects or denominations. The two major ones are the Theravada and the Mahayana. These schools or sects agree on the core teaching of Buddha—the Dharma (teachings of Buddha, seen as the immutable laws of both the natural and moral order.) These schools of thought came into existence because of differences in the Sangha (monks and nuns— who are the bearers of Buddhist tradition) after the death of Gotama (Buddha). The differences gradually led to the development of some monastic fraternities, each with a slightly different monastic code (Vinaya.) "All the Sangha branches trace their ordination-line back to one or other of the early fraternities." Divisions in most world religions often happen with the death of the founder because of leadership conflicts and misinterpretation of the teachings and precepts of the founder. Buddha died at the age of 80, appointing no successor. He instructed the followers to follow his teaching (Buddha’s teaching) as a guideline. The lack of leadership caused disunity and gave birth to many sects and schools of thought. However, the Theravada school is believed to be the earliest sect, which has continued to the present date. The Mahayana, or Great Vehicle, came into existence in the early time of the Christian era.

Buddhist precepts condemn the intentional termination of life at any stage. The first precept in Buddhism is respect for life or non-violence (ahimsa). Ahimsa is an essential precept regarding end-of-life care. It provides ethical guidance for decision-making for organ donation, withholding, and withdrawal of medical treatment. It also provides the ethical norms for life-sustaining procedures, voluntary cessation of eating, physician aid in dying, and euthanasia. Buddhist condemnation of intentional killing does not mean that human life must be preserved at all costs. There is no duty or compulsion, for instance, to connect a patient to life-sustaining machines to keep the patient alive. There is also no duty to perform surgical operations such as organ transplants on PVS patients to preserve or keep them alive when the treatment does not
yield a positive result.\textsuperscript{127} Buddhism has no objection to physicians stopping futile treatments that are an excessive burden to patients and families. However, Buddhism advocates care, relief of pain, and compassion for the sick irrespective of their condition and state. Persistent Vegetative State (PVS) patients, from a Buddhist perspective, are equal in dignity and respect with other patients. Therefore, PVS patients deserve proper care like any other patient because PVS patients are persons with dignity.\textsuperscript{128} Both modern medical science and Buddhists consider PVS patients alive from the current standard of brain death criteria. They are not cadavers depending on life-sustaining treatment. They can remain alive if food and water are given to them. The view of PVS patients being kept alive with nourishment is not contestable legally.\textsuperscript{129} On the other hand, from a Buddhist perspective, "[Death] is a source of useful disgust and useful fear. The disgust is an antidote to lust; the fear is an antidote to laziness."\textsuperscript{130}

Buddhism teaches that to deny death and cling to life is wrong. It is also wrong to deny life and seek death. During terminal illness, self-starvation is accepted in Buddhism; when the illness is severe, terminal, and long-lasting, and when a monk allows himself to die to lessen the burden of those taking care of him. In these two cases, three conditions justify the result. First, when there is no help during a long and terminal illness, a monk may choose to starve to death to lessen the burden for those attending to him. Second, it is acceptable during a terminal illness, when death is imminent, and the monk has reached a meditative task. Third, self-starvation is accepted when it results from an inadvertent side effect of an essential duty. Moreover, when it is an act of compassion, and further eating is futile, it will not permit the patient to complete the meditative task.\textsuperscript{131}

Belief in Karma and Rebirth has a significant impact on the way and manner in which Buddhists live their lives. There is a strong notion of rebirth that promotes respect for the life of all
creatures. The idea of the cycle of rebirth also provides a perspective on life, which supports sympathy and respect for other beings. Within the round of rebirth, all beings are of the same cycle of life. Of course, such teachings urge kindness and non-violence towards all living things; terminal illness in Buddhism is seen as Karmic maturation. It is not encouraged to prevent it from taking a full course at this present life; if it were prevented from taking effect in this life. It would only have to be faced again at a future point, perhaps in less advantageous circumstances. Better, therefore, to face up to it now and allow it to exhaust itself in this life. The movement of beings in rebirth is a logical process directed and ordered by the law of karma. Karma (Pali Karma) is simply defined as an action. The principle law of karma is that beings are born following the nature and quality of their past deeds. Karma is frequently compared to a seed. The two words for karmic rewards are vipaka and phala (ripening and fruit), respectively. Accordingly, an action is like a seed sown, which will sooner or later grow as part of a natural developmental process, resulting in certain fruits that the doer will reap in the future.

Suicide is condemned in Buddhism with this statement—"one shall not throw oneself off the cliff." It is a standard command that pious people should not kill themselves because they deprive the world of having the advantages of their good deeds. The commentary says:… (1) "But of whom there is a great illness, long-lasting, (and) the attending monks are wearied, are disgusted, and worry what now if we are to set (him) free from sickness? if he thinks: 'this body being nursed does not endure, and the monks are wearied, stop eating does not take medicine, it is acceptable, (vattati)." (2) "Who (thinking) this illness is intense, the life activities do not persist, and this special (meditative) attainment( visesadigamo) of mine is seen as if I can put my hand on it' stops (eating): it is acceptable surely." This implies that a terminal patient may stop eating and taking medication if the illness is overwhelming because eating and medicine
will not alleviate the health condition. However, PVS patients should not be treated differently from other patients. Primary care and comfort are to be provided. The withdrawal of such services as nutrition and hydration is arbitrary, unwarranted, and condemnatory.\textsuperscript{137}

In Buddhism, all persons, regardless of physical condition, are worthy of compassion. Buddhism stresses the need for universal as opposed to selective benevolence, and to exclude PVS patients from such would be arbitrary and unjust. Even unconscious patients can remain the focus of human emotion and be the recipient of compassionate concern. They provide an opportunity for others to exercise goodwill and, through humane treatment, affirm solidarity with them even under the most adverse conditions. Buddhists support many hospice care movement ideals directed at helping a patient have a good death. The goal is to die without anxiety and agony.

For those left behind in a conscious state, such care is also calming and uplifting. However, it is preferred not to die in a drugged and unconscious state. In Buddhist culture, the family and friends of a dying person do their best to facilitate a good death. Buddhist monks may be invited to chant and sing calming songs to inspire a tranquil and joyful state of mind.\textsuperscript{138} The \textit{Book of the Death} is read as a patient reaches and passes a death point in the Northern Buddhist tradition.

However, in the Eastern Buddhism custom, in a Pure land Buddhist, an image of Amitabha Buddha may be placed on the dying person’s bed and put in his/her hands with a thread attached to the hand of Amitabha. The custom or rite is to help dying patients die peacefully with the hope and mind of being drawn to Amitabha's Pure Land.\textsuperscript{139}

In Buddhism's ancient authority, death happens when the body lacks these three things: “vitality (\textit{ayu}), heat (\textit{usama}) and sentiency (\textit{vinnana}).” The problem posed by this definition of death to contemporary Buddhists is how to conceptualize these three traditional indicators consistent with the concept of death in modern medical practice.\textsuperscript{140} Death is the irreversible loss of integrated
organic functioning. Therefore, the concept of death as the irreversible loss of consciousness (the higher mental faculties) is rejected.\textsuperscript{141} Buddhists have various opinions on death determination; some accept that brain death corresponds to the ancient definition, while some disagree.\textsuperscript{142} Buddhists would propose the criterion for death as the irreversible loss of the functions of the brainstem. It is essential to observe that death is the end of the integrated organic functioning, and the concept of death as the separation of the sentiency (\textit{vinnana}) from the body is not incompatible. Indeed, there is every reason to support that organic integration, an organism display, is explained by reference to \textit{vinnana}. In this respect, irregularity can be seen between the end of life and its beginning. Just as death is the loss of integration in an organism, so conception is the beginning of the integrated organic functioning, which characterizes the life of an ontological individual?\textsuperscript{143} Unlike Catholicism, Buddhism has no central ethical body or leadership that regulates and formulates medical ethical practice. Individuals are to follow their consciences. The scriptural teaching, custom, tradition, and the opinions of reputable teachers are the main guiding formula that should form their consciences in medical decision-making. Although no central authority or body is regulating medical practice, there are fundamental moral norms and values that all the Buddhist schools of thought accept; the principles are compassion and respect for human life. It is on this backdrop that medical ethics and end-of-life care have a considerable understanding of Buddhism.\textsuperscript{144}

**Catholicism**

The fifth commandment of the Decalogue condemns intentional termination of life at any stage of development. Human life is sacred from conception to natural death; it is the creative hand of God. It remains in a unique and special relationship with God, the sole author of life and death.\textsuperscript{145} The fifth commandment is analogous to the precepts of \textit{ahimsa} in Buddhism that
condemn all intentional killings. Both doctrines preach and promote non-violence to living things. The fifth commandment is against the deliberate killing of any person. The act of deliberate and direct killing is prohibited and considered a mortal or grave sin. The murderer and those who cooperated in the act willfully commit a grave sin that cries out to God, who lives in heaven for revenge.  

It teaches respect for life, respect for human dignity, and the promotion of peace. It prohibits intentional homicide, abortion, euthanasia, and suicide. Suicide opposes human and natural predisposition to preserve and maintain life. It is completely opposed to the love of self. For example, direct euthanasia is an intentional killing of the disabled, sick, or dying person. It is morally objectionable, no matter the means or motives. It condemns the act of omission that intentionally causes death for the elimination of suffering and pain. It violates the dignity of the human person. It is also an affront to God, the sole creator of life and death. The Catholic Bishops Conference of Nigeria (CBCN) consistently treads and maintains this teaching of the church in promoting and defending human dignity and non-violence. The bishops always condemn the various violent crimes that claim human lives and properties in the country as acts of insensitivity and disregard for human persons and their dignity. The bishops following the traditional church teaching repeatedly insist that the right to life begins from the inception of pregnancy to natural death. It is an essential human right and integral to all human beings.

The sick person in a vegetative state is a full living person
with equal dignity with other persons. The patient has the fundamental rights of primary care as the patient looks forward to recovery or natural death. The patient has the right to nutrition, hydration, cleanliness, warmth, and other necessary care. The patient also has the right to the prevention of complications related to ill-health and infections. The person has the right to appropriate rehabilitative care, nursing care and to be monitored for clinical signs of eventual recovery. The assessment of chances, created on declining hopes for recovery when the vegetative state is extended after a year, cannot ethically justify the termination or withholding of the nominal care for the patient, such as the provision of food and drink. Death "by starvation or dehydration truly is the likely result because of stoppage of food and water. In this sense, it ends up becoming, if done knowingly and willingly, true and proper euthanasia by omission." Pope Saint John Paul II stated that the term vegetative state is degrading. "A human being must never be dismissed as having the status of a "vegetable." Catholic tradition indeed allows forgoing life-sustaining treatment in some cases, medical treatments that no longer correspond to the patient real-life situation either because they are at the moment inconsistent with the expected outcome or they are an extreme problem to the patient and family should be stopped. It does this by weighing the burdens and the benefits of treatment for the patient. That is, it requires that the patient's quality of life now and after treatment is evaluated. The mere fact that a patient will continue to live with MANH is not of itself reason to require it. The discontinuation of medical treatments and therapies that are burdensome, dangerous, extraordinary, or disproportionate with uncertain benefits and results can be legitimate. A patient needs, besides medical care, love, and spiritual care. These are to come from those close to him/her, such as parents, children, the Christian community, and medical professionals. The use of painkillers to alleviate pain and suffering is permitted in the Catholic Church. Also
allowed is palliative care, which is considered a unique form of "disinterested charity." Therefore, palliative care ought to be encouraged.\(^{159}\)

Death in the Judeo-Christian traditional view is a single and ontological event. It is a supernatural occurrence.\(^{160}\) It is the moment of separating the physical (body) and the spiritual (soul) components of the human body. It is the separation of the corporal form from the spiritual state. It is the result of the total disintegration of the body components. Death understood from this perspective is an event beyond any empirical analysis or scientific technique. The Catholic Church understands the dying process, and the human experience is that at death, some biological organ ceases to function and disintegrates. The cessation and non-functioning of the biological organ are inevitable and followed by other signs. Therefore, the church accepts the judgment of medical science in the determination of death. Thus, the medical method of determining death today should not be understood as the technical and systematic method of ascertaining the particular time of one’s death but as a technical and logical way of securing and identifying the disintegration of the body and signs that a person is actually dead.\(^{161}\) Besides, it was in 1957 that Pope Pius XII acknowledged that the determination of death "cannot be deduced from any religious and moral principle and, under this aspect, does not fall within the competence of the Church,…it is the function of the doctor, and especially the anesthesiologist, to give a clear and precise definition of death and the moment of death of a patient who passes away in a state of unconsciousness."\(^{162}\) Pope Benedict XVI, following the thoughts of the previous popes on the determination of death, acknowledged the progress made by science in certifying the death of a person. The Pope further says that the result of the research needs the approval and consent of the entire scientific community so that further research and evaluation of the determination of death should be made to avoid any doubt of arbitration. Moreover, when in
doubt or uncertain, the principle of precaution must prevail or be followed. One may conclude that following the teachings and testimonies of these three Popes, the Catholic Church has left the determination of death in the hands of the medical profession.

**Similarities and Differences between Buddhism and Catholicism**

There are similarities and differences in understanding end-of-life care and death in Buddhism and Catholicism. Both share the belief in the sanctity of life and respect for life and that life should always be preferred to death. They also promote human dignity, peace, and respect for human persons from conception to natural death. The two also advocate that life should not be preserved at all costs; that is when it becomes burdensome to both the patient and the health caregiver. In other words, the use of life support machines and other medical advancements should not be over stretched but should be carefully studied and used.

Also, the two traditions see earthly life as temporary and ill-health as a way of preparation for eternal life. They advocate that life should not be shortened or hastened because of suffering and illness. In Buddhism, it is not advisable to terminate one's life because of illness. This is because Buddhism believes that death is not the end of life, and suffering does not end with the death of a person. However, suffering continues until the Karma that created the suffering has played itself out. Therefore, it is worthless to kill oneself or help another die to escape from suffering. A terminal illness represents the repayment of karmic debt. The reason is that since the disease results from the maturation of karma, it is undesirable or wrong to prevent it from taking its course. Catholicism considers sickness and suffering as sharing in the suffering of Jesus Christ, Who offered His life as an expiation for our sins. Christians are encouraged to understand illness and suffering from this perspective and support dying and terminally ill persons with
prayers and love. Death, therefore, in both traditions is a transition. In the situation of illness, it is a period of preparation for this onward movement.

Both traditions preach that compassion, love, care, and kindness should be given to terminally ill and dying patients. The two traditions encourage prayer and songs in the care of the dying and terminally ill. In the Buddhist tradition, a monk may be invited to chant and give words of encouragement. In contrast, in the Catholic tradition, a priest may be asked to administer Holy Communion and anointing (sacrament of the sick). The Holy Communion is called *Viaticum* in Catholicism, meaning "go with me on this journey." While in the Buddhist tradition, the *Tibetan Book of the Dead* is to be read, or a painted picture of Amitabha may be placed on the legs and hands of the dying patient.

Furthermore, both traditions support artificial means of sustaining life and approve of its removal when it is no longer helpful. The two traditions hold that ordinary means of nutrition and hydration should not be withheld, but they may be forgone in some cases when it does not benefit the patient. The compassion shown to the sick and dying patient is a good act in both Buddhism and Catholicism. It is considered solidarity and support to both patients and families at this stage of life.

Both palliative and hospice care provided for the sick and dying patient are encouraged in Buddhism and Catholicism. They provide support to the ill and the dying patient, as well as the family members. The care provides comfort and relief to the patient; they also offer an opportunity for the caregivers to do good works in preparation for their death. Other good can be achieved by sharing in the practice of contemplating death and sickness as a way Buddhists understand the transience of life. The *Catechism Catholic Church* (CCC) requires that patients and those whose lives are deteriorating need to be supported to live a life of dignity. They
deserve respect and care. In addition, the Catechism encourages the use of palliative care as a suitable method of caring for the dying. It promotes the use of painkillers as morally acceptable even when it shortens the dying progress, mainly when it is not intended (principle of double effect.) In this case, both traditions support hospice and palliative care as a means of aiding the sick and dying.

The two religious traditions agree that PVS patients are alive and should not be treated as cadavers or corpses. They are patients with full dignity, like any other patient or person. All patients need compassion, love, and care because life is sacred and should be handled with absolute care, compassion, and love.

The two traditions speak of withdrawing medical procedures that are unnecessary and burdensome to the patient. They see it as futile and not sinful. It is worth mentioning that the two traditions believe that it is not a duty to preserve life at all costs when medical procedures are no longer beneficial to the patient. In both traditions, death is seen as a crisis moment in one's life when one makes an exit from this contemporary world to the supernatural world.

Both traditions acknowledge that suffering is a part of the preparation for this journey to eternity, which may come as a prolonged and severe terminal illness. Both traditions equally accept that it is not acceptable to shorten this period of sickness in one's life, for it is better for the person to pass through such a period. For Buddhists, it is part of karmic life. The Catholic tradition considers it as partaking in Christ's suffering and uniting with Christ in His redeeming sacrifice, which He offered in total submission to the Father’s will. Death, therefore, for both traditions is a period of transition in the situation of illness; it is a period of preparation for this onward movement to eternity. The significant difference between the two tradition's understanding of the end of life care and death is the procedure and application. As stated above, their scriptural and
theological ideologies account for the differences. However, Buddhism allows a dying person to starve himself/herself to death if he/she lacks the necessary care and support and if he/she is constituting an unnecessary burden to those caring for him/her. During terminal illness, self-starvation is accepted in Buddhism; when the disease is severe, terminal, long-lasting, and when a monk allows himself to die to lessen the burden of those taking care of him.\textsuperscript{170} The two traditions uphold the sanctity of life and its respect; both also reject vitalism. That is, life must not be preserved at all costs. From a Buddhist point of view, continuous tube feeding and/or mechanical ventilation may have the effect of preventing the person from entering the next phase of their life and the occasion to experience the fruit of their karma in their next rebirth.\textsuperscript{171} In Catholicism, it is advisable to forgo and refuse all treatments in conscience, especially when death is imminent despite all the means applied. It would only give a precarious and onerous prolongation of life, in so far as routine care for the patient in a similar health condition is not interrupted.\textsuperscript{172}

In conclusion, suffice it to say that the dying process and death itself pose significant challenges in human life. A patient at this stage of life is a person with full dignity that should be respected. Futility in medical practice does and should not stop care and comfort for a dying patient. A dying patient deserves all the basic needs of life, and none is to be avoided because of his/her health situation. Nutrition and hydration are basic needs of life when given artificially or through the normal process. However, when it becomes an excessive burden and degrading to the dying patient in any form, it can be discontinued. The determination of death is complex and challenging in both medical and religious quarters. One is certified dead medically with the cessation of cardiopulmonary function and brain function (brain death).
On the other hand, death from a religious perspective has an ontological interpretation. It is part of the human process of entering a new life of eternity. Human suffering and agony are part of the purification and cleansing process left from the debris of sin and corruption. At the end of one's human existence, we are entitled to love, care, and freedom from pain on our journey to eternity. The most important thing is that human life must be respected at the end of life because human beings at any stage of life have dignity. The spilling of human blood is violence against human dignity, which is also violence against the environment in some cultures. For instance, in *Things Fall Apart*, when Okonkwo accidentally killed a kinsman, he was banished from his village because it was considered a crime against the earth goddess.\(^\text{173}\)

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Chapter Four- Human Dignity in Emerging Genetic Science

Genetic Science comes with many innovations in health care, particularly and human society at large. The innovations are meant to improve human life as well as the environment in general. They also enhance and affect the environment and the human person, both negatively and positively. Therefore, some critical questions about genetics have risen. Is human dignity respected in some of these emerging genetic sciences? What are the socio-ethical and legal implications of these innovations for the present and future generations and the environment that will accommodate them? Are developing countries able to sustain these genetic advancements? Will science (geneticists) control and contain the social, health, and ecological problems that might come with these innovations? The most challenging thing in this situation is what human beings are to articulate and think. "The fear [over genetics] seems amorphous, a vague feeling that we can do things we have never done before and that fear may change the human species. These worries are important but hard to deal with." These were the opening remarks of the 11th meeting of President's Commission for the study of Ethical Problems in Medicine and Biomedical, Splicing Life: A Report on the Social and Ethical Issues on Genetic Engineering with Human Beings July 9-10, 1981, Virginia.  

Again, on June 20, 1980, the General Secretaries of the National Council of Churches, the Synagogue Council of America, and the United States Catholic Conference (Dr. Clair Randall, Rabbi Bernard Mandelbaum, and Bishop Thomas Kelly) wrote a joint letter to the President of the United States Jimmy Carter. The letter stated: "We are rapidly moving into a new era of fundamental danger, triggered by the rapid growth of genetic engineering. Albeit, there may be an opportunity for doing good; the very term suggests the danger. Who shall determine how human good is best served when new life forms are being engineered…."
The relationship between assisted reproduction, human genetics, and embryonic research is an exciting field in science and medical research. These new arenas are fast-growing, resulting in many significant changes in human reproduction and procreation. Human beings, by nature, are empowered with the ability to procreate through sexual acts. However, medical science has empowered human beings to create and control the traits of their offspring, character, and personalities in recent times in the petri dish. This new field of science is called **reprogenetics**. Reprogenetics is fast-growing and making a significant impact on human society. The creative potentials of reprogenetics come with many provoking ethical dilemmas.³

### 4. A. Pre-Implantation Genetic Diagnosis Interventions (PGD)

Following the breakthrough of in vitro fertilization in 1978, which is now commonly used for assisted reproduction (sometimes referred to as test-tube babies), PGD is growing and being accepted in many countries.⁴ Pre-implantation genetic diagnosis is a method of performing genetic testing on the embryos before actual pregnancy (implantation) to determine if the embryo has any genetic disorder or disease. PGD may be performed using three methods. First, the eggs retrieved during IVF are tested for genetic conditions through the process of exclusion. The second is the *blastomere biopsy*, an embryonic biopsy performed after three days of fertilization through IVF. The third is the blastocyst biopsy. An embryonic biopsy is performed on the fifth or sixth day when the embryo is composed of more cells.⁵ PGD evaluates the genetic status of cells. The cell is usually a single-cell biopsied from oocytes/zygotes or embryos produced in vitro during an assisted reproductive treatment (ART). Hence couples can use PGD to select the characteristics of their offspring outside the ones with genetic traits.⁶ According to David DeGrazia, "geneticists have identified more than 2,000 diseases related to mutation for which tests are clinically available. Some of these mutations exist for cystic fibrosis, Turner syndrome,
Alzheimer's disease, X-linked mental retardation, hemophilia, and Lesch-Nyhan syndrome." It is worth noting that not all conditions tested for PGD are genetic deficiencies.  

PGD was initially developed to help fertile couples at risk of transmitting genetic diseases to their offspring and reducing inheritable conditions. It enables the couples to select or choose against embryos with identified inheritable characteristics from an embryo free from traits. However, PGD can be used for both negative and positive desires, choosing against undesired traits and desired features, respectively. There are two primary reasons for the application of PGD. First: thalassemia syndromes and hemoglobinopathies. PGD is used as an early form of prenatal diagnosis. It is an alternative reproductive option to the regular and conventional prenatal diagnosis for couples at risk of transmitting hemoglobinopathy's genetic threats to their offspring. The advantage of the thalassemia syndromes PGD over the routine prenatal diagnosis test is that they preclude the dilemma of terminating a developing pregnancy when the test dictates genetic disorder. Based on this information, PGD is a treatment and valuable reproductive alternative for women who have, in the past, had an abortion because of pathological results from a conventional prenatal test. It is a good option for carrier couples with an infertility problem who must opt for ART. It serves as an alternative to couples with ethical and religious objections to abortion. The most prevalent group of severe autosomal dominant single-gene disorders is hemoglobinopathies. Hemoglobinopathies count for about 300,000-400,000 affected births yearly.

Second, PGD is used for testing the human leukocyte antigen (HLA) with the tissue type of an embryo (PGD-HLA). It is used to determine embryos that are well-matched with an older sibling that requires hematopoietic stem cell transplantation (HSCT). This purpose provokes an ethical question because the child is created as a spare part for the older sibling. It makes human
beings a mere means (an object and not a subject) for the benefit of another person. This contradicts Article 3 of the UNESCO Declaration on Bioethics and Human Rights that the interest and welfare of the individual should have priority over the sole interest of science and society. It supports the Kantian moral principle that states that everyone is an end itself, and no one is a means to an end. However, living in a society makes it necessary for each person to contribute to the development and welfare of the community.

PGD had also helped in the advancement of IVF to screen embryos from common age-related diseases and disorders- aneuploidies (aneuploidy screening, PGD-As). PGD is also used to treat Adult-Onset disorder called Huntington's Disease, a progressive neurologic disease with symptoms that begin by the age of 35-40. The use of PGD for an Adult-Onset disorder has been controversial in many quarters of life. A more controversial issue is the use of PGD for purposes other than identifying medical conditions; for example, PGD is used for gender selection in some countries, like China and India. In addition, PGD reduces the rate of miscarriage and boosts the opportunity for a successful and uncomplicated pregnancy.

PGD sounds pleasant and welcoming because it offers the world the opportunity to reduce some hereditary diseases and physically challenged children. However, "…PGD came into being out of the same complex matrix of emotional desires-of wanting to help, wanting to relieve suffering, wanting to be able to know and to do more, and never knowing "how far to go"- that characterize it today." Hence, PGD raises ethical, legal, and social questions in the context of human dignity. It also presents a concern with respect for human life and human society.

4. a.i. Legal and Socio-ethical Implications of Pre-Implantation Genetic Diagnosis
PGD is controversial legally, socio-culturally, and ethically. Its controversy is rooted in fundamental human rights, autonomy, and freedom. For example, the principle of autonomy gives parents the right to make reproductive decisions for their progenies.\(^\text{19}\) Legally and clinically, parents have the rightful authority to decide for their children who are minors. Parents must understand that a child is not an object or an extension of their bodies in making such a decision. Therefore, their decision must be made in the best interest of the child.\(^\text{20}\) Parents are to decide based on the best interest of the child, considering him/her as a subject with dignity and respect. However, individual autonomy does not mean individualism that neglects the social and interpersonal relationships existing within human society.\(^\text{21}\)

**The Laws and Regulations**

There may not be any international law regulating the practice of PGD at present. However, many countries have some guidelines on the approach and application of PGD.\(^\text{22}\) The only international document that outlined the ethical considerations on PGD is *The Report of the International Bioethics Committee of UNESCO on Pre-Implantation Genetic Diagnosis and Germ-line Intervention*. The committee outlined 12 ethical points about PGD without legislation. Although PGD has been in use for about a decade, the committee considered it an experimental procedure requiring an expert and a multidisciplinary method. The committee also concluded; it cannot make a general declaration on the moral acceptance of PGD because of the ethical controversy about the moral status of the embryo (prenatal life.) However, it adopts the pluralist view that resonates with the *Report on the Use of Embryonic Stem Cells in Therapeutic Research*. It also concluded that: PGD is ethically acceptable for therapeutic reasons and unethical for non-therapeutic reasons such as sex or gender selection. It is unethical to use PGD to select and implant embryos with a similar genetic ailment or disorder (one of) the parents.\(^\text{23}\)
The United States has no federal or state laws regulating the practice of PGD. However, the State of New York regulates the practice of genetic testing that uses PGD. Some laws that legislate assisted reproduction or genetic testing may sometimes apply to PGD for gender selection. The use of PGD in the United States is regulated by a professional body, The American Society for Reproductive Medicine (ASRM). The ASRM Ethics Committee says, "PGD done solely for sex selection is physically... burdensome, and necessarily involves the destruction or discarding of embryos." ASRM never considered the embryo as a human being or a moral subject. However, it is recommended that the embryo should be given special respect during its developmental stages.

ASRM condemns using PGD for gender selection. This is because the intention of using PGD for choosing a particular gender of interest is not reason enough to validate the conception and destruction of an embryo for the gender composition in the family.\textsuperscript{24} In 2007, The American College of Obstetricians and Gynecologists (ACOG) published \textit{A Clinical Management Guideline on Screening for Fetal Chromosomal Abnormalities}. The guideline recommends optional or voluntary access to prenatal screening for an inheritable genetic disorder.\textsuperscript{25} However, in 2013, ASRM accepted PGD for Adult-Onset conditions as ethical based on reproductive liberty or autonomy.\textsuperscript{26}

Although there is no federal law regulating PGD in the USA, some countries have regulations on the use of PGD, especially in the case of gender selection. About 36 countries have rules governing the use of PGD for gender selection. Most of these countries also proscribe the use of PGD for non-medical reasons.\textsuperscript{27} In July 2011, the German government passed a law that allows PGD. The law permits PGD to screen embryos of parents predisposed to a severe genetic disorder or illness. However, all applications must pass through the ethics committee, and intended parents are to undergo counseling. "The bill outlines an exception to the Embryo
Protection Act of 1990 that bans PGD, which remains intact. There will be no designer babies and also no so-called savior babies used as spare parts for a sick child." It is to ensure that PGD would not be used for non-medical gender selection or an ordinary medical procedure.\textsuperscript{28}

The United Kingdom, Japan, Canada, and Israel have laws regulating the use of PGD. These countries banned PGD for gender selection and non-medical purposes but allowed it for medical purposes.\textsuperscript{29} Pre-implantation Genetic Screening (PGS) regulation in the United Kingdom, which includes PGD, is regulated by the amended Human Fertilization and Embryology (HFE) Act of 1990. According to Section 10, embryo testing and sex selection for pre-implantation genetic diagnosis (PGD) can be carried out for an inheritable condition only in two circumstances:

1. Where there is a particular risk that the embryo to be tested may have a genetic, mitochondrial, or chromosomal abnormality, and the Authority is satisfied that a person with the abnormality will have or develop a severe disability, illness or medical condition, or

2. Where there is a particular risk that any resulting child will have or develop a severe gender-related disability, illness, or medical condition. A condition is gender-related if the Authority is satisfied that it affects only one sex or affects one sex seriously more than the other. In the first situation, PGD may be carried out to establish whether the embryo has the suspected abnormality; in the second, PGD may be carried out to establish the sex of the embryo.\textsuperscript{30}

In Japan, the regulation of PGD is carried out through professional organizations that have compulsory membership and the legal authority to enforce the regulations. Japan also discourages the use of PGD for sex selection. In Israel, the regulation of both PGD and IVF is monitored by the ministry of health. PGD for gender selection is only allowed for medical purposes and is generally prohibited for non-medical purposes. However, the ministry of health
may permit PGD for sex selection on a case-by-case basis. The couple needs to petition the ministry to ask for approval and demonstrate strong reasons for family balance before approval is granted.\textsuperscript{31} The state of Israel allows PGD to create an HLA match for a patient sibling who acts as the "sibling's savior."\textsuperscript{32}

In Nigeria, there is no legal or ethical regulation on PGD and other high technology-based human reproductive processes at the time of this research. The Nigerian Medical and Dental Council of Nigeria, in its ethical code titled, Rules of Professional Conduct for Medical and Dental Practitioners, acknowledged the practice of some high-technology (advanced) reproductive systems in the country. These practices are in-vitro fertilization, sperm donation, egg donor techniques, embryo donations, gestational surrogacy, full surrogacy, and other emerging genetic procedures. The council advises its practitioners to resolve all ethical matters that may arise before proceedings. The council ethically accepts sperm and egg donations for in-vitro fertilization. However, it recommends that parties must be counseled. Practitioners need to resolve ethical matters such as counseling and consent of donors and psychological stress that may arise. Other ethical issues to resolve are the gamete or embryo processing, the recipients' screening, and testing for various purposes, including the offspring. The need for openness and secrecy are options for complete disclosure. According to the document, the rules and principles guiding child adoption are applied to in-vitro fertilization at the moment. There is a concern about monetary payment for the embryo, implying the commercialization of the early stage of human life. There are also worries regarding unused embryos that are not used to initiate pregnancy nor discarded. The concerns are on the types of research to apply to them. Therefore, there is a need for the country to come up fast with rules to regulate this practice; the Medical and Dental Council of Nigeria advises that gametes and embryos should be donated voluntarily.
The lack of laws regulating artificial fertilization in the country may promote unethical behaviors and abuse of human dignity at the beginning of life. The lack of law also shows the government's inability to promote human dignity at its earliest inception. It will be necessary for the Medical and Dental Council to develop ethical guides to regulate its members as it waits for government policy because the absence of ethical principles and law will encourage the abuse of human embryos. However, the National Health Act of 2014 forbids any manipulation of genetic materials. It includes the genetic material of human gametes such as zygotes or embryos. It also prohibits cloning.

Furthermore, PGD is permissible in China because of the high rate of genetic diseases and disorders affecting many families and society. The government, because of genetic diseases and conditions, permits the use of PGD. It is also used for population control policies. However, the use of PGD for sex selection and other non-medical purposes is prohibited. The technology is permitted as an option for prenatal diagnosis and termination of genetically abnormal pregnancies. China has about seven PGD centers, with the first successful PGD recorded in 1999. Since then, China has performed about 82 cases of PGD cycle with 21 clinical pregnancies and 17 births of healthy babies. PGD for sex selection is explicitly illegal in China. However, statistics show that this law is not enforced and monitored because it has a cultural gender-driven ideology. The historical, culturally driven ideology leads to a pattern of aborting female fetuses, which has affected the gender ratio in China: "117 boys born for every 100 females."

Socio-ethical Issues and Implications

The other issue regarding the use of PGD is its ethical dilemma. The terms ethics and morals, in most cases, are used interchangeably. These terms refer to the rightness and wrongness of human actions and activities. The ethical controversies surrounding PGD include the use of PGD for
both medical and non-medical purposes such as HLA matching, gender selection, sexual orientation selection, and genetic disease treatment. This paper evaluates these controversies using the four principles of biomedical ethics: autonomy, beneficence, non-maleficence, and justice. Although "the meaning of these principles is rather abstract, it allows for diverse, but valid interpretations of them." The ethical controversies of PGD have potential effects on the status of the human embryo and persons with disabilities.

The Principle of Autonomy Argument for PGD

The principle of autonomy includes self-rule: freedom from external controls and limitations that prevent one from making a meaningful decision or choice, such as inadequate information. Personal autonomy gives patients' preference to choose a treatment plan. The principle acknowledges the moral right of competent adults to decide their preferences and actions in life. The proponents of the autonomy argument say that PGD is an excellent medical technology based on parental autonomy. Parents have the autonomous right to make reproductive decisions for their offspring's gender, disability, and genetic traits; because parents are the legitimate decision-makers for their offspring. Therefore, parents are at liberty to choose the type of child they would like to have as part of their family.

Additionally, parents are responsible for the well-being of their children from birth to adulthood. Parents are at liberty to choose the child that would not cause an excessive burden on them if the technology and resources are available. The arguments for the use of PGD for both medical and non-medical purposes are based on individual autonomous rights and freedom. The principle of autonomy is spelled out in the Universal Declaration of Human Rights as well as in the UNESCO Universal Declaration on Bioethics and Human Rights. The moral status of the
embryo is controversial. The proponents of PGD argue that the embryo has no moral status and invariably has no autonomous right. The discarding of excess embryos produced in vitro is not an ethical or legal reason to condemn PGD.\textsuperscript{43} According to them, it is after birth that human beings acquire rights, duties, responsibilities, respect, and dignity.

In contrast, respect for autonomy as an essential principle in biomedical and clinical practice grants individuals the power to make ethical and medical decisions. Autonomy brings with it the burden of responsibilities. Moreover, autonomy is not unlimited.\textsuperscript{44} In decision-making, the consequences of the choice, either positive or negative, an individual and the society make should be considered. The principle itself is not even well understood by the proponents of the autonomy argument for PGD. In this case, individual autonomy does not mean individualism that neglects the social relationship existing within human society. The effects of both positive and negative choices of a personal decision may affect the entire community.

Furthermore, respect for autonomy is not a ticket for the parents to choose inappropriate and unethical treatment for their child. However, physicians are not obliged to accept all patients' medical requests, especially when they contradict the medical practice code.\textsuperscript{45} Physicians are also autonomous persons with respect and dignity; above all, physicians must obey the law and ethics of medical practice.

The use of PGD for non-medical purposes, such as gender selection, disability, and offspring characteristics, may create societal imbalances, discriminations, and coercion.\textsuperscript{46} For example, in India, China, and Nigeria, the choice of males over females is higher. The use of PDG for gender selection in these countries will lead to gender imbalances, sexism, and gender discrimination against women. It will also promote the coercion of women in such cultures. Women in such
cultures may face maltreatment for not giving birth to male children.47 "In the United States, four out of five couples seeking PGD for sex selection want boys."48 Another argument against the autonomy argument for PGD is that it violates the natural course of procreation by the fertilization of eggs in the petri dish. It separates the parents from the procreative bond of an intimate sexual relationship. It thereby makes procreation the work of scientists and physicians; in a way, it may be considered playing God and nature.

Furthermore, PGD creates a sharp disparity between the rich and the poor. It is costly; the poor may not afford it. PGD is considered an abortion because it produces many embryos. Some of these embryos are discarded at the end. In this way, PGD may be regarded as an abortion, or worse still, infanticide. Also, PGD is objectionable based on the moral status of the embryo. The proponents of this view consider the embryo as a human being because life begins at conception. Every individual being has a right to life from conception to natural death. The discarding of an embryo is equivalent to murder; it is a violent act on an innocent new life. It prevents the new life from reaching maturity.49 This statement resonates with the condemnation of abortion in some cultures in Nigeria, as stated in chapter two. For instance, the Yoruba strongly believes that human life begins at conception and that the fetus is a potential life and needs to be cared for and protected in the womb to reach adulthood.50 Again, societal influence may pressure parents who may not want to use PGD for various reasons to use it because of its mere availability and accessibility.51

However, the western understanding of the ethical principle of respect for autonomy differs from its African understanding. Hence, practical application of autonomy in Africa is sometimes problematic or challenging because African ethics is based on preserving and promoting life and vital force and communitarianism.52 Communitarian life is pivotal in African society. Hence an
African man or woman will often say, "I am because we are, and since we are, I am." The communitarian life is a lived life experience of everyday activities in traditional African society. Hence, an individual exists corporately with the community and does not and cannot exist alone. He owes his/her existence to God, nature, and people—past, present, and future generations. On this ground, an Igbo man or woman takes an oath or makes libation to God, nature, and past generations (ndi ichie—ancestors). Any Igbo man or woman will take an oath saying, *ala guo mu, ndi ichie guo mu, and Chukwu guo mu, o buru ma mu mere ihe a.* (let the land, ancestors, and God kill me if I am wrong or committed the offense). It is also demonstrated in morning prayer or libation, *Chukwu were Oji, ndi ichie were Oji, ala were Oji.* (God take kola nut, my ancestors take kola nut, and the land take kola nut.) The communitarian principle is objective and integral in African socio-political, economic, and health life.

In African tradition, a human being is human because of others. Life is meaningful when humans live together because alone, a person is nothing and can achieve little or nothing. Based on this understanding, an individual lives for him/herself as well as the community. He/she is first an individual and second a community. The African society is understood as having sacral unity that comprises the gods, living, ancestors, and future generations. Therefore, it means that "[humans] are defined in relation to themselves, to their community and their creative spirit which embodies their destiny." Also, the definition takes into consideration the environment in which they live and have sustenance. Autonomy in African ethics should not be understood from the perspective that an individual is an embodiment of socio-cultural values and relationships. That negates individual liberty and freedom or denies the importance or uniqueness of an individual in society. It is acknowledging and recognizing the limit of personal decision and freedom that discourages individualism and selfishness. Hence, excessive individual autonomy
expression is considered a denial and disassociation from one's corporate existence (root). The communitarian autonomous principle is used to build and sustain the vital, harmonious community and moral order among created things. It is based on the view that everything is interrelated and interconnected. The arbitrary and tyrannical disruption of the order of things in the universe is an affront to human dignity and nature at large. Also, communalism in African society is a construct for human dignity. It is multi-facial (social, cultural, economic, and inter-generational-the dead, spirit, living, and future generations).

The Principle of Non-maleficence Argument for PGD

The ethical principle of non-maleficence advocates non-violence and "do no harm" to patients and research subjects. The proponents of the non-maleficence argument for PGD argue that the use of PGD for medical purposes is to protect the offspring from foreseen harm and suffering. For instance, the use of PGD for Adult-Onset Disorder (Huntington's Disease) has been advocated by some people based on the principle of non-maleficence to save the unborn child from future harm. Also, the use of PGD to solve genetic diseases and disorders is to protect the future offspring of parents with genetic diseases and conditions from health crises and complications. "It is generally accepted that parents have to refrain from conduct that may harm the child and apply preventive measures aimed at improving the chances of having a healthy child."

In contrast, the non-maleficence argument that supports the use of PGD for medical purposes contradicts itself because the moral status of the embryo is a crucial issue in ethical debate. The National Institute of Health's Human Embryo Research Panel in 1994 accepted the pluralist
position that the fetus has more moral standing than the embryo. On this basis, PGD is permissible but does not make PGD ethical, obligatory, and right.⁶²

PGD involves the creation and discarding of the embryo; for the pro-life advocates, the destruction of an embryo is murder and abortion because of the sanctity of life theory. However, for pro-choice advocates, an embryo has no moral or legal status. Since PGD involves the fertilization of the embryo in the petri dish, it distances a child from the mother.⁶³ It denies the child the motherly affection it receives in the womb because the early stage of the embryo was spent outside the womb, and after implantation, the fetus and mother have to adjust to each other. The adjustment period may be difficult for them. It may create both emotional and psychological harm to the child. The fertilization of the egg in vitro separates the sexual act from the reproductive act. It distorts the procreative act of mutual self-given love between man and woman. It subjects procreation to scientific powers and manipulation. It is also a deceitful act when the embryo is fertilized by heterogeneous artificial means. The child will have a false identity of the father.⁶⁴ There are health difficulties associated with natural pregnancies. Still, PGD and IVF double potential health risks for both the mother and the child, making them vulnerable to many health complications.⁶⁵

In addition, in cultures like that of the Yoruba in Nigeria that strongly oppose extra-marital sex, an embryo fertilized by heterogeneous artificial insemination will be an abomination. "Legitimacy of a child is paramount to marriage stability in Yoruba culture. As a result, every family wants to prove that a child is their direct offspring. So, it is an abomination for a family to go out of wedlock to have children. It was argued that this could lead to the problem of identity in the lineage."⁶⁶ Even when the eggs and sperm are retrieved from the couple, some consider it
ethical and unethical because of their religious affiliation; “my religion forbids me to have children through artificial means.”

The Principle of Beneficence Argument for PGD

The Principle of Beneficence "potentially demands more than the principle of non-maleficence because agents must take positive steps to help others, not merely refraining from harmful acts." The Principle of Beneficence is a moral virtue that directs one to help others who are in need. It is very relevant in medical practice. It is also a religious virtue, the act of charity. Medical treatment is meant to improve the quality of life of the patient, thereby bringing satisfaction to the patient. PGD is intended to enhance the quality of life for an embryo to be free from genetic disorders and disease. PGD has many medical advantages, which make its proponents argue that it is beneficial to humankind, especially for couples with a genetic disorder. In practice, PGD is currently used to treat and guard against many severe genetic diseases and diseases hereditary from parents to offspring. The beneficence group argues "in support of PGD for serious Adult-Onset conditions including the right to personal reproductive choice, the medical good of preventing transmission of genetic disorders, and the potential social benefits of reducing the overall burden of diseases." However, PGD is also used to select traits that will not benefit the embryo if the embryo was created to help an older sibling or family member. An example is creating an embryo that is an HLA to match another sibling who needs a stem cell transplant.

The Beneficence Principle argument that supports the use of PGD because of its benefits to human beings also has some loopholes because benefits should be holistic and not selective. For instance, PGD for eugenics purposes like "screening out preferences instead of screening out
abnormalities" and enhancement will fuel social inequalities and imbalances in human society. PGD can also be used to select irrelevant characteristics like eye color, height, and even complex traits like intelligence and body physique. The beneficence argument also does not consider the health complications that may result from the use of PGD. "The procedure is invasive: the ova have to be removed by ultrasound-guided aspiration in order to be fertilized in vitro. While perhaps not as bad as many medical interventions, for some women who psychologically consider themselves healthy and not 'patients,' this can be a deal-breaker." The use of PGD for the selection of traits that supports parents' reproductive rights is sometimes detrimental to the interest of the offspring. For instance, many people agree that hearing is better than being deaf. The beneficence argument that allows parents to select deaf traits for their offspring alters the real or original identity of the offspring. It plays on nature and God, and above all, forces the offspring to accept a false identity. The argument that PGD is beneficial for creating an offspring that will provide stem cells for older siblings makes the offspring a spare part for the older sibling. It thereby makes the child an object and not a subject. The act of creating a child as a spare part violates his/her fundamental human right to dignity. It also contradicts Kantian ethical theory and Article 3 of the UNESCO Declaration on Bioethics and Human Rights. "PGD with the only goal of HLA typing and selecting embryos fit for donorship after birth is, however, considered unethical, since the embryo becomes instrumentalized for the benefit of others." Although the child may be considered a savior to an older sibling, which seems reminiscent of baby Jesus, who was born to save us, it is unethical on two grounds. First, it violates the child's fundamental human right to dignity by making him/her an object. Second, it makes the child a spare part for the older sibling. Comparing Jesus with the “HLA child” is not valid because Jesus was not conceived as a spare part. He consented to take the role of a savior to humanity; this
argument is based on the pre-existence of the Logos in St John's gospel (Jn.1:1ff). There are many medical benefits from PGD, but these benefits make an individual or an entity like the embryo a mere means to an end, which is ethically wrong.

The Principle of Justice Argument for PGD

Justice refers to "those moral and social system theories that attempt to distribute the benefits and burdens of a social system fairly and equitably in the system."77 The concept of justice is fundamental in medical practice and reproductive rights. The argument will be that justice demands that parents are duty-bound to safeguard their offspring from foreseen harm and danger. Using PDG to avoid and prevent a known medical condition that might affect a child in the future is justifiable on this ground. PGD, therefore, may be accepted based on the parents' procreative freedom and liberty. The argument is that parents have the reproductive right to have healthy children. This argument justifying the use of PGD for medical and health benefits is made for reducing disabilities in the world. It is also to reduce genetic disorders and diseases and create an HLA match for an older sibling.78 Based on these medical benefits, many countries are allowing the use of PGD to reduce genetic disorders.

However, there is an outcry about social, political, economic, and health inequalities in the world today. "These inequalities exist in access to health care and health status, combined with dramatic increases in the cost of health care. Fueled debates continue about what, if anything, justice requires of particular societies and the global community."79 Justice demands fairness and equity for all persons irrespective of race, color, tongue, and nationality. PGD will increase the socio-economic, socio-political, and socio-cultural, and gender inequalities in the world. PGD is very expensive because of its use of IVF.80 PGD will create gender discrimination; statistics
show that most parents using PGD for gender selection seek male children, among other inequalities and societal differences.\textsuperscript{81}

The ethical dilemmas involved in the practice and use of PGD do not only revolve around the procedures, economic, and social factors. However, at the bottom of these controversies are the ethical, moral, societal, and religious acceptability of creating embryos in vitro, screening, selecting, and discarding problematic embryos.\textsuperscript{82} These significant controversies hang on the moral status of a fetus. The fetus is seen as a prenatal human life by both the conservative and pluralist views. The views acknowledge that the embryo should be accorded some special moral and legal status.\textsuperscript{83} Since the two views granted some special moral status to the embryo, PGD has many ethical questions to address because the fetus is a potential life. Although, as possible life, it cannot live or survive on its own, it has some dignity and respect. Since ethics tries to promote the dignity, respect, and sanctity of human life, PGD is ethically problematic. This idea resonates with the \textit{Ọfọ} dibia in Igbo traditional health care practice, which stands for justice, fairness, truth, and right.

\textit{Ọfọ} is a holy object and an important symbol in Igbo traditional religion and the people's entire life. It is influential and respected by the people because, through it, the people continually witness their ancestors, the gods, and acknowledge their divine presence and sacredness.\textsuperscript{84} It is very symbolic in rituals, decision-making, judgment, initiation ceremonies, and other important issues in the lives of the people. \textit{Ọfọ} is the Igbo sacred divine staff of truth, justice, fairness, and authority.\textsuperscript{85} It "symbolizes righteousness, peace, longevity, process, probity, accountability, fair play, and sincerity."\textsuperscript{86} There are different types of \textit{Ọfọ} in Igbo cultural practice. The title \textit{Ọfọ}, used by titled men and women, the \textit{Ọfọ} of priests and priestesses (the authority of divinity) and \textit{Ọfọ} of the \textit{dibia} (traditional medicine man).\textsuperscript{87} PGD will ethically not synchronize with the
principle of *Ofọ* because it lacks truth, justice, and fairness, which *Ofọ* in both Igbo culture and medical practice personifies.

PGD is ethically controversial when used for medical purposes, such as detecting chromosomal disabilities and genetic disorders. It is even more morally controversial when employed for non-medical purposes. Some non-medical purposes are selecting the preferred gender, eye coloration, intelligence, and other genetic traits that enhance the natural body.\(^8^8\) PGD faces much ethical condemnation under biomedical principles because autonomy is not unlimited and does not imply individualism. Besides, beneficence and justice arguments in creating a child that matches older siblings neglect the UNESCO Declaration Article 10. "The fundamental equality of all human beings in dignity and right is to be respected so that they are treated justly and equitably."\(^8^9\) Otherwise, it makes the child an object and not a subject. Moreover, non-maleficence arguments state the ethical challenge of moral status between pro-life and pro-choice advocates.

4. a.ii. Faith Perspectives of Pre-implantation Genetic Diagnosis

Religion, morals, and ethics are often intertwined. It is sometimes challenging to divorce or separate one from the other. Above all, religion plays an essential role in the ethical and moral formation of human beings (the adherents). The religious impact on the life of its followers extends to all aspects of human endeavors: technology, ecology, health, behavior, social enterprises, and economics. Religion is highly influential in ethical decision-making at the beginning and end of life.\(^9^0\) Human reproductive technology is at the heart of the ethical and moral teachings of most religious groups. Because most religious traditions promote and advocate the sanctity and dignity of life from conception to natural death. These teachings of
many faith traditions on the sanctity and dignity of the human person from conception to natural death have no legal foundation in many countries. It is because many countries are secular. Therefore, the teaching is left for an adherent to comply or not to comply. The dignity and status accorded to the human embryo in different religious traditions differ. Some religious traditions have a conservative approach, while some have a liberal approach to the moral status of an embryo. However, most traditions believe that the embryo is a prenatal life. Therefore, it deserves some dignity, respect, position, and protection at different stages of its development.

**Abrahamic Religious Faiths**

The Abrahamic religious traditions, Christianity, Judaism, and Islam, share a common origin and some common beliefs. They all trace their ancestry to Abraham of Ur, and the three traditions believe in the oneness of God. Christians, especially Catholics, see this oneness in a Trinitarian formula. The three faiths differ in the mode of worship, as well as in ethics and morals. For example, "Sabbath Day," as reflected in the creation narrative and the Ten Commandments, is an excellent illustration of the differences in worship and doctrine. The Jews observe Saturday as a day of prayer, most Christian churches observe on Sunday, and some Saturday, while the Muslims observe Friday. Again, the three traditions abhor abortion, but in a situation where the mother's life is in danger, these religious faiths use different ethical and moral principles in handling it. The Catholic Church uses the principles of Double Effect, while Judaism and Islam use Rodef or Pursuer and Maqasid, respectively. PGD is a welcome idea in some religious groups to overcome hereditary diseases and genetic disorders. In contrast, some groups oppose it because of the procedures involved, like creating the embryo in a petri dish and destroying excess embryos produced in vitro. It also separates the unity of man and woman in a marital relationship, which is fundamental in the marriage and procreative act. 91
Judaism

Like the other Abrahamic religious traditions, Judaism has different sects, namely the Orthodox, Conservative, and Reformed Jews. These three sects have their similarities and differences in worship, morals, and ethics. The Talmud offers pregnant women some pieces of advice on how to improve the health of their fetus and to have healthy children; for instance, "eating parsley in order to have handsome and beautiful children, drinking wine in order to bear healthy children, or eating corianders to have especially plump children."\(^{92}\) The ethical and legal codes of Judaism are very high. Jewish Law has some restrictions on individual reproductive freedom and liberty. Procreation in Jewish tradition has a tripartite dimension, mother, father, and God. The will of God in this trilateral relationship is more paramount than that of the mother and the father.\(^{95}\)

Regarding PGD, the parent's wish of having offspring of a particular genetic trait may be restricted when achieving such desires interferes with other dominant Jewish norms and values.\(^{94}\) The Jewish Law does not consider the human embryo as a full person; little legal and moral status is given to the embryo in the Jewish tradition. Although the embryo has little legal and ethical status in Judaism, some rabbinical authorities will not permit indiscriminate destruction of an embryo after 40 days. If it must be allowed, there must be compelling medical and health reasons for the procedure. In Orthodox Judaism, the moral status of an embryo rests on two factors: the developmental stage and the implantation stage. An embryo that has been gestated for less than 40 days and has not been implanted in the woman's uterus does not have equal status with an embryo that has been gestated for over 40 days and has been implanted in a woman's womb. The embryo that has been implanted in the woman's womb has more moral and legal status than the one that has not been implanted in the woman's womb.\(^{95}\)
The Orthodox Jews are highly committed to the Halakah, the traditional body of the Jewish legal and ethics system. The Halakahic Judaism permits the use of reproductive technology to help couples to overcome the problem of infertility. However, there are some limitations to the application of these reproduction technologies. Halakahic Judaism allows intrauterine homologous insemination (IUI). It also permits in vitro fertilization (IVF) (using the gametes of the couples). It rejects heterologous IUI and IVF (using donors' gametes). The Jewish legal and ethical code (Halakah) rejects PGD for gender selection and non-therapeutic reasons and permits it for medical and therapeutic purposes. The permission of PGD for medical purposes by the Halakah aligns with the *American Society of Reproductive Medicine*. The use of PGD has legal backing in Judaism for the following purposes: first, the child will undoubtedly manifest the disease should it be carried to term. Second, the illness is terminal or related to protracted and severe misery. Third, the disease presently has no treatment or effective therapies. The production of a child who will serve as a donor to an older sibling with a severe genetic disorder or disease is permissible in Judaism in some cases, provided the necessary precautions are observed. Using PGD for sex selection, enhancement, and selecting traits or bearing a child with lower disease risks is ethically prohibited in Judaism. PGD for sex selection, in some cases, is accepted in Israel. According to the schools of Beit Shamai and Beit Hillel, "in order to fulfill the obligation of procreation, at least one son is required. Therefore, the application of sex preselection for non-medical indication may be of practical importance using the method of sperm separation or sex selection of pre-embryo by PGD. It is allowed in the state of Israel to balance a family with some limitations."
Recall that Islam means total obedience to the will of Allah or total submission to the will of Allah, the Most Compassionate and the Most Merciful. "Hence anyone who submits to God and strives to be good can be called a Muslim." It pre-existed the Prophet Mohammad in the 7th century. It is all the prophetic messages delivered from Adam to Prophet Mohammad. Furthermore, it was not named after a person or ethnic group. Islam is a way of life that addresses the spiritual and corporal way of life of its adherents. Therefore, it defines the relationship between individuals and the Creator-God and other forms of life. Muslims always seek guidance before performing any action to know whether it is morally and spiritually acceptable or prohibited (halal and haram,) respectively. Islam follows the Islamic moral law-the Sharia. It consults the Glorious Quran, the Sunnah, and the consensus of previous Islamic scholars in deciding moral action. In the absence of a moral code governing an action, "exert ijtihād (independent reasoning) is applied. This will consider maqāṣid al-sharī`a (the objectives of Islamic moral law) for the preservation of religion, life, intellect, wealth, and progeny." Islamic religious tradition welcomes reproductive technology for the treatment of diseases and infertility. Reproductive technology is restricted within the marital union (husband and wife) to preserve posterity. The Islamic religion forbids the donation of sperm and egg in reproduction technology. It also allows using excess embryos for scientific research, provided they are not used in unfitting or illicit pregnancy. It believes that using extra embryos for medical and scientific research will help the medical and scientific communities acquire more knowledge to help human beings. The ethical and moral acceptability of PDG as new technology is not rooted in the Quran or Sunnah; therefore, its application comes from an extra ijtihād (independent reasoning). The Islamic religion always encourages its adherents to explore and use new technological innovations, provided they do not contradict the teaching of Allah and the
Prophet. Because it is Allah that created these new technologies, in other words, it is Allah that gave human beings the wisdom and knowledge for these technological innovations. Allah allows the adherents of the Islamic religion to seek medical treatment when sickness strikes. For it is "Allah that created disease and treatment, and He made for each disease a treatment. So, seek treatment and do not use haram (forbidden things)." The use of any reproductive technology, including PDG, for medical and therapeutic purposes such as treatment of infertility or prevention of genetically transmitted diseases is wholly allowed in Islam. The use of PGD for medical purposes was accepted in a workshop organized by the International Islamic Center for Population Studies and Research at the Azhar University of Cairo. The workshop warned against its use for non-medical and therapeutic purposes.

PGD is highly acceptable in the Islamic religion based on its potential benefits to alleviate the burden of diseases and health disorders among Muslims and human society. However, the considerable ethical controversy that arises in the use of PGD for therapeutic use is the status of the human embryo. What is the moral and ethical acceptability of discarding disease or defective embryos in Islamic tradition? In answer to this question, most Islamic jurists believe and accept that an embryo before implantation is not a human being because its life depends on the mother. It is essential to state that embryonic developmental formation is rooted in the Quran (23:12-16), as discussed in chapter two. The Islamic jurist will allow the discarding of superfluous embryos produced during IVF, provided the couple will not use them in the future. Still, these embryos should not be donated to another couple. Therefore, Islamic tradition allows reproductive technology to treat genetic diseases and disorders, sex-link diseases, and infertility. It is also permissible for mothers who require healthy chromosomal embryos for implantation. These procedures are not seen as an affront to the divine will or playing God. However, they are seen as

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discovered truths to help couples have healthy children and children of their own since procreation is a divine motive. On the other hand, Islam prohibits PGD for sex selection and human enhancement procedures that have no medical purpose. It also forbids the use of PGD for avoiding disabilities compatible with lifelike deafness, blindness, and risks for late-onset diseases in the future.\textsuperscript{106} PGD is advised, where possible, as an alternative to circumvent clinical abortion for couples at extraordinarily high risk.\textsuperscript{107} Generally, the Islamic religion does not disallow using reproductive technologies to treat infertility and avoid genetic diseases. It does not see it as an affront to the divine motives; instead, it is a discovered truth capable of helping couples overcome infertility and have healthy children.\textsuperscript{108}

\textbf{Christianity- Catholicism}

Christianity has many denominations; thus, there are often difficulties in having a common ethical ground in morals and reproductive issues. Although difficulties exist in finding a common governing ethical ground, Christians accept the Bible as their sacred book and Jesus Christ as the fullness of revelation. Christianity is characterized by its missionary orientation movement and its universality.\textsuperscript{109} The use of reproductive technology in the Christian religious tradition has both conservative and liberal acceptance. The Catholic Church strongly objects to reproductive technology, including PGD, which involves discarding embryos and procreation in vitro (in a petri dish).

Nevertheless, PGD may have some objections in some Christian denominations. Some Christian denominations may forbid PGD because of its use for sex selection and other non-medical and therapeutic purposes. They may also forbid it because it results in the discarding of embryos. The act contradicts the old datum and teaching of the Christian tradition that life begins at
conception, championed by the Catholic tradition. However, some Lutherans and Anglican groups do not disallow abortion. These two Christian denominations do not give an embryo independent moral status. They do not consider embryonic life sacred. "These groups tend not to advocate the legality of reproductive genetic technology such as PGD, but at the same time, they are not opposed to it." There are diverse views among Christian denominations on the status of the embryo. Some Christian denominations see the embryo as a 'lesser life' that is growing towards personhood. For the advocates of this view, life does not begin at conception. The lesser status view of the embryo allows them to permit embryonic reduction based on a "greater good" and the safety or health of some babies. "As a consequence, it is impossible to say with confidence that there is a protestant account of the embryo's moral status."

For clarity, this work will emphasize the Catholic teaching on PGD because it is the most organized tradition with vast literature among the other Christian churches. The Catholic Church's objection to the use of PGD is biblically rooted in the teaching that human beings are made in God's image and likeness. (Gen: 1:27-29) Therefore, based on this teaching, human life is believed to be sacred from conception to natural death. Hence every human person, irrespective of status, should be respected and protected from the beginning of life (conception) to natural death. There are several reasons the Catholic Church objects to the use of PGD to assist a couple with fertility and inheritable disease problems. The Catholic Church rejects PGD on the following grounds:

First, PGD is only possible through the use of IVF. Second, IVF requires the fertilization of many eggs and their destruction. Third, embryos are given equal status with already existing persons. Therefore, the destruction of an embryo is considered abortion. Four, PGD, being done through IVF, goes against the natural procreative teaching of the Catholic Church on
matrimony and procreation. "[The] inseparable connection is willed by God and unable to be broken by man on his initiative, between the two meanings of the conjugal act: the unitive meaning and the procreative meaning." IVF separates the unitive and procreative acts of marital and sexual union, even when there is no embryonic destruction. The Catholic Church's rejection of PGD is based on her ancient teaching on the marital act and moral status of an embryo.

The Catholic Church allows any therapeutic procedure on the embryo for healing and treatment purposes. "A strictly therapeutic intervention whose explicit objective is the healing of various maladies such as those stemming from chromosomal defects will, in principle, be considered desirable, provided it is directed to the true promotion of the personal well-being of the individual without doing harm to [person's] integrity or worsening his conditions of life." The Catholic Church permits prenatal diagnosis that is meant to respect the life, dignity, and integrity of the embryo. The Catholic Church also allows therapeutic procedures for the promotion, safeguarding, or healing of an embryo. It is worth mentioning that the Catholic Church believes that spouses are not conferred with the right of procreation by matrimony. Instead, it provides an avenue and right for them to perform the natural acts, which per se are geared towards procreation. Children are not objects that a spouse must-have. Instead, children are "the supreme gift" and the most gratuitous gift of marriage. They are a living testimony of the mutual giving of his parents.

Therefore, pre-implantation diagnosis is a eugenic approach that accepts selective abortion to prevent given birth to children affected by various abnormalities. It is both disgraceful and wrong because it weighs the value of human life based on health or normality and physical well-being. PGD directly legalizes abortion, infanticide, and euthanasia because every unhealthy embryo must be killed. It is disallowed in the Catholic Church based on discrimination and to
avoid the disparity between the rich and poor. The Catholic Church opposes discrimination of a person at any stage of development. It considers the right to life as a right complete at all human development. The respect for life in theory and practice starts from the moment the procreative process begins. It teaches that once the sperm fertilizes the ovum, a new life has begun. The new life is unique and independent. It is a subject and not an object. Above all, it is not an extension of the parents' bodies. Any discrimination on the grounds of gestational development or stage of life is not justifiable.\textsuperscript{118} A dead embryo is also given status in the Catholic tradition. According to Catholic teaching, a dead embryo should be given a proper burial like any other human being.

"The corpses of human embryos and fetuses, whether they have been deliberately aborted or not, must be respected just as the remains of other human beings."\textsuperscript{119}

In summary, Islam and Judaism allow the use of PGD only for therapeutic reasons and reject the use of PGD for non-therapeutic purposes. The Catholic Church rejects using PGD for therapeutic and non-therapeutic purposes because of the status of the embryo and her teaching on procreation, which hangs on the marriage and conjugal act.

**Non-Abrahamic Religious Traditions**

This work looks at PGD in Hinduism and Buddhism because of their doctrine of non-violence and respect for life. However, Hindus and Buddhists are few in Nigeria. This work creates awareness of their teachings to non-Hindus and Buddhists, who may encounter them in hospitals. The acceptability and rejection of PGD in any religious faith differ. PGD, both in Hinduism and Buddhism, has an ethical evaluation of its acceptability and rejection because these two traditions are strongly pro-life advocates based on the teaching of *Ahimsa*. Also, genetic advancements are novel in Nigeria. However, pre-existing cultural values and traditions on reproduction among the various ethnic groups serve to evaluate its ethical acceptance or
rejection. The sanctity of life, as mentioned above, is central in the traditions of most ethnic
groups in Nigeria.

**African traditional Religion**

**Igbo ethnic group**

Some Igbo scholars strongly believe the Igbo will accept any technology that will help couples
with fertility problems. The argument is based on the hypothesis that children supersede the
procedures that produced them or the circumstances that led to their birth. Hence the Igbo will
say *nga nwa si yo uwa ya hiri* (wherever or however a child is conceived, let him/her live or be.)
This idea is depicted in a name like *nwahiri*, given to a child born in the circumstance mentioned
above. A couple's inability to conceive or beget children among the Igbo brings worry, insult,
and disrespect. It makes the couple consult herbalists and native doctors, even oracles, to
know the reasons and, if possible, make sacrifices to appease the gods and ancestors.

In some cases, the native doctor makes an invocation to appease the gods on their behalf. They
also prepare medications and charms for them. There is also a practice among the Owerri zone
called "iya nwa" (begetting a child through spirited powers or a child begotten through spiritual
power - witchcraft). The native doctor uses magical powers to invoke the ancestors or the god of
fertility to help the couple conceive. However, with the coming of Christianity, this practice is
hardly practiced or heard.

Western artificial reproduction differs from Igbo artificial reproduction. The Igbo artificial
reproduction is what Joseph Gbenda called cultural-assisted reproduction. It is practiced in three
ways: a married woman who is barren marries (pay dowry) of another woman who bears
children for her, a widow who lost her husband at a tender age may beget children from any of
her brothers-in-law, or from another man within the community with a prior agreement with her family.\textsuperscript{121} Finally, an impotent husband may allow his wife to meet an agreed man to get pregnant secretly. These are some methods the Igbo use to overcome barreness and infertility. However, the issue of PGD finds its meaning more in diseases and sicknesses. Again, health in Igbo (African Tradition) is holistic. Although Igbo welcomes any child, male or female, male children are valued more because of the need to preserve the lineage. Disease and illness are considered evil and bad omen. Hence families and individuals try to live a good and healthy life. Children born with deformities are cared for and treated, though the Igbo dread genetic diseases. For example, the things asked during marriage inquiry are whether the family has genetic and hereditary diseases. Mental illness and epilepsy are considered genetic and hereditary diseases among the Igbo. Families often advise their loved ones not to marry from families with a history of such diseases.

The Igbo marriage (selection of husband or wife) resembles Plato's work on marriage and procreation in his work in the Republic. Plato, in this work, suggested that human reproduction should be controlled and supervised by the government. He believed that energetic and talented persons in the society should intermarry to raise offspring that will preserve such a group of persons for the well-being of the state.\textsuperscript{122} The difference between the two is that the government controls marriage and procreation, in Plato's view, while the family controls them in Igbo culture. It implies that the two views support institutional control of marriage. The Igbo encourages people to marry from good, energetic, and healthy families to reduce bad behaviors (stealing), hereditary diseases, and deformities in society. Based on this view of marriage and procreation, the Igbo will accept PGD to prevent genetic disorders. Therefore, the Igbo will accept it for medical purposes and object to it for non-medical purposes. Additionally, Igbo may
reject PGD for both medical and non-medical reasons because they adhere to Christian principles.

**Yoruba Ethnic Group**

ART is gradually taking root in Nigeria to overcome childlessness and infertility among couples across various ethnic groups. Many couples in the country who can afford it will likely pursue it. There are many IVF centers across the country. IVF, among other ART, is not prohibited in Nigeria, as will be discussed subsequently. Although ART is as good as it may be in helping childless and infertile couples achieve or overcome childlessness, cultures and faiths accept or react to it differently. Among the Yoruba, ART is accepted by some to overcome childlessness, and others are apprehensive about it because of socio-cultural norms and values concerning human reproduction. In discussing any technology or ethical theory about a culture, it is essential to understand the socio-cultural dynamics of the issue and the people.

For the Yoruba, like most African ethnic groups, "everything derives from communal values, the common good, the social goals, traditional practices, cooperative virtues, and social relationship. An individual does not exist in a vacuum but within a web of social and cultural relationships." The notion of communality defines and regulates the way an individual makes critical decisions. In this sense, "the Community-wide agreement forms the basis of acceptance of moral rules." Communitarianism is both relational and social. Hence human beings are socio-political beings. It implies that the individual is best understood in the concept of the role he/she plays as a citizen and his/her participation in the common good.¹²³

There are cultural and ethical issues confronting the use of ART for both medical and non-medical purposes. The cultural issues of using ART in Yoruba tradition revolve around the
legitimacy of the offspring born through ART, religious commitment, patriarchal polygyny, and the value of children. Children and childbearing are paramount to marriage stability in Yoruba tradition. In Yoruba tradition, the preservation of lineage identity is vital. Hence every family wants to have children that are their direct offspring. Therefore, to have children through an extra-marital union is considered an abomination. It is believed that children born through extra-marital union will not resemble the family members both in identity and character. Because of the high esteem placed on family image and name, it is also believed that such children might bring disgrace to the family. They believe too that a child born through ART may face discrimination and disrespect in the community.

Religiously speaking, ART use among Yoruba people is divided within each family, faith tradition, Islam, Christianity, and African Traditional Religion. Families are to follow the teaching of their religious faith in the use of ART. ART is novel in Nigeria. Its awareness is limited to a few people. PGD, too, is novel in Nigeria; there may not be a PGD center in Nigeria. The acceptance of PGD among the Yoruba will likely be based on culture and religious practices. There is a relatively good understanding of ART technology by many Nigerians. Hence, the vacuum created by this lack of knowledge and broader use across the country creates many problems on its acceptability or rejection.

Non-Abrahamic religious traditions

Buddhism

Buddhism is a non-theistic religion because neither God nor any deity created the world and human beings. However, Buddhism is a strong pro-life advocate and emphasizes the ethics of non-violence in all forms of life. The belief in rebirth, karma, and Ahimsa is very central to
Buddhism. Buddhism believes that human life comes from past rebirth (reincarnation), where an individual takes any form of life, human, animal, and ghost. In Buddhism, life beings at conception. It is "when the stream of consciousness from a previously deceased being enlivened an egg in the process of fertilization in the womb or an IVF test-tube." The status of an embryo is not an issue in Buddhism. Buddhism considers an embryo at any developmental stage to be alive, conscious, and human, despite that its physical, spiritual, and intellectual faculties take time to develop fully.\textsuperscript{126}

The use of any form of reproductive technology in Buddhism has no strong opposition because procreation is not fixed, and it is not a straightforward process. There is absolutely no difference between fertilization and conception in the womb through natural sexual intercourse and fertilization and conception with the aid of reproductive technology in Buddhism. Therefore, PGD in Buddhism has not much opposition. Buddhism sees life as sacred from conception; thus, it opposes embryonic reduction because the sacredness of life is a cardinal virtue of \textit{Ahimsa}. PGD is allowed in Buddhism because the psychological and spiritual trauma and stress in taking care of physically challenged children outweigh the negative consequence of discarding an unhealthy embryo. Buddhism has a liberal attitude towards genetics because Buddhism accepts scientific innovations to verify truth by reason and experience.\textsuperscript{127}

\textbf{Hinduism}

Hinduism, as a religion, derives its teachings from the \textit{Sacred Vedas}. Its belief comprises many religious theories and philosophic ideologies from polytheism, atheism, pantheism, and monotheism. Reincarnation, karma, and dharma are central in Hindu religious tradition. The human soul in Hinduism is eternal. "It has to live many earthly lives in order to purify itself, to
reach perfection and a higher state of existence called Moksha." It has about one billion followers around the world.128

Hinduism has a liberal approach to reproductive technologies, which PGD is among them. The Hindu religion does not oppose assisted reproductive techniques. It recommends that the oocyte and the sperm used in the procedure (better) come from the couple undergoing the procedure. However, in extreme situations, Hinduism accepts sperm donation but recommends that the donor be a close relative of the infertile husband.129 The embryo is given a high moral status in Hinduism. The deliberate destruction of the human embryo among conventional Hindus is considered a homicide. Because the destruction of an embryo is an interruption of the process of reincarnation, this is a belief in Hinduism and some other religious faiths that the human soul undergoes series of rebirths at conception. Some liberal Hindus will accept embryonic research until the seventh month because, at this stage, the embryo is not considered a person.130 The Hindu belief is that the divine spirit - 'atma' - enters the human body in the seventh month of gestation. The embryo at this developmental stage is placed at the level of consciousness. A 14-day old embryo in Hinduism has the same status as a plant. In other words, the sanctity of life of a 14-day old embryo is equivalent to a plant.131

Hinduism and Buddhism share the same opinion on PGD. However, they have a slightly different view of the moral status of the embryo. Buddhism has no problem with conception either through natural or artificial reproductive technology. However, one fundamental aspect of Buddhism is that life begins at conception. In Hinduism, the sacredness of the human life or the embryo at its developmental stage is put on the level of consciousness; a 14-day old fetus is equal to a plant. However, Buddhism sees life as sacred from conception; as such, it opposes embryonic reduction. Judaism and Islam permit PGD for medical and therapeutic reasons,
although PGD may be allowed for sex selection in Israel. The Catholic Church prohibits PGD for both medical and non-medical purposes. PGD is not eugenic because its intention is not to create a perfect society or wipe out inferior human beings. Instead, its main objective is for treatment and enhancement of the human person for medical and non-medical purposes and alleviating the burden of diseases affecting human beings.\textsuperscript{132} However, PGD has some eugenic tendencies, which makes it morally problematic. It directly promotes the principle of procreative beneficence. The principle holds that "when a couple plans to have a child, they have a significant moral reason to select, of the possible children they could have, the child who is most likely to experience the greatest well-being- that is, the most advantaged child, the child with the best chance at the best life."\textsuperscript{133} It also creates a disparity in society between the rich and the poor.

4. B. Human-Animal Chimera Research

The distinctiveness between human beings and other human-animal species forms the basis of legal, ethical, and social debates on proposed human-animal chimera research.\textsuperscript{134} The purpose indeed is to solve many human medical problems, especially organ transplantation. Still, the problem is maintaining the natural uniqueness that exists between human beings and other human-animal species. The uniqueness of human beings from other human-animal species is fundamental and profound. "Just as there is no right to use nuclear energy for every possible purpose, so there is no right to manipulate human life in every possible direction. Technology must be at the service of man so as better to ensure the functioning of his normal abilities, to prevent or to cure his illnesses, and to contribute to his better human development."\textsuperscript{135}

4. b.i. Human Dignity, Medical Practice, and Biomedical Research
In medical practice, the dignity of the human person is a core moral and ethical principle. It is also an objective social value for health policy or everyday medical treatment and procedure planning.\(^{136}\) The growth in genetic science is rapid, leading human beings into a new area of underlying uncertainties. Although these acts may be avenues for improvement, they suggest harm to human beings and other forms of life. The doubts about some genetic advancements raise some questions. These questions are: How is human dignity best served when new forms of life like chimeras are produced? How will genetic experimentation and its results with staggering implications for human dignity be controlled? "Scientific progress is opening to technology - and will open still more - the possibility of delicate interventions, the consequences of which can be very serious, for good as well as for evil. These are achievements of the human spirit which in themselves are admirable. But technology can never be independent of the criterion of morality, since technology exists for man and must respect his finality."\(^{137}\) These are moral, ethical, social, biological, economic, and religious questions. These questions deal with the intrinsic and subjective values of the human person, human dignity, the social aspect of human beings, and the interrelation between created things in the universe.\(^ {138}\) There are diverse notions of human dignity in various fields of life and studies.\(^ {139}\) In many religious traditions, human dignity is understood from the concept of the image of God.\(^ {140}\) Human dignity is an ethical principle and social objective in health policymaking and medical practice.\(^ {141}\) In this regard, biomedical experiments should avoid any experiment that degrades human dignity and the human person. The biological distinctiveness between humans and animals should be upheld in biomedical research and experimentations.\(^ {142}\)

There are two underlying understandings of human dignity, the individual and collective understandings. These are the subjective values of every individual human person and the "value
of humanity as a whole, including the future generation.\textsuperscript{143} Human dignity is an intrinsic and subjective value of every human being. It makes a person human, and it does neither increase nor decrease as one grows in life.\textsuperscript{144} Respect for human dignity is a core principle in intergovernmental declarations regulating biomedical matters, such as the \textit{Universal Declaration on Human Genome and Human Rights} of UNESCO.\textsuperscript{145} Human dignity is strongly connected to human rights in international and regional constitutions, for example, Article 1 of the \textit{Universal Declaration of Human Rights} (1948),\textsuperscript{146} the \textit{Constitution of the Federal Republic of Nigeria}, among other regional and international laws. The human being as a subjective being has been an end in itself. Therefore, no one should ever "be treated simply as a means to be disposed of in order to obtain a higher good."\textsuperscript{147} The human person, as a person, possesses some qualities that are inherent in him or her. As human beings, these qualities need to be cared for and loved and not be maltreated. A human being is a subject and not an object.\textsuperscript{148} This idea agrees with Article 3 of the UNESCO Declaration on Bioethics and Human Rights that says the interest and welfare of the individual should have priority over the sole interest of science and society. The Kantian moral principle states that everyone is an end itself, and no one is a means to an end. However, living in a society makes it necessary for each person to contribute to societal development and welfare.\textsuperscript{149} The purpose of medical science and biomedical experiments is not to solve all the problems of human mortality, sickness, and even age. However, "all technological intervention should be at the service of humanity to cure illnesses, contribute to his full human advancement and not to degrade him."\textsuperscript{150}

Furthermore, these branches of studies do not have absolute control over human destiny. The role of medical science and biomedical experimentation must be limited to what is human and avoid what is superhuman. Their primary functions are to relieve pain and bring comfort to those
who suffer psychologically and physiologically because of illness and those at the end of life.\textsuperscript{151} Similarly, medical science and biomedical experiment should avoid any experiment that is dehumanizing and degrading to human dignity and the human person. There is a biological uniqueness between human beings and animals. Human beings possess some biological and physiological features that do not exist in animals. "[Human] dignity is ipso facto democratically present in human beings, a legacy of our phylogeny, unfolding, and actualized in the ontology of each person…"\textsuperscript{152} The dignity and value of the human person and life are being undermined by reproductive technologies like cloning, embryonic stem cell research, human-animal chimera, human-animal embryo, and other forms of eugenics.\textsuperscript{153} The practice of keeping human embryos alive in vivo or in vitro for experimental or commercial purposes is opposed to human dignity.\textsuperscript{154}

**Human Subject Research in Declarations**

**a. UNESCO-Universal Declaration on Human Genome and Human Rights 1997**

The 1997 conference of UNESCO on the *Universal Declaration on Human Genome and Human Rights* acknowledges the previous UNESCO declarations on human rights and protection of human dignity. The opening remarks referred to the preamble of UNESCO's constitution, which states, "‘the democratic principles of the dignity, equality and mutual respect of men,’ rejects any ‘doctrine of the inequality of men and races,’ stipulates ‘that the wide diffusion of culture, and the education of humanity for justice and liberty and peace are indispensable to the dignity of men and constitute a sacred duty which all the nations must fulfill in a spirit of mutual assistance and concern’…"\textsuperscript{155} The conference made the following declarations:

Article 2.b. "That dignity makes it imperative not to reduce individuals to their genetic characteristics and to respect their uniqueness and diversity." Article 11. "Practices which are
contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted...." The declaration expressly condemns all research, especially reproductive research, that undermines human dignity. It condemns cloning. If cloning is condemned, invariable chimera production, which is worse than cloning, will be condemned.


The National Research Act was passed into law on July 12, 1974, and by signing it into law, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research was created. It was charged with the responsibility of establishing fundamental ethical theories that should govern and supervise the conduct of biomedical and behavioral research relating to human subjects. It is also to create rules and regulations that should be maintained to ensure that such research is carried out according to those theories.156 The Commission made these declarations:

1. Boundaries between Practice and Research

The Commission first tries to explain the difference between medical practice and biomedical and behavioral research. It first states the difficulties involved in elucidating the terms differently because of their closeness to each other on the one hand and the clear distinction between them on the other side.157 The Commission thus defines the difference between practice and research. It defines practice as an intervention intended for the sole improvement and enhancement of the good or welfare of the individual patient or client that is expected to produce a consistent result. The goal of medical or behavioral practice is the provision of diagnosis and preventive treatment, as well as providing therapy to individual patients in need of these treatments and therapies.
However, "research is an activity designed to test a hypothesis, permit conclusions to be drawn, and thereby to develop or contribute to general knowledge." It is most often defined officially as a procedure that has objectives and measures calculated to arrive at that objective.

1. Basic Ethical Principles

The Commission identified three basic principles and how they can be applied in medical and biomedical practice and research. These principles are Autonomy, Beneficence, and Justice.

There are two fundamental ethical components of the principle of autonomy. One, every person is to be treated as an autonomous agent. Two, persons incapable of an autonomous decision are to be protected. The principle of Beneficence, as expressed by the Commission, goes beyond the act of charity. Instead, as an obligation not to harm the person and "maximize possible benefits and minimize possible harm." The Commission discusses the principle of Justice on the concepts of benefits and burden. The Commission came up with these formulations: "1, to each person an equal share, 2, to each person according to individual need, 3, to each person according to individual effort, 4, to each person according to societal contribution, and 5, to each person according to merit."\(^{158}\)

3. Application of the Principles of Research

The following conditions must be considered in conducting research: "informed consent, risk/benefit assessment, and the selection of subjects of research." Informed consent- the subject is allowed and not forced to choose what shall or shall not happen to him. The Commission gives some conditions that govern research. The conditions include: the research subject must be given adequate research information. The information must be explained in the language the subject understands appropriately. All the procedures are to be explained to the subject, including its
risks and benefits. The person should be intelligent enough to understand the language used and its effects and benefits. Voluntariness means that a subject freely and willfully accepted to participate in the research procedure. It also includes freedom from coercion and undue influence, which includes excessive pressure and inappropriate rewards.\textsuperscript{159} The risk and benefit assessments call for a proper investigation of the procedures, and include data for the research, and, in some cases, seek an alternative to that research. The risk and benefit assessments include the nature and scope of risks and benefits and the systematic evaluation of the risks and benefits. In selecting research subjects, the principles of respect for persons and beneficence must be respected because consent and risk/benefit assessment are prerequisites in both principles. Therefore, the principle of justice is a moral guide proper in the selection of subjects and results.\textsuperscript{160}

c. Universal Declaration on Bioethics and Human Rights

The \textit{Universal Declaration on Bioethics and Human Rights} speaks of the dignity and respect of the human person by making sure that human life is respected and protected in research and experimentations. It acknowledges the importance of scientific and technological research and its usefulness to human health and good. It warns that these scientific and technical researches should be done within the circumference that respects human dignity, human rights, and fundamental freedom, Article 2, numbers c, and d.\textsuperscript{161} Article 3 of the declaration is solely dedicated to human dignity and human rights. Numbers One of Article 3 centers on human dignity, human rights, and freedom. The Articles recommend that these fundamental rights are to be fully respected in all circumstances.\textsuperscript{162} In line with this declaration, the creation of human-animal chimeras jeopardizes the dignity of the human person. Its mixture of embryos from animals of lower species with human embryos is an affront to human dignity, divine will, and
nature. If the chimeras are to co-exist with human persons and other forms of life, what will be their moral status? It will provoke other moral, social, economic, political, and ethical questions, like transgender people using public washrooms at airports and other public centers.

Number Two of the same Article centers on protecting individuals in the society he/she lives. It recommends that the interest and welfare of individuals are before the sole interest of science or society. Scientific and technological advancements need to be acknowledged and applauded. However, scientists should equally understand that not all that is scientifically possible is humanly moral and ethical. Some scientific innovations geared towards the improvement of human life and well-being may, in the end, be chaotic and problematic to human and non-human society. It is thereby creating a bigger problem in the process of solving a minor issue.

The dignity, respect, and inviolability of human life have been the core ethical concern regarding human-animal chimera research. Human dignity, right to life, and respect for life are fundamental ethical and legal principles of civil society. The Nuremberg Code, mainly number 5, speaks about an experiment that might cause death and disability. The creation of human-animal chimera, the chimera product of this experiment, is an already foreseen disability and misfit in human society. Chimeras are already misfits and disabled creatures. It implies that society has to make special provisions to accommodate their basic needs and welfare. Undeniably, their needs will likely be different from the needs of both humans and already existing non-human creatures.

4. b.ii. Chimera Research

Ancient Egypt and Greco-Roman empires have religious-mythological lives shrouded in mysterious creatures like sphinxes, centaurs, harpies, and minotaurs. Although these creatures
were not considered human beings, they were not seen as inhuman or completely animals. Instead, they were considered monsters. Therefore, the idea of a chimera is not all that new to humankind, as it has its origin from ancient times.\textsuperscript{166}

The term chimera refers to an ancient mythological goddess.\textsuperscript{167} “The raging chimera was of divine stock, not of men, in the fore part a lion, in the hinder a serpent, and in the midst, a goat, breathing forth the might of a blazing fire.”\textsuperscript{168} This chimera human-animal creature was killed in a war by an ancient Greek hero. However, the Greeks have great fear and respect for this chimera–animal creature because of its divine nature.\textsuperscript{169} The chimera has a supernatural origin, an offspring of Echidna; she is mighty and mysterious and the mother of all monsters. It is worth noting that all the bodily parts of chimera have no human body part resemblance. There are other monsters and mysterious legendary beings that possess both human body parts and animal body parts, like the Minotaur; these mythological creatures performed various functions in human society, such as fruitfulness and harvest.\textsuperscript{170}

The idea of a chimera is not lacking in some African religious-mythological lives. There are paintings and carvings of images of gods and goddesses with multi-body parts in some Igbo shrines. Some of these carvings and paintings have male and female body parts, sometimes with tails like animals. These carvings and paintings are not considered human or animals. This idea of chimera among the Igbo resonates with ancient Egypt and the Greco-Roman empire. They are images of the gods and goddesses of the people. These images are prominently found in Owerri zone.

Additionally, a legendary creature that depicts chimera among Igbo of Owerri zone is a mysterious being called \textit{Ọwa}. The term legendary is used because there is no verified eyewitness available to ascertain its descriptive veracity. It is an imaginary creature or one with existential
facts. However, the common narrative about this legendary being is that Ọwa is a nocturnal creature that glows intermittently as it flies at night. Based on this description, Ọwa may fall under the class of bat. It has mysterious features and walks or flies. It is said to have dangerous weapons or a sharp body with which it hunts its victims. It has a glowing light that helps it to see clearly and attack its victims. Its movement is in a straight-ward direction. In this sense, it may be described as a robot. It is a creature with a bad omen. Its appearance is terrifying and dreaded by the people because of its mysterious or magical powers.

Ọwa is rarely seen or heard of in contemporary Igbo society beginning from the advent of missionization and environmental degradation. It is among the legendary creatures that suffered from loss of biodiversity in Igbo culture. The image of Ọwa among the Igbo resonates with religious-mythological creatures of the ancient Egypt and Greco-Roman empires that are shrouded in legendary creatures like sphinxes, centaurs, harpies, and minotaurs. According to Callum et al., "The raging chimera was of divine stock, not of men, in the fore part a lion, in the hinder a serpent, and in the midst, a goat, breathing forth the might of a blazing fire."171 Like Ọwa, which has a glowing light that helps it to see clearly and attack its victims. This creature in Igbo land is not considered a human being or an animal. It depicts evil and bad omen in society.

**Human-Animal Chimeras at the Crossroad of Pro-life and Animal Rights Advocates**

At the crossroad of human-animal chimeras are two groups, the pro-life advocates and animal rights advocates. The two extreme groups express worries over the mixture of an animal embryo with a human embryo and vice-versa, "moving non-human parts into human beings and moving human parts into non-human beings (xenotransplantation)."172 Xenotransplantation is defined as replacing organs, tissues, or cells of one species with those of another species. For example,
using a pig valve to help the human heart recover is an accepted practice. Xenotransplantation has been practiced in medical science for centuries.\textsuperscript{173}

Despite the full acceptance of xenotransplantation in the past, some countries practicing it are questioning its safety. Some have already ruled out the use of animal parts “because of the increased risk of transmission of infectious diseases that these animals are immune to,” which human beings are not. The use of animal parts for transplantation may introduce some animal diseases to human society because of their biological and physiological differences. Also, some other ethical, health, and moral issues in xenotransplantation are considered.\textsuperscript{174} Some attempts made in these areas of xenotransplantation have failed. For instance, a baboon's heart was in the 1980s transplanted to a baby (Baby Fae), who survived for a few days. There was rejection after some weeks. In the 1990s, Starzl and his colleagues transplanted baboon livers into two patients. The patients survived for only 70 days and 26 days because rejections also occurred. "The most striking success was the nine-month survival of a chimpanzee kidney transplanted into a human by Reemtsma and colleagues." Other attempts involved using a pig heart, liver, and kidney; the patients who received them never lasted long because rejection occurred within days or weeks.\textsuperscript{175}

In 2004, the USA President's Council on Bioethics addressed introducing the human embryo into a non-human animal. In their report titled the \textit{Character and Significances of Human Procreation}, the Council outlined some possible use of human embryos in reproductive technology.\textsuperscript{176} The Council stressed the need to preserve and maintain a reasonable boundary between human beings and animals. The Council, therefore, prohibits the following acts:

- Transferring any human embryo into the body of any member of a non-human species and producing a hybrid human-animal embryo by fertilizing the human egg and animal sperm or an animal egg using the human sperm.\textsuperscript{177} The council also stated the need to respect the woman's
body and her physical dignity. Human pregnancy and procreation are not to be exploited or
degraded. It warns that "a woman and her uterus should not be regarded or used as a piece of
laboratory equipment, as an ‘incubator’ for growing research materials, or as a ‘field’ for
growing and harvesting body parts." Therefore, it proscribes: transferring a human embryo
(produced ex vivo) to a woman's uterus for any reason other than to attempt to conceive a live-
born child.\textsuperscript{178} Human and non-human gestation poses some ethical and social dilemmas. For
example, in 1984, the mixture of human eggs with the sperm of a sheep was conducted in
Australia. It raised some ethical issues, like the place of dignity in scientific research, as well as
respect for human embryos and fetuses. It also provoked thoughts about physical and
psychological harm should the experiment produces a human-animal child. It did not exclude the
shame such an individual will face in the community where he/she lives.\textsuperscript{179} Pro-life advocates
will frown on producing a human-animal child that will serve as an experimental object or spare
part. Their reason is that it commercializes and makes human beings objects of trade and
commerce and may contaminate the eco-system

Pro-life advocates vehemently abhor any act of violence to human life at any stage of
development. These acts include abortion, discarding of an embryo, and other violent acts to
human life.\textsuperscript{180} Xenon-gestation raises some ethical questions both for pro-life and animal rights
activists. If fertilization occurs and the whole gestation period is completed, and a child-animal is
born from this experimentation, which species will this child-animal be human or animal? Where
is the dignity of the human embryo and fetus? Where is the respect and dignity of human life, as
well as that of animals, in the future? Where are these creatures to live? What type of food are
these creatures going to eat, among other social and economic factors?\textsuperscript{181} The embryo should be
treated and accorded dignity and respect as a person. It must be defended, safeguarded, cared for,
and given adequate treatment that is proper to any other human being. The inability of human beings to acknowledge, give value, and respect to the helpless innocent persons, the human embryos, and the disabled persons makes it difficult for them to respect God and nature. It also makes it difficult for human beings to hear, acknowledge, and understand the cry and the changes in the universe itself. Everything in the universe is interrelated and interconnected; plants, animals, the atmosphere, and human beings require care, respect, and protection. The willful destruction of cosmic order, through the introduction of deadly, poisonous, gaseous, and human-made creatures like chimera, is an affront to human dignity and the environment. The proponents of animal rights will not be comfortable with the arbitrary use of animals in little, duplicative, unnecessary, and unwise scientific research that is solely for the good of humanity.

The Ethical Issues and Implications Surrounding Human-animal Research

The proposal for creating human-animal chimeras has provoked many ethical and moral questions and disagreements in religion, economics, health, politics, and biology. It questions the mingling of human and animal embryos, the dignity and respect of human persons, and animal protection rights. It also questions these creatures' social and moral status and their positions in the hierarchy of species. Other ethical issues about creating human-animal chimera species include the risk of creating new diseases and infections. The psychological risk and scenario this might create in the human society, and "the breeding generation of human-animal chimeras and the uncertainty of the nature of the offspring produced." Besides, what will be the impact and implication of human-animal chimeras to the future generation? It is worth noting that the present age owns it as a duty to preserve a sustainable-convivial environment for the future.
generation, an environment free from chaos and environmental hazards and epidemics?\textsuperscript{189} The questions are, where does the money for this project come from, a personal or separate tax fund?

\textbf{a. The Ethical Implication of Human-animal Research on Animals}

An examination of animals' moral and social status following the Nuffield Council's Report \textit{on Bioethics} is vital in this analysis.\textsuperscript{190} The council identifies three positions; the first position is called "clear line view." It explains the clear moral line that divides human beings and animals: Humans are moral agents, and animals are not. In the second position, there is no apparent difference existing between animals and humans. Still, there is a continuum of order or grade between humans and animals, and that human beings are at the peak of the list, followed by primates.\textsuperscript{191} The third position is that "biological classification is not by itself sufficient to support claims about a categorical moral distinction between human and non-human animals."\textsuperscript{192}

The issue of human-animal chimeras has raised some ethical questions concerning animal rights and welfare. Some of the questions are the opposition of this species in the hierarch of beings and their socio-political status.\textsuperscript{193} "Scientists don't know how their monkeying around might alter the intelligence and emotions of animals on how to measure any cognitive changes they might induce in an ape monkey or other non-human primates…"\textsuperscript{194} The proponents of animal rights over the years consider animals as moral subjects to some degree. However, scientists in the field of medical and biological sciences have, over time, developed new ideas that have been useful in producing new medicines and therapies using animals. Many animal rights activists look forward to a day when using animals for laboratory research will end. The use of animals for medical and biological research has a long history, which has led to medical advancement in the treatment, cure, and management of various health issues. Sir William Paton said that "every area of
biological or medical knowledge would be adversely affected had animal research been forbidden." The importance of animals in scientific and medical research is challenging to quantify.

Additionally, those who are against the use of animals as research objects see it as a prejudice. It makes animals disposable objects, known as *speciesism*. Speciesism is a biased attitude that has a preferential interest of one's species over other species. Animal activists, like Singer, believe that vertebrate animals and humans feel some level of pain, suffering, distress, and other states of negativity. Moreover, some animal research causes much suffering and pain on animals with little or no benefits, making this research morally unjustifiable. It implies that some animal-based research has little or no benefits to humans, animals, and the environment. Animals used in such a study suffer much pain or suffer in the course of the research.\(^{195}\)

**b. The Ethical Implication of Human-animal Research on Human Beings**

The human-animal chimeras do not only have an ethical implication on animals. Its socio-ethical implication on human beings is more complex and problematic. The human-animal chimera will be a danger to human dignity. If chimeras are not ascribed a moral status as human beings, it may only threaten human dignity and not violate it. However, if understood from this view and patents are to be given to the inventors, "patents on human-animal chimera would be similar to patents on human genes, tissues, and cells." Therefore human-animal chimeras will have a mere objective value as incomplete commodities. It only has a commercial value with little or no dignity. Hence, it will undermine the humanness of the human person. It treats a human person as an incomplete being and threatens the person's dignity. It makes the individual an object of scientific experimentation. Furthermore, it makes the person have only extrinsic value. Also, the
person has no intrinsic value that is a characteristic of every human being. The lack of the inherent value (humanness) that is a fundamental attribute of every human being makes the person a commercial object bought and sold at will.

The human-animal chimeras may be a threat to state security and welfare because the state has a mandatory obligation to protect and defend its citizens' lives and properties. For instance, how will the state protect and regulate the activities of such humanlike creatures or "humanzee."196 For example, insecurity and violence are global health menace. Many countries globally are suffering from insecurity and violent activities that have crippled many human developments. The creation of human-animal chimera may fuel insecurity and violence as some people may use them for dubious purposes. Also, chimeras may cause environmental violence and chaos in attempting to co-exist with other creatures.

The creation of human-animal chimeras is contrary to divine and natural order and motive. The chimera creatures will distort and violate the moral boundaries that divide and separate human beings from other forms of life.197 It also creates a socio-environmental disorder in the order of species. Besides, in some religious traditions, the distinction between species is the bedrock of morality and moral judgment. Simultaneously, for social activists, the integrity of creation is the foundation of morality and principles.198 The chimera creatures will distort all these fundamental human social structures, creating a new beginning of socio-political, economic, and religious structures. Presently, the treatment of transgender has been a socio-political issue, especially on public utilities like public washrooms and pronoun use in addressing them. It poses legal and ethical challenges in human society. Besides, humans have both moral and legal status, and animals have not. How will these transgenic organisms be treated in society?199
Other human implications and ethical issues surrounding human-animal chimeras include the development of new infectious diseases and viruses. Infectious diseases can be transmitted from human to animal and from animal to human. Human-animal chimera may cause contagious diseases which human beings may not withstand. In other words, the human person may not have the immunity and medication to fight such an infection.\textsuperscript{200} The human-animal chimera poses a risk to the health, dignity, and respect of the woman's bodily integrity. To impregnate a woman with or without her consent with animal sperm exposes her to health hazards. It violates her dignity and respect because it is an exploitation of her dignity and respect.\textsuperscript{201} It makes the woman's womb a scientific laboratory. The human-animal chimera may create a psychological risk in human society. A chimera born with all human sensory faculties may be ashamed to associate freely with other human beings;\textsuperscript{202} and may experience depression, anxiety, and isolation.

c. Can there be any Alternative to Human-animal Chimera Research

The ethical issues surrounding the creation of human-animal chimeras by introducing a human embryo with an animal embryo raises this question; are there alternative methods of creating these chimeras without using human embryos?\textsuperscript{203} The various concerns arising from using animals for research are based on biological and physiological differences between animals and human beings. However, these concerns do not justify the mixture of human embryos with animal embryos.\textsuperscript{204} Human-animal research is still unnecessary because pluripotent cells can be created. The creation of pluripotent stem cells can be created without the use of embryos. Induced pluripotent stem cells (IPSC) are genetically produced by introducing genetic elements that alter an adult cell into zygote-like stem cells without using a fertilized egg.\textsuperscript{205} It is worth mentioning that the National Institute of Health guidelines on stem cell research prohibits the
“introduction of human pluripotent cells into early-stage embryos of non-human primates.”

Induced pluripotent cells (IPS cells) are formed from adult cells. The cell has been biochemically modified to have the attributes and the behaviors of embryonic cells. It is essential to accept that animals are not subjective beings; instead, they are objective beings created to realize human ends. Animals and plants were created to be sources of food, clothing, and medication for human beings. Animals and plants are preferable when they provide human beings with the materials for scientific research and experimentation to improve human well-being. Therefore, animals are the alternative to human-animal chimera research.

**Scientific Reasons and Motives for Human-animal Chimera Research**

Human-animal chimera research is gaining more influence in scientific experimentation. Hence, many scientists are ready to introduce a human embryo into an animal embryo for scientific and medical reasons. Presently, human-animal chimeras are created by adding "human cellular materials such as stem cells to a non-human blastocyst of an embryo. For example, the transplanting of human neural stem cells into the forebrain of a bonnet monkey to assess stem cell function and development." Some types of chimeras have been developed by researchers to study and understand biological processes and mechanisms, as well as to study diseases pathogen. Examples of such chimeras include, "goats with human DNA, a chicken embryo with human embryonic stem cells, and mice with human neuronal stem cells." In medical practice, chimeras are becoming increasingly common.

There are many scientific reasons for the attempts to create human-animal chimeras. The first reason for the creation of human-animal chimera is for academic purposes to evaluate the evolutionary theory. In his publication, Marie Bernelot Moens, *Truth: Experimental Researches*
about the Descent of Man, to conclude the evolutionary theory, proposed the insemination of a female chimpanzee with a human sperm for an experiment. The second reason for creating human-animal chimeras is to create a superhuman or an "invincible human being." The superhuman being will be insensitive to pain, resistant to diseases, indifferent to weather conditions and other human qualities, feelings, and agonies. The creation of chimera also has an intention to attack the religious teaching on creation narrative, the social, moral, and dignity of the human person. It is also a tool for liberation from the church's authority and power of control in the world. "The topic proposed by Professor Ivanov … should become a decisive blow on the religious teaching, and maybe aptly used in our propaganda and our struggle for the liberation of the working people from the church." The third reason for creating human-animal chimeras is for medical purposes, creating an animal that would supply human organs for human organ transplantation.

Today many persons have some parts of their body replaced with animal parts (e.g., pig valves). Chimera production will reduce the issue of organ transplants to the lowest minimum. The second medical reason is to create animal models for experimental and research purposes in medical and biomedical research. It will help vaccine testing for diseases and infections that cause death and illness to humankind, like COVID 19. The creation of human-animal chimeras will be less expansive in science, medical, and biomedical research because higher primates are expensive.

Moreover, translating medical research and findings to human beings has raised many ethical and medical questions. The creation of human-animal chimeras will reduce the number of animals used for experimental and research purposes. This is one of the arguments used in animal welfare and the Three Rs Theory. "Indeed, there is some evidence that genetic
modification is reversing a third-year trend towards reducing the total animals used in research."\textsuperscript{218} The creation of human-animal chimeras will be of great value in education, especially for medical and biomedical students. The student will have an excellent specimen for the study of individual parts and human organ function.

**The Current Policies on Human-animal Research in Some Countries**

The ethical dilemmas surrounding research generally have drawn attention in different fields of study. The problematic nature of research is not only a moral concern; it is also a socio-economic, socio-political, socio-cultural, and socio-religious problem. Because of these problems and dilemmas arising from any form of research, human-animal, human, or animal (lower animals), many countries at individual levels have established some guiding rules and regulations to control and govern research and experimentation. There are both international and regional codes of conduct that monitor and supervise research and experimental projects, especially those that involve human subjects. For example, in 1974, the *National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research* was established and charged with drafting an ethical guideline for human subject research. This gave birth to “the *Belmont Report* written by the *National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research*. The Commission was created as a result of the *National Research Act of 1974*.\textsuperscript{219}

Furthermore, the *Universal Declaration of Human Rights*, in its Articles 1 and 2, references the dignity and rights of every human person. This declaration serves as the foundation from which most countries make and formulate laws and regulations concerning human rights and human dignity. Article 2 states that everyone, irrespective of status, race, color, sex, language, religion,
culture, and politics, is entitled to all the rights, freedoms, and privileges enshrined in the declaration. There must be no distinction based on the political jurisdiction or international status of a country. In other words, persons are not to be discriminated against because of state of origin, "whether it is independent, trust, non-self-governing, or under any other limitation of sovereignty."\(^\text{220}\)

Article 1 of the Japanese *Act on Regulation of Human Cloning Technique-2000* states that the purpose of the Act is to regulate and guard against the risks that might emerge from the cloning technique. One such danger is creating an organism that is neither animal nor human, which may severely affect human dignity, the security of human life and body, and the maintenance of social order and value.\(^\text{221}\) Article 2 of the same Act gave descriptions and explanations of the terms. Article 3 states: "No person shall transfer a human somatic cell, nuclear transfer embryo, human-animal hybrid embryo, human-animal clone embryo, or human-animal chimeric embryo into a human or animal uterus."\(^\text{222}\)

Later, in 2001 *the Japanese Guidelines for the Handling of Specified Embryo* was formulated based on preserving human dignity, the safety of human life and body, and order in human society. The guideline contains the following rules regarding the handling of human-animal chimera embryos.\(^\text{223}\) Articles 2 and 9 of these guidelines allow the production of only animal-human chimeric embryos. The research is limited to nine categories of specified embryos. Their production purpose shall be restricted to creating human cells-derived organs that are transplantable to human beings.\(^\text{224}\) Article 9 prohibits transferring human cloning techniques and other similar techniques into a human uterus or an animal uterus for the present.\(^\text{225}\) The Japanese banned the transfer of the human-animal chimeric embryo to protect and preserve the dignity and respect for the human person. "The transfer of a human-animal embryo into the
human or animal uterus should be prohibited as long as there is the risk that it might affect the preservation of human dignity in a manner equivalent to that of a human clone or hybrid individual." These laws and regulations are primarily relevant because of the aim and objective of the Act. They are to defend and protect human dignity, promote the safety of human life and body, and maintain peace, order, and harmony in society.\textsuperscript{226} Japan is the first country to sign into law the prohibition of implantation of an embryo produced through the process of induced pluripotent stem cells. Induced pluripotent cells (IPS cells) are formed from adult cells. The cell has been biochemically modified to have the attributes and the behaviors of embryonic cells.\textsuperscript{227}

\textit{Swiss Federal Law of December 19, 2003, on Research on Embryonic Stem Cells status} as of January 1, 2014, stipulates one of the purposes of embryonic stem cell research; the objective of this law is for the protection of human dignity. Article 1, No. 22, is intended to prevent the misuse of surplus embryos and embryonic stem cells and protect human dignity.\textsuperscript{228} This law regulating research presents human dignity as one of its principal objectives. The journey of human life, which has its early beginning at the embryonic stage, needs to be protected, defended, and above all, be accorded the essential dignity due to it. Article 2 of this law describes and explains what an embryo is and the basic terms related to the fetus.\textsuperscript{229} Article 3 of this law states all that is prohibited by this law. It also referred to past regulations on the \textit{Reproductive Medicine Act of December 18, 1983, of Switzerland}. For example, Article 3 of the \textit{Reproductive Medicine Act} prohibits the following: (a) "to create an embryo for research purposes, to derive stem cells from such an embryo, or to use such cells; (b) to modify the genetic material in a germ-cell, to derive embryonic stem cells from an embryo that has undergone germline modification, or to use such cells; (c) to create a clone, a chimera or a hybrid, to derive embryonic stem cells from such an organism, or to use such cells." The Swiss
government does not only prohibit the production of a cloned chimera and hybrid embryos. It also legislated against the use of cloning, chimera, and hybrid embryos in the production of stem cells. These laws are meant to protect human dignity, human life, and respect for the human person. They are also for the maintenance of social order in human society. If these organisms are produced, they may not only be an insult to the human person. It will also cause disorder and tension in the social community.\textsuperscript{230}

In Nigeria, the \textit{Codes of Medical Ethics} titled \textbf{Rules of Professional Conduct for Medical and Dental Practitioners in Nigeria} and the \textit{National Code of Health Research Ethics}, there are no regulations about human-chimera research. There are no strict rules in regulating many advanced reproductive technologies. However, the \textit{Code of Medical Ethics titled Rules of Professional Conduct for Medical and Dental Practitioners in Nigeria} is aware of high-tech genetic development in reproductive technology. It advises its members to tread with caution in applying any advanced reproductive technology as it waits for government regulations and guidelines.\textsuperscript{231} Nevertheless, Nigeria is a signatory to the Helsinki Declaration. It follows that the guidelines and regulations of Helsinki are binding in Nigeria.\textsuperscript{232} In addition, Part IV of the \textit{National Health Act of 2014}, on the \textbf{Control of the use of Blood, Blood products, Tissues, and Gametes in Humans}, prohibits all reproduction and therapeutic cloning of human [beings]. It also sanctions the manipulations of any genetic materials, such as human gametes, zygotes, or embryos.\textsuperscript{233} Although it is not explicitly prohibited in Nigeria's medical rules and ethics, chimera production is not permitted in the country following the probation of cloning and manipulation of genetic materials. Although Nigerian Medical and Dental Council waits for the Government to make rules and regulations that guide advanced human and non-human genetic engineering, it is also essential as a professional body to develop an ethical principle that controls its members. The
Council waiting for the government is not good because the absence of ethical regulation will promote abuse of human dignity and disrespect for the human person. Respect for human dignity, the human person, and the environment is integral in African culture because Africans live in harmony with nature and respect every nature—chimera is like Owa with a bad omen among the Igbo. Therefore, actions and behaviors that defile the environment must be avoided, such as abortion, spilling blood (homicide), suicide, indecent sexual behavior, and creating organisms that might constitute a problem. Among the Igbo, land is a source of law and morals. The spilling of innocent blood is a grave sin against the land, which affects the people and the environment. Therefore, it becomes pertinent for the Council to develop an ethical guide to control its member as it waits for government regulation. Alternatively, the Council can make a proposal or formulate some rules and suggest to the government, since there is already a concern on monetary compensation and selling of embryos.

The creation of human-animal chimeras and chimeric embryos would be a significant breakthrough in medical science, especially in solving the problems related to organ transplantation. However, the ethical issues around it, especially in the context of human dignity and respect for human persons, make it unethical. Human-animal chimera violates human dignity and respect for human persons. It is an affront to divine and cosmic motives. Moreover, it may cause disorder and disharmony in human society. Human-animal chimera will make human beings objects of laboratory experiments and reduce human dignity and respect. Above all, it is solving a minor problem and creating a bigger one. Genetics comes with many innovations having both good and bad effects. All genetic experiments or tests need to consider their impact on human dignity and the environment. Any use of technology that harms human dignity and its environment will cause more harm than good.
Public health ethics deals with social justice and the environment. Genetic science also deals with the environment and human development. It becomes pertinent for the two to partner in human genetic engineering to promote human dignity and the environment and avoid abuse. The abuse of the environment is an abuse of human dignity because human dignity and the environment are integral and intertwine. This chapter concludes the first segment of this work that focused on the traditional-individual approach to human dignity, discussed from various cultures, religious, and socio-legal perspectives, in the context of the beginning of life, end of life, and emerging genetic science. The following chapters (5, 6, and 7) engage a new approach to human dignity that focuses on community and the environment.

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Chapter 5- Human Dignity, Non-violence, and the Environment

Human dignity and human rights cannot flourish in a violent environment. Therefore, to protect human dignity and human rights, a non-violent environment is a sine qua non. In Nigeria today, there is incessant violence across the country. Repeatedly, innocent people at different times across the country have been ruthlessly attacked, and their source of revenue mindlessly destroyed. Private and public places are not spared as churches, schools, hospitals, markets, and mosques are burnt to ashes. Examples include the 2020 and 2011 Abule-Ado explosion in Lagos and the Madalla Bomb blast in Niger State. The Catholic Bishops of Nigeria lamented the evil effects of this violence using the words of Thomas Hobbes; these criminals have made life in our nation "nasty, brutish, and short," making the citizens live in misery, poverty, fear, and desperation.¹ Violence in Nigeria is caused by many complex issues, such as political, economic, environmental, and ethnoreligious factors, for example, the fight over scarce resources (land) in the north-central and violent-conflicts in Niger-Delta over ecological devastation.

5. A. Human Dignity and Right to Health in Declarations

Health is a primary concern of everyone, male or female because good health is necessary for human development. Conversely, ill-health limits and prevents human development. Therefore, health, human well-being, and development are inseparable. It means that the right to health is an integral part of our human rights and essential in understanding a life of dignity.² Again, the World Health Organization (WHO), in its constitution of 1948, declared health a fundamental right of every person irrespective of status, gender, race, age, and locality. It defines health as "a state of complete physical, mental and social well-being."³ From the time of Aristotle to its definition by WHO, health has been understood as more than the absence of disease or infirmity. “It is a highly prized personal asset. However, although highly valued by the ancient Greek
philosophers, health was mainly considered physical in character and granted only to some. The Latin phrase *orandum est ut sit mens sana in corpore sano* (we should pray for a sound mind in a sound body) refers to the extension of the concept of health to include mental health and well-being." The understanding of health as a state of mental and physical well-being also appears in religious traditions.

For example, as of the 6th century, Buddha referred to health as including body and mind. At the same time, African traditional medicine is holistic in understanding health. It treats the patient physically, spiritually, and psychologically. Hence, an illness is given a spiritual, moral, psychological, and physical diagnosis. The link between health and human rights was solidified in *The Universal Declaration of Human Rights in 1948*. It states: "Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing, medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age, in the circumstances beyond his control." *The International Covenant on Economic, Social, and Cultural Rights of 1976* Article 12, 1, and 2 define it as a fundamental right of everyone to enjoy the highest achievable standard of physical and mental health. It outlines the various steps member states are to take to achieve the full attainment of these rights. The right to health remains a difficult task to accomplish in both developing and developed countries. Access to basic life needs is challenging because poverty, unemployment, and socio-political unrest continue to be prevalent in developing countries, while in developed countries, millions of people are underinsured and uninsured. Faced with global warming and climate change caused by ecological degradation, pollution, and devastation, the world today is witnessing many health problems. These include the emergence of new diseases (COVID-19 and variant Coronavirus), disease-resistant drugs,
millions of displaced people, unemployment, hunger, drought, insecurity (violence, food, water, and housing), unfriendly environments, pollution, and degradation. Despite these issues, *The Right to Health* has been adopted for about 70 years. It has been periodically reviewed in subsequent conventions and declarations. At least 56 countries have enshrined *The Right to Health* as a section of their constitution or statutory law since its adoption by the *Universal Declaration of Human Rights in 1948*.10

*The Right to Health* is contained in Article 14.1&2 of the *Universal Declaration on Bioethics and Human Rights* (UDBHR). The declaration states that countries have a legal obligation to provide health care for their citizens without discrimination.11 It is also contained in the following international declarations: “The 1965 *International Convention on the Elimination of All Forms of Racial Discrimination: art. 5 (e) (IV)*, the 1966 *International Covenant on Economic, Social, and Cultural Rights: art. 12*, the 1979 *Convention on the Elimination of All Forms of Discrimination against Women: arts. 11 (1) (f), 12 and 14 (2) (b)*, the 1989 *Convention on the Rights of the Child: art. 24*, the 1990 *International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families: arts. 28, 43 (e) and 45 (c)*, the 2006 *Convention on the Rights of Persons with Disabilities: art. 25.*”12 The right to health is also in these constitutions and conventions: *European Union (EU) Charter of Fundamental Rights, Article 35*, and the *African Charter on Human and People's Rights, the American Convention on Human Rights, the Constitution of the Federal Republic of Nigeria Chapter II 17 3c, Constitutions of India, and Ecuador*. All have health as a right of every person, irrespective of status and state.13 The right to health is connected and related to other human rights. Moreover, health is integral to human development because good health enhances development and social interaction. *The Committee on Economic, Social and Cultural Rights (CESCR)* on 11 August
2000 in its General Comment No. 14 Article 12 No 2 reaffirms Article 25.1 of the *Universal Declaration of Human Rights of 1948*. “The right to health is closely related to and dependent upon the realization of other human rights, as contained in the *International Bill of Rights*, including the rights to food, housing, work, education, human dignity, life, non-discrimination…” The *Millennium Development Goals* (MDGs), a program of the United Nations as part of its commitment to the establishment of peace and a healthy global economy, has goals on health care. The *Sustainable Development Goals* (SDGs), known as "Global Goals," is a global call for action. It aims to "end poverty, protect the planet, and ensure that all people enjoy peace and prosperity." SDGs' third goal is "Good Health and Well-Being: ensure healthy lives and promote well-being for all ages." The SDGs' aims and third goal seem like a mirage, as violence, conflicts, poverty, and environmental degradation continues to be prevalent in the world.

Furthermore, the UNESCO *Declaration on Bioethics and Human Rights* Article 14: no. 2 states: "Taking into account that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition, progress in science and technology should advance: …" Therefore, health care policy is not only about funding and provision. It also includes the care and improvement of socio-environmental and socioeconomic factors that make people sick and need medical attention. The socio-environmental and socioeconomic factors are crucial components of health and well-being. These components include employment, a healthy environment, potable water supply, food availability, an excellent transportation system, and housing. The International health policy guideline recommends that health care is a fundamental human right and essential for socioeconomic and political development. "The social responsibilities for health
are a fundamental concern for the ethics of professional public health practices." It becomes a great concern that health care services professionals are accountable, reliable, committed, and transparent.\textsuperscript{18}

Despite its legal backing in many declarations and policies globally, the right to health faces many challenges and problems in its actualization. Today, poverty and unemployment grow deeper and deeper. Refugees and internally displaced persons are increasing because of political, social unrest, environmental scarcity, and degradation. Drought and flood continue to ravage many places; hunger and insecurity (Nigeria as an example) are increasing. The eco-system continues to collapse because of human activities, like oil spillage and gas flaring, mostly in developing countries of Africa and Asia. The central problems facing the right to health care are access and provision (obligation not to deny basic health care and an obligation to provide basic health care). These challenges affecting the right to health center on two main questions: obligation not to deny access and obligation to provide "First, what is the scope of right and responsibility to fulfill this right in relation to access and provision, second, on who does the obligation fall?"\textsuperscript{19} The dilemma makes the right to health to be “a vague and complex idea with a morally valid core, requiring the provision of international law to be grounded in philosophical and sociological understanding."\textsuperscript{20} The dilemma between provision and access to the right to health is funding health care services and provisions. For instance, "fifty million US citizens, approximately 16.3% of the total population and 18% of the non-elderly population, lack health insurance of any kind."\textsuperscript{21} The condition is worse in countries like Nigeria, where many persons lack insurance because it is still a novel idea; there is no universal coverage for unemployed persons.
Furthermore, there are not enough health care facilities and workers to care for the growing population in the country as the number of health care facilities does not correspond with the population and quality of health care services. It is appalling that some services are not available to a large percentage of the people. Industrial action by all cadre of health care providers, such as strikes and sit at work, continuously disrupt health care service.\textsuperscript{22} The situation is worse because many health care facilities in the country are located far from the people, especially the rural dwellers. Health care is difficult to access in these areas. The climax is the financial cost of health care services, which is positively outrageous. The unfriendly and unethical behaviors of some health workers make the situation more problematic and painful.\textsuperscript{23}

In addition, the quality of health care services provided by the government to its citizens is very poor. It has made the wealthy and government officials seek medical assistance abroad and flock to better private hospitals. The situation makes health care in the country a commodity sold and bought by the highest bidder. "Even where quality may be high, the perception of the service users may not correlate with the actual quality of care delivered. This may be due to the poor attitude of health workers, lack of clarity of standards and protocols, as well as inadequate implementation of these guidelines, and other regulations."\textsuperscript{24} The provision of goods and services (access and provision) depends significantly on how to specify health care entitlements. The access and provision of health care are best understood in this way; everyone has the right to access the available health care services and goods anywhere, provided the person can pay.\textsuperscript{25}

However, the right to health has many components: provision, availability, access, transparency, a healthy environment, access to clean water, and more. The right to health needs to be appropriately defined and adequately articulated. If it is inadequately defined, it will lack meaning and be challenging to implement in real-life situations.\textsuperscript{26} The provision of clean water
in many developing countries is a dream. It remains an idea and does not translate into reality.

For example, sixty-one percent (61%) of the households in Nigeria have access to a better-quality water source. The question that follows is: what happens to the remaining 39% of the population? Are they not entitled to a right to health (right to clean water since water is essential to life)? Another question that might be asked is: whose responsibility is it to provide clean water? Internally displaced persons in Nigeria lack access to clean water and many basic social amenities. Their lack of access to potable water, food, education, housing, and employment does not resonate with the provision of CESCR General Comment No. 14 Article 12. No 2, which has these as components of The Right to Health. The Right to Health cannot be realistic and obtainable without the proper protection of all other human rights. When human rights are not adequately protected, both rights to health and human dignity suffer.

The declarations and laws on the right to health created some gaps. Health, first and foremost, has both individual and communal dimensions. The declarations failed to state when the right to health is attainable. Some people argue that the right to health is impossible because there is nothing like perfect health and a perfect society. Moreover, there is no standard scale to measure the health of a given community. The right to health lacks clarity on its foundation, scope, and justification. The absence of transparency in these areas has made applying the right to health complex and problematic globally. It is captured in this statement; "the failure to provide a stronger conceptual foundation and more comprehensive theoretical exposition for the right to health linked to that foundation has complicated efforts to reach a consensus about the normative content, scope, and requirements of the right. It has also hindered efforts of some judiciaries to interpret the right." Hence, the right to health can be "understood as a merely contingent social right conferred by the states, the right to health ends up being interpreted and
implemented by legislative and executive powers, not mainly by the courts. Even when considered as an authentic right, the position of the court might be in some ways restricted because of its limited powers to require public expenditure."³⁰

Additionally, some people have misconceptions about the right to health.³¹ First, the right to health does not mean or is not the same as the right to be healthy. Some people think the government must guarantee individuals good health. Good health and healthy life are not within government power because many factors contribute to a healthy life. These factors include individual biological make-up, socio-economic condition, and personal lifestyle. The climatic, as well as genetic disorders, contribute much to a healthy life. However, “the right to health refers to the right to the enjoyment of a variety of goods, facilities, services, and conditions necessary for the realization of good health and wellness. It is why it is more accurate to describe it as the right to the highest attainable standard of physical and mental health, rather than an unconditional right to be healthy.”³² Second, the programmatic structure of the right to health as something to attain within the long term does not imply that states are not saddled with obligations, duties, and responsibilities to perform. Countries should work assiduously with their available resources to realize the right to health. They should make it achievable and an objective within the possible time. Despite limited resources to fully realize the right to health, some obligations are indispensable and need immediate attention. These actions are to guarantee the right to health in a non-discriminatory manner. It is essential to develop specific legislation and plans of action and other similar steps towards achieving this right, like human rights. Third, an unfortunate financial situation is not an excuse to absolve the country from its responsibility to achieve the right to health. Although financial constraints may make countries delay the full realization of the right to health, states cannot absolve themselves from this duty because of
financial difficulties. “States must guarantee the right to health to the maximum of their available resources, even if these are tight.” The achievement of the right to health by states over a more extended period does not mean a deficiency of the state’s responsibilities of all meaningful content. Thus, the state must ensure that the citizen's right to health is protected. These obligations are put into three categories: obligation to respect, protect, and fulfill.

First, the obligation to respect encompasses a commitment to facilitate, deliver, and promote. It demands that states should not directly or indirectly hinder or intrude with the enjoyment of the right to health. Countries are to refrain from interfering with the right to privacy, censoring, or misinterpretation of health information and limiting anyone's access to health care services and goods. Second, the duty and responsibility to protect requires states to take measures that prevent third parties from interfering with Article 12 guarantees of CESCR. It requires that countries make a law regulating the private sectors providing health care services. The law must ensure that the private sectors perform their services in conformity with the human rights standard. It should control the marketing of medical services and goods. It should ensure that privatization does not threaten availability and accessibility. Also, it should not affect acceptability and the quality of health care delivery. Third, there is an obligation to fulfill demands that member countries make regulations, budget, legal, and take other measures to achieve the right to health. Countries must develop a national health care policy that covers both the public and private sectors. The National Health Policy, Promoting the Health of Nigerians to Accelerate Socio-economic Development is an excellent example. “It should guarantee the establishment of health facilities, including immunization programs against transmittable diseases and services designed to reduce and avoid more disabilities….“
The right to health includes autonomy and freedom from non-consensual treatment, such as medical research, experimentation, and forced sterilization. It also includes freedom from torture, harsh treatment, brutality, and humiliating treatment or punishment.\(^{37}\) It has consideration for vulnerable populations, such as HIV and AIDS patients, children, and disabled persons.\(^{38}\) *The Right to Health* contains these essential elements; availability, accessibility, information, acceptability, and quality. It also includes a provision requiring non-discrimination and equal treatment.\(^{39}\) Therefore, equity, justice, and equality are integral aspects of ethics. They are crucial components of an ethical system and its principles. It becomes impossible to write any ethical or bioethical principle or declaration without reference to them in recent times.\(^{40}\) Aligned with these ethical principles is that the fundamental equality of all human beings in dignity and rights should be respected so that all humans are treated fairly and equitably.\(^{41}\) Regarding equity, justice, and equality, health care services do not resonate with the common good principle, right to health, and human dignity, because health care in most parts of the world is a commodity sold to the highest bidder.\(^{42}\)

Finally, the notion of rights in the legal sector is an entitlement. It is the beginning of controversy about the right to health in terms of finance and provision.\(^{43}\) The right to health can be understood with the words of Gustavo Gutierrez about human rights; "human rights presupposes that our society enjoys equality that does not exist."\(^{44}\) So, too is the right to health; our society presupposes the right to health that cannot be attainable in reality. Hence human dignity and the environment are not often protected by the government and the people.

**5. a.i. Human Dignity, Common Good, and Right to Health**

As stated above, human dignity and rights are strong concepts in many international and regional declarations, conventions, and constitutions. They are also strong concepts in the Catholic health
“Human dignity is the supreme value on which all human rights and duties depend and an intrinsic attribute of every human being.” However, human rights are inherent to all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or other status. These rights are “the right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work and education, and many more. Everyone is entitled to these rights without discrimination.” Human dignity and human rights are the foundation of all laws. They should not be violated by any socioeconomic and governmental system or policy from the beginning of life to its end. These are patrimonies (fundamental rights) of every human being, of any age, race, and color. It is inhuman and unethical to deny any human being these rights because human beings are rational and moral beings possessing rights and responsibilities. Humans are different from other creatures and therefore entitled to the fundamental rights that other beings do not have the right to enjoy.

The right to health is integral and connected to human dignity, human rights, and the common good. It deals with the right to life, an essential and inalienable right of every human being. It compliments human dignity and enhances humanness because everyone contributes to health care, and it should be available to all. Health is a common good because of its place in the right to life. Therefore, everyone should be given equal access to health care. “Health is a fundamental human right indispensable for the exercise of other rights.” The right to health can be achieved through many and complementary approaches. These approaches include the formulation of health acts and policies. States may use WHO programs and policies or develop theirs, like the Nigerian National Health Act of 2014 and the National Health Policy of 2016.

In addition, the common good is the most essential and fundamental objective of a decisive action of any state or society. A society is not a contractual association that separates individuals
living in it. However, a society is a relational community pursuing goods that can only be achieved in solidarity and a common interest. The common good is an essential and fundamental goal in realizing any kind of affirmative public action. Health care, understood in this context, is a means for attaining society's common good. For a community to grow and develop (socially and economically), health care is essential, and health is the engine of every society. Therefore, there is a need to promote equality among members of society in access to health care services and provisions that reduce class differences. Because health care boosts a healthy life and productivity, which helps society carry out their daily duties, it also allows people to contribute something meaningful to the common good. In the diverse pursuit of their goals, everyone, in the end, has something meaningful to contribute to the common good and welfare of the state. There is unity in diversity. This unity is the common good, achieved through various means and by different persons living in a society. Every social community is a community of persons; health and the environment are the common good of the universal community and each society. Justice demands that access to basic health care is made available to all members of society. It should, above all, be affordable.

The environment and health care are global public goods because they are shared collectively by all nations in a relational way. A country can only enjoy these goods when other countries are enjoying them. In this direction, The United Nations Development Program (UNDP) sees both environment and health as a global public good. The global nature of the environment and health is a great challenge to a national model. “The people of an individual nation share in a global public good precisely because their nation is part of a global network in which that good is present.” The common good can only flourish in a society where every member of the society views each other as mutual members equal in rights and privileges. The common good's primary
requirement is the existence of a civil society in which persons living in it see themselves as associates.\(^5\) Therefore, to deny a person or a group access to health care services is to treat them as second-class citizens. This causes chaos and damages the peaceful co-existence of the life of society. It also destroys the common good's reality, which should be accessible to everyone irrespective of location and status.\(^6\) “It is generally accepted today that the common good is best safeguarded when personal rights and duties are guaranteed. The chief concern of civil authorities must, therefore, be to ensure that these rights are recognized, respected, coordinated, defended, and promoted and that each individual is enabled to perform his/her duties more easily.”\(^7\) However, this ideal is not easily achieved in Nigeria; it is a country where power is might.

Health care forms an integral part of a properly functioning society. If citizens are free from disease, those with injuries and illnesses are treated. They live in an environment free from smog, toxins, and diseases and have access to the basic amenities that support life; they will work well to contribute to the common good. On the other hand, if people lack adequate health care services and live in a filthy and contaminated environment, they will be exposed to disease, injuries, and illnesses. They will be less productive, and the development of society will be affected or impacted. Besides, health care today can treat many injuries, cure and manage illness, and prevent many infectious diseases.\(^8\) The developments in health care and medical practice have contributed significantly to the world economy as many infectious diseases have been contained; for example, in 1979, WHO declared the eradication of smallpox.\(^9\) Humanity now enjoys better health than it did in previous years.\(^6\) The development of preventive medicine and health promotion further elevates health care as an essential part of modern societies' common
good. Health care has now taken a global dimension, hence the notion of global health (global public health).

Furthermore, health is a universal common good because the outbreak of an epidemic in a particular part of the earth or a pandemic is a threat to life across the world. One example, the outbreak of Ebola, was a severe threat to the entire world. Also, the present outbreak of Coronavirus (COVID-19) is a threat to the world as a whole. It affects the global economy and the well-being of everyone. Also, if there are no ethical guides (checks and balances) in organ procurement, wealthy patients in need of organs may exploit the poor. This makes organs commodities to buy and sell at will and promotes the exploitation of the poor.\textsuperscript{61}

The WHO's motto, \textit{``Health for All,''} brings and bolsters the notion of health as a global common good. Therefore, to achieve the WHO's motto, public health measures like social distancing (border closings and quarantines) are taken to avert the spread of infectious diseases from one region to the other. These measures are taken to protect the life of the global community from environmental and socioeconomic unrest and violence. It is necessary to provide clean water to some communities, shelter victims of natural disasters, help refugees and internally displaced persons. There is a need too for a global campaign to educate the public on good sanitary habits. Human rights are inherent parts of a worldwide or universal common good. Health is a human right; health care invariably is a global common good, which everyone should access when necessary.\textsuperscript{62} The global common good of health is fundamental because today, the world is a village, and the social life of human beings is expanding daily through technology and social media. Above all, some human rights are integral elements of the global common good, and health is one of them.\textsuperscript{63}
Furthermore, the notion of health care as a global common good is demonstrated by the socioeconomic and environmental undertones and situations surrounding health care and health care systems in socioeconomic and human development. The environment and socioeconomic structure of society are inseparable from people's health and well-being. Therefore, persons assigned with responsibility for health care services and provisions should be aware of the importance of health in human society. They must understand that healthcare providers deliver health care services to improve human society. In this regard, government authorities must ensure that social resources are not allocated to individual patients or providers on a preferential basis. However, health workers should maintain honesty, transparency, equity, and justice.\(^6\)

In line with this understanding, the very nature of the common good makes it possible for every member of the state to have the right to share and participate in the common good, according to each person’s needs and situations. Therefore, governments must promote the common good of all without differential treatment to a city or group. Health care based on this foundation is a common good because everyone has the right to share in it.\(^5\) From a historical perspective, the common good is understood as the good of individuals in relation to societal good or the good of individuals in connection with the societal good.\(^6\) Because, “as human beings, we are all valuable social entities whereby, through the force of morality, through implicitly forged covenants among us as individuals and between our governments and us, and through the natural rights we maintain as individuals and those we collectively surrender to the common good, it has been determined by nature, natural laws, and natural rights that human beings have the right, not the privilege, to health care access.”\(^6\) It is a common good, first and foremost, for respect to the human person and the dignities that are inalienable rights of the human person. The state should be duty-bound to respect the fundamental rights of each member of society.\(^6\)
The relationship among the right to health, human rights, and the common good is intertwined and inseparable. Hence, the right to access adequate health care services is a fundamental right of every human being. It is a right that originates from the sacredness of human life and human dignity, which is integral to every person created in the image and likeness of God. This statement strikes at “appalling lack of access to health care for millions of uninsured and underinsured Americans” and Nigeria's health inequalities. The inequality in access to health care in these countries, among others, is a violation of the right to health as a fundamental human right and an affront to the common good, as well as human dignity. In these nations, access to health care is based on insurance status and socioeconomic status. The common good demand is highly dependent on the socioeconomic situation of every historical epoch. It is linked to respect for the human person, human dignity, and the integrated development of human beings and their fundamental rights. These demands deal with the following: peace and security of the state, the organization of the political structure of the state (power), a functional and corruption-free legal and judicial system, and environmental protection. Common good also encompasses providing necessary amenities, which are fundamental human rights—freedom of worship and communication. It includes providing work and respect for socio-cultural differences, food, education, transportation, and proper health care. These factors are difficult to achieve in Nigeria, where winning elections is placed above human dignity and life, as elections are marred by violence, militarization, and vote-buying.

The quest and pursuit of the common good in the state should include health care meant to provide a healthy and vibrant society free from illness. The society should be concerned with its citizens' health and well-being by helping the citizens attain a good living-condition. The socioeconomic and political development of a state is intertwined with healthy living conditions.
is the common good that fosters this development in the state. Therefore, the development of the human person is an obligation and responsibility of the state. It can only be achieved with the common good, through healthy living conditions, like good health care facilities, water, housing, and education. The government should provide a safe environment that promotes a happy and healthy life, such as a suitable information system, the right to establish a family, and transportation, among other things. This strikes at the dilapidating nature of Nigerian infrastructure - roads, electricity, hospitals, and schools.

The common good also requires peace and harmony, stability, an orderly society, and security. Security should be an essential objective of the government because the absence of peace breeds violence, chaos, and war. This strikes the appalling insecurity in Nigeria, where insurgency, Boko Haram, banditry, and armed robbery take tolls on human lives daily. The common good is preoccupied with the improvement of human beings. Hence the right to health is ordered towards the well-being of persons and the promotion of human dignity. As the order of things is made for the welfare and promotion of the human person, human persons are not made to promote things. This order is built on truth, justice, equity, and transparency to promote human dignity.

The relationship between the right to health and the common good should be understood as a mutually exclusive relationship. The government, carrying out its responsibilities in maintaining the common good, has a unique role in protecting citizens’ rights to adequate health care and respect for human dignity. As a matter of duty and responsibility, the government on the societal level is called to provide and make available good health care facilities. “Health care is so important for the full realization of human dignity and so necessary for the proper development of life, which is the fundamental right of every human being.” Because human
life is the foundation of human dignity, and only the living possesses these rights, this captures the Igbo understanding of the common good stated in chapter one. Therefore, health is a common good, and the common good is integral to human dignity.

5. a. ii. Common Good Connects Individuals with Society

Human beings are, by nature, economic, political, and social beings. It is, therefore, reasonable that human beings naturally are consistently in need of social life. Social life is not something accidental to human beings; instead, it is natural, integral, and intimate to the human person. The human person, therefore, is the focal and uniting point of all human actions and policies. A society is a group of individuals joined together gradually by the principle of unity that surpasses each of them. “As an assembly that is at once visible and spiritual, a society endures through time: it gathers up the past and prepares the future…[an individual] rightly owes loyalty to the community of which he is part and respects those in authority who have charge of the common good.” A person lives and works within a social community of people; this social life is the sign that characterizes human habits, traits and, in a sense, constitutes his essence and humanness. The interaction and relationship in the society bring about a more profound and enduring meaning to the individuals who make up the society. The interactions and relationships are only possible in a community of persons. The social and interactive nature of human beings does not automatically lead to communion among them or self-giving. Sometimes, the spirit of selfishness and egotism makes one cultivate social habits that lead him/her to remain within his/her ability and locality to dominate others. It is in pursuit of good and out of love and respect for others' dignity that people come together. The aim of their coming together is to attain a common good that binds them together. It is a good that promotes the well-being of all the members of the society and the environment. However, the social nature of human beings is not
uniform; instead, it is exercised in various dimensions. The common good is subject to dynamic social heterogeneity and diversity. The diverse parts of society come together to form a unified and harmonious entity within autonomous individuals with different interests. Therefore, “the pursuit of the common good must be based on the respect for the sanctity and dignity of life and the equality of all people.” The environment that provides essential elements for human development must be respected.

An individual living in a society is part of that society; his/her full potentials find meaning in relationships and interactions between each person and other forms of life; this is what makes up the society and environment (eco-system). The society acknowledges the individual good. Besides individual good, there is also a good that connects the individual to the society; this good is called the common good. The common good is that good shared by every member of the society, individuals, families, and social groups that make up a society. It is suitable for the well-being of the people of the social community. “It requires the social well-being and development of the group itself.” The desire for the common good and working towards its achievement is a requirement for justice and charity. The human interrelatedness, interconnectedness, and interdependence in the world bring to fullness the common good's role and importance. It binds all human beings together and brings about the global common good.

The common good is “the sum total of social conditions which allow people, either as a group or as individuals, to reach their fulfillment more fully and more easily.” It is an integral aspect of any society. “For the common good, since it is intimately bound up with human nature, can never exist fully and completely unless the human person is taken into account at all times. Thus, attention must be paid to the basic nature of the common good, and what it is that brings it about.” Because it connects individuals and society, individuals are not mere consumers living
for personal and self-centered motives. However, they are people motivated and concerned for the good of the state, which is the common good. The common good is the bedrock of every society, which is to maintain and remain in service of the human person. The human person cannot attain full human- hood unless he/she lives with others and for others. The common good is multidimensional. It consists of political, social, economic, religious, educational, and environmental aspects. Each of these dimensions contributes to the unity that binds the individual, the common good, and the society together. It emphasizes the inseparable bond between every individual and the environment. The well-being of an individual flourishes best in a vibrant and healthy social society. The common good has two indispensable theories: “1. It provides a vision of wholeness and speaks to the interconnectedness of life. 2. The common good is the ethical precept that guides individual behavior on behalf of the community.”

According to Gary Gunderson and James Cochrane, “The common good requires that individual interest find meaning amid generalized interests.”

The Catholic Social Teaching uses three principles to explain the connection among the individual, the common good, and the society in a relationship of participation, solidarity, and the universal dimension of goods. These principles begin from particular (national) to universal (global), showing how the entire universe is interrelated and interconnected. The association of persons in a society contributes to the community's culture, economic, political, religious education, and social life in which the persons live. Participation becomes an obligation that must be consciously carried out as a duty and tradition by all involved because of the society's common good. “As a duty, participation forbids persons from concentrating on their individual or family well-being and ignoring the growth and well-being of the community. Participation speaks to the dynamic relationship between part and whole: the whole does not consume the part
because it is a whole only through every part's active involvement. The part does not fulfill itself until [it] participates in the whole." Participation protects and secures the common good through each person's active involvement based on individual capacities.

Furthermore, the *Fundamental Human Rights of 1948* encourages active involvement in the cultural and scientific life of the society. “Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts, and to share in scientific advancement and its benefits.” Participation in societal activities is not just one of the primary desires and dreams realized without restriction and free involvement of every person. It is an essential and necessary tool for all democratic systems that promote security, health, economy, and the flourishing of the governmental structure of the state. It also supports the well-being of the citizens. Hence, democratic government is defined as exercising governmental power and functions by elected few for the people and on their behalf. It is undeniable that every democratic society must be participative and all involving. The citizens are well informed, allowed to air their views, and participate in the governance of the state. A genuinely democratic society respects and upholds the rule of law, respects the dignity of the human person, respects the common good principle and fundamental human rights. It provides an atmosphere for the advancement of the citizens in education, health, economic activities, and formation in good ideas, religious and moral. Individual members of society are provided with structures that promote and encourage participation and collective responsibility in state affairs, such as good health care and education policies. These structures are essential in developing them to be good and responsible citizens.

This statement strikes at Nigerian democracy, where elections and political campaigns have become theaters of war and bloodbaths with the citizens sacrificed on the altar of electoral and political violence.
Solidarity is another principle of Catholic Social Teaching that shows the relationship between the individual, the common good, and society. Solidarity is a social principle that advocates collaboration and cooperation among the members of the state. The principle of solidarity is not exclusively Catholic in thought. It is also an article of the *UNESCO Declaration on Bioethics and Human Rights* (*UDBHR* article 13). It states, “Solidarity among human beings and international cooperation to the end is to be encouraged.”\(^{100}\) The principle of solidarity encourages each person in the state to cooperate in various social activities to achieve or attain a common goal.

Solidarity is a link that connects people to participate in the socio-economic, socio-political, and socio-religious activities of the state. Relationships and collaboration in the modern world are inevitable since science and technology have made the world a community. Everyone shares and contributes to what the world is today with all its advancements. Therefore, solidarity is accepted as an ethical theory that promotes unity and peace in human society. Suppose the concept of solidarity is understood as correlation, cooperation, interdependence, and interrelatedness. In that case, it resonates with the ethical principles of virtuous acts. It is not the shedding of crocodile tears and the mere feeling of people's pain, sympathy, and agony. It is a strong passion and readiness to actively participate in helping and committing oneself to the common good, to help lessen the misery and pain of the weak for the good of the society because every person is responsible for all in society.\(^{101}\) The practice of solidarity within each society becomes true when its members acknowledge the joy, sorrow, happiness, and pain of the other members. They respect each other as human persons and share their goods and services. The rich, seeing the pains and sorrows of the poor from the abundance of their resources, help the most impoverished people. The poor should also contribute their quota for the common good, no matter how small it
might be. The middle class should not be self-centered but also respect the common good and contribute to its growth. Nigerian democracy lacks this because it has widened the gap between the rich and the poor and divided the country along the borderlines of ethnicity and religion. It is evident in the gap between elected officers’ salaries and civil servants, as well as the high incidence of insurgency, banditry, kidnapping, and armed robbery, which has made life difficult and unpleasant for the populace.

The principle of the universal dimension of goods promotes the relationship and interrelatedness of the global common good. Article 24 of the UNESCO declaration on Bioethics and Human Rights articulates this principle. It encourages cooperation between states. The principle can only be possibly achieved on a global level when states share resources. The Catholic Social Teaching brought this global common good to a concrete reality by placing the earth as a common heritage of all people worldwide. The world and all within it are made for everyone by God. He wills that created things should be equitably shared by human beings in the spirit of justice and charity. The Laudato Si highlights it by calling the earth our common home, a mother, and a sister. This notion is not lacking in African ecological ethics. For the Igbo, "the earth-ala remains the nearest and dearest, maintained to be a merciful mother … the understanding of Africa's earth –ala is the foundation for ethics, religion, and justice." Therefore, the environment is the pivotal substance of the lives of humans and other beings.

The health of the environment in one part of the world is connected to other parts of the world in various degrees and ways. For instance, “carbon-dioxide emission from the burning of fossils in developing or newly industrialized countries as well as the cutting of trees in the rain forests of tropical regions of developing countries both seriously threaten to change the climate of the entire globe.” The bush burning in California and the Amazon is a threat to global oxygen. The
environment is a determinant of health. Therefore, health care and the environment are connected; they are global public goods. Health today is also considered a global common good because the emergence of epidemics like SARS, ZIKA, Ebola, HIV/AIDS, and COVID-19 are excellent examples of the interconnection between health and the common good. These epidemics and pandemics show how diseases transmit in the global community. Health is also positively linked to security and socio-economic development because epidemics and pandemics are not only threats to human health; they also hurt economic and socio-political life. The outbreak of COVID-19 is an excellent example. There is anxiety, fear, and worry about biosecurity and micro-organisms that can be used as bioweapons. Therefore, the global dimension of the common good includes health, environment, and security. These three elements link all human beings directly or indirectly together and connect them to the environment.

5. B. Common Good, Non-Violence and Environment

Human history has recorded many forms of violence at different times and in many places. Violence is caused by various reasons, such as scarcity of renewable resources and ecological degradation (eco-violence). It also takes different forms like war, terrorism, riots, socio-civil unrest, robbery, and domestic violence. Violence of any type or form (structural or personal) is a threat to human life and health. Hence, it is a public health menace because many lives and properties are maimed, lost, and destroyed during violent-conflicts. Human beings are the primary cause of violence because of disagreement, thirst for power, greed, and selfishness. Amidst all forms of violence, the environment suffers to some degree the effects. Some examples are the desolation caused by the atomic bomb on Hiroshima and Nagasaki in 1945, the Gulf War, and wildfires in the Amazon in 2019. To prevent war, conflict, terrorism, and human rights violations that are a threat to global life, Pope Benedict XVI declares, “If you want to cultivate
peace, protect the environment,” because respect for the environment is crucial for the peaceful co-existence of humanity.\textsuperscript{112} This statement of Pope Benedict XVI captures the topic of this work because violence to the environment affects human dignity. Public health ethics based on social justice is a functional tool to resolve it since public health ethics is concerned with social justice, the environment, and health promotion.

On the other hand, the continuous devastation of the natural environment by industrial development and mineral exploration promotes conflicts, terrorism, and war in the world. The destruction of people’s means of livelihood causes violence. For instance, life in most African countries revolves around the land; when the land is contaminated, polluted, overpopulated, or access to it is limited or denied, it negatively affects the quality of people’s lives. When land scarcity is tied to other preexisting problems like ethnoreligious, political, insecurity, deteriorating infrastructure, people migrate or take arms against the presumed enemy.\textsuperscript{113}

Therefore, respect for physical ecology is respect for peace and human dignity.\textsuperscript{114}

Human behavior towards the environment has triggered violence and scarcity in different parts of the world. It has affected the lives of both wealthy and emerging countries, the rich and the poor. It is making life miserable and difficult for all created things. “[Human beings], especially in our time, have without hesitation, devastated wooded plains and valleys, polluted waters, disfigured the earth’s habitat, made the air un-breathable, disturbed the hydrogeological and atmospheric systems, and turned luxuriant areas into deserts and undertaken forms of unrestrained industrialization, degrading the flowerbed which is the earth, our dwelling place.”\textsuperscript{115}

These acts are the ecological crises experienced in the world today, which are affecting human beings and other creatures. These environmental crises include rising sea levels, the dryness of freshwater, rivers, and lakes attributed to global warming and climate change. The effects of
these ecological crises are the emergence of new diseases, epidemics, and disease-resistant
drugs. These environmental crises are the primary cause of the high migration rate, mortality and
morbidity, food and water scarcity, violence, wars, and species destruction.

“The changes in climate, to which animals and plants cannot adapt, lead them to migrate [or die].
It affects the livelihood of the poor, who are forced to leave their homes, with great uncertainty
for their future and that of their children.”116 It becomes self-evident that non-violence
encompasses human beings and other forms of life because harm to the environment harms
human persons. Whatever destroys the environment affects or destroys human beings, directly or
indirectly. As Vietnamese monk, Thich Nhat Hanh said, “We should not harm ourselves; we
should not harm nature…. Human beings and nature are inseparable.”117 The degradation,
pollution, and exploitation of the environment are imminent dangers and hazardous to human
health and nature.118

Furthermore, the abuse of harmony and civic friendship among humans harms the
environment.119 Human beings are home to their fellow human beings and other forms of life
because all things coexist and correlate. “Each of us, as a dweller in the wider eco-system, is in
this respect an environment for our fellow human beings. Human beings are an environment.”120
It implies that an optimum function of the environment needs the presence of other forms of life.
It also needs rain and sunlight because they contribute to the eco-system and human beings' 
beauty and health. It becomes pertinent that human beings must consciously respect nature for
peaceful co-existence in human society because the destruction of nature and its arbitrary and
selfish use causes chaos and anarchy.121 The crisis in the Niger Delta region of Nigeria is an
excellent example- the Ogoni crisis is caused by oil spillage and gas flaring. It also shows that
the bond between peace with creation and peace among human beings cannot be
Therefore, non-violence to both human beings and the environment is a *sine qua non* for conviviality on earth. “It is a matter of common and universal duty, that of respecting a common good destined for all, by preventing anyone from using with impunity the different categories of beings, whether living or inanimate….“

Ecological issues are focal points of discussion both at local and international levels, religious and in non-religious bodies. Many conferences were held and more likely planned to tackle the world's ecological crisis to save human life. As the natural ecology is threatened and destroyed, human health and life are threatened and destroyed. In 1972, with the *Stockholm Conference*, the Magna Carta of the ecological discussion by international communities organized by the United Nations draws attention to humankind's dangerous and cruel attitude to nature and its effects on human beings' health and life. A call for eco-friendly and non-violence to human ecology was made to safeguard the eco-system and to protect human life and other creatures, and leave a convivial environment devoid of toxins and pollution for future generations. The conference reminds us that the environment has an intergenerational connection; Pope Francis highlighted these ideas in *Laudato Si’*.

Regarding the dangers that human beings are presently facing, Patriarch Bartholomew observes that respect for human beings should not be separated from environmental respect as an image of God. Because everything in the world is integrated and interrelated, he further said that the cause of the present ecological crisis might be traced to a poor understanding of the word justice. According to him, justice implies fairness to everything because justice contains every virtue. “Justice extends even beyond one’s fellow beings to the entire creation. The burning of forests, the criminal exploitation of natural resources, the gap between the wealthy north and the needy south all constitute expressions of transgressing the virtue of justice.” The transgression of
justice is mirrored in ecological violence. The structural causes of global economic problems need to be reduced by correcting policies that cause ecological problems. They are to be replaced with eco-friendly policies that guarantee respect and non-violence to human and physical ecology. It is essential to realize that there exists a strong relationship between human beings and the eco-system, morally, socially, and religiously. It is uniquely captured in Igbo ideology; thus, "Ala is known as the mother of all things. She is also perceived as the guardian of ethical behavior." Ala as a mother and goddess in Igbo culture shows a relationship between humans and other creatures. Hence, ala has a prominent place among the Igbo because it is in the beauty of creation that human beings appreciate and understand their existence and creator. It is also the source of their ethics- Omenala, which means coming from the land or given by earth's mother. Again, Pope Francis understands land as more than property to some ethnicities. It is for them a gift from God and their ancestors who rest there. It is holy and a means of communication between them and their ancestors.

Physical ecology is not just a raw material that should be used indiscriminately or at one’s whim. The physical ecology has its dignity and sanctity which human beings should respect. The goodness of ecology to humanity cannot be overemphasized. Human beings are to listen to the words or language of ecology and respond accordingly. The ecological problems of the world are functional languages or statements of the eco-system. They are telling human beings to rethink and change their attitude towards nature to save humans and other forms. The eco-system is in pain. It is groaning because of the harsh and violent treatment it receives from human beings every day. The crying and groaning of nature call on humans to change their attitude to save it from further harm and destruction.
The non-violent approach to the ecological crisis in the world is another way of protecting the natural integrity of the natural environment. Human beings should not harm or violent the ecosystem, and public health ethical approach serves as a practical way of reducing environmental crisis. The eco-system’s deplorable condition and the entire earth show how cruel and violent human beings are to the eco-system and natural world. This cruel and violent human attitude shows itself in climate change and global warming, famine, hunger, disease, war, and violence. Human beings cannot ignore or remain blind to weather changes and their adverse effects on the health of humanity and other living beings. The reality of global warming, climate change, desertification, and the deplorable agricultural land condition are signs of the eco-system’s deplorable condition. The deforestation of tropical forests worldwide (wildfire and gas and oil flaring), the pollution of water bodies of the world with industrial waste all show the deteriorating conditions of the eco-system and our physical environment. It is evident in the number of “environmental refugees” who fled their ancestral homes and are now forced into hardship, displacement, and uncertainties about their livelihood. It has increased the number of violent-conflicts in many nations, such as Nigeria, Morocco, and Papua New Guinea. The protection of human ecology becomes crucial because it “forcefully reaffirms the inviolability of human life at every stage and in every condition. The dignity of each person and the unique mission of the family is where one is trained in the love of neighbor and respect of nature.” It implies that violence to the environment is violence to human dignity.

5. b. i. Connections between Individual and Public Health

The relationship between the individual and public health has been controversial for ages. It is evident in the Hippocratic era when some religious traditions proposed suppressing individual health benefits to protect the broader community. Quarantine, isolation, border control, and
social distancing are public health measures used in ancient and present times to control disease outbreaks like SARS, Ebola, and Coronavirus (COVID-19). At times, the potential good of an individual patient comes at the mercy of the public good and policies.\textsuperscript{135} Public health policies are sometimes formulated without consideration of their effects on human rights and civil liberties. The inability to do so may cause chaos and ineffective implementation.\textsuperscript{136} The historical use of quarantine in a public health emergency emanated from the idea of a contract. When individuals agree to forgo some fundamental rights and liberties to prevent significant harm for the good of the broader community, the agreement is made between three parties: individuals, the government, and other members of society.\textsuperscript{137} “Judeo-Christian religious tradition and many other religious codes of ethics will occasionally require the physician to refrain from benefiting a patient if the patient’s benefit will produce great injustice to others.”\textsuperscript{138} In developing plans for an outbreak of a pandemic or epidemics, measures should include balancing the possible conflict between individual interests and social interests.\textsuperscript{139} It means that extreme positions should not be encouraged—the total protection of public health without considering individuals' fundamental and civil rights. Public health measures like social distancing, border closures, and isolation do not mean imprisonment and violation of civil rights and privileges. Individuals' fundamental rights are not neglected. They are protected as essential businesses continue to function, people work from home, and large crowds are avoided. “The equitable distribution of benefits and burdens would demonstrate an appropriate balance of public health and individual rights, the mark of desirable public health policy.”\textsuperscript{140} During an infectious disease epidemic or pandemic, public health measures may impose some restrictions. The restrictions may infringe on individuals’ fundamental and civic rights to protect a broader community's health. Nevertheless, efforts to protect individual rights should be part of
any public health policy formulation. The measures that limit individual rights and civil liberties must be necessary, reasonable, proportional, equitable, and non-discriminatory. They are to resonate with the nature of the disease and international and local guidelines for public health epidemics and disease control measures.\textsuperscript{141} The Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights Clauses iv 25 and vi 29 and vii 33 and 34 outline the public health and security measures applicable during emergency health and security threats. Public health and security measures may be invoked to limit certain individual rights of the population to manage severe health and security threats.\textsuperscript{142} The closure of non-essential businesses in many countries during COVID-19 in 2020 is an excellent example because individuals owe some responsibilities to the society in which they live. As remarked by J.S Mbiti, “the individual does not and cannot exist alone except corporately.”\textsuperscript{143} This implies that an individual lives both for himself/herself and for the society. This expresses the African relational autonomy against the individualist autonomy of the west. The African relational autonomy resonates with the Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights Clauses stated above and Article 29: 1&2 of the Universal Declaration of Human Rights.

The Universal Declaration of Human Rights Article 29:1&2 states the duties and responsibilities individuals owe their community. Everyone has obligations to society because it is within the society that a person develops his full potential and ability. “In the exercise of his rights and freedoms, everyone shall be subjected only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.”\textsuperscript{144} Again, the International Bill of Human Rights, the International
Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Political Rights, and the additional two Optional Protocols acknowledged that some human rights are integral to human dignity. These rights are not to be restricted or infringed upon even during public health emergencies. These rights are “the rights to life, to freedom from torture, to freedom from enslavement or servitude, to protection from imprisonment for debt, to freedom from retroactive penal laws, to recognition as a person before the law, and freedom of thought, conscience, and religion.” Therefore, during pandemic and security challenges, public health measures must respect these people's inherent rights, integral to their humanness and dignity. Civil and political rights and liberties may be limited and infringed when it is compulsory for a larger society's good and interest. These rights and liberties are “the right to liberty and security of person; freedom from arbitrary arrest, detention or exile; freedom from movement; freedom from arbitrary interference with privacy, family, home and correspondence, the right to peaceful assembly and association; and freedom of opinion and expression, including the right to seek, receive and impart information.” During a public health emergency, minor rights may be infringed on for society’s interest if there are no other alternatives.

An example is school cancellation during poor weather for the safety of the children and teachers. Furthermore, the principle of distributive justice demands that public health should not place heavy burdens and undue responsibilities on a particular segment of society. Still, it should put more emphasis on the most vulnerable population, the poor, and those who are liable to discrimination and isolation based on ethnicity, geographical location, social, religion, economic status, and other social status. It is evident that, in emergencies, the government may use some measures that infringe on the civil rights and human rights of the individual as a
precautionary measure—for instance, the use of curfew in times of social unrest and civil disturbances.

The connection between the individual and public health has a triple dimension, which involves the government, population, and individuals, especially when the population’s health and an individual’s freedom and rights conflict. The government must handle public health measures necessary for security and the prevention of infection.\textsuperscript{149} It is the government's single duty to formulate public health policies and make socio-economic policies like taxation and expenditure of public funds, e.g., palliative funds given out by various state governments during the COVID-19 pandemic. The tension between public health and the individual creates a problem in society; it challenges the government's ability to maintain peace and health. The government and stakeholders must formulate policies for the maintenance of peace and a healthy environment. It rests on the nature of the measure taken, the situation of individuals directly affected by it, the time, and the nature of the risks involved by applying or not applying a specific measure.\textsuperscript{150} Moreover, “public health programs are public goods that cannot be optimally provided if left to individuals or small groups.”\textsuperscript{151}

Public health gives considerable attention to population health. “Population health is used to refer to the state of health of the members of a certain population.”\textsuperscript{152} It originated from the development of sanitary methods for the prevention of infectious diseases. It expanded in the 20th century to include environmental health to maintain the physical, mental, and social health of the society.\textsuperscript{153} Its function provides health promotion, disease prevention, epidemiological data collection, population surveillance, and other empirical quantitative assessment forms. It also concentrates on the complex interaction of biological, behavioral, social, and environmental factors in developing an effective intervention. Public health is centered on understanding and
reducing diseases and disabilities in the society and interaction among diverse professionals.\textsuperscript{154} Public health in the present era has a multidimensional approach to health issues. By its operational methods, public health requires some interference with individuals’ social life and social practices. It may sometimes move into the private life of individuals because health has both individual and public dimensions. Some public health measures affect individual rights and civil liberties because they are abrupt, coercive, and forceful. These force public health officials to continue to face these problems of “narrow and broad conceptions of health, individual versus public goods, and efficiency versus equality. This diverse concern about the ends of public health can be used to illustrate the peculiar complexity of public health ethics and policy.”\textsuperscript{155} Because public health is a specialized branch of health care service with population health as its primary task, public health policies are often taken at the expense of individual rights and liberty. It creates tension between the rights and liberty of the individual and the needs of the society. “Public health is unique because dilemmas between individuals and the community arise in other contexts where public and private interests interface.” It is not exceptional or uncommon that public health does not follow ethical guidelines and principles of clinical medicine; hence public health ethical principles regulate public health excesses.\textsuperscript{156} The resistance between public health and individual health is evident in applying the following public health measures: immunization, quarantine and isolation, border control, resource management, and screening programs. Immunization is the most effective public health measure for containing and reducing infectious diseases in human history, based on public health records. Also, quarantine and isolation are other public health measures used in combating infectious diseases. Biblically, lepers and individuals with skin diseases are quarantined to curtail disease spread (Lev13:45). The limitation and infringement on civil rights and liberties (quarantine,
isolation, and social distance) are the most common public health measures to combat infectious diseases and security crises. In applying these public health measures, caution must be exercised, and a comprehensive study of viral transmission patterns considered. It is also essential to understand the sensitivity of circumstances and the risk to cohabitants. Additionally, there is a need for legal information because issues affecting individual rights and liberty in public health measures are always ethically dilemmatic and challenging. For example, should immunization be made mandatory by law for the sake of the public good, or are individuals at liberty to refuse it? The issue of mass immunization always creates ethical dilemmas between individuals and public health. “The roots of the problem with coercion lie quite deep, in the natures of mass immunization and dissension; mass immunization programs are very complex affairs that invite sincere and thoughtful discussion.” The society needs accurate information and education about any public health measure that conflicts with their fundamental human and civil rights. Education and information are crucial elements required to promote any public health measure for a positive result. Individuals in society need accurate information about the benefits and risks of the disease and the intended goal of any public health measure. It allows individuals to make decisions and offer their informed consent.

It is worth noting that there is a consensus amid the tension between individual and public health, which is the distinctive feature of public health ethics. Public health, applying the principle of human dignity to protect and promote population health, must, at the same time, respect the autonomy and dignity of individuals and avoid costs of every kind, which range from physical to emotional harm. The prevention of contagious diseases and health promotion is becoming essential for public health care policies and legislation globally and locally. The development is comparable with the fast-growing novel scientific breakthroughs in genetics and information
technologies, which have improved human health and well-being in recent times. Therefore, it is imperative and a matter of consistency to apply human rights principles applied to genetics and other technological innovations to the fast-growing field of public health, especially in the areas of prevention and health promotion. It becomes crucial that in formulating public health policies and laws, human dignity should be given a prime place in the decision-making process because human dignity has a prime position in health-care policy formulation. It is the foundation of human rights. Public health and human rights often share patrimony and harmonious existence. Human rights promotion is the most protective way of preventing diseases and promoting healthy life, solidarity, cooperation, social responsibility, and peace in society. Above all, public health and human rights objectives are made to protect the individuals in society. They also encourage peaceful co-existence and promote cooperation and solidarity and a shared vision for the good and safety of society, thereby protecting its health and socio-economic development.

However, “policy should be based on the best available scientific evidence, using generally accepted criteria for evaluating the quality and implications of the evidence.” Scientific assessment of risk should be considered in decision-making in public health issues. The socio-cultural background (religious and traditional life) and the perception of risk in a health situation are essential factors that need consideration. These factors influence people’s understanding of disease and treatment and their acceptance of risk factors of the disease and public health measures. Two areas need special attention in public health matters, the facts about the cause of the diseases and the efficacy of the treatment or intervention. It is unethical to apply public health measures that infringe on civil rights with little or no benefit. For instance, some public health policies and measures are often inadequate, vague, and contestable. “[Public health
policies and measures] may not always reveal which policy would be the most effective. However, poor evidence should not be used automatically as a reason for doing nothing because this, too, can have negative consequences on the health of the people.”

In formulating public health measures and policies, facts about the cause of the disease should be sufficient and scientifically verified. The verification must state the connection between the proposed risk factor and the disease before policies and measures are formulated. It involves using available and updated data to produce the best possible result, among other uncertain results and experimentations. On the other hand, evidence about the efficacy and effectiveness of the interventions should have enough scientific proof to show that the health policy and different methods for which the policies are planned are geared towards health promotion. Furthermore, the measure also can reduce disease burden, illness, and possible harm. An additional question will be if an intervention that has been scientifically verified will produce similar degrees of effectiveness? “This has been called the ‘does it work?’ question.”

Another consideration is the proportionality of the policy that has been considered adequate; do its potential public health benefits outweigh the infringed civil rights and liberties? “For instance, the policy may breach autonomy or privacy and have undesirable consequences. All of the positive features and benefits must be balanced against negative features and effects.”

When public health actions, practices, and policies infringe on the civil rights and liberties of the people or a given population, it is essential to explain and justify the reasons behind the infringement. The explanation and justification of the policy should show that it justifies all the regulations regarding and governing public health policy that infringes on people’s rights and liberties in a pluralistic democratic society. It implies that the policy should respect human
dignity and treat everyone in that society equally and with respect. It is also essential to state that public health policy should be transparent. Transparency, in this case, will create an atmosphere of trust and accountability.\textsuperscript{172} In recent times, public health has been charged with two fundamental responsibilities: protecting and promoting population health and promoting and protecting human rights, and protecting and promoting environmental sustainability. Human and civil rights promotion and protection are highly connected to promoting and protecting people's health. In conclusion, it is well to protect public health by respecting human rights and civil rights and not with coercion and force. It is bearing in mind that the protection and promotion of human rights and civil rights will promote and protect public health policies.\textsuperscript{173}

5. b.ii. Non-Violence as a Health and Environmental Concern

It is a fact that modern technologies used in societal development come with irreversible toxins and pollution harmful to human health and the environment. This is evident in the smoke in our cities, chemicals in our water, land, and food, eroded farmland blowing in the wind, the loss of tropical forests, and a poor toxic waste disposal system. All of these are a threat to the health of industrial workers and farmers, as well as the entire global community.\textsuperscript{174} For instance, the tropical rainforest zone in Bougainville in Papua New Guinea (PNG) is polluted by copper mining as rivers are filled with residues, farmlands destroyed, fish and other freshwater creatures killed. The rivers and seas are contaminated with heavy metallic substances. The tailing spreading threatens rural dwellers' lives, as their livelihood source has been contaminated with residues from copper mining.\textsuperscript{175} These pose many health risks to the people and the environment, both now and in the future. Human beings should reduce using hazardous and pollutant materials to control and prevent further pollution and contamination of the eco-system. It will help to reduce the ecological disaster we face in the world. Unfortunately, these new technologies' long-
term adverse health effects on the environment are sometimes not considered before planning, development, and application.\textsuperscript{176} Environmental violence is highly attributed to technological and scientific developments with short-sighted economic and political policies. It results from economic selfishness and greed. This problem may be reduced by ensuring that economic and developmental strategies must include environmental and human health and safety. Scientific and technological development must also consider ecological health and the damages that go with it in human society as part of the planning strategies and the expenses incurred.\textsuperscript{177}

Any act of violence and destruction of the environment affects human health and other living creatures. Instances of violence that damage the environment include the use of biological and chemical weapons in war. “In 1995, the Japanese religious group \textit{Anum Shinrikyo} released sarin gas in the Tokyo subway system, using the natural environment's contamination as a weapon. Terrorists could also release biological agents into a city water supply or detonate a radioactive dirty bomb-making an area uninhabitable for humans.”\textsuperscript{178} The testing of an atmospheric nuclear weapon by the United States has caused many health hazards like cancer, thyroid, and congenital disabilities in places like Shoshone, Ute, Navajo, Hopi, Paiute, Havasupai, Hualapai, and other communities in the downwind area. The testing of a nuclear bomb by India and Pakistan created health problems for some Indian villagers. Reports show that some complained of radiation sickness like vomiting, nosebleeds, skin and eye irritation, and other related symptoms.

“The burial of nuclear waste and the testing of nuclear and conventional weapons often go unrecognized as violent acts. However, the fallout from nuclear tests, the incineration of chemical weapons materials, radiation released in the environment from nuclear waste in heavily militarized regions pose profoundly important and sometimes intractable problems.”\textsuperscript{179} The most extreme forms of environmental violence globally today are the violence of nuclear waste and
militarized landscapes. Unfortunately, most people do not notice these environmental violence forms, but their hazards are complicated and dangerous.\textsuperscript{180} These types of ecological violence have many health implications, both for humans and other forms of life. In the spirit of good health, a healthy environment and atmosphere ought to be free of toxic waste and any form of industrial waste. When present, these toxins in the environment and atmosphere make human beings more vulnerable to diseases and infections, increasing mortality and morbidity rates. “Toxic chemicals could possibly damage the proteins and enzymes involved in the separation of chromosomes at the point when the sperm or the eggs are formed….” The result of such damage in the fertilization process will be the birth of a Down syndrome child.\textsuperscript{181} A large land area in northern Kuwait and southern Iraq was contaminated by the depleted uranium used by the British and U.S armed forces during the two wars with Iraq. Also, the U.S army used chemical defoliants in the Vietnam War. These may have long-lasting health effects on both the people and the environment.\textsuperscript{182}

Creating a non-violent environment for a healthy life for humans and other creatures makes it important to respect and protect the environment. The protection and respect of the environment have become essential for the peaceful and healthy coexistence of human beings.\textsuperscript{183} The degradation and exploitation of the environment will give rise to socio-economic, socio-political unrest, disease, and illness. It is a fact that the destruction, pollution, and contamination of rivers, seas, and land, which are people’s sources of livelihood, cause war and social unrest (eco-violence). There is a connection between human dignity and the environment because any act of violence affects human dignity and the environment. The destruction of a people’s source of employment violates the human right to work, which says: “Everyone has the right to work, to a free choice of employment, to just and favorable conditions of work, and the protection from
unemployment.”¹⁸⁴ This strikes at the effect of mining in Bougainvillea. It has affected the people's livelihood because of the reduction in agricultural land. In the face of this danger, Boge Volk wrote, “Our land is being polluted; our water is being polluted, the air we breathe[e] is being polluted with dangerous chemicals that are slowly killing us and destroying our land for future generations. Better that we die fighting than to be slowly poisoned.”¹⁸⁵

Additionally, human beings are the dust of the earth, and human bodies are composed of natural elements and compounds. It is the air in the atmosphere that human beings breathe. Human beings need freshwater from rainfall; rivers, lakes, underground water, and warm sunlight are necessary for photosynthesis. If these resources are contaminated, they affect the health of human beings, in present and future generations, as well as other creatures, plants, and animals. Some scientific works have shown that Down syndrome is linked to water contamination and toxicity in some places globally, like Pampa, Texas, and Punjab.¹⁸⁶ The earth is made up of different component elements, water, atmosphere, and land. The movement of matter connects these components of the earth. They are hydrological and biogeochemical. The earth is one entity. It is indivisible and irreplaceable, and everything on earth is interconnected and interdependent. It is monitored by some delicate but important mechanism working at a different pace and time scale.

It becomes crucial for human beings to protect and safeguard the natural species, the atmosphere, and the ecosystem since human health and well-being depend on them. “The earth’s linked physical and biological system- the atmosphere, ocean, soil, minerals, freshwater, and living organisms-keep the planet fit for life and able to provide for human needs.”¹⁸⁷ The impact of chemical, toxic waste, and nuclear weapons on health calls for action. There is a need to control the pollution produced by residues and poisonous waste found in different places. “Each year,
hundreds of millions of tons of wastes are generated, much of it non-biodegradable, highly toxic, and radioactive, from homes and businesses, from construction and demolition sites, from clinical, electronic, and industrial sources.” Industrial and chemical waste from production companies in the industrial and agricultural areas may constitute bioaccumulation in the organisms in residential areas, notwithstanding the low level of the toxin in these places. Sometimes, an action is not taken quickly or not taken until the inhabitants are sick and their health is compromised.\textsuperscript{188} The peaceful relationship between human beings and the environment changed dramatically with the emergence of the industrial revolution, the development of chemical industries, and nuclear technology.\textsuperscript{189} Developments and advances in molecular biology, modern technology, genetics, and biotechnology need to be carried out with care and proper supervision. These will reduce pollution and environmental degradation, which will lessen health hazards to human beings. Understandably, these modern ideologies have much to offer to better human health, such as the production of new drugs, reagents, diagnostics kits, vaccines, engineered plants, and genetically modified food.\textsuperscript{190} However, modern technologies and scientific research must practice caution, placing human health and the environment above profits and academic laurels.

For instance, cities like Kettleman and Abidjan, and the state of California, where chemical toxic waste was dumped, have witnessed health hazards. In 2010, many children in Kettleman City, California, were born with a series of genetic neurological disorders. One was a stillbirth, and three children died within 12-36 months after birth.\textsuperscript{191} In late August 2006, the toxic waste dumped in Cote D’Ivoire caused death, intestinal and respiratory problems. In Abidjan, the capital city of Cote D’Ivoire, with about a population of four million, about 3,000 people experienced intestinal and respiratory problems resulting from fumes caused by the toxic waste
deposited there. The dumping of toxic waste caused health hazards and environmental hazards, and violence in Cote D’Ivoire. The people of Abidjan noticed that their land and water had been contaminated. It caused hardship to them because their livelihood source, farming, and fishing, had been destroyed. They protested against the government. Also, the Electronic-waste dumping at Agbogbloshie in Accra, Ghana, is considered the giant E-waste dump in the world, causing many health crises to the people. The adverse health effects include respiratory, neurological, and genetic problems because exposure from open-air burning of insulated materials containing toxic chemicals and metallic objects contaminating land, air, and water.¹⁹²

Toxic wastes are chemical and metallic substances capable of causing death, harm, and illness to human beings and other creatures. Wastes are toxic if they are harmful, unhealthy, and emitting radiation. They are also oncogenic, fiery, and can cause disabilities and harm to both humans and the eco-system. They cause food contamination, which may result in injury and illness. Waste contains disease-causing agents and is hazardous, like used syringes and batteries. Toxic wastes are poisonous when ingested, inhaled, or absorbed by the skin, nose, mouth, or soil.¹⁹³ Toxic waste, nuclear and chemical weapons have adverse effects on both humans and the environment because they do not only destroy human lives and social structures; they also contaminate, damage, and poison the entire ecosystem.¹⁹⁴ Hence, “no peaceful society can afford to neglect either respect for life or the fact that there is an integrity of creation.”¹⁹⁵ Therefore, non-violence is necessary for both human development and environmental sustainability. Public health ethics based on social justice can reduce pollution and ecological degradation in Nigeria because these are social justice and health issues affecting human dignity, health, and peace.

5. C. Eco-Violence and Public Health
An understanding of the concept of environmental scarcity is vital in explaining eco-violence. "Environmental scarcity is the scarcity of renewable resources. Natural resources, in general, can be non-renewable (for example, oil and iron) or renewable (for example, forest, soil, lake and river water, and the stratospheric ozone layer)." Renewable resources are interdependent and interconnected, unlike non-renewable resources. The destruction of one renewable resource affects the other. For example, deforestation has a severe impact on the surrounding ecosystem: sea, river, lakes, air, and soil. It changes the oxygen and carbon cycles as well as the vegetation of an area. It also changes rainfall cycles in the region and beyond, e.g., the Amazon and California wildfires. At the same time, it affects the quality of the freshwater in the area. The poor quality of freshwater is a threat to the health of a large portion of the global community.

Again, open-pit mining damages the natural environment, especially in susceptible environments like Bougainville, mostly covered with a tropical rainforest climate. Mining in seas and rivers damages, contaminates, and pollutes the eco-system, especially in tropical rainforest zones, for example, Niger-Delta.

Environmental scarcity is caused by many complex factors, such as population growth, consumption behavior, technology, and farming practice. Therefore, eco-violence is the violence that arises from the scarcity of renewable resources such as fresh water and arable land. The scarcity of these resources is a threat to public health because they cause hunger, starvation, drought, and dehydration. They also cause chaos, conflict, war, and violence because of the struggle over limited resources. However, the insufficiency of renewable resources like arable land and freshwater hardly causes conflict and wars between countries. They cause much stress on the economy, politics, and social life of the people. “When combined with certain other factors, these stresses, in turn, boost the likelihood of sub-national insurgencies, ethnic clashes,
and urban clash.” For instance, the #EndSARS protest in Nigeria is a combination of many factors such as bad governance, corruption, violence, and low infrastructural development. These happenings made Nigerian youth protest and demand peace, development, and justice. Eco-violence promotes human displacement. For example, about 2.5 million people are displaced globally because of environmental issues, such as floods, droughts, toxic spills, desertification, hydro-electric projects, dams overflowing, soil erosion, and land degradation. People are also displaced because of solid and liquid mineral mining and toxins from chemical and nuclear weapons. Persons displaced as a result of environmental issues carry the same burden and stigma as other refugees. Displacement and migration often cause overpopulation and congestion, and insufficiency of basic social amenities in the place of resettlement. They also bring about poor hygiene, insecurity, and food insecurity, which are public health problems because these conditions breed contagious and infectious diseases, as well as violence and other social vices. “The health implications of all of these factors are many… From a public health [perspective], this is having and will continue to have serious ramifications for the people that move, the family they leave behind, and the communities that host the newcomers.”

The environment and human health are interrelated and intertwined because “the environment means the marriage or relationship existing between nature and the people that live in it.” The environment in recent times is a leading cause of migration, violence, and conflict. Climate change and global warming are excellent examples; people are forced to migrate from their ancestral homes for safety and greener pastures. People migrate from a place of scarce renewable resources to areas with abundant renewable resources. The contact between migrants and the indigenes may create scarcity, inflation, and insecurity. It may sometimes cause violence and conflict. “For example, the Arab-Israel conflict, the shortage of water in that region has often
been a source of contention.\textsuperscript{204} The deforestation and soil loss in Haiti has created a constant and persistent economic and social crisis causing violence and strife. Also, the shortage of land in Bangladesh caused the mass exodus of people to India. The migration has, in turn, caused ethnic violence and conflict in the state of Assam.\textsuperscript{205}

Public health is a multi-dimensional discipline. It is also systematic and scientific in methodology. Public health as a systematic, scientific, and multi-dimensional discipline can help manage eco-violence and other forms of violent-conflicts in Nigeria and globally. Because public health works include sanitary management (environmental and ecological), disease prevention, and violence control. Environmental degradation, insecurity, and violence threaten human health and dignity in Nigeria as citizens lose their lives, property and are injured daily. Pollution, oil, and gas flaring continue to cause illness and death as well.

The \textit{UNDP Human Development} in 1994 changed the concept of security that comprises two primary forms: “From an exclusive stress on territorial security to a much greater stress on people's security and from security through armaments to security through sustainable human development.”\textsuperscript{206} It further outlined the security components to include economic, food, health, environmental, personal, community, and political securities. The ecological threat challenging many countries globally is a combination of two factors, degradation, and scarcity of renewable resources. For example, “water scarcity is increasingly becoming a factor in ethnic strife and political tension.”\textsuperscript{207} The inclusion of the environment as a security challenge by UNDP in 1994 buttresses the idea that not all security problems are solved by military confrontation and weapons. Hence public health is an excellent tool to reduce eco-violence.

5. c.i. Eco-Violence and Public Health in the Niger Delta
The Niger-Delta was called the “Whiteman’s Grave” during the colonial and missionary expeditions because of the mosquito bites that caused malaria and led to the death of many colonialists and missionaries. The discovery of black gold (oil) in the 1950s changed the region from Whiteman’s Grave to Oil Cities. The slogans (pet names) of the states that make up the area express it better; Treasure Base of the Nation (Rivers State), Glory of all Lands (Bayelsa State), and Land of Promise (Akwa Ibom State.), also Big Heart of the Nation, (Delta state) and Heartbeat of The Nation (Edo state), Eastern Heartland (Imo State), Sunshine (Ondo State), and God’s Own State (Abia state.) It covers “over 20,000 km2 in the South-East region of the country.”

It has unique vegetation that is different from other parts of the country. It is richly endowed with abundant mangrove vegetation, with tall trees and animals and sea creatures of various species and a highly humid climate, with arable land, petroleum, seas, and rivers (freshwater), fishery, and transportation.

The land of rich vegetation and biodiversity is gradually losing its beauty from green vegetation and biodiversity to grey vegetation and lack of biodiversity. The black gold turns to be a curse and punishment for the people. Oil spillage and gas flaring continue to contaminate and pollute land, sea, and atmosphere, causing harm to people, plants, and animals. The land with plenty of seafood, tuber crops, and vegetables has no more food to sustain and provide to its citizens. Poverty hits deeper and deeper, and hyperinflation is prevalent. The zone's natural beauty may become history in the future because its beauty is gradually being stripped away. Its naturalness fades away daily as petroleum exploration and mining continue to devastate the land, sea, and atmosphere, with smog, residues, metallic objects, and chemical waste. The natural air is mixed with smog; rainwater turns to acid water as plants, fish, and animals are continuously annihilated. The communal and convivial life of the people has turned to chaos, anarchy,
violence, conflict, and unrest. “What type of society and environment is this generation leaving for the future generation and the growing children?”

The factors responsible for the violent-conflict in Niger Delta are scarcity of renewable resources, selfishness of people, wicked and corrupt economic, social, and political systems that promote disparity between the rich and the poor, and governments' negligence. There is a deficiency of accountability and transparency regarding the money accruing from the oil sector. The Catholic Bishops Conference of Nigeria (CBCN) calls it a “gross violation of human dignity” that has impoverished the citizens and threatens the country’s security. Since the 1970s, the Niger-Delta region has witnessed many violent-conflicts; prominent among them are the Nigerian-Biafra War (1967-1970) and the 1990 violent-conflicts between the Nigerian government and the Movement for the Survival of the Ogoni People. The primary cause of war and conflict was the uneven distribution of revenue accruing from petroleum in the South-South geopolitical zone. The revenue realized from oil exploration is shared among the three levels of government in Nigeria (Local, State, and Federal) and the oil companies. The host communities are left in poverty with a polluted and contaminated environment. The rising of the Movement for the Survival of Ogoni People and militancy in the region has led to insecurity and violence. It has encouraged other militant groups like the Movement for the Emancipation of the Niger Delta (MEND). Against this backdrop, it is quite pertinent to say the mining of gold in Zamfara State is controlled by the Zamfara State government, which provokes complaints by the Niger-Delta citizens. The people ask why their resources should be shared as ‘a national cake’ while gold mined in Zamfara State is not shared among states and local governments. However, ecological degradation and devastation is the primary factor. The degradation and devastation of the eco-system because of oil exploration have given rise to the scarcity of
renewable resources because of oil spillage and gas flaring. The scarcity of renewable resources is the primordial factor. The people are angry and disappointed with the government because oil mining is polluting their environment. The oil-producing communities are protesting collectively to develop their communities, employment, protect the environment from further degradation, and pay commensurable compensation for the various damages to the ecosystem. Since 2003, there has been continuous protest, violence, banditry, and thuggery in the region as hardly a year passes without violent conflicts over oil that claim lives and properties. Hence, “for the oil-bearing communities, security means the maintenance of the carrying capacity of the fragile Niger Delta environment.” This statement asserts that environmental degradation (contamination and pollution) is the primary cause of violence, insecurity, and violent-conflict. Apart from insecurity and scarcity of renewable resources caused by ecological degradation, great powers (governmental policies) can make people take violent-conflict in self-defense. Violent-conflicts caused by environmental degradation and the devastation of renewable resources often show themselves in socio-economic conflicts and crises within the regions of developing and transitional societies. The mining activity in Ogoni land by the Federal Government of Nigeria and oil companies triggers violence because of the transformation of the landscape and revenue. The violent-conflict is about government operations on the destabilization of socio-economic structure and the destruction of traditional lifestyle. The destruction of peoples’ means of livelihood is a human rights issue. Eco-violence in this context is a struggle between two groups. The socio-economically defined group (government and oil companies) who controls and manages the natural resource to maximize profits, and the other group who oppose (Niger-Delta) this ideology. In such a situation, a small unit of the population controls and allocates a mass portion of the resources to themselves. It
excludes most people who have to wrestle for slops that fall from the master’s table. In turn, the majority population rises against the small unit to receive a fair share or an even distribution of the resource. In this situation, the acts of violence are carried out, usually by the rich and the more energetic – the Nigerian government and the multinational companies, against the poor and weak people of the Niger-Delta. In return, the people rise against them through violence, protest, oil pipeline vandalization, and kidnapping.

The host communities want to know the quantity of oil and gas extracted from their land and the revenue realized. “The externalization of access and control of oil resources breed disenchantment and frustration, given that the people are highly conscious of how much wealth is derived from their environment.” It is alleged that licensed oil well owners and oil bunkers are mostly non-Niger-Delta indigenes. The Federal government of Nigeria uses three legislations to control and manage petroleum exploration. These legislations make the people lose control over their land and petroleum exploration. The first legislation is decree No 51, of 1969 of the Federal Republic of Nigeria: chapter 350; Petroleum Act, Article 1, subsection 1 and 2; (1), the decree vested the ownership of petroleum under the land and in the sea to the federal government. The second legislation is the Offshore Oil Revenue (Registration of Grants) Act 9, 1971, which empowers the Federal government to register and license persons connected with the petroleum industry within Nigeria's territorial water and land shelf. The third law is the Land-use decree of 1979 that vests ownership of all land to the state Governor. These legislations are contrary to the traditional land tenure system in most Nigerian ethnic groups, where the community or individual owns the land through inheritance.

Furthermore, Niger- Delta people have been accused of dissatisfaction with monetary compensation paid by oil companies and the Federal government for exploitation rights and
ecological degradation. The people are accused of being selfish, greedy, and unpatriotic because of their demands from oil companies and the Federal government.\textsuperscript{232} The problem is not monetary compensation; instead, the people ask for a habitable environment conducive to living, which will promote their farming and fishing. The people have had enough monetary compensation, which will never replenish or restore the devastated land and eco-system.\textsuperscript{233} However, some Niger-Delta people still ask for financial compensation, but their utmost demand is cleaning up oil spillage and reducing gas flaring. The government and oil companies have lied to the public and called the people greedy and unpatriotic. However, the fact is that the downfall and misfortune of humanity come from an intentional opposition to truth, which is the fundamental reality of who God is and the background of human life and existence.\textsuperscript{234} The host communities are the minority ethnic groups in the country.\textsuperscript{235} This has implications for minority ethnic groups living amid majority ethnic groups who use their land resources to develop their area because the majority group has political and economic power. “The issue is who gets the fruits of development, and whose environment should be sacrificed in exchange, for what point of domination, alienation, resistance, and conflicts.”\textsuperscript{236} Hence, eco-violence is predominant in arid, semi-arid, mountainous, and tropical forest areas worldwide, mostly degraded by mining and exploration minerals resources. It occurs mainly in Africa, Latin America, Central and Southeastern Asia, and Oceania. The violence and insecurity in these places have one thing in common: the marginalization of the minority group by the majority group.\textsuperscript{237} The security situation in the Niger-Delta is a threat to the host communities, oil companies, and national security agents. The Federal government uses the military for extrajudicial killing, torture, rapes, looting, and destroying the host communities' businesses and residences.\textsuperscript{238} This action is meant to suppress and intimidate the people and keep them in harsh and miserable
conditions, prone to many health hazards. Security is among the fundamental human rights and a prerequisite for human development that cannot be underestimated. It is the absolute responsibility of the state to provide adequate security for its citizens. It is a global common good. “The foundations of global security are threatened. These trends are perilous—but not inevitable.” Civil rights cannot be defended in a corrupt and unjust socio-economic situation like Nigeria.

5. c.ii. Developing a Sustainable Ecology

Ecological sustainability is defined as “the limits set by the carrying capacity of the natural environment (physically, chemically and biologically) so that human use does not irreversibly impair the integrity and proper functioning of its natural processes and components.” Therefore, “the concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities.” There are two different understandings of sustainable development: the weak and the strong notions. However, two factors also qualify sustainable development. These are the needs of the poor and the state of technology. At the center of sustainable development is the needs of the poor. Therefore, the socio-economic, political organization and state technology limit sustainable development. Sustainability understood from this perspective addresses three principles: people, planet, and profit, or social, environmental, and fiscal responsibility. It, therefore, “includes maximizing the productive life cycle of investments in the health care system and is a fundamental component of public health and well-being.”

Ecological sustainability is at the center of many conferences and conventions, such as the 1997 Twenty-ninth session of the United Nations Education, Scientific, Cultural Organization Paris

Furthermore, developing sustainable ecology for both future and present generations features prominently in religious discussions. For instance, the Catholic Church has published many documents that promote ecological sustainability. Among them are Laudato Si (On Care of Our Common Home), Pacem in Terris (Peace on Earth), Evangelii Gaudium (On the Proclamation of
the Gospel in today’s World), and the Compendium of the Social Doctrine of the Church. The encyclical Laudato Si speaks of Cultural Ecology. The concept of cultural ecology presents ecology as the inheritance of nature. This natural inheritance is a shared identity of everyone and the bedrock of all living beings, animals, and plants. It also speaks of Daily Ecology, which challenges everyone to rethink how they treat the environment. Again, it speaks of integral ecology, a concept of ecology that is founded on the notion of intergenerational solidarity. It is marked by a broader vision that connects past, present, and future generations. Subsequently, Patriarch Bartholomew’s ecological vision and initiatives define ecology and economy; “ecology, then, is the logos or study of our home, while the economy is the nomos or regulation, namely stewardship of our world as our home.” The lasting solution to ecological crisis and climate change can only be possible with a collective response, shared responsibility, and accountability, in the spirit of solidarity, participation, cooperation, and service.

Other religious groups are not silent on ecological sustainability. There are many publications and organizations in Judaism that speak about ecological sustainability. The prominent ones are the Coalition on the Environmental and Jewish Life (COEJL), with over 10,000 members. The organization educates the Jews on environmental matters, such as living a healthy environmental life, beginning with the greening of the synagogues and supporting its various legislative initiatives. The Hazon Organization, taking a further step in ecological sustainability, has attempted to take the concept of Eco-Kosher to the production of organic food for Jewish consumption. Eco-Kosher is a distinctive Jewish contribution to the ecological discussion. It was Schacher-Shalomi who coined the term Eco-Kosher. It means “integrating a wide-ranging critique of unjust social practice with a deep concern for the earth and its natural resources and compassion for the socially marginal.” Ecological sustainability is also at the heart of African
thoughts. It is best understood with this Igbo axiom *ndu mimiri, ndu azu, iyi atala, ma azu anwuala* (the life of the river, the life of fish, let the river not dry and fish not to die.) The axiom calls for ecological integrity and respect.\(^{259}\) In a statement, *Hear the Cry of the Earth*, Pope Francis and Patriarch Bartholomew posited that human dignity and well-being are deeply linked to the care for the entire cosmos. \(^{260}\) Ecological sustainability is not lacking in other religious faiths like Islam, Buddhism, Hinduism, and others.

Environmental sustainability is at the center of ecological public health because of the challenges environmental determinants pose to public health and social justice. Recently, public health has moved beyond preventive medicine and disease control to a broader spectrum that comprises human development and eco-community. This explains the four principles of ecological public health—conviviality, equity, sustainability, and global responsibility. The understanding of these four principles of environmental public health creates a new understanding of public health. Understanding and acknowledging that human beings are part of the eco-system is essential in sustainable development. However, separating human beings from the eco-system is a danger to sustainable development. Human beings, although they are part of the eco-system, are not central to it. Ecological-ethical thinking links the principles of ecological public health together thus:

As people of an environmental community, “we are dependent on the integrity of the eco-system (sustainability), on the sharing of the ecological common good (equity) and on living together in human and natural community (conviviality).”\(^{261}\) Understanding the health consequences of the environment brings in public health ethics that connects public health and environmental health to solve public health problems. Public health ethics extends to animal and environmental health. It deals with these wide-ranging commitments that reflect the increasing concern with individual health, population health, animal health, and environmental health. It is well-positioned to
reconnect the three fields of ethics (bioethics, medical ethics, and environmental ethics) to promote a healthier ecosystem.\textsuperscript{262} It helps in explaining how human health is intricately connected to the health of the eco-system. It also explains the importance of community health to individual health and how individual health can affect community health by linking it to the ecosystem.

The intersection between public health ethics and environmental ethics has progressed to address problems like climate change and global warming.\textsuperscript{263} Public health, in various ways, contributes to ecological sustainability. Ecological health, physical ecology, health, and human ecology can promote Public health intervention in environmental sustainability. Public health cannot handle ecological problems without the collaboration of these fields of study. They are integral to ecological public health and environmental sustainability. Environmental health, ecology, and human ecology complement each other to solve overlapping health, environmental, and development difficulties.\textsuperscript{264} Since public health ethics and environmental ethics are interconnected, public health ethics can address insecurity, violence, and ecology. These are issues affecting public health and human dignity in Nigeria; above all, violence of any kind is a threat to human dignity and the environment.

The Agenda 21 of the Earth Charter Commission stresses the importance of education (formal and informal) in ecological sustainability. Chapter 13 mainly focuses on the management of the fragile eco-system and sustainable mountain development. It encourages state governments to collaborate with the educational institutions in promoting a “multidisciplinary land/water ecological knowledge based on mountain ecosystems.”\textsuperscript{265} The education should focus on these areas; the recognition of conviviality, interrelatedness, and interdependence of human beings and the eco-system.\textsuperscript{266} Educational sustainability is at the heart of Igbo ecological sustainability.
because children are taught from cradle the importance of organic manure to soil and respect for the eco-system. Moreover, there are laws guiding the relationships between human beings other creatures in Igbo culture, such as hunting, fishing, and farming.

*Education for Sustainable Development (ESD)* is a term used in explaining the practice of teaching sustainability. It is the term commonly used globally and by the United Nations. The Earth Charter laid the foundation for sustainability education. ESD uses multidimensional approaches to teach people how human activities are threatening the eco-system. The Earth Charter encourages training undergraduates and graduates in the science of conservation. It promotes the proper use of *Plant Genetic Resources for Agriculture (PGRFA).* Civic education can complement public health in educational sustainability programs because education and health promotion are integral. “Civic education is a classroom subject introduced into the Nigerian school curriculum as part of the basic educational program to develop young Nigerian people into responsible citizens.” Its curriculum extends to environmental protection and sustainability.

The 2014 National Conference recommendations on sustainable ecology in Nigeria encouraged environmental integrity, protection, and safeguarding for the present and future generations. This idea resonates with the concept of intergenerational solidarity in *Laudato Si* and Igbo ecological ethics. For *Laudato Si*, the present age should not only speak of suitability but should speak about intergenerational solidarity. Furthermore, in Igbo ecological ethics, intergenerational solidarity starts from the ancestors, the present, and future generations, for which the earth is the connecting reality. The Conference adopted *Article 24 of the African Charter on human and people’s rights*, of which Nigeria is a signatory. It also proposed adopting the *1992 Rio declaration, the American Superfund Act, Article 16 and 24 of the African Charter on human*
and people’s rights, and Act CAP 10, Law of the Federation of Nigeria. These are useful measures to resolve eco-violence in the Niger-Delta. Besides, among the goals of Citizenship Education and Basic Education in Nigerian- tertiary, secondary, and primary schools are the training of responsible citizens. Against this backdrop, all forms of citizenship education taught in Nigerian schools should focus on respect for human dignity and person irrespective of status and gender. It should foster a friendly relationship among different ethnic groups in the country and sustainable ecology.

In summary, human dignity, the right to health, and the environment are inseparable and intertwined. A healthy ecology is a precondition for the flourishing of the right to health and human dignity. Human dignity ceases to flourish under chaotic and hazardous environments. In the face of ecological crises, there is a need to develop systemic environmental sustainability programs that connect health and the environment. Public health serves as an excellent tool in this area because ecological public health focuses on the interdependence between humans, health, and physical and social environments. Eco-violence is a threat to global health. Its effects are felt in different ways globally, such as mass migration, pollution, poverty, and other socio-economic stresses. Human beings suffer; peace, development, and conviviality cease to exist in these stresses. The cooperation and collaborative effort of all persons are needed to crumble eco-violence because violence is both an environmental and health problem.


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Chapter 6- Human Dignity- Violence and Vulnerable Population

The rapid change in financial stability, climate, diseases, epidemics, pandemics, natural disasters, poverty, unemployment, and insecurity has made the concept of vulnerability to be commonly applied in many fields of study. Among many other global problems, these factors can distort people's development in all facets of life, economics, health, and education. "The world is changing rapidly. The scope and scale of connectivity and related insecurities are accelerating, as are the threats of contagion and exposure to natural disasters and violent conflict." It implies that human life on earth is full of uncertainties. Thus "every human being is exposed to the permanent risk of suffering wounds to their physical and mental integrity. Vulnerability is an inescapable dimension of the life of individuals and the shaping of human relationships." Therefore vulnerability is the future of all human beings and not of any one person. It is a generalized condition of all human beings and not an individual characteristic. All human beings are equally vulnerable, and understanding that all human beings are vulnerable is essential for professional health care practice and relationships. Therefore, "vulnerability represents the interface between exposure to the physical threats to human well-being and the capacity of people and communities to cope with those threats. Threats may arise from a combination of social and physical processes. Human vulnerability thus integrates many environmental concerns." 

Nigeria has seen many violent-conflicts since its independence in 1960, such as the Nigeria-Biafra War, the Boko-Haram insurgence, the herdsmen-farmers conflicts, the jihadist movement, kidnapping, thuggery, and army banditry. According to the CBCN, "since the end of Nigeria's tragic civil war, at no time in the history of our dear country has the issue of common citizens been subjected to more strain. We have witnessed the ubiquity and the rising profiles of
ethnic militias and their increasing destructive violence against our commonwealth… Thus, rather than breathe the free air of democracy since the end of military rule, our lungs are choking amidst the fumes of violence. Insecurity has turned our country into a theater war."⁵ Violent-conflicts and natural disasters are factors making Nigerians vulnerable to injuries, sickness, and death, to which they are exposed daily at various times and degrees.

6. A. Violence and Vulnerable Population

Violent-conflicts worldwide make people more vulnerable because violent-conflicts claim and maim people's lives and properties. These may have a global dimension because violent-conflict in one area may spread to other parts of the world through mass exodus, food insecurity, and unemployment. For example, the Nigerian-Biafran war (1967-1970) had global effects. Some Western countries supported either party with food and ammunition, and some Biafran children were refugees to neighboring African countries. Boko-Haram has spread to some other African countries since its inception. Violent-conflicts cause much pain and sorrow to individuals, societies, nations, and the global community. They also increase social uncertainties by generating insecurity and disrupting educational, socio-political, and socio-economic activities and services. Violent-conflicts, most times, cause forced migration and displacement. Migrants and displaced persons are separated from their families and jobs. Migrants and displaced persons are highly vulnerable to homelessness, poverty, famine, food insecurity, unemployment, and impaired ability to withstand danger. Yearly, millions of people are displaced globally because of violent-conflict. For instance, in 2012, about 45 million people were forcibly displaced because of violent-conflict in the world. This is the highest in 18 years, with about 15.4 million as refugees.⁶ In Nigeria, the Boko-Haram and Fulani herdsmen insurgency have killed, maimed, and displaced millions of people in north-eastern and north-central Nigeria and destroyed
properties worth billions of Naira. People are made vulnerable when displaced, for whatever reason. They are often deprived of the essential needs and made compulsory visitors in another land. Sometimes they are threatened by both human and natural factors. The Nigerian-Biafran War of 1966-1969 killed and displaced millions of people and devastated south-eastern Nigeria. The effects of the war included starvation, famine, and displacement; as captured by this statement, "the terrible tragedy of Biafra's people has now assumed catastrophic dimension. Starvation is daily, claiming the lives of an estimated 6,000 Igbo [ethnicity] most of them children. If adequate food is not delivered in the immediate future, hundreds of thousands of human beings will die of hunger."8

The WHO defined "violence as the intentional use of physical force or power, threatened or actual, against oneself, another person or a group or community, that results in, or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation."9 The causes of violent-conflicts are many and complex, such as scarcity of renewable resources, corruption, ethnoreligious strife, and political factors. These factors may be causing violent-conflicts because the scarcity of renewable resources may promote the already existing ethnoreligious conflict in an area. Violent-conflicts cause grief, pain, and hardship for people. The neglected problem associated with violence that is not often discussed is "the explosion of mental illness: major depression, psychosis, schizophrenia, manic depression… post-traumatic stress disorder, and anxiety disorder…One of the saddest images of war is not just the dead and physically wounded but also the mental scarred, the so-called madmen and women who had been psychologically devastated by the anguish and myriad of war."10 Some violent-conflicts are invisible, although modern social media and technology have made some of them visible.
However, some violence happens out of sight, like homes, workplaces, schools, health care facilities, and hospices. The causes of violent-conflicts are rooted in the socio-cultural and economic systems of some societies. Recent studies have also shown that biological makeup and other individual factors explain some of the preconditions to violence; these tendencies are connected to family, community, culture, and societal factors that promote violent occurrences.

Violence is not the only factor that exposes people to hazardous conditions; natural disasters, epidemics, pandemics, and human development also make people vulnerable. For instance, earthquakes, tornados, hurricanes, and other natural disasters expose people to dangerous conditions. Small island countries in different parts of the world are most vulnerable to natural disasters. "Small islands are, by definition, fragile because they are small, have poor natural resources, a unique and fragile eco-system, and have problems with transportation and communication." Likewise, epidemics and pandemics make people vulnerable to contagions and illnesses, such as Ebola and COVID-19 outbreaks. Infectious diseases are also a threat to security; they can trigger an existing ethnoreligious crisis. They can promote protests and violence against the government like the #End SARS protest in Nigeria.

Furthermore, human development exposes people to hazardous conditions due to pollution and contamination of the atmosphere and land. The mining of solid and liquid minerals makes people vulnerable to pollution, contamination, and environmental degradation. For example, the mining of barite in the Eastern Anti-Atlas of Morocco has many negative environmental, health, and social effects, as found in the air, soil, water, wildlife and vegetation, acid mine drainage, noise, vibration, and migration of population from/or to the mining areas. The logging of trees and wildfire also makes people susceptible to health disasters, as seen in Haiti and Guinea's deforestation. The Guinean forest was devastated by refugees from Sierra Leone and Liberia.
"As the Guinean forest was chopped down, new kinds of a collision between bats and people likely occurred."\(^\text{14}\)

Everyone in life is exposed to a hazardous condition that makes the person vulnerable to tragedies and diseases. However, some individuals and groups are more susceptible than others because of various social, cultural, environmental, and economic conditions.\(^\text{15}\) Hence, concern was raised regarding the vulnerable population in biomedical ethics. "Concern about moral status in biomedical ethics has often grown out of a concern about ostensibly vulnerable populations. Rules requiring additional protections for the population judged to be vulnerable are the foundation of clinical and research ethics. These protections arose from concerns about exploitation and the inability of the members of some groups to consent."\(^\text{16}\) The concept of vulnerability appeared first in the *Belmont Report of 1979*, which considered the vulnerable groups' involvement as research subjects unethical. The *Belmont Report* listed the following as vulnerable subjects: "racial minorities, the economically disadvantaged, the very sick, and the institutionalized." There is the possibility that these groups may always be looked for as research subjects in places where research is conducted because of their availability.\(^\text{17}\) The concept of the vulnerable population has appeared in other declarations and conventions such as *the International Organization of Medical Science 1982* and the *Helsinki Declaration of 2002* articles 9 and 17, the *Universal Declaration on Bioethics and Human Rights 2005 (UDBHR)*.\(^\text{18}\) It was also repeated in the *World Medical Association (WMA), Declaration of Helsinki – Ethical Principles for Medical Research involving Human Subjects, 2013*, articles 19 and 20. "All vulnerable groups and individuals should receive specifically considered protection." However, medical research with a vulnerable group is only permissible if it serves its specific health needs. When the research cannot be conducted with a non-vulnerable group, in that case, the group
should stand to profit from the knowledge, practices, or interventions that come from the research. Thus, the vulnerable population is a social group with a higher relative risk or predisposition to adverse health threats. It manifests itself in morbidity and mortality rates and a low standard of living. The vulnerable group includes the poor, children, minority ethnic groups, migrants, and elderly persons.

Age and disability specifically are central facets of vulnerability. Children are naturally more vulnerable than others during natural and human disasters like floods, hurricanes, tornados, war, violence, communal conflicts, and clashes. They can easily be abducted, killed, maimed, kidnapped, raped, and stampeded. In his essay *On Liberty*, John Stuart Mill spoke about protecting the vulnerable, especially children. "We are not speaking of children or of young persons below the age which the law may fix as that of manhood or womanhood. Those who are still in a state to require being taken care of by others must be protected against their own actions as well as against external injury." For instance, during the Nigerian-Biafran War, many children died of starvation. "At least 300,000 children were suffering from kwashiorkor… and three million children were near death."

Furthermore, during war and insurgence, children may be deployed to serve in the military. As lamented by CBCN, it is worrisome to use innocent children by Boko Haram to commit hideous crimes, such as suicide bombing in Nigeria. Children are vulnerable because they lack moral and legal authority to consent to participate in research or any other activity requiring consent. It is "a perceived need to defer to adult authority, a lack of independent resources for autonomous decision making and potential influence by a longstanding institutionalized relationship of adult authority and power." However, children participating in research need additional protection to prevent them from being exposed to unnecessary risks for others' good.
Disabled persons are also vulnerable during a crisis because of their inability to flee or defend themselves. Some of them lack the physical capacity to claim and exercise choice and freedom. They are often victims of abuse, mostly mentally impaired ones—the socio-economic, political, and demographic factors describing the vulnerabilities of the disabilities. For example, most disabled persons are incapable of working as compared to non-disabled persons. Their incapacity limits the work they can do. They have limited job opportunities in society. Hence, they are poor in most cases.\textsuperscript{26} The mentally impaired are highly vulnerable because of their inability to give informed consent for participation in research and other activities that require consent, such as medical treatment because consent is required by law for surgery, a significant and sometimes lethal invasion of the human body.\textsuperscript{27} They also lack the cognitive capacity to work or study; this makes life difficult for them. Some live a life of dependency all through their lives.

Furthermore, migrants, refugees, and internally displaced persons are vulnerable to climate and diseases because of their living conditions. They face challenges with food, language, health care access, rules and regulation (insurance), and housing.\textsuperscript{28} Migrants, internally displaced persons (IDPs), and refugees are exposed to unsafe conditions like drug abuse, alcoholism, and violence. They suffer limited access to health care during transit and early insertion phases. Migrants sometimes carry infectious diseases during their transit and inject them into their new settlement.\textsuperscript{29} Generally, women are not to be considered as a vulnerable group. However, some conditions can make them vulnerable; for example, women can be vulnerable to research. Research studies involving females or transgender persons and sex workers may make them vulnerable. Also, research studies that involve sexual abuse, intimate partner violence, trafficked women, and refugees are likely to make them vulnerable.\textsuperscript{30}

6. a.i. Violence, Insecurity, and Vulnerability in Northern Nigeria
Northern Nigeria, in the recent past, has been the epicenter of violent-conflicts in the country. It has 19 states out of the 36 states of the Federal Republic of Nigeria. It is subdivided into three zones or regions, north-east, north-central, and north-west. The violent-conflict in northern Nigeria is multidimensional and complex. However, it can be compressed under these headings: illiteracy, political or electoral violence, ethnoreligious, farming and grazing, and ecological factors. For instance, farming and grazing are the leading cause of violent-conflicts in the north-central. Religious fanaticism and illiteracy are often the cause of violent-conflicts in the north-east (Boko Haram). The scramble over increasingly limited land and water impend peace, harmony, and stability in many north-east and north-central states. The land and water conflicts interconnect with ethnoreligious and political problems to rapidly promote violence. These factors are the primary cause of violent-conflicts in the north-west and north-central regions. Since the beginning of 1990, West Africa and Nigeria particularly are experiencing many violence-conflicts connected to natural resources. The climax and most concerning one is the conflicts between herders and farmers. However, each zone has an aspect of these factors (illiteracy, political or electoral violence, ethnoreligious, farming and grazing, and ecological factors). Moreover, violent-conflict in northern Nigeria can be understood from the context of Islamic violence of the historical event before Nigerian independence in 1960. The history of radical Islam in Nigeria goes back to the Jihadic movement of Uthman Dan Fodio in the 9th century. In his match against the British Colonialists and local monarchies, Uthman Dan Fodio promoted a fundamentalist Islamic movement that rejects all forms of western culture. Boko Haram activities in recent times can be understood against this backdrop.

The violent-conflict in the north-east is attributed to Boko Haram (western education is evil or forbidden) Jihadist movement. Boko Haram insurgency has affected more than 15 million people
within Nigeria and the neighboring countries of Chad, Cameroon, and Niger. Boko Haram's main area of operations includes sections of the north-eastern states of Borno, Adamawa, Kaduna, Bauchi, Yobe, and Kano. The group has conducted attacks across other northern states, including Sokoto, the site of the caliphate. Its attacks have spread increasingly within the southern and western states. The insurgency has claimed and maimed lives and properties in the areas. It has led to displacement and destruction of social structures (schools and hospitals). It further widened underdevelopment and regional disparities. The most disadvantaged groups are women, children, youths, and the disabled. "Boko Haram's tactics have included multiple modes of attacks, including suicide bombing, seizure, and destruction of villages, forced displacement, abduction, sexual violence targeting women, and forced recruitment of men." Boko Haram activities have separated children from their parents, making some orphans, widows, and widowers. When Boko Haram insurgency was at its peak in 2014, it occupied territory as large as Belgium. The mission of Boko Haram is to establish an Islamic state and implement the Sharia legal system. "We have started a jihad in Nigeria, which no force on earth can stop. It aims to Islamize Nigeria and ensures the rule of the majority of Muslims in the country." Boko Haram has claimed attacks on public worship areas in different parts of northern Nigeria, for example, the November 2008 attack on a congregation in Biu in Borno state. The Boko Haram insurgency is connected with national issues like corruption, poverty, illiteracy, and inequalities in northern Nigeria.

The violent-conflict in the north-central zone of Nigeria has been recurring over time. The conflict's leading cause is competition over scarce resources- land for both pasturing and crop production. "The conflict has been triggered by persistent drought, desertification, and population growth." It is good to mention that political, religious, and ethnic reasons also
influence the conflict. The violent-conflict has led to the loss of lives and properties. It had made some people flee their homes for safety. When people flee their homes for safety, they are often vulnerable to human and natural threats such as diseases, insecurity, and abuses. Also, they face problems of food insecurity, water, shelter, clothing, education, and health-care. These problems are principle elements that are contained in the Right to Health. Human rights are interconnected and inseparable. Thus, the right to health is interconnected and inseparable from other fundamental human rights, such as the right to a decent standard of living, education, and employment. The violent-conflict in north-central Nigeria has taken the death-defying dimension with incredible effects for food security, displacement, peace, and mutual co-existence. Local news reports from Nigeria said about 70% of the displaced persons were women and children. These women and children are exposed to different forms of violence, insecurity, and threats. In some cases, displaced women are exposed to gender-based violence and sexual exploitation. Children, too, are exposed to child labor to make ends meet, lack educational opportunities, trauma, and sometimes forced marriage.

The violent-conflicts in the north-west are complex and difficult to categorize. However, "according to the Nigeria Watch database, Kaduna has the second-highest occurrence of election-related deaths in the country between 2006-2014." In recent times, Kaduna State has been the epicenter of violent-conflict in this region. The state is believed to have an equal population of Muslims and Christians. The conflicts in the area are understood from the perspectives of ethnoreligious conflicts and political violence. Political violence is often used to fuel the pre-existing ethnoreligious conflicts between the Hausa-Fulani and Southern Kaduna Christian ethnic groups. The region has records of election violence as follows; in 2007, four persons were killed during the presidential election in Kaduna North Local Government Area.
(LGA.) In 2011, there was violence over the presidential election result in Jama'a LGA that claimed 60 lives. In the same 2011, violence over the presidential election result claimed and maimed lives in Zango-Kataf, Kachia, and Zaria. Churches, mosques, homes, and people's businesses were burned to ashes.

The CBCN lamented the horrible situation, saying, "We receive with deep sorrow the tragic news of the resurgence of further horrific killings in some parts of Kaduna, Benue, Taraba, Kogi, Edo, Zamfara, Adamawa, and other states. Against this backdrop of violence and bloodshed that characterized the last election, we are pained that the culture of death is becoming embedded in our daily lives." The violent-conflicts in Nigeria stem from the ignorance and selfishness of both its citizens and their leaders. However, they arise more from the leaders who use ethnoreligious pre-colonial issues to fuel conflicts among the various ethnic groups. The violent-conflicts across the country can be addressed using Citizenship and Civic Education as a social justice approach. Citizenship Education is a first-year course that all students of universities, colleges of education, and polytechnics must take irrespective of their academic programs. Civic Education, on the other hand, is taught at the primary and secondary school levels.

Citizenship and Civic Education can help reduce the rate of violence in Nigeria. For instance, the May/June 2019 West African Examination Council (WAEC) Civic Education, question 3, was on civic problems in the society and how to solve them. Some of the students' answers include human trafficking, violence, conflicts, war, oil spillage, child abuse, and labor. The answers encompass the situation in northern Nigeria and Niger Delta; for example, oil spillage and gas flaring continue to degrade the Niger-Delta eco-system, increasing poverty, joblessness, conflicts, agitations, and health hazards. The students not only mentioned these problems, but some have also experienced them and known how bitter and brutal it is to live in such situations.
The crisis in Nigeria prompted some scholars to propose an innovation of school curriculum that promotes national unity, religious tolerance, socio-political and cultural integration. It established content-based "on the spirit of nationalism rather than ethnocentrism and individualistic tendencies." This innovation gave birth to Citizenship Education. Citizenship Education should teach and promote African cultural values, "such as honesty and communalism, which is a core aspect of active citizenship, togetherness, integrated family system, mutual and co-operative efforts, and respect for elders and constitutive authority, and loyalty to a collective cause." These values are consonant with Ubuntu philosophy that promotes solidarity and cooperation among different cultures, religions, and ethnicities. The goal is to train good citizens aware of the various human, socio-political, religious, and economic issues impacting the nation. This knowledge requires each citizen to develop ethical and moral qualities to combat these problems.51

6. a.ii. Violence against Health Workers, Women, and Children

Violence against health workers, women, and children comes in various forms and places. Health workers, women, and children are often victims of violent attacks. They are vulnerable to physical, verbal, and emotional attacks at work, school, and other places. Violence and abuse are committed by family members, partners, patients, parents, and teachers.

Physical violence and abuses against health care providers are on the increase in recent times. Globally, violence against health care workers is prevalent. Violence against health care workers has made most health care facilities vulnerable to attacks, especially hospitals in sub-urban densely populated areas, high crime areas, and the ones located in isolated areas.52 According to WHO, health care workers are vulnerable to violence globally. It is estimated that between 8% and 38% of health care workers globally have experienced violence at one time in the discharge
of their duties. Violence and abuses are perpetrated by patient families, friends, patients, and visitors.\textsuperscript{53} In 2012, a review of 25 major attacks on health institutions between 2013-2016 by Human Rights Watch, 200 deaths were reported from 10 countries, and 44 were health care workers.\textsuperscript{54} Sadly, most of the violence against health care workers is carried out with weapons. The attacks sometimes may cause injury or death of the worker. There are various reasons patients or their relatives attack health care workers, such as long waiting times and lack of communication between patients and workers. They also include worsening health conditions of the patient or death of a patient.\textsuperscript{55} Violence against health care workers is also caused by the arrogance and negligence of some health care providers in rendering their services. For example, some women have complained about nurses and doctors not attending to them at labor or being rude and arrogant.\textsuperscript{56}

In Pakistan and Nigeria, more than 70 polio vaccination workers have been maimed and killed. Some were arrested in Bahrain and Turkey for providing care to protesters. There are instances of hospital bombing, which caused the death of hundreds of patients and health workers in Syria.\textsuperscript{57} According to the WHO report, in Nigeria, especially in the north-eastern zone and Borno State, particularly, the Boko-Haram insurgence has destroyed or seized more than two-thirds of the health facilities.\textsuperscript{58} Despite the International Humanitarian Law (laws of war) that prohibits attacks on health facilities and medical workers, they continue to increase. The attack on health care workers and facilities violates the very foundation of the law of war. When health care providers are killed and facilities destroyed, it risks citizens' health in the present and future.\textsuperscript{59} Violence and abuses against health care providers are improper. It has adverse effects on their mental and emotional well-being and affects their motivation and morale. The consequence of
violence against health care providers is that it compromises the quality of care they provide. It is a risk for health-care facilities and leads to waste and loss of financial and material resources. Although violence against women has come into focus with many new laws in countries and international conventions, however, much needs to be done, particularly in developing countries, where the rights of women and children are regularly violated. Article 1 Declaration on Elimination of Violence against Women defines violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life." Article 2 of the declaration gives examples of violence against women as physical, sexual, and psychological violence that happens in the family. Violence against women comes in the following forms; "battering, sexual abuse of female children in the household, dowry-related violence, marital rape, female genital mutilation and other traditional practices harmful to women, non-spousal violence and violence related to exploitation." Also, violence against women is sometimes cultural. The violence and abuse (verbal, physical, and sexual) women undergo in some homes are against the very nature of the marital bond. In places like South Africa, Papua New Guinea, and some parts of the USA, there are women raped by gangs of men. Women in some cultures have low status; they are sometimes seen as persons who need discipline and control for their good.

The growing cases of human trafficking for sexual exploitation reduce humans to commodities. Sometimes, women and young girls are victims of human trafficking. They are trafficked within and across the bounders of Africa for sexual exploitation. People, mostly women, and children are reduced to commodities being trafficked within and outside Nigeria. They are used for various motives, such as sexual exploitation, forced servitude, and organ harvesting.
United Nations Convention against Transnational Organized Crime defines trafficking in persons as "recruitment, transportation, transfer, harboring or receipt of persons, by means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for exploitation."  

Sexual violence against women and children comes in different forms and different places. For instance, sexual violence occurs in schools, health care institutions, refugee camps, and as part of armed conflicts. It takes the form of rape within and outside of marriage, systemic rape, and armed conflict. It also includes gang rape, sexual molestation, and abuse of mentally and physically challenged persons. It includes forced marriage and early marriage, sexual trafficking, forced abortion, demanding sex for work, or promoting a student. Sexual violence against young women often takes place in schools. Some girls have experienced sexual harassment and rape by their classmates. The harassment of girls by boys is a global problem. Some male teachers carry out sexual violence against girls. There are instances where teachers demand sex in return for good grades or for not failing students. Sexual violence also takes place in refugee camps. There are reports of some abuses in the refugee camps, such as the diversion of food and materials for refugees. There are also sexual harassment cases, embarrassment, and abuse in the camp, such as IDPs and refugee camps. Men and boys also experience sexual harm, which is often neglected and rarely acknowledged. It occurs at home, in school, at the workplace, in prison, in the military, and during a war. It is alleged that forced sex occurs in prison among prisoners to establish hierarchies and discipline. Prisoners are sometimes forced to have sex with
each other as entertainment or with prison officers. Some men are pushed to have sex with their fellow men in prison for sexual gratification.  

Furthermore, women are sometimes abused in health care facilities. It is troublesome that acts of violence and abuse exist in an environment where care and respect are expected. Some women in developing countries are violated during childbirth. Some women have complained of verbal, physical, and emotional abuse during childbirth. These forms of violence do occur in some places in some developing countries. They are often deliberate and are a violation of human rights and an affront to human dignity. They exemplify the low quality and ineffectiveness of health care services. Some of these abuses are used as a means of controlling patients. They are sometimes learned in school and practiced after graduation in health institutions. Abuse happens mainly in circumstances in which the legitimacy of health provision is dubious. It can also be the result of bias against specific population groups or ethnic groups. Its cause lies in the socialization of health care professionals and broader problems in society. In some developing countries, health care providers, because of their scientific training and laws regulating medical practice, enjoy privileged and powerful situations above their patients. Health care providers need the cooperation of patients to be efficient and productive. Ideally, this is obtained through information, participation, and trust.  

Violence in health care institutions can be reduced by the provision of adequate security networks and measures. The porous security situation in Nigeria has given rise to many crises in all sectors of life. There is a necessity to improve the security of the country to save lives and properties. Also, violence carried out by health care works requires intervention during recruitment and training. The inappropriate behaviors of some health care providers begin during
their education and in their training. There is a need to give precedence to the teaching of
discipline and ethics to health care students.

Moreover, medical and nursing training should be holistic. Communication skills, cultural
competency, respect for human dignity, and rights must be emphasized. The working
environment and conditions need to be improved. Health care workers are to be provided with
the necessary equipment consistently and in a timely fashion. The salaries and allowances should
be paid when due; they must have vacation and days off to avoid burnout. A poor working
environment, condition, defective equipment, poor salaries, and allowances are predispositions
that cause anger and aggression. Seminars, conferences, and symposia should be periodically
organized to improve their skills and knowledge. Furthermore, erring and unruly health care
workers are to be disciplined when necessary as a deterrent for others. Hard work and good
behavior are to be applauded as a way of encouraging others.

Child abuse and violence have appeared in literature, art, and science in many parts of the globe.
Child abuse and violence such as infanticide, mutilation, abandonment, sexual abuse, and other
forms of violence and abuse date to ancient times and were accepted by some cultures. There are
many reported cases of child maltreatment, abuse, and violence, such as unkempt, weak, and
malnourished children abandoned by their families. They are left to care for themselves, and
some have been sexually abused. Some charitable groups have been advocating for the
prevention of child molestation. This practice got the attention of medical practitioners and the
general public in 1962, "with the publication of a seminal work, *The Battered Child Syndrome.*
"The term *battered child syndrome* was coined to characterize the clinical manifestation of
serious physical abuse in young children." Child abuse is a global menace that happens in
various forms. It is sometimes rooted in societal, cultural, and socio-economic practices. In 1991,
the WHO Consultation on Child Abuse Prevention defined child abuse thus: "Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, result in actual or potential harm to the child's health, survival, development or dignity in the context of the relationship of responsibility, trust or power."75

The government of Nigeria has enacted many laws and policies to prevent and protect children from abuse and violence. The laws include the 1999 Nigerian Constitution, the Matrimonial Causes Act Cap 220, the 2010 Criminal Code Cap C38, the Law of the Federation of Nigeria (LFN), the 2004 Labor Act Laws of the Federation of Nigeria, the 2004 Trafficking in Persons (Prohibition) Law Enforcement and Administration Act, and 2003 Child Right Act. The policies are the 2011-2015 National Strategic Framework for the Elimination of Obstetric Fistula in Nigeria, the 2013 National Policy on Child Labor, the 2002 National Policy and Plan of Action on the Elimination of Female Genital Mutilation, the 2006-2010 National Plan of Action on Orphan and Vulnerable Children, and the 2014 National Policy on Education. There are also international conventions to prevent child abuse and violence, such as the 1919 International Labor Convention on Child Labor, the 1973 Minimum Age Convention, and the 1999 Worst Form of Child Labor Convention.76 Despite these laws and policies, child abuse and violence are increasing; an estimated 15 million Nigerian children under 14 work in various economic sectors to support themselves and their families. The most prominent jobs are informal market labor, hawking goods on the streets and highways, and working on the farms.77 Children working on farms may not constitute child abuse or labor because it is a cultural way of training children in farming and ecological sustainability. After all, agriculture is the people's primary occupation,
especially in rural areas. The recent and trading children abuse in Nigeria is kidnapping school children and asking for ransom from their parents.

The primary reasons for child labor and abuse in Nigeria are cultural practice, ignorance, and, above all, poverty. Poverty is the most vital determinant of child abuse and violence. The religious, socio-cultural, weak judicial system, and gender inequality are other factors that promote child labor and abuse. Nigerian girls are trafficked as street and sex hawkers within and outside the country. The boys are deployed into street vending, agriculture, illegal mining, petty crimes, and drug-related crimes. Some Nigerian children of school age are seen on busy roads hawking fruits, vegetables, and other items. Some of these children have been knocked down by vehicles, kidnapped, and raped by other children and adults. Their parents and guardians sometimes send them to make ends meet or as punishment. Violence against children includes shaken infants, battered children, sexual abuse and molestations, early and forced marriage, forced labor, neglect, physical and verbal abuse.

In 2014, a 14-year-old girl was forced into marriage with a 35-year-old man in the Kano State of Nigeria. The girl poisoned her husband and three friends with rat poison. Child and forced marriages are common in northern Nigeria, predominantly Muslim and impoverished, where bride price is a source of income and poverty alleviation. The religious practice of Almajiri in northern Nigeria that allows male children to be tutored by a Mallam (Islamic teacher) in the act of Islamic rites and values often exposes children to begging and hawking to fend for themselves and send proceeds to the Mallam. The practice has made these children vulnerable to diseases, abduction, rape, kidnapping, and cheap labor to carry out political violence. In Nigeria, "the minimum age of marriage is not captured in the constitution, but the Child Rights Act set this age at 18 years. However, only 23 of the country's 36 states have adopted this act. There are areas
within the country in which the minimum age of marriage can be as low as 12 years." The United Nations Children’s Emergency Fund "defines child marriage as any form of marriage or informal union earlier than the age of 18." Forced and early marriages are associated with domestic violence (verbal and physical abuse), kidnapping, isolation, non-consensual pregnancy, stalking, rape, death threats, false imprisonment, torture, emotional abuse, and sexual and economic exploitation. Sexual abuse is commonly carried out by fathers, religious leaders, school teachers, child-care workers, and neighbors. Although child sexual abuse is not often reported, it is more prevalent among girls than boys. The perpetrators are usually male, known by their victims, whether the victims are male or female.

Violence and abuse against children affect their general well-being, physiologically, psychologically, and emotionally. For instance, girl-marriage exposes girls to medical complications such as Vesico Vaginal Fistula (VVF), prominent among Muslim mothers in northern Nigeria. It also transpires in other parts of the country to a lesser degree. The girl-child marriage poses young girls with severe health problems like VVF and associated pregnancy-related difficulties, which may cause death. It affects the neurological development of the child, which impairs the child's academic achievement and performance. It also affects the child's psychological balance. Children are fragile and need care, love, and a non-violent environment to enable them to grow to maturity. When children are raised in a non-violent environment, they become disciplined, energetic, and productive. If trained in a violent environment, they become fierce, undisciplined, unruly, weak, sick, and less effective. Therefore, a public health ethical approach based on social justice is helpful to reduce child violence and abuse in Nigeria. The government at all levels, individuals, and religious bodies must cooperate (and put heads together) to stop this menace from destroying our future leaders and parents. The following
suggestions can effectively reduce child violence and abuse in Nigeria. These are poverty eradication, improvement of the judicial system, promotion of child education, and implementing the various international and national policies on child protection.

In Nigeria, poverty is the primary determinant of child abuse; there is a co-relationship between child abuse and poverty. Parents are sometimes compelled to send their children out for street hawking to make ends meet. Therefore, the government, at all levels, should work assiduously to improve the living condition of the citizenry by providing them with socio-economic and political structures that promote productivity. The government of Nigeria should incorporate family support approaches into its educational curriculum to train children in parenting as practiced in Singapore, where education and training in parenting are taught in secondary schools as a preparation for parenthood. In Nigeria, international and national laws and policies guarding child violence and abuse need to be incorporated into the Citizenship Education and Civic Education curricula at tertiary and secondary school levels. It is noteworthy that human rights and violent acts are covered in the civic education curriculum. For example, the May/June 2019 West African Examination Council (WAEC) Civic education question 4 was the effects of human trafficking, the meaning of WOTCLEF (Women Trafficking and Child labor Eradication Foundation), and its activities to human trafficking in Nigeria. According to the Examination Board, the student demonstrated a good knowledge of the question. Also, question 3 of May/June 2014 Civic Education was on the Human Rights Declaration of 1948. These show that secondary students are being educated about child abuse and violence. The government at levels should put more effort into enforcing the Violence against Persons Prohibition Act (VAPP) 2015. They should also provide a working judicial system that is corruption-free to prosecute and discipline offenders. States are to establish family courts that attend to family
matters and child abuse, following the examples of states like Lagos and Ekiti that already have family courts to promote peace in the family and justice for children.\textsuperscript{91} Citizenship Education is an excellent social structure in promoting human dignity, non-violence, and environmental sustainability in Nigeria; as stated above, students in secondary are taught issues related to violence and abuse of human rights and dignity. They are also taught ecological protection; the only thing lacking is the willpower to practice this acquired knowledge and skill because of poverty and fear.

6. B. Female Genital Circumcision in South-Eastern Nigeria

Female circumcision is an old cultural-religious practice among many ethnic groups in Africa and Asia. It is a norm in places where it is practiced. In the recent past, following scientific and medical development, this norm and tradition are considered harmful and violent acts against women and girls. The new thinking brought a change in terminology from female circumcision to female genital mutilation or cutting. \textit{The Inter-African Committee on Traditional Practices Affecting the Health of Women and Children (lAC), during its regional meeting in 1989, endorsed the term Female Genital Mutilation or Cutting.} The term female genital mutilation (FGM) underscores the severity and irreversibility of the practice.\textsuperscript{92} Following this change in nomenclature and medical understanding, many conventions and declarations locally and internationally have legislated against it as an act of violation of women's bodily integrity, abuse of fundamental rights, and discrimination against women and girls. They include the \textit{1948 Universal Declaration on Human Rights}, the \textit{1954 Nations Convention on the Rights of Child}, the \textit{1990 African Charter on the Rights and Welfare of the Child}. Others are the \textit{1992 United Nations Convention on the Elimination of All Forms of Discrimination against Women}, the \textit{1993 United Nations Declaration on Violence against Women}, the \textit{1993 World Conference on

a. Meaning, Origin, and Types

In medical literature, the term circumcision implies removing the prepuce or foreskin of the penis or clitoris. This procedure is complicated to perform in young girls. Generally, the use of the "term is not so precise and merely describes ritualistic cutting of the genitals for cultural or religious reasons. In the latter sense, ‘female circumcision’ is no different from male circumcision, as both are cutting rituals performed on a child with no demonstrated positive impact on health." In traditional Igbo society, both males and females are circumcised (ibi ugwu) on the eighth day after birth. However, it may be performed later if the baby is not healthy or for other reasons. In southern Nigeria, female genital circumcision is performed on babies on the eighth day or within two weeks of birth, while in Uganda, it is performed on a young adult female. Both male and female circumcision among the Igbo is done without bias or prejudice. It does not demonstrate masculine superiority over women or gender-based inequality. Male and female circumcision in Igbo communities is not by coercion; people are encouraged to undergo it because of cultural and religious attachments. However, some African women in western countries have taken undue advantage of female genital circumcision. For instance, some African women in danger of deportation from the USA and other European countries as undocumented
immigrants had successfully used female circumcision to avert the danger of deportation. They claimed to be at risk of being forcibly circumcised.\textsuperscript{98} Although FGC is primarily a cultural heritage among the Igbo, not all Igbo undergo FGC. The reason for some women not experiencing it is unknown.

Circumcision among the Igbo is performed at the early stage of life. Families give consent for any female or male child to undergo it.\textsuperscript{99} It deprives both boys and girls of the opportunities to make independent decisions about their bodies because it is done at a tender age.\textsuperscript{100} In Igbo land, FGC is called \textit{ibi-ugwu}, with its English equivalent, meaning is cutting of clitoris.\textsuperscript{101} The origin of female circumcision is froth with controversy and discrepancies. Female circumcision is a cultural practice whose origin is not well-known, and as such, it is said to be shrouded in secrecy, uncertainty, and confusion. The ritual is so widespread that it could not have risen from a single origin and cultural background because it is found across continents.\textsuperscript{102} Female circumcision is a practice that has existed for centuries in some parts of Africa and the Middle East.\textsuperscript{103}

There are four major types of FGC practiced in Nigeria. However, clitoridectomy or Type I is the most common practice. Its severity is less compared to Types II and III. It includes the cutting of the prepuce or the hood of the clitoris. It sometimes involves the removal of all or a part of the clitoris. "In Nigeria, this usually involves excision of only a part of the clitoris." The second Type is the Sunna or Type II, which is more severe than Type I. It involves the removal of the clitoris with partial or total removal of the labia minora.\textsuperscript{104} According to the WHO, these are the most widely practiced FGC types with severe pain and irreversible damage to girls' bodies. "The most common types of female genital cutting rituals involve amputation of part or all of the clitoris and the labia minora resulting in irreparable physical damage and increased risk of health complications."\textsuperscript{105} Type I and II are less harmful when compared with Type III and IV.
Type III or infibulation is the most painful and severe. It involves the excision of the clitoris, labia minora, and adjacent medial part of the labia majora. It also involves the stitching of the vaginal orifice. The procedure leaves a pin-size opening for menstruation and urination. Type IV is a residual category of FGC consisting of pricking, piercing, or scrapping off the vaginal orifice or cutting off the vagina. The practice of FGC varies from country to country, ethnicity, tradition, and culture. Type III is predominantly practiced in northern Nigeria, with Types I and II more in southern Nigeria. Type IV is very rare in Nigeria. Among the major cultural groups in Nigeria, the Fulani ethnic group is the only ethnic group that does not practice it.

The WHO, United Nations International Children's Emergency Fund (UNICEF), and United Nations Population Fund (UNFPA) in an April 1997 joint statement defined FGC "as all procedures which involve partial or total removal of the external female genitalia and/or injury to the female genital organs, whether for cultural or any other non-therapeutic reasons are wrong." In its report in January 2017, The United Nations Children's Fund has raised the alarm over the increasing incidence of FGC in Imo State.

b. Reasons for the Practice of FGC

There are various reasons for the practice of FGC. The reasons are custom and tradition, purification, family respect, hygiene, aesthetics, prevention of virginity, and protection against promiscuity. There may be other reasons among various ethnic groups that practice it. However, western medicine and modern science claim that there are no empirical data to justify these assumptions. FGC is both a cultural and traditional practice among many ethnic groups. The Igbo ethnic group are lovers of their culture and tradition. They like to maintain the traditional norms and values of their ancestors (ndi iche). Ndi iche has two conceptual uses/understandings in traditional Igbo society. It can mean a title given to some elders in the community. It also
means ancestors; it is used in the concept of the latter in this work. They firmly believe that their
culture and tradition are knowledgeable and excellent. They believe in the richness and goodness
of their culture. They often express it in a statement like this "our custom is a good tradition and
has to be protected- it is our Omenala (tradition)." FGM is also practiced because of religious
beliefs among the Igbo ethnic group.

In Igbo culture, religion and other aspects of life are interwoven and intertwined. It is
challenging to separate people's life from their religious beliefs and practice. FGC is connected
to the people's religious and cultural practices; it connects them to ndi ichie (ancestors) and the
gods. Furthermore, FGC is performed in the traditional Igbo society to discourage promiscuity
among women. It is also believed that FGC reduces women's sexual arousal and discourages
and prevents promiscuity. "This view is consistent with traditional views of the ancestral origin
of FGC in many cultures." It is also believed that FGC prevents stillbirth.

Some cultures believe that uncircumcised women have prolonged labor. Moreover,
"uncircumcised women are believed to kill their newborn babies due to contact with the head of
their clitoris." This belief makes some cultures perform circumcisions on uncircumcised women
even during their labor." Again, hygiene is another reason for the practice of FGC in some
cultures. The external female genitals are thought to be dirty, and their removal is believed to
ensure cleanliness." Some cultures consider the size and smoothness of circumcised female
genitals prototypically feminine and even visually beautiful. Generally, socio-cultural factors
are the primary reasons for FGC's practice in south-eastern Nigeria, not economic reasons and
gender superiority. FGC is sometimes usually done as an integral part of social traditionalism
and in line with community uniqueness.
6.b.i. Health and Ethical Implications

Female circumcision has been condemned as violence against women, which is not different from rape, trafficking, forced prostitution, early marriage, physical and emotional abuse, stalking, and other forms of sexual harassment.\textsuperscript{118} Hence, the WHO condemns "the medicalization of female genital mutilation, that is, the involvement of health professionals in any form of female genital mutilation in any setting, including hospitals or other health establishments."\textsuperscript{119} Many conventions and policies globally have condemned FGC's practice, as stated above, because of its health complications and also as a violation of the human rights of women and girls. It is considered a violation of their bodily integrity. \textit{The 1948 Human Rights}, which is binding on all state parties, enumerated these points and condemned their violation. "The rights to health, non-discrimination based on sex or gender, and physical and mental integrity. Female genital mutilation violates each of these precepts."\textsuperscript{120} FGC in traditional Igbo society may violate the right to health and body integrity because it involves the body's mutilation, having been considered as castration and mutilation of the body. That is removing the pleasure part of the woman's sexual organ, making sexual intercourse very painful and unenjoyable. In so doing, it violates their fundamental human rights. However, the types practiced by the Igbo do not discriminate and are not a show of sex or gender superiority.

The effects, as stated above, vary according to the types and the procedures used. According to studies, types I, II, and III of FGM/C present severe health problems documented by several authors. Although "types I and II are mild, may involve severe health complications with reports of complications like shock, hemorrhage, urogenital complications, obstetric complications, and sexual dysfunction."\textsuperscript{121}
In contrast, if FGC is considered castration and mutilation of the body and condemned as unethical, inhuman, and a violation of body integrity, one wonders why sex-transition, tattoos, and other non-therapeutic surgeries are not condemned as unethical and inhuman and violation of body integrity. Some gender dysphoric people pursue medical treatment to transition from one gender to another in recent times. Sex transition surgery is more complicated, expensive, and problematic than FGC because it involves a total change from one sexual organ to another. It is complete mutilation and castration of the sex organ. The "treatment consists of counseling, then dressing, and living as the other sex, along with hormone therapy affecting secondary sex characteristics. The next step in a transition is 'top surgery,' that is, mastectomy for female-to-male (FtM) transpersons or breast augmentation for the male-to-female (MtF) transpersons. The final step is 'bottom surgery,' which consists of refashioning the urinary and reproductive structures into those of the sex. Some transitions are completed without surgery, which is expensive and irreversible."\(^{122}\) The argument in favor of sex transition may be based on the principle of informed consent and autonomy. It is also essential to state that some adult girls in places where circumcision is practiced at a later age willingly and conscientiously accept circumcision because of their love for their cultural heritage.

Both female and male circumcisions are painful. They may have adverse effects, especially when they are improperly performed and both are non-therapeutic. Surprisingly, female circumcision proponents have not raised moral, ethical, and health arguments to abolish male circumcision. There are instances where young and infant boys have died of complications due to circumcision. It implies that moral, ethical, and health arguments against female circumcision should equally apply to male circumcision. According to Godfrey Tangwa, is the call for the abolition of female circumcision a clear case of "treating equals unequally"? Why is it that male
circumcision has wider acceptances despite its health risk and non-medical purpose?, is it because male circumcision has a more precise historical origin than female circumcision or its origin and place in Judeo-Christian tradition. Moreover, it is easier to condemn female circumcision not only unanimously but with the most draconian disincentive; perhaps it has its origin from unenlightened, crude, and naïve people who have nothing to offer.123

Circumcision is only understood among the Igbo as an ethnoreligious practice without sexual or gender bias. Its condemnation in the Igbo tradition may be based on the non-acceptance of cultural practices harmful to human body integrity and non-therapeutic. The African Charter on the Rights and Welfare of the Child (the African Charter), article 21 adopted by the Organization of African Unity (African Union) in 1990 condemns such arts thus: "State Parties to the present Charter shall take all appropriate measures to eliminate harmful social and cultural practices affecting the welfare, dignity, normal growth, and development of the child." However, the Charter did not mention FGC; it mentioned child marriage, gender and status discrimination, and prejudicial cultures to health and life.124

FGC has received much condemnation because of its adverse health, physical, and psychological effects on women's reproductive and general health. Some of the physical consequences and complications, according to the WHO, include death, bleeding, shock, and injury to neighboring organs. It also includes urine retention, infection, and severe pain; mostly, type III of FGC involves the external female genitalia's excision because excision permanently damages the female genital. There is not much statistics or data on the psychological effects of FGC on women. However, other physical and emotional effects include fear, and constant pain during intercourse, and menstruation.125 "There is only one published case of psychopathology in a child resulting from fear of circumcision in the medical literature."126 These health consequences and
complications cause mortality and morbidity (maternal mortality and reproductive morbidity) in girls and affect their education. Other health complications are the risk of pelvic inflammatory diseases and contracting infections like HIV and hepatitis B because of unsterilized instruments. It may cause severe complications during childbirth, leading to a caesarian section and heavy bleeding during and after delivery, especially type III. The degree of complication depends on the type and severity of FGC.

6. b.ii. Elimination and Agencies Responsibilities

a. Elimination of Female Genital Cutting

Tradition and culture define people of various ethnic groups across the globe. They make them unique and form their world view about the solar system, life, death, norms, and value. Tradition and culture are essential in the formation of human behavior. Also, cultural diversity and pluralism create harmony and beauty in the world. The Universal Declaration on Bioethics and Human Rights (UDBHR) acknowledges the importance of culture and tradition in people's lives. It also cautions against a harmful and degrading culture that violates human dignity, human rights, and fundamental freedom. "The importance of cultural diversity and pluralism should be given due regard. However, such considerations are not to be invoked to infringe upon human dignity, human rights, and fundamental freedom..." FGC is among cultural and traditional practices that are considered harmful and dehumanizing. Therefore, efforts should be made to eliminate it. FGC's elimination requires a multidisciplinary approach because it has socio-cultural, economic, and religious components that are multidimensional.

Public health ethics is a functional tool to eliminate FGC because it uses a multidisciplinary and science-based approach to solving problems. It draws ideas and views from various fields of
study, including: education, psychology, medicine, sociology, criminology, epidemiology, and economics.\textsuperscript{131}

Moreover, public health involves the collaboration and association of many professional associations and government agencies in health development, improvement, maintenance, assessment, and intervention. Therefore, the "public health system consists of all the people and actions, including laws, policies, practices, and activities that have the primary purpose of protecting and improving the health of the public."\textsuperscript{132} Furthermore, societal structure, legal and cultural practices generally contribute to public health. Social injustice and abuse of human rights, such as disparity in health care services, racism, and gender inequality, have adverse health effects. Traditionally, public health activities are not concerned only with medicine and health care; from its earliest beginning, public health has focused much on the poor and the impact of squalor and hygiene on health. It continues to keep this tradition by focusing on the social determinants of health to date. Although public health emphasizes the social injustice that affects health, it also gives attention to moral and ethical issues that contribute to health care.

According to Jonathan Mann, "public health officials now have two fundamental responsibilities- protecting and promoting public health and protecting and promoting human rights. Sometimes public health programs burden human rights, but human rights violations have adverse effects on physical, mental, and social well-being." Human rights promotion and protection are closely linked with the promotion and protection of human health.\textsuperscript{133} The process of social change, mobilization, and enlightenment in the community with a collective, coordinated effort to discourage the practice (of FGC) by a community-led action is essential and adequate.\textsuperscript{134} Public health ethical approach becomes useful in Nigeria to address FGC, human dignity violence, and the environment since FGC is considered a public health menace, abuse of
girls' rights, and violence against women and children. Public health ethics based community approach is pertinent in handling this issue, as it will involve traditional rulers, clergymen and women, and stakeholders.

FGC has a long history across the globe. It is a practice deep-rooted in the cultural, social, and religious life of the people. Therefore, its elimination will equally take time. Peace, dialogue, and enlightenment are essential steps. However, where female circumcision is a cultural and religious practice, its abolition cannot be sudden and automatic without severe disruptions and conflicts. Cultural and religious practices deal with a community's way of life and worldview. They can only be changed gradually as other ideas, practices, and habits supplant them. Culture is dynamic and human interaction has made acculturation possible, especially with modern media like the internet. For example, the throwing away of twins in south-eastern Nigeria, a ritual practiced in ancient times, was abolished in the 1940s through dialogue, education, and awareness. Also, slavery was once an acceptable practice; however, slavery has been abolished through dialogue, although slavery persists in the form of human trafficking to this day. Again, crusades and inquisitions were once carried out by the Catholic Church and were judged right, but today they are no longer accepted. It is essential to acknowledge the relationship between people and their culture. People's cultural and traditional heritage should be respected as honorable, upright, morally sound, and dignified. Also, the people practicing FGC want the best for their children. They are not practicing FGC with any evil intention to hurt or harm them. The use of peace, dialogue, education, and awareness will make them understand the adverse effects of this cultural practice. They will also realize that the practice has no health benefits but has health risks and complications for their daughters and wives.
Education has been an excellent tool in human development and moral formation. The Nigerian Educational System should promote the teaching of cultural practices vis-à-vis their positive and negative effects. The meaning, value, reason, and origin of various cultural practices in different ethnic groups need to be explained to the students. The knowledge and background provided will help students understand FGC's harmful effects, which will help to discredit its practice and, if possible, bring an alternative and less harmful tradition.\textsuperscript{137} The educational and social status of women needs improvement, especially in states with lower-class girls in school. The teaching and awareness of FGC's complications in Secondary and Tertiary institutions and the experience of some women who have undergone it will make future parents disapprove of it. The more enlightened and informed women are, the more active they will be in the socio-political and economic activities of society. Education also will make women understand the harm and work to stop this practice that is harmful to their health.\textsuperscript{138} For instance, the May/June 2014 \textit{West African Examination Council} (WAEC) civic education question 1 was about values. According to WAEC, "values are ideas, things, or principles cherished by people in society."\textsuperscript{139} Female circumcision is a culture cherished by the people because of its socio-cultural background. However, explaining to the students its health complications drives the message home. Besides educational factors, other aspects to be emphasized are discrimination and violence against women and girls within educational facilities. Education should teach students values and ethical disciplines to combat and fight violence and abuse against women and girls.\textsuperscript{140} Also, public health ethics is educational in approaches; hence it serves as a functional tool in eliminating FGC through a health awareness campaign and seminars for young mothers and girls. Education will help to reduce illiteracy and ill-rational behaviors that promote ethnicity and violence at any slightest provocation. Ignorance sometimes is the cause of violent behaviors that threaten human
dignity and the environment; with an excellent educational system, the country can reduce violence and abuse of human dignity and promote environmental health.

The health effects of FGC have received global attention. There is documentation of the health effects of FGC in many medical journals and books. There have been many policies, laws, and campaigns to eradicate the practice at different levels and times. However, these actions have not produced the expected result. FGC is still prevalent globally, although some success has been recorded in Nigeria and other parts of the world. In "Senegal, a community-led approach has been effective in eradicating the practice."141 In Nigeria, the federal law legislating against FGC's practice is the Violence against Persons Prohibition Act (VAPP) 2015. The Act condemns all forms of violent acts under the following categories: physical, psychological, harmful traditional practices, and sexual and socio-economic violence. The Act prohibits FGC explicitly; it is punishable by imprisonment with an option of a fine of #200,000. "A person who performs female circumcision or mutilation or engages another to carry out such circumcision or mutilation commits an offense and is liable on conviction to a term of imprisonment not above four years or to a fine not exceeding #200,000 or both."142

Policies and laws are essential in regulating violence and abuses in society; an excellent judicial system that is corrupt-free and prompt in delivering judgment is essential. Before laws and policies take effect, people need to be informed and allowed to participate directly or indirectly (through election or referendum) in their formulation. In addition, laws and policies are not to be in the form of threats and sanctions. Instead, they should be approached through dialogue and social justice because "premature legislation is ineffective and is ignored. All it may do is drive circumcision underground, as happened when the Kenyan Government tried to prohibit medical
personnel from circumcising females in hospitals." As Mackie "points out, unpopular legal
prohibitions or harsh propaganda are doomed to meet with resistance. It is just human nature.\textsuperscript{143}

\textbf{b. Actors and Agencies for its Elimination}

There have been tremendous results in the elimination of FGC in the south-east and Nigeria as a
whole. However, a collaborative effort is essential for the total elimination of FGC in Nigeria
and the south-east. There is a need to assign duties and responsibilities to individuals and groups
because laws and policies without people and agencies to execute them are useless and
ineffective. The works, guidelines, and policies of international organizations are commendable.
However, local organizations like The \textit{Nigerian Medical Association} (NMA), the \textit{Nigerian
Nurses and Midwifery Council} (NNMC), the \textit{Christian Association of Nigeria} (CAN), the
\textit{Nigerian Supreme Council for Islamic Affairs} (NSCIA), and the \textit{Ministry of Women Affairs} at
state and federal levels should be allowed to implement these policies. Therefore, for the smooth
elimination of FGC, the services of the following institutions and individuals are recommended:

\textbf{Religious Groups}

Religious groups have been involved in the social justice movement in various parts of the
world. They have been the prophetic voice of the voiceless. They have often raised their voices
against unjust socio-economic structures such as poor treatment of widows, orphans, and the
poor. They raised their voices against a corrupt and selfish government that impoverished the
people through inequality that meant a comfortable life for a few and suffering for many.\textsuperscript{144} In
Islam, for instance, FGC is not obligatory in Sharia law. As explained by medical experts, its
health implications have made many Islamic scholars understand why it should be eliminated,
and they strongly oppose its practice.\textsuperscript{145} The Post-Synodal Apostolic Exhortation Amoris Laetitia
(The Joy of Love) calls for eliminating "unacceptable customs" that dehumanize and violate human dignity and rights. It mentioned, in particular, the ill-treatment of women in some customs. Some shameful and abusive treatments women are subjected to include domestic violence and other forms of enslavements. It is sometimes a show of male dominating culture and control over women. It calls it a "weak and coward act of wickedness."¹⁴⁶

Furthermore, scriptural passages can be cited in teaching men and women equality in Islamic and Christian religions. For instance, the Quran presents a doctrine of equality between men and women. That they are created for each other, and there is no superior or inferior to the other. Concerning the first Adam, the Qur'an says: "Who created you from one single soul, and created from it its mate" (Qur'an, 4:1.) The Qur'an says in several places: "Allah created your mate from your own kind."¹⁴⁷ The Bible also presents a doctrine of equality between men and women in the creation account. "So, God created man in his image; in the image of God, he created him; male and female, he created them." (Gen 1:27) Religion is an essential tool in the development of conscience and the moral formation of the people. That is why the religious approach to the elimination of FGC will be helpful.

**Traditional Rulers and Stake Holders**

South-eastern Nigeria is more of a patriarchal society and decentralized government, where the elders and different age groups make decisions. In places like Ohafia, Abribe, and Afikpo, there is a matriarchic culture. Both patriarchal and matriarchic culture is practiced in Igbo culture; however, patriarchal culture is more prominent.¹⁴⁸ The elders and the different groups that form the society’s decision-making body need to be informed and worked with to eradicate this culture, having seen its negative and adverse effects. The stakeholders in the community that can make this possible include the council of elders and the titleholders. They are the defenders and
promoters of the culture and the tradition in the communities in south-eastern Nigeria. Their engagement in policy formulation and implementation will help eliminate and prevent female genital mutilation in the communities where it is still dominant.

Since 2009, Nigeria has sought the active involvement of traditional rulers and religious leaders in polio eradication, making them stakeholders in the eradication program under The Nigerian Communications Engagement model. Following the engagement of traditional rulers and religious leaders in the polio eradication program between 2009 and 2011, there was a sharp drop in reported polio cases in the country. There was a tremendous improvement in polio vaccination delivery in the country. "This progress was attributed to the engagement of traditional and religious leaders, although no proper evidence based on field research was relied on for this conclusion."¹⁴⁹ This indicates the role traditional rulers and religious leaders can play in health promotion and disease prevention. Most often, traditional rulers and religious leaders are the people's eyes in many things that affect their welfare. Traditional rulers in Nigeria play a key role in governance at the community level. This is true of some other countries in Africa; for instance, the traditional rulers were instrumental in the "implementing of the Maternal, Newborn and Child Health (MNCH) policy in Malawi through the mobilization of the community for MNCH campaigns and encouraging women to deliver at the health facility rather than with Traditional Birth Attendants (TBA)."¹⁵⁰

**Women’s Groups**

Circumcision is primarily done in south-eastern Nigeria by women. It is difficult to find a male circumciser in south-eastern Nigeria, especially in the Owerri zone. Traditional birth attendants are primarily middle-aged women who combine midwifery jobs with the circumcision of
babies. Sometimes, the people who promote this practice are not men; instead, it is women due to selfish advantages and illiteracy. If women are the major players in this act, in that case, they can help stop it since scientific evidence shows that it has adverse effects on their general well-being. Moreover, Nigerian women have played political and socio-economic roles in the societal development of their localities before, during, and after colonial rule. The diplomatic roles of women such as Queen Amina of Zaria, Moremi of Yoruba land, Queen Kambasa of Ijaw Land, and Queen Owari of Ilesha remain alive in Nigerian politics and socio-economic history. The Aba Women Riot of 1929 is another example of a situation where women resisted imperialism and protested against unjust treatment during colonial rule. The 1941 and 1947 protests of the Egbasu women group of Yoruba ethnic group against injustice and exploitation melted on them by the colonial masters. Again, "in the mid-1970s, women of Umueleke in Ehime Mbano LGA of Imo State staged a protest against sexual child abuse, some left their homes for their [husbands] who did not do so much to punish the culprit… Their action attracted attention, and the men were forced to act immediately." The women in Igbo culture are strong and dynamic. They are involved in the social justice movement and can bring changes to unjust situations. The annual home and abroad meeting of women held between August and September is another strong vehicle women are using in promoting social justice and conflict resolution.

Violence and vulnerability are not new in human history. Both violence and vulnerable conditions are part of the everyday challenges humanity face. They cannot be totally eliminated in the world because some violence and vulnerable situations occur naturally. Human beings have no power to control them. Human-induced violence and vulnerability cannot be totally eliminated because they are some of the evil or bad attributes of human beings. It is evident that violence constitutes a great menace to human health. It distorts peace and development. It causes
injury, death, and displacement. It is the duty and responsibility of humankind to come together and protect one another through non-violent practices. The factors and circumstances causing violence and vulnerability can be reduced by promoting social justice and peace. Public health ethics is another model to prevent violent and vulnerable conditions.

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Public health is an integral part of government policy because health care is a common good, and the government has to legislate and regulate health care. It is a fundamental human right that is integral to human dignity. It is also the primary task of the government to provide excellent and affordable health care for its citizens. However, health care globally faces the challenges of delivery and payment, especially in developing countries, because of inadequate insurance coverage, facilities, labor/personnel, poverty, and insecurity. Nigeria's health care system is growing daily to meet the World Health Organization's (WHO) guidelines and directives. In its growth to meet the WHO guidelines, public health in Nigeria faces challenges in finance, equipment, human resources, and other barriers. It faces the problem of individual autonomy and public health, especially in immunization and insecurity (public safety.) The lapses in the Nigerian health care system with security problems have increased the country's morbidity and mortality rate. Hence, many people have no access to health care either because of poverty or the lack of some health care services and insecurity. The situation creates disparities between the wealthy and the poor and urban and rural dwellers. "Health equality is increasingly identified as a principal goal to be achieved through public health policies and activities."¹ Public health function includes social justice, environmental health, health education, and public safety. Since human dignity is not protected in a violent and polluted environment, it brings ethics and morality to protected human dignity and the environment. In Nigeria, the continuous violence and pollution are a menace to human dignity and the environment, as pollution and violence continue to cause citizens death, injury, and illness. Public health and its ethics are functional tools to address violence and pollution in the country by applying the objective of public health,
such as reducing health disparity and balancing the controversy between population health and
civil liberty, especially among the vulnerable populations and environmental health.

7. A. Public Health, Public Health Ethics, Morbidity, and Mortality

Public health is as old as humanity because human beings from the beginning have faced many
epidemics and influenzas that needed community or public effort to fight. For instance, the
medieval era witnessed two horrible pestilences: the Justinian Plague of the sixth and the Black
Plague of the fourteenth centuries. Both plagues killed millions of people in many European
countries and devastated the structure of the communities. Therefore, it is impossible to separate
health from human life because health status is integral to human existence. Also, good health is
attributed to blessing in some cultures and religions and bad health to evil. However, the most
fearful and threatening health crisis in human history is population health crises, like influenzas,
pandemics, epidemics, environmental health, land, water, and food contamination. As expressed
by the Encyclical Fratelli Tutti (On Fraternity and Social Friendship), "the pain, uncertainty and
fear, and the realization of our own limitation, brought on by [COVID-19 pandemic] have only
made it all the more urgent that we rethink our styles of life, our relationship, organization of our
society and above all, the meaning of [human] existence." A pandemic like COVID-19 makes us
understand we are a global community, according to the adage "we are all in this together." It
clarifies humanity's universal vulnerability and that an individual health problem sometimes is
the health problem of all because we are all interconnected and interrelated.

Public health effort is needed to contain, manage, and prevent communicable diseases-epidemic
and pandemics. Public health developed from the prevention and management of population
health crises that threatened human beings. Its approach and management of epidemics,
pandemics, and influenzas were through sanitation and hygiene, divination, prayers, and
repentance in ancient times. These methods were applied in ancient times because of the understanding of disease pathogens and diagnoses. The ancient knowledge of disease pathogens was Theo-centric and less scientific than it is today. For example, in the Dark Ages, "health problems were, for the most part, 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." During this period, pandemics and plagues were believed to be the anger of God. The solutions to these problems were prayers, atonements, and penance.

In addition, the Igbo ethnic group also believes that mother earth's rage and anger manifest in forms of famine, plague, epidemic, and defeat in inter-communal feuds, high mortality and morbidity rate, especially among young people, drought, and poor fruitage. Whenever these happen, the people often consult a traditional (native ) doctor to know what has gone wrong in the land. Upon discovering what must have gone wrong, a day of atonement and purification is scheduled for the community. Some of the crimes considered as an abomination or taboo (nso or aru.) that defile the land (ala) in Igbo culture are homicide, patricide, incest, adultery, bestiality, abortion, suicide, and killing of sacred animals, among others, based on a local belief of each civic community. The solutions to them are prayers, sacrifices, atonements, and penance. Among the Yoruba, there are four causes of illness and sickness: supernatural, mystical, natural, and hereditary. The Yoruba believed that only a traditional health care provider could cure illness and disease caused by the gods. The traditional health care provider consults the oracle (ifa) to know the cause of the illness and its appropriate solution or cure. Illness is seen as an enemy that is likened to supernatural or mystical events of life.
Public health is the offshoot of the population health crisis. It is not like clinical medicine that focuses on individuals. Public health recognizes and evaluates other factors such as societal behavior, environmental and economic factors that are determinants of health. Public health concentrates on health promotion, disease, and disability prevention.\textsuperscript{13} For instance, public health services include protecting the population from disease burden (predominantly infectious diseases), injuries, hazards, pious substances, influenza, epidemics, and virus outbreaks.\textsuperscript{14} It collects and uses data from epidemiology, population surveillance, and other empirical quantitative assessment to analyze and recognize the multi-dimensional nature of health determinants. It also uses data and analysis to develop an effective way of solving the population health crisis. Public health practice at a global level handles health issues affecting the global community, such as the threat of a pandemic (e.g., COVID-19), climate change, and global warming. It can engage in managing other health issues, such as introducing new hygiene procedures when necessary.\textsuperscript{15}

Historically, population health has been improved through various measures. The improvements in population health include those achieved within clinical medicine programs, such as vaccination programs, and other measures such as improvement in the workplace, home, and general environment safety. However, much has been achieved outside the health care context, with legislation and sanitation. For instance, "the clean air legislation and improved housing and sanitation considerably reduced morbidity and mortality in western European countries in the 19\textsuperscript{th} and 20\textsuperscript{th} centuries." The \textit{Clean Air Act of 1956} and the \textit{Sanitary Act of 1866} in England legislated the domestic and industrial population's control. "The local authorities are to provide a water supply for the disposal of sewage and waste, respectively."\textsuperscript{16} Using face masks, avoiding crowds, hand washing, and hand sanitizer are recommended to prevent COVID-19 spread.
Additionally, various health measures and safety regulations for public places and workplaces have helped reduce sickness and premature death.\textsuperscript{17} Professor Winslow of Yale University gave one of the earliest definitions of public health, which also attempted to provide public health scope. According to Professor Winslow, public health is "the science and the art of (1) preventing disease, (2) prolonging life, and (3) organized community efforts for (a) the sanitation of the environment, (b) the control of communicable infections, (c) the education of the individual in personal hygiene, (d) the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and (e) the development of the social machinery to ensure everyone a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birthright of health and longevity."\textsuperscript{18} The WHO also defined public health as "the art of applying science in the context of politics to reduce inequalities in health while ensuring the best health for the greatest number." It defines population health as "the state of health of the members of a certain population."\textsuperscript{19}

The goals and scope of public health are well captured by Professor Winslow's definition, as contained in \textit{Nuffield Council on Bioethics Report} entitled \textit{Public Health: Ethical Issues}. According to this document, public health should aim at the following: "to reduce the risks of ill health that people might impose upon each other; pay special attention to the health of children and other vulnerable people; to reduce ill health by regulations that ensure environmental conditions that sustain good health...and to make it easy for people to lead healthy lives by the provision of advice and information." The Report acknowledged the constraints in achieving these goals. It says regarding the limitations in achieving these goals; the programs should "not attempt to coerce adults to lead healthy lives and seek to minimize interventions that affect important areas of personal life."\textsuperscript{20} Public health faces constraints in achieving its goals because
it focuses on population health over individual health. It also handles the prevention of health inequalities, the spread of contagious diseases, and the control of hazardous substances.\textsuperscript{21} It is a multi-purpose endeavor that sees all aspects of human and non-human health related to environmental health and safety. The branches of the government that support public health are the executive and legislative.\textsuperscript{22} A public health crisis is often a regional problem. It can be a global problem, such as the Ebola and COVID-19 pandemic outbreaks. Therefore, as public health's duties and responsibilities increase and become more prominent, the ethical issues associated with it increase and become more apparent.\textsuperscript{23} Moreover, "public health problems are influenced by, among other things, institutional arrangements and prevailing structures of cultural attitudes and social power." Public health problems understood from this perspective require that their strategies and interventions be genuinely public or community-based. It proposes the need for collective involvement, open discussion, civic problem solving, and capacity building.\textsuperscript{24}

**Public Health Ethics**

Public health is a multi-dimensional discipline with a broad scope. It is "uncommonly wide, encompassing ethics in public health as well as the ethics of public health."\textsuperscript{25} Ethics should be understood from the context of norms, values, virtues, principles that encourage people to live together in justice and peace, love and harmony, respect, and dignity. Hence only a few issues in public health do not come under the auspices of ethics.\textsuperscript{26} Public health ethics is the offshoot of two established courses, medical ethics, and bioethics. Medical ethics is primarily concerned with an ethical obligation in medical practices (clinical practice.) Bioethics in the 1960s focused more on the ethical implications of biotechnological advances than clinical medical practice concerning the patient-physician relationship. Public health ethics is a new field that was born
only recently. In the beginning, this field borrowed much from the clinical ethics-based approach. However, it has put more focus on justice (social justice and distributive justice). Although "there is no single agreed-upon approach, the common foundational values shared by a majority of earlier frameworks reflect the tension between public health and individual autonomy and the common good."27 Public health ethics is not in opposition to medical ethics and bioethics. They are interwoven and complement each other to pursue one goal- the right thing to do in human society.28 Medical ethics focuses more on individual-patient autonomy and the responsibilities of health care providers to the patient. However, public health ethics is concerned with equity and proficiency in distributing health care resources and protecting human well-being.29

Although public health ethics is a new branch of study, there are two consensuses about this discipline. Firstly, "public health presents distinctive ethical challenges, not just moral problems already [common] with medical ethics and bioethics." Public health is, by definition, a specific part of health care that focuses on the entire population. The second consensus is "public health and, consequently, public health ethics are distinctive. It will be a mistake simply to apply the common findings in medical ethics and bioethics to public health problems."30 Professional ethics, or ethics of public health, "relates to the mission of public health to protect and promote health and focuses on the professional character of public health practitioners who hold themselves accountable to standards or codes of ethics." The difference between public health ethics and health care ethics exists in the difference between public health and health care. Health care ethics focuses fundamentally on an individual patient relationship with the health care provider as he/she receives treatment and care from the practitioner and health care system during injury or illness.31
"Public health and its ethics, on the other hand, focus on the health of the population, made up of large numbers of people in the settings of their daily lives, particularly as they are affected by social and political structures and environmental structures." Although public health focuses on the entire population, it also handles equity in the health care and health of the disadvantaged, oppressed, or marginalized members of the society. Hence, public health ethics can be understood as the code of conduct guiding public health interventions. That is to promote and protect population health and prevent and control disease outbreaks and environmental factors that are determinants of health. It also considers hygiene and socio-environmental safety.

Public health ethics is a practical discipline built on other theoretical fields like philosophy, political science, and economics. The foundation laid by these branches of studies has a relationship with politics, economics, and justice in global structure and network. Therefore, public health ethics based on social justice should use these platforms to develop a just system regarding global public health and global justice.

Public health ethics is engulfed in a three-way dilemmatic condition—government, population, and individuals. Its triple relationship is problematic because sometimes there are clashes of interest between the community members, such as the immunization program (cf. chapter 5.B.1.) Another example of a conflict between public health and individual health is the face mask-wearing during the COVID-19 pandemic. The use of face masks is understood as a way to contain the spread of COVID-19. However, some members of the public are not willing to comply with this public health directive. The central ethical problem with face masks is whether individuals can refuse to wear them because they are a personal choice, or is this selfish to refuse given its public health benefits? Can the government make face mask-wearing compulsory or mandatory like some states in Nigeria have done? When implementing compulsory wearing of
face masks, where is the right point to be in the continuum from voluntary to mandatory participation?\textsuperscript{35} This is a sharp criticism of the autonomy principle of Beauchamp and Childress in \textit{Principles of Biomedical Ethics}. Again, the African relational-autonomy serves as a better principle in this situation if everyone believes that we live for ourselves and one another. Hence, Lappe suggested that "individual rights can be compromised for the sake of community interest, but only when there is proportionality. That is, the benefits must be larger than the sacrifice, and the absolute level of infringement on the individual right must be minimal… there must be evidence that the programs will provide the good on which they are premised."\textsuperscript{36}

The ethical dilemmas involved in public health policies and health care management are complex and problematic because they involve population health and not an individual. Moreover, individuals have a free and autonomous right to accept or refuse medical interventions and treatments. According to the WHO's discussion paper on \textit{Addressing Ethical Issues in Pandemics Influenza Planning}, some of the policies proposed to contain pandemic situations include quarantine and isolation, international travel and border controls, social-distance measures, and decreased social mixing. It also includes veterinary measures and farming practices.\textsuperscript{37} In applying these strategies, ethical considerations should be recognized not to infringe on people's rights and liberty, such as balancing rights, interests and values, transparency, public involvement, social mobilization, information, education and communication, and resource constraints.\textsuperscript{38} The public health policy must be reasonable, transparent, trustworthy, communicated to the masses on time, and educative. Also, the WHO Constitution of 1948 states that "informed opinion and active cooperation on the part of the public are of the utmost importance in improving health."\textsuperscript{39} Even with all these policies and
directives put in place, public health's ethical problem is not quickly resolved in many countries, especially during a pandemic.

Public health ethical frameworks are values that come from individual and clinical orientations, such as autonomy, human dignity, noninterference, individual liberty, respect for persons, and rights. They also include principles and values that originate "from the community or collective orientation such as obligations, producing benefits, preventing harm, protecting trust, confidentiality, population utility, justice, transparency, relationship, equity, disparities, and participation." Lately, the attention of public health ethicists has moved towards individual autonomy and the common good. It also considers the intricacies and interrelationships between human beings and other creatures and social determinants of health. The unique goals of public health ethics are to further enhance local, national, regional, and global health through a mechanism that respects human dignity and promotes justice, equity, and fairness. Public health ethics in a concrete reality has to address pressing issues in global health and global justice, such as the causes of inequities, the government's responsibilities to its citizens, the responsibilities of more prosperous countries to the poorer countries, and global ecological sustainability. It should also address issues in global public health, as globalization is common agenda. Appropriate attention must be given to the widening global disparity in health, wealth, and socio-economic standing.

7. ai. Public Health in Nigeria

To provide an excellent and functional health care system, the National Health Policy and Strategy to Achieve Health for All Nigerians was first launched in 1988. It was revised in 2004. However, it becomes necessary to produce a new health policy that mirrors current issues and trends, including the uncompleted program of the Millennium Development Goals (MDGs) and
the New Sustainable Development Goals (SDGs), and manage the emerging health crises, particularly epidemics and pandemics. “The provisions of the National Health Act of 2014, the new Primary Health Care (PHC) governance reform of bringing PHC under one roof (PHCUOR), and Nigeria's renewed commitment to universal health coverage. It also became essential to develop plans to respond properly to globalization, climate change, the challenge of insurgency, and their impacts on the Nigerian health system.”

In addition to the country’s experience in executing the 2004 Revised National health policy and the 2010-2015 National Strategic Health Development Plan provided an avenue for developing a New National Health policy. The 2004 National Health Policy was applied through the National Health Sector Reform Program (2004-2007) and afterward through the National Strategic Health Development Plan (2010-2017) and the annual operational plan. “Since then, Nigeria’s desire to offer affordable and accessible health care services to all Nigerians has led to efforts to revitalize primary health care delivery. This new health policy comes at an opportune time following the passage of the National Health Act in 2014. The Act, therefore, provides the legal framework for the new national health policy” (2016 National Health Policy Promoting the Health of Nigerians to Accelerate Socio-economic Development).

In 2016, following the review of the 2004 National Health Policy and considering the present emerging health challenges, such as epidemics, pandemic, insurgency, climate change, and global (warming, a new Health Policy with the theme: "Promoting the Health of Nigerians to Accelerate Socio-economic Development," was adopted in Calabar, the capital of Cross Rivers State. The idea is to provide Nigerians with good health care policies, services, and deliveries. It resonates with "the thrust of the third goal of the SDGs, which is to ensure healthy lives and promote well-being for all at all ages. It also aligns with the Nigerian Vision 20:2020 goal."
Vision 20:2020 is Nigeria's developmental agenda of growing economic and developmental strategies from 2009-2020. Vision 20:2020's goal for the health sector was to establish an affordable and accessible general hospital in each of the country's 774 local government areas. The overall goal of National health policy is "to strengthen Nigeria's health system, particularly the primary health care sub-system, to deliver effective, efficient, equitable, accessible, affordable, acceptable, and comprehensive health care services to all Nigerians." The goal resonates with the 1999 Constitutional provision of the Federal Republic of Nigeria Chapter II, section 17: 3.d. Thus, "the state shall direct its policy towards ensuring that there are adequate medical and health facilities for all persons." The policy goal on health service delivery is "to provide and ensure access to and use of high quality and equitable health care service, especially at the primary level by all Nigerians." These include "the provision of minimum health care service packages for all Nigerians at all levels and to improve the quality of health services and ensure patient safety at all levels of a health system among others." Health service delivery has eight set objectives: "1.) The provision of a minimum health care service package for all Nigerians at all levels 2.) To strengthen governance and accountability of service delivery unit to improve the management of health facilities 3.)To enhance demand creation for health care services and health system responsiveness to clients' needs and 4.)To strengthen the referral system," among four other objectives. According to this policy, "The primary health care policy shall remain the basic philosophy and central focus for the national health development." Its overall policy and objectives are to design a health service network that can reach most citizens. Furthermore, it is to prevent and treat diseases responsible for high death rate, illness, disease outbreak, disability, and injury in the country.
The Nigerian health care system is divided into three according to the country's three tiers of government, Local, State, and Federal.\(^5\) It is a shared responsibility for these three tiers of government. However, the private sector complements the services provided by the government.\(^5\) The country's health care delivery is carried out through primary, secondary, and tertiary health care services provided by the government, private sectors, and traditional medicine.\(^5\) The Federal Government provides mainly tertiary health care services (teaching and specialist hospitals.) The Nigerian Federal Ministry of Health is the umbrella that monitors and regulates all the health care activities in the country. It is assigned with these roles: development of policies, strategies, guidelines, plans, and programs that provide the overall direction for the national health care delivery system in the country. State Governments are responsible for secondary health care, while Local Governments are responsible for primary health care. The private sector (including multi-national companies and institutions) provides mainly secondary and primary health care services. The National Primary Health Care Development Agency (NPHCDA) efforts to get these private institutions to include immunization as part of their services have yielded promising results. However, immunization data reporting is still a challenge.\(^5\)

Primary Health Care (PHC) delivery in Nigeria is a duty assigned to Local Governments. The Federal Government and States support it. The Primary Health Care System was adopted in alignment with the *Alma-Ata Declaration in 1978*. The *Alma-Ata Declaration of 1978* sees primary health care as the foundation and basis of health care in the state. It is an integral part of a country's health care system, which is the central function and main focus of society's overall socio-economic growth. It is the closest and nearest health care service to individuals, families, and communities.\(^5\) It has produced a vibrant, functional system, seen as a tremendous
improvement in the Routine Immunization (RI) coverage to about 80% in 1990. Although it is the local government's primary obligation to provide PHC, all three arms of government and other agencies are involved in its management.

The 1999 constitution provisions govern Nigeria. Unfortunately, the constitution did not emphasize health care service and provision. It failed to assign or indicate each of the tiers of the government's roles and responsibilities in health care management and delivery in the country. The National Health Act of 2014 is the nation's first legislative health care system framework. Unfortunately, this legislative health care framework did not address the loopholes among the three tiers of governments' responsibilities and roles in health care provision and management. There are several sub-sectorial policies and strategies which the country has for its health care system, such as "1. reproductive health policy, 2. national human resource for health (HRH), 3. policy and plan, 4. national health promotion policy, 5. health financing policy, 6. national strategic plan of action for nutrition, among others."

The National Health Act of 2014 created a fund known as the Basic Health Care Provision Fund. It is maintained and funded by the federal government's yearly grant of not less than one percent of its consolidated income, resources from other sources, and international donations. However, health care in Nigeria is funded by the government and individuals. Health care is financed through tax revenues, out-of-pocket payments, health insurance, donor funding, exemptions and deferrals, and subsidies. The funding of health care in a country determines whether citizens receive proper health care or have a financial burden when accessing health care services. "The individual funds contribute over 70% of the total health expenditures (THE), and this can be: out-of-pocket payments (OOPs) in the forms of fees (informal or formal direct payments to health care providers at the time of service) about 90% and payments for goods
(medical products such as bed-nets, or condoms) about 10%." Despite these health funding options in Nigeria, the finances are still unfairly allocated across the country's health system. The uneven allocation of funds creates regional disparities in health care expenses.\textsuperscript{61} Out-of-pocket funding is the payment made by the patient to health care providers that are not reimbursed. The donor funding includes all financial assists received from international and non-governmental agencies, such as WHO, UNESCO, UNICEF, the World Bank, and \textit{United Nations Children Fund}, among other funding agencies. Insurance Scheme is another source of funding for health care in the country, such as \textit{SALUS TRUST and the National Health Insurance Scheme}. The \textit{National Health Insurance Scheme} was first proposed in 1962 and established by Decree No.35 of 1999. The Decree says, "There is hereby established a scheme to be known as the \textit{National Health Insurance Scheme} for the purpose of providing health insurance which shall entitle insured persons and their dependents the benefit to prescribing good quality and cost-effective health services; as set out in the 2005 budget."\textsuperscript{62} \textit{SALUS TRUST} is among the private health insurance companies springing up daily to complement the National Health Insurance. Private health insurance companies in the country serve as an option to the National Health Insurance, especially for self-employed persons and public servants.

Traditional medicine is central and integral to the health care system in Nigeria. "Due to the age-old importance of traditional medicine and new trends in health care delivery coupled with the reality that a high proportion of Nigerians patronize traditional medical practitioners, there is a need to integrate the practice with [western] medicine by ensuring the establishment of minimum standards for the practice."\textsuperscript{63} Among the Igbo, "indeed, the diverse folk medical traditions of the Igbo people are inseparable from the rest of the culture. To this end, they are likely to continue to subsist if other cultural elements subsist."\textsuperscript{64} It is patronized mainly by the poor because health
care is paid out of pocket. The most common challenges to accessing health services by the population are the financial burden, distance to the health facility, and health workers' behaviors. This situation has left some people with no other alternative than to patronize traditional health care practitioners. It also makes some self-medicate by using local herbs and over-the-counter drugs.

Moreover, even where the hospitals are well-staffed, equipped, and accessible, Nigerians sometimes still prefer traditional medicine over western medicine because of heavy financial cost (medical service is financed out of pocket) and the people's strong belief in their cultural heritage. Also, the understanding of health and illness in traditional African society promotes traditional medicine in Nigeria. In many African cultures, both spiritual and human agents are believed to cause diseases and death because African traditional medicine is practical and religious-oriented. Moreover, in Africa and particularly among the Igbo, diseases, suffering, pandemic, sickness, and illness are understood from the context of causality (cause and effect.) Often illness, infection, and misfortune are linked to supernatural or human powers because they believe they are caused by spiritual and human forces like witchcraft and voodoo. The western-styled medical system does not consider or include the spiritual and supernatural link to illness and disease. As discussed above, the ancient religious understanding of illness is still predominant in most rural communities in Nigeria (illness seen as God's anger or human wickedness.) The Nigerian public health system is divided between Western/modern and Traditional medicine.

Chapter Four of the National Health Care Policy of 2016, titled Policy Objectives and Orientations, exclusively deals with the significance of public health and other health problems. The document discussed the priority of public health under the following headings: 1)
Reproductive, maternal, neonatal, child, and adolescent health; 2) prevention and control of infectious diseases, 3) prevention and control of non-communicable diseases (NCDs), 4) public health emergency preparedness and response and other health problems. Each of these headings has goals and objectives. For example, the goal of reproductive, maternal, neonatal, child, and adolescent health is "to reduce maternal, neonatal, child and adolescent morbidity and mortality in Nigeria, and promote universal access to comprehensive sexual and reproductive health services for adolescents and adults throughout their life cycle." The objectives include reducing maternal and childhood mortality and morbidity rates and promoting the health and development of school children and adolescent information and services to promote the awareness of access to comprehensive health services. The second priority worthy of mention is the prevention and control of infectious diseases. The goal of public health in Nigeria is the prevention and control of infectious diseases. It also includes "to significantly reduce the burden of communicable diseases in Nigeria in line with the targets of the third goal of the Sustainable Development Goals." Public health's objectives in Nigeria include reducing the stigma attached to HIV/AIDS and improving access to quality health care and service delivery for HIV/AIDS patients, among other objectives. According to this policy, another public health priority is "public health emergency preparedness and response." Its goal is to minimize the problem of public health emergencies. Its objective is "to strengthen the national alert and response capacity for public health emergencies including epidemics, humanitarian crises, and natural disasters." Other significant priorities of Nigeria's public health are the environment, chemical products, medical waste management, and health promotion. It is public health's goal to maintain the proper medical, chemical, and other hazardous waste management to protect the citizens from the hazards and effects of climate change. It is public health's responsibility to provide the
citizens with information, knowledge, attitude, and skill to make a healthy choice of behavior.\textsuperscript{74} The major public health problems in Nigeria are malaria, mass immunization, environmental pollution and degradation, insurgency, banditry, motor accident, and outbreaks of epidemics such as lesser fever, cholera, meningitis, and recently Ebola and COVID-19 and other infectious diseases.

**Challenges Facing the Nigerian Health System**

The problems facing the Nigerian health care system are multi-dimensional. The problems include inadequate funding, insufficient staff, old equipment, and poverty. The problems extend to corruption among health care providers and government officers, poor sanitary conditions among the populace, and religious and cultural beliefs among most rural dwellers, mostly low educated ones. Most illnesses are connected with witchcraft, sorcery, magical power, and gods' anger in rural areas. This implies that "the sick person or his immediate environment may be regarded as magically contaminated and isolated from others."\textsuperscript{75} Religious influence is another problem; for instance, "in 2003, the *Supreme Council of Sharia in Nigeria* (SCSN) brought to a stop the polio immunization in the north, urged members of the Islamic community to abstain from immunizing their children and wards with the allegations that the polio vaccine is contaminated with antifertility drugs, HIV and some cancerous agents and that polio vaccination was a plan by the western [countries] to reduce the Islamic population in the world."\textsuperscript{76} Furthermore, the boycott of immunization in northern Nigeria may not be unrelated to the Pfizer Trovan trial's horrible experience in 1996. The fear and distrust that arose from this horrible experience that put children at health risk remain vivid in most northerners' memories, making them skeptical of any vaccination coming from the western countries. Another factor connected to the boycott of immunization in northern Nigeria was the 1988 President Babangida's
population policy, which advocated a limit of four children per woman. Therefore, the boycott of immunization in northern Nigeria has political, religious, and experiential reasons. The action stopped the polio vaccinations in northern Nigeria for some time. It also led to the killing and abduction of some polio vaccination workers in the region. "In Nigeria, in 2013, in Kano State, nine polio vaccination workers were killed. In 2014, in Bauchi, some polio vaccination workers were abducted." According to the UNICEF report, these actions made polio resurface in Nigeria, making the country rank the most polio-endemic country globally. Not only that, but it also infected the other parts of the country with polio since polio is infectious. Socio-economic, environmental factors (climatic conditions), insurgency, and violence contribute to the country's public health crisis.

The Nigerian health care system also faces the problem of insufficient staff. According to the 2012 Nigerian Health Profile, the country has the highest medical staff index in sub-Saharan countries. The number of health care workers in Nigeria as of 2012 was as follows: 65,759 medical doctors, 249,566 nurses and midwives, 16,979 pharmacists, and 5,986 community health officers. It also has 42,938 community health extension workers, 28,458 junior community health extension workers, 1,286 radiographers, 19,225 medical laboratory scientists, and 2,818 physiotherapists. The number of health care workers, impressive as it appears, does not correlate with Nigeria's 160 -200 million people. The problem lies in the number and the uneven distribution of medical staff across government hospitals. The situation is more tragic because most specialists rarely go to rural areas for various reasons, such as insufficient social amenities, insurgency, poverty, and violence. There is rarely any primary or secondary health care facility in rural areas with any of these medical specialists; gynecology, cardiology, and nephrology, among others. The socio-economic disparities in the country worsen the situation. There are
sharp income disparities among the rich and the poor, government officials, and civil and public servants.\textsuperscript{81}

The government poorly funds Nigerian public health care; this makes finance a big problem in government hospitals. Nigerian health care financing rates are meager (very low). For example, household out-of-pocket expenditure increased by 64.5\% between 1998 and 2002.\textsuperscript{82} Health financing challenges in the country include "gross underfunding of health, inadequate public health funding, low external funding, with the little external funding not being in tandem with national priorities, incomplete and unreliable data…."\textsuperscript{83} This statement best captures the situation: "The state which is supposed to provide for the poor is subjected to the profit motive. It depends on profit to function. The state-dependent on profits motive has made it an avenue for maximization by those whose sole existence is for accumulation."\textsuperscript{84} The World Health Organization (WHO) "sees health care financing as it concerned with the mobilization, accumulation, and allocation of money to cover the health needs of the people, individually and collectively in the health system." The health care system should be planned so that every citizen can easily access health care without excessive financial burden irrespective of status or location. It is the character or constituent of an equitable and just health care system.\textsuperscript{85} The capitalist system of the country also manifests itself in the health care system. The state and its agencies take health care services as "a commodity to be sold and bought for profit."\textsuperscript{86} Access to government and private hospitals is always problematic for the poor because of financial burden and location.\textsuperscript{87}

The country's 1999 Constitution offered little or no answers to resolve its health care financing crises. There is no transparency in the health care budgetary process. Other problems in health care service in Nigeria include weak leadership will and commitment to health care provisions

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and low budget allocations to health care. The leadership problem includes instability in the Federal Ministry of Health, State Ministry of Health, and Local Government Health Departments because the government in power appoints ministers, commissioners, and directors. There is also a high level of misappropriation of funds and fraud. There are poor working conditions between the three arms of government as well as private and other agencies involved in health care services and delivery. According to the CBCN, "to respect the dignity of a person is to concede his rights to him as fully human. We cannot fail to point out that the pervasive lack of accountability and transparency in governance in Nigeria has become a serious abuse of human rights." This statement attests to the weak and corrupt institutional framework that monitors, regulates, and evaluates the quality and standard of health care provision and delivery in the country. There is a lack of an established guideline that monitors quality and standards.

In Nigeria, there are about 34,173 health care facilities across the 36 states and the Federal capital territory (Abuja). As of December 2011, there were about 30,098 primary health care (PHC) facilities in the country, which accounted for 88%, 3,992, and 83 health care facilities were secondary and tertiary health care levels accounting for 12% and 1%, respectively. Other facility problems faced by Nigerian health care are physical structures such as buildings and other amenities like pipe-borne water, access roads, electricity, and transportation are still deficient in most communities. There is inadequate surgical equipment, computers, laboratory equipment, and generators in most Nigerian public health care facilities. Again, lack of maintenance and management culture among staff worsens the situation. Nigeria has a Geographic Information System (GIS); however, there is a need for standardization and coordination.
Violence and insurgency are also problems confronting health care services in Nigeria, especially in the northern zones. In recent times, Boko Haram, herders, and farmers' insurgence and violence are challenges affecting health care service delivery in the northern zones. Violence and insurgency have fueled the burden of health care in these zones. The northern zones have witnessed a deplorable health care delivery over a decade because of violence and insurgency. These include the destruction of health facilities and the flight of health care workers from the areas. Borno State is the beehive of the Boko Haram insurgence. It has lost many of its health facilities to Boko Haram in recent times. These facilities are either destroyed or have ceased to function. Some were converted to camps for internally displaced persons (IDPs.) The World Health Organization (WHO) report says, at least 35 percent of the state's 743 medical facilities have been destroyed. The surviving facilities are not functioning because of security challenges, lack of workers, and clean water supply.  

The quality of health care delivery in the country is like a penniless couple with nonchalant behaviors. The situation has made many seek medical help abroad. The country ranks high in health tourism in global health ratings. According to the Vanguard Newspaper of August 23, 2017, Nigeria suffers heavily from health tourism by patients and health care workers. The country annually loses about one billion dollars to health tourism. In the last couple of years, because of low health funding and investment in our country, the country had a brain drain and lost many good doctors. The country suffers from brain drain as many of its health providers have migrated overseas. As the country suffers from a brain drain, it also suffers from patients drain. Most Nigerians, especially the wealthy class, lack confidence in the health care system in the country. Nigeria has about 37,000 doctors in the diaspora, with about 30,000 in the United
States and 5,000 in the United Kingdom. The number of Nigerian medical workers abroad is almost equivalent to the number serving at home. The language barrier is another problem encountered in health care service delivery in the country. Language is an essential tool in human society; it is the primary tool of communication. When talking about language, it includes all forms of language skills, like body language. It is part of the cultural life of society. It is used to solve social issues and crises. After all, no society or culture can function effectively without proper communication. It is a bridge to access differences and connect people with social, cultural, and traditional differences. Poor communication with healthcare providers will distort access to health care, challenge trust in the quality of medical care received, and decreases the likelihood of a proper follow-up. Lack of communication also may lead to erroneous diagnoses and, in turn, inappropriate treatment. It is advantageous for health care organizations to employ multi-lingual staff. It makes communication easy and effective, thereby making health care service and delivery proficient and prompt. This approach is known as linguist competency. In the absence of multi-lingual and multicultural staff, a well-trained and qualified interpreter with diverse cross-cultural communication knowledge is essential. Health care providers cannot know and understand all languages. However, understanding some nonverbal language signs used by different ethnic and cultural groups is of great value in providing health care. Both the patients and clinicians should understand that there are appropriate and professional reasons for touching a patient. They should not see it as an assault but as a part of proper medical care and service. In Nigeria, language and communication are a challenge in accessing health care. The northern zone of the country has a few number of health care personnel. While the southern part has more health care personnel, some of the south's health care workers are employed or posted to the
north to make up for the gap in the north.\textsuperscript{103} The problem encountered in this arrangement is communication because of the language difference. Most rural Nigerians are less educated, and some health care workers cannot communicate in the indigenous languages of these people. Sometimes, patients feel very satisfied and comply with physicians who understand and communicate in their language. They also have more trust and confidence with people of their ethnicities. It makes a physician-patient relationship more cordial and the diagnosis and treatment plan easier.\textsuperscript{104} Language is a substantial barrier in accessing healthcare, especially in the northern part of Nigeria and in some parts of southern Nigeria that are multi-lingual or multidialectal.

7. a.ii. Morbidity and Mortality Rates in Nigeria

Nigeria has made incredible progress in health care service delivery in the last two and half decades. The country has recorded much success and improvement in fighting these major infectious diseases: HIV/AIDS, tuberculosis (TB), and malaria. It has also recorded progress in the area of maternal and child health. Recently, Nigeria has been able to, among others, halt the transmission of wild poliovirus, eliminate guinea worm disease, and efficaciously control the spread of the deadly Ebola virus. The success stories in Nigeria's health care are a ray of hope that the country's health care is improving. They also indicate the need to build a resilient health care system that provides accessible essential health services in a sustainable pattern.\textsuperscript{105} The CBCN commended the Nigerian government on controlling the Ebola virus; thus: "The Ebola disease is a source of worry to all people all over the world. We highly commend the Federal Government for the action taken to stop the deadly virus from spreading to other parts of the country."\textsuperscript{106}
Furthermore, as COVID-19 pandemic cases increase globally, Africa was expected to receive the highest hit because of poverty, corruption, inadequate health care facilities, malnutrition, and lousy government. However, it seems that Africa has defied the COVID-19 projected scenarios. What might be the reasons that a weak and unequipped continent is doing tremendously well on its management of the COVID-19 pandemic over developed countries? According to the Washington Post: "Ghana is doing much better with it than America. While so much about the virus and how it operates remains unclear, sub-Saharan Africa so far has dodged a deadly wave of coronavirus cases. Many factors have contributed to this. [Many] West African nations already had a pandemic response infrastructure in place from the Ebola outbreak of late 2013 to 2016." For instance, Liberia lost about 5,000 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. Many African countries strengthened their preparedness against COVID-19 by improving airport surveillance and implementing temperature screening at entry ports. Nigeria and Ethiopia were also interviewing 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. The mantra for the success achieved for the moment "might best be summarized as act decisively, act together, and act now. When resources are limited, containment and prevention are the best strategies." The cooperation and solidarity among African leaders understood from Ubuntu's African philosophy (I am because we are and because we are I am) resonated with the Igwebuike or umunnawuike of the Igbo ethnic group. Igwebuike, which means community, is strength, explained by the Igbo adage a gbako nyuo mmamiri, o gbaa ofufu (when people gather together and urinate, it fumes) captures it well. It explains the
African cultural and traditional way of life, practice, and institutional framework. It also embeds the spirit of cooperation and solidarity, as well as the promotion of the common good.\textsuperscript{110}

The country has recorded success in the area of infant and under-five mortality rates. The average life expectancy at birth has increased from 46 to 52.62 in 2008 and 2013. There was a decrease in the under-5 mortality rate from 201 deaths per 1,000 births to 128 deaths in 2003 and 2013, a 31\% decline. Infant mortality has witnessed a decrease between 2003 and 2013 from 100 deaths per 1,000 to 69. At 37 deaths per 1,000 live births, the neonatal mortality rate has not reduced at the same rate as the infant and under-5 mortality.\textsuperscript{111} Despite the decline in infant mortality, Nigeria has the third-highest rate of infant mortality in the world. Each day, the country loses about 2,300 under-5-year-olds and 145 women of childbearing age yearly, making the country the second-largest contributor to under-5 and maternal mortality rates globally.\textsuperscript{112} The principal causes of infant death in the country are birth asphyxia and severe infection, tetanus, and premature birth.\textsuperscript{113}

The average life expectancy in Nigeria, according to WHO, is between 53/56 for males and females, respectively, in its 2015 report.\textsuperscript{114} There is the likelihood that 12\% of women and men are to die between the ages of 15 and 50. The fundamental cause of death among women of childbearing age is maternal death. It accounts for 32\% of the deaths of women between the ages of 15-49. The lifetime menace of maternal death shows that 1 in 30 women in Nigeria will have a death related to pregnancy or childbirth. About 37\% of children under five experience stunted growth. The percentage of undersized children declined from 41\% in 2008 to 37\% in 2013.\textsuperscript{115}

Infectious diseases like malaria, acute respiratory infections (ARI), measles, diarrhea, neglected tropical diseases (NTDs), tuberculosis, and HIV/AIDS are the primary causes of Nigeria's high
morbidity rate. They cause about 66% of the morbidity rate in the country. HIV/AIDS patients have substantially declined in recent times. However, the number of HIV/AIDS patients still places a heavy morbidity burden on the country. Malaria counts for about 32% of morbidity and mortality rates in the country. It is approximated that about 97% of the assumed country's population of about 160 million is at risk of malaria. Children under the age of 5 and expectant women are the most vulnerable. They account for the highest morbidity and mortality toll from malaria infections. Ebola virus (EBV), Avian Influenza, and the Monkeypox outbreak in 2017 have contributed to the weight of infectious diseases and the burden of disease-causing morbidity and mortality rate. The neglected tropical diseases (filariasis, onchocerciasis, trachoma, worm infection, schistosomiasis, leprosy) also remain a major public health menace. The recent outbreak of COVID-19 has added to the mortality and morbidity rate of the country. As of August 17, 2020, Nigeria has recorded 49,063 cases, with 978 deaths.

The burden of combating non-communicable diseases is on the increase each day. The morbidity and mortality rates associated with non-communicable diseases like cardiovascular diseases, diabetes mellitus, cancers, chronic obstructive lung disease, kidney, and liver failure are increasing. "Nigeria Watch data on the causes of death (2006-2018) records that the three biggest causes of death to be: crime, political issues, and religious issues. The type of violent and crime-related activities include armed robbery, piracy, cult violence, mob action, kidnapping, domestic violence, ritual killing, herdsmen attacks, and killings by security forces." Injuries caused by violence in many parts of the country are also the leading cause of morbidity and mortality. Besides disability, mental health disorders, and other psycho-social problems resulting from violence and social unrest, the Boko Haram in the north-east and Fulani-Herdsmen in the north-central zones attacks contribute to high morbidity and mortality rates. The continuous killing
resulting from banditry, kidnapping, assassination, armed robbery, reckless use of force by security agencies and lynching, has increased the country’s morbidity and mortality. The irresponsible use of arms by some security agencies, especially the Special Anti-Robbery Squad (SARS,) has triggered protests among youth nationwide. The conflicts among herders communities and farmers and the activities of Boko Haram insurgents have remained, causing the loss of innocent lives. These make living in Nigeria very perilous. The conflict situation is the primary cause of food insecurity, poverty, hunger, and malnutrition, especially among the IDPs: who fled their homes with little or nothing. Recently, the country witnessed an upsurge in suicide cases and attempted suicide, contributing to its morbidity and mortality rate.

Furthermore, poverty, malnutrition, and nutritional diseases are significant public health problems, especially among rural settlers and low-income earners. "Poverty has been described as both a cause and effect of ill health. Disease is part of the poverty trap in Africa. People get sick because they are poor. And they get poorer because they are sick." Malnutrition and nutritionally related diseases cause about 53% of under-five morbidity and mortality rates in the country. Many malnourished children have severe health damages, including lower mental development, which will result in life-long health challenges. For instance, some IDPs eat a smaller quantity and quality of the meal, skip meals, and sell some assets to buy food. The food scarcity in IDP camps is causing death, malnutrition, starvation, and other life-threatening conditions.

7. B. Healthcare Disparities, Cultural Competence, and Public Health Ethics

The diverse nature of human society has both negative and positive effects. It causes both unity and division in socio-economic, socio-political, religious, and health care services. It is visible in ethnicity, race, religion, and gender in human society. In many countries, people have
complained of marginalization and exclusion from common goods such as health care, education, roads, and other social infrastructure. Inequalities or disparities in health care delivery are tearing nations and communities apart. A disparity of any type is an inhuman act and an affront to social justice and the common good. It causes violence, mistrust, and socio-political unrest. Health care disparity is a fundamental problem in health care delivery globally. It is caused by many factors, such as weak governmental policies, social injustice, ethnicity, race, education, wealth, and location.\textsuperscript{127} The reasons are many and complicated. Therefore, health care disparity is related chiefly to socio-economic, political, and religious differences, the difference in health-related risk factors, environmental factors, and direct and indirect consequences of marginalization.\textsuperscript{128} Health disparity, defined from a racial and ethnic perspective, is "a racial and ethnic difference in the quality of health care that is not due to access-related factors or clinical needs, preferences, and appropriateness of intervention."\textsuperscript{129} Health disparity refers to established or known differences, inequalities in health care service delivery across a population of various ethnic, gender, and geographic locations. "The term disparities today most often imply differences across racial/ethnic groups, but the term has been extended to differences in health across income, education, cultures, and gender groups. The term is regularly used interchangeably with the term health inequalities…."\textsuperscript{130} The problem of disparities in access to health care services is most often associated with religious affiliation, education, and socio-economic status, ethnicity, and racial differences.\textsuperscript{131} It results in unjust systematic differences in health care services between people of racial, ethical, and cultural differences living within a given location like Nigeria and other pluralist societies in the world.\textsuperscript{132} Inequality in health care service delivery caused by the factors mentioned above is preventable and avoidable, using a public health ethical approach based on social justice.
7. b.i. Health Disparities in Nigeria

There are apparent health disparities in the Nigerian health care system. Health inequalities exist between the wealthy and poor, rural and urban dwellers. They also exist among the six geopolitical zones. For example, "childhood mortality rates are higher in rural areas than in the urban areas and higher among the northern zones than the southern zones. Also, childhood mortality rates correlate with the wealth and the level of a mother's education." Socio-economic, environmental, and educational differences among the zones are the causal factors of health inequalities in the country. There are marginal health disparities between the north and the south in immunization coverage; children in the south have more opportunities for full immunization coverage than those in the north. The disparities are not only in immunization coverage. It extends to the workforce, health care facilities, and health care institutions. It also encompasses education as there are educational inequalities between the southern zones and the northern zones. The educational differences reflect in the sanitary, housing, and healthy lives of the zones.

There are ethnic and class disparities in health care service delivery in Nigeria because of geographic location, education, poverty, religious affiliation, and cultural values. The [western or modern] health care system in Nigeria emphasizes medical cure as a substitute for medical care, and there is a huge inequality in health care provision among the class and geopolitical zones in Nigeria. These factors are identified as socio-cultural, immunization, staff, facilities, and environmental issues that are major causes of disparities in health care service delivery in Nigeria. The disparities are not only in immunization coverage, as mentioned above. Some indices show that the southern part of the county has more qualified medical practitioners and better health care facilities than the northern part. For instance, "55% of
training institutions for community health extension workers are located in the north, while 75% of nursing schools are located in the south.\textsuperscript{141} Also, as of 2012, out of the 27 accredited medical schools in the country, 78% are in the nation's southern part.\textsuperscript{142} Logically, the southern part of the country has more health care workers. Therefore, there is a belief that southerners provide northerners health care workers. It is worth noting that there are language differences among these ethnic groups, with southerners working in the north facing communication difficulties, as discussed above.

Also, "in 1999, public secondary health facilities were observed to be more concentrated in the south-west and north-central of the country's geo-political zones accounting for 56% of the 827 secondary health facilities despite that the two zones harbor only 34% of the population."\textsuperscript{143} The insecurity in northern Nigeria has widened the disparities, as mentioned earlier. A more significant problem is the uneven distribution of health care providers between the rural and urban areas and geo-political zones. For example, according to the 2016 National Health Policy, the country's total number of medical doctors was 52,408. The distribution of doctors in percentage among the geo-political zones was 9.73%, north-central, 4.06%, north-east, 8.35%, north-west, 19.59% south-east, 14.37%, south-south, and 43.9%, south-west. Again, the total number of nurses in the country as of the same year was 128,918. Their distribution was as follows; 16.4%, north-central 11.65%, north-east, 13.52%, north-west, 15.29%, south-east, 27.75%, south-south and 15.35% south-west.\textsuperscript{144} Also, other health care specialties have similar disparities in the distribution of personnel.

The structure of Nigeria's health care system features social inequalities, class differences, and social status. These are fundamental determinants of access to health care. The rich get better health care services, and the poor get more inadequate health care services. Because health care
is not considered a public good (common good), access to health care service is based on the individual's finances (ability to pay.)\textsuperscript{145} The capitalist nature of the country is reflected in its health care provision and service delivery. Because health care service delivery is profit-oriented, better hospitals, private and government hospitals, are located in areas with higher anticipation of profits.\textsuperscript{146} The finance system of health care in Nigeria contributes to disparities in access to health care services. Health care finance ought to be structured so that the poorest of the poor can have access without much burden and irrespective of where someone lives. This is not Nigeria's situation; in most cases, the poor cannot afford medical care.\textsuperscript{147} The health care system is not evenly distributed. It is structured so that the ruling class has better access to health care service delivery and provision over the masses.

The best hospitals, private and public, are located in cities like National Hospital Abuja and Aso Clinic Abuja. Despite this, the best hospital facilities are reserved for government officeholders. Health tourism is a common practice among government officeholders because they know that most of Nigeria's hospitals are substandard and poorly equipped.\textsuperscript{148} For instance, in 2017, President Muhammadu Buhari was on medical leave in a London-based hospital for three months. It prompted many reactions from Nigerians, who called for his resignation.\textsuperscript{149} Health care and other social goods have turned into commodities sold to and bought by the highest bidder. The situation has caused corruption to considerably affect public goods' provision substantially both in production and socio-economic structure. "The state and its agencies, in a capitalist system, are unmistakably a commodity to be sold for profit."\textsuperscript{150}

7. b.ii. Cultural Competence and Public Health Ethics

Culture is "the accumulation of beliefs, values, customs, and behaviors shared by a group of people and passed from generation to generation, which provides meaning, interprets experience,
and generates behavior. It is the whole way of life, including custom, language, dress, religion, and other rituals. Culture plays an essential role in health care and other facets of human life. When care is culturally compatible, it improves and promotes the patient's recovery and satisfaction, thereby making care and treatment holistic. Sometimes, patients feel comfortable and respond well to clinicians who accept and understand their cultural practices, values, beliefs, and traditions. For example, northern Nigerian culture is highly influenced and shaped by the Islamic religion. Therefore, the socio-cultural value system can be called a religious-cultural value system. In contrast, southern Nigeria is predominantly Christian, with more western cultural orientation and education. Cultural and educational differences play significant roles in the health behaviors of people from these regions. The people from the southern part are more comfortable with western medical practices because of their early exposure to western education during missionary expeditions. This is evident in the immunization rate, out-of-school children, and maternal and infant mortality rates. To provide health care services in these regions, acknowledging the cultural settings of the places is essential. Because culture, education, and cultural forces, among other social forces, are powerful determinants of health-related behavior and access to health care treatment. It is a fact that peoples' belief systems, ideologies (political, social, and economic), religious institutions, and governmental structure, and their health behavior all revolve around their cultural values and orientation. Their culture also determines these factors. It is an essential characteristic in any given society because it clarifies life and death issues and other aspects of life, like health, commerce, agriculture, moral and religious practices. The importance of culture in health care service delivery is evident in medical tradition. It emphasizes that a proper knowledge of patient history (cultural and social) is fundamental in disease diagnosis and treatment plans. Sometimes, therapeutic options and
other treatment plans are offered and chosen by clinicians who pay attention to peoples' basic needs and cultural values because the knowledge of peoples' cultural values and background makes them view, accept, understand, and manage health, sickness, pains, suffering, life, and death in a particular way and behavior.\textsuperscript{160}

Culture and language are crucial in health care delivery because language is the primary tool for communication. On the other hand, culture is a primary determinant of health in care service delivery. For example, language and culture are essential in diagnosing mental health disorders. "Since mental health disorders affect thoughts, moods, and the integrative aspect of behavior, the diagnosis, and treatment of such disorders greatly depends on trust between the patient and clinician."\textsuperscript{161} The cultural practices, value system, and language (communication) are primary tools that constitute significant challenges in health care service delivery in Nigeria. Therefore, "if you wish to help a community improve its health, you must learn to think like the people of that community. Before asking a group of people to assume new health habits, it is wise to ascertain the existing habits, how these habits are linked to one another, what functions they perform, and what they mean to those who practice them."\textsuperscript{162} Moreover, health, illness, disease, and treatment are defined, identified, examined, and treated based on cultural background.\textsuperscript{163} Hence cultural competency is an excellent tool in handling health disparities that are cultural and racial.

**Using Cultural Competency to Address Disparities in Health Care Services**

Cultural competency may be defined "as an individual's capacity to create good and successful communication with a working skills relationship that supersedes cultural difference within a diverse group." At the patient-physician level, it is a process by which health care providers consciously work within the cultural background of a patient that is different from their cultural
The issue of cultural difference has been a big problem in health care and medical practice for ages. However, it has only recently become a central issue for discussion in many fields of study, such as medicine, anthropology, education, and most behavioral sciences. These fields of studies have understood and acknowledged the importance and relationship between culture, tradition, and health care. Cultural competency care takes into account awareness and compatibility with the patients' acculturated health backgrounds. It also considers the patients' religious beliefs, cultural values, and traditions. Cultural competency care combines professional knowledge with cultural knowledge to attend to the patient's medical, psychological, physical, spiritual, cultural, and traditional preferences and health care needs. "Cultural competency is a lifelong process with no endpoint…. [Clinicians] must recognize that cultural factors exist with each client and influence [medical treatment].”

Nigeria is a country that has about 285 linguistic groups, also known as ethnic groups. However, three ethnic groups comprise about 60% of the country's population. The country, by nature, is multi-ethnic and multi-lingual. Invariably there are some socio-political, socio-cultural, and socio-economic differences among these ethnic groups living together. One of these socio-political and socio-economic issues is health disparity. Cultural, religious, and political inequalities also exist among these ethnic groups. According to Martin Luther King Jr, "Of all the forms of inequalities, injustice in health care is the most shocking and inhuman.” The country's health care disparities can be addressed and reduced using a cultural competency model. Cultural competency can reduce socio-economic, socio-political, language, and other barriers and inequalities in health care service delivery. Cultural competency is essential in reducing disparities and inequalities in health care service delivery because it is more than cultural sensitivity or awareness. It encompasses more than knowledge of cultural diversity and
respect for individuals’ cultural backgrounds and values. It includes the ability to apply them in a multicultural setting in clinical practice. Cultural competency will serve as a functional ingredient in providing quality health care service delivery and reducing inequalities in health care in a multicultural nation. Cultural competency can be applied in resolving health disparities in Nigeria using these suggestions:

**Legislation and Policies**

In a pluralistic society like Nigeria, with many ethnic and cultural differences, legislation and policies are essential in health services delivery to curb health disparities among different ethnic and cultural groups. For example, the oath of induction taken by prospective medical and dental practitioners in Nigeria reads: "...I will not permit consideration of religion, nationality, race, party, politics, or social standing to intervene between my duty and my patient; I will maintain the utmost respect for human life from the time of conception;.....” If this oath/vow of the medical and dental practitioners of Nigeria is kept by those who take it, it will help to reduce ethnic and cultural inequality in health care services in Nigeria. In the USA, the *Civil Rights Act of 1964*, with its supporting rules and regulations, is a vital instrument used to prohibit some forms of discrimination in access to health care service delivery. The *Civil Rights Acts Title VI* forbids and condemns any form of discrimination based on ethnicity, race, or nationality in any program or activity funded by the Federal Government. This law prohibits clinicians from discriminating in providing health care services to individuals based on ethnicity, race, or nationality.

In addition, the *Code of Medical Ethics* in Nigeria further states in clear terms, "Whatever the religious orientation of the practitioner or patient, it must not determine the quality of treatment
so offered. Practitioners should, therefore, be aware that society, and indeed the law, recognize the individual right to accept or refuse medical treatment.\textsuperscript{175} This law does not mention health care disparities. However, the above legislation implicitly points to inequalities and discrimination in health care service delivery. Should these oaths be enshrined into laws and policies that guide and control health care service delivery that will help reduce health care disparities in the country?

Legislative acts, such as the \textit{National Health Act} and \textit{National Health Care Policies}, should promote equity, justice, and fairness irrespective of political and ethnic affiliations, not in paper but in practice. Hospitals across the country should be funded and staffed equitably, irrespective of location. In addition, public health has an obligatory role in disease prevention and health promotion in the country, a role assigned to it in \textit{Chapter Four of the National Health Policy of 2016}, as mentioned earlier. The obligations should have a mentoring and enforcement agency for the proper performance of the role. Hence, "public health is one of the few professions that have, in many matters, legal power-in particular police power behind it. It can, through the use of the law, coerce citizens into behaving in some approved healthy [manner]."\textsuperscript{176} This statement captures the implementation of compulsory face masking in Nigeria during the COVID-19 pandemic; police are empowered to arrest and detain those in violation of the rule.

\textbf{Educational Approach}

The issue of health care disparity among the ethnic, racial, and social classes in multicultural societies can be addressed with an educational approach by educating health care practitioners and people on health law and fundamental human rights\textsuperscript{177} Some people do not know that health care is a fundamental right and not a privilege. Moreover, it is illegal and unethical to deny
someone access to health care. Sometimes, in Nigeria, people are denied access to health care because of their inability to pay the initial deposit (admission fee, popularly called card fee), especially in private hospitals. Health insurance should cover admission fees to help patients access medical care, especially in emergency cases. The country's health care policies should be taught in schools to enlighten the people on their rights and privileges. It is quite appalling that most Nigerians are not aware of their health and other legal rights. It makes them victims of abuse and discrimination. It allows corrupt and cruel health care workers and government officers opportunities to continue to abuse them and misappropriate funds designated for health care in the country.

Medical schools' curriculum in Nigeria should contain cultural competency education for the students if it is not included. Teaching cultural competency in the medical schools in Nigeria will help student doctors and other medical students be culture-sensitive, aware, and responsive to patients from different parts of the country and foreigners from other parts of the world living in Nigeria. It will promote respect for the human person and dignity because no culture is superior to the other and reduce violence against health care workers caused by cultural insensitivity. It also promotes patients-health care workers' relationships and trust. The curriculum needs to address cultural disparities, like religious beliefs, cultural orientation, sexual orientation, and societal values. A competent cultural education should cover the following four areas; "cultural awareness, cultural knowledge, cultural skill, and cultural encounters."

There is a need for a multi-lingual study of indigenous languages in the medical and nursing schools in Nigeria because language is a substantial barrier in accessing health care both for the health care providers and patients. The issues range from a low level of formal education and imperfect interpretations to a lack of understanding between the health care providers and
patients, creating a chasm between the two parties. More Nigerian indigenous languages should be included in the curricula of primary and secondary schools. This will help to overcome some language barriers in medical practice and access. Education, no doubt, is an essential tool for nation-building. The Nigerian government should encourage and invest more in education to bridge the educational gap among regions and between men and women. For instance, "about half of the women and three-quarters of men in Nigeria are illiterate. Literacy is higher among women and men in urban areas than those in rural areas." In addition, in 2016, "about 38% and 21% of women and men respectively have never attended school. Women and men in urban areas are more likely to achieve a higher level of education. Younger women are more likely than older women to have attended school."

There is a need to teach cultural and ethnic studies in the medical curriculum to prepare future health care personnel on the issue of cultural and ethnic disparities. These are common problems in medical practice, and teaching medical students how to manage them will be a valuable idea. It can be done by expanding the curriculum of citizenship education and civic education in tertiary and secondary schools. The course has to be taken for more than a semester in medical and nursing colleges. The Recommendations that brought Citizenship Education into the Nigerian school curriculum according to the 1969 National Curriculum Conference and 1973 Seminar, 3rd and 7th Recommendations discussed cultural sensitivity and interpersonal relations. The 3rd Recommendation says," Nigerian education should be geared towards self-realization, better human relationships, self, and national consciousness and national unity." The 7th Recommendation is centered on the goal of primary education. Primary education is to nurture a child's self-realization. It aims to teach them how to collaborate with others in mutual understanding and be more active citizens. These recommendations should be emphasized in
the curricula and syllabi of medical and nursing schools in the country. "There is enough in our constitution to guarantee citizen's rights and dignity."\textsuperscript{186} The citizens' lack of knowledge of their human rights and low formal education level are the primary reasons injustices, social unrest, corruption, and violence continue to perpetuate in Nigeria.\textsuperscript{187} Civic Education and Citizenship Education should acquaint teachers and students with the knowledge of both their constitutional rights and human rights to promote and defend a better health care system.

In addition, ethics education should also be included in the medical schools' teaching curriculum in Nigeria if not already included. Although there are educational policies, curricula, and government regulations on medical practice, these programs may not be effective without ethical formation and education. Ethics is about moral and conscience development; a well-developed conscience always seeks the right things. However, health inequality is a socio-political problem, which can be solved through public health policies. "Health equity is increasingly identified as a principal goal to be achieved through public health policies and programs because public health aims to improve population health, a commitment to health equity requires attention to the distribution of health benefits and burdens among population groups."\textsuperscript{188} This will promote human dignity and non-violence in Nigeria because equity promotes peaceful co-existence among various ethnicities. And public health ethics based social justice approach deals with issues of equity, inequity, and social injustice, which are an affront to human dignity.

**Respect and Acknowledgment of Cultural Differences**

Cultural diversity is the identity of a pluralistic society. It is a unique feature of a pluralistic and multicultural society. Therefore, acknowledging the culture of others can help overcome health care disparity in a pluralistic society. Health care providers should be well informed in cultural
diversity, thereby "promoting trans-culture and cross-cultural approach in health care
practice." Health care providers should acknowledge and respect other cultures that differ
from theirs. They should also understand that no culture is superior or better because culture
defines people and makes them unique. Again, there is beauty in diversity, as there are unity,
harmony, and chaos in nature. Clinicians' understanding of different people's cultural and
societal value system and how it influences their access to health care will help overcome
disparities, stereotypes, and biases. These insights will help clinicians understand how different
ethnic and racial groups feel and experience birth, death, illness, and pain. "Public health
programs and policies should integrate a variety of approaches that anticipate and respect diverse
values, beliefs, and cultures in the community." 

As stated above, the Medical and Dental Council of Nigeria's Code of ethics contains respect for
cultural beliefs, like their USA counterpart. The 8th principle of the American Public Health
Association Code of Ethics states: "Public health programs and policies should incorporate a
variety of approaches that anticipate and respect diverse values, beliefs, and cultures in the
community." The Council should continuously make visits to hospitals to ensure their proper
implementation. "Health Educators should value diversity in society and embrace a multiplicity
of approaches in their works to support the worth, dignity, potential, and uniqueness of all
people." Cultural competency will help health care providers to respect and value patients'
cultural values. It will help them not to be sentimental or judgmental when attending to them.
The health care provider should also strive towards cultural awareness and sensitivity, and at
least bilingual proficiency. Through cultural sensitivity and awareness, the health care providers
will have some basic understanding of the other groups' cultures and beliefs in the society.
Health care providers should strive to be humble, to accommodate different cultures and
ethnicity, and above all, avoid stereotypes or bias. They should guard against one encounter with a person from a particular ethnic group or cultural group as a yardstick to judge other members of the same cultural background. Human beings are dynamic; even identical twins have different behaviors. Moreover, experiences and exposures sometimes make people overcome their naivete and erroneous cultural values.

Cultural shock can be traumatic and painful to work and live. However, culture is human, and human beings are cultural beings. Cultural disparities in Nigeria range from ethnicity and religion to include urban and rural settlements. Cultural disparities can be addressed among health care providers during their National Youth Service Corps (NYSC) program. The program was established in 1973. It provides University and Higher Colleges graduates under thirty years, compulsory one-year community service outside their states of origin. The program's core aim is to expose the graduates to the country's cultural diversity. It makes them understand, acknowledge, and tolerate the country's religious, socio-cultural, and ethnic differences. It aims to unify and correct the 1967-1970 civil war's ill-effects and promote friendship and a spirit of teamwork among the youth. The program begins with a month of cultural orientation at camps in different states of deployment. During this time, Corps members are taught the basic culture, language, and values of the people of their states of assignment. The program is achieving much in the areas of inter-ethnic marriage, employment, and acculturation. It is promoting conviviality among the different ethnic groups in Nigeria. However, some Corps members' killings, abduction, and kidnapping have recently occurred because of ethnic, political, and religious violence. There are also problems of inadequate housing and non-payment of allowances to Corps members, rape, and sexual molestation. Despite these problems, the NYSC is helpful in promoting cultural diversity, ethnic and religious tolerance in Nigeria. The NYSC
promotes tolerance among the different ethnicities, promoting non-violence and human dignity, as some Corps members have defended and protected children from abuses and molestation through health and educational programs. Some also promote environmental safety through community service, like cleaning the streets, roads, and tree-planting exercises.

**Violence and Conflict Prevention**

Although violence has been part of human history and a public health threat, humans should not accept and see it continue to threaten their lives and the environment. Violence can be prevented and reduced to lessen its effects on human lives and the environment. In recent times, public health has played an important role in violence prevention and reduction. For instance, in 1992, the Mayor of Cali in Colombia, a public health specialist, helped the city reduce suicide by setting up a comprehensive program called DESEPAZ *Desarrollo, Seguridad, Paz* (development, security, and peace). The program used an educational approach for both the police and the public. It used a television program that stressed the importance of tolerance and self-control. It organized cultural education in schools collaborating with family and non-government agencies. It banned the carrying of handguns on weekends and special occasions and restricted alcohol sales. The program sets up projects that provide economical and safe recreational opportunities for youths. These measures helped to reduce Columbia's violence by 30%. Public health is an excellent tool for global violence prevention. Eco-violence and other forms of violence in Nigeria can be prevented with some public health approaches that are social justice-based. For instance, applying the 2014 Nigerian National Conference recommendations will help avoid the ecological crisis in both the country's northern and south-south regions. The Conference recommended the practice of irrigation, drainage, irrigated grazing lands, and grazing ranches against open grazing, which is causing conflict between herdsmen and
To eradicate poverty and insurgency in the country, the government needs to create more employment for the youth because idleness is not suitable for young people. It is worthy of mention that the 19 northern governors' recent decision to eradicate the Almajiri system is highly commendable. This decision will help to reduce poverty, insecurity, and illiteracy in the country. "More important is their vow not to allow the long-discredited tradition to continue because of its domino effect of perpetuating poverty, illiteracy, insecurity, and social disorder." It is for the common good of the nineteen northern states and the country at large. "A World Bank Report says street children are an alarm signaling the dire need for social development and poverty reduction policies to improve the situation in the community at large, and to prevent more young people from becoming marginalized." The eradication and banning of the Almajiri and integrating them into a formal school system is a promising idea. However, "a root-and-branch approach is crucial. The conundrum of indiscriminate procreation and marrying of many wives beyond one's financial capacity should be tackled."

Cultural competency is essential in reducing disparities and inequalities in health care service delivery. It is not about being culturally sensitive or just having awareness; it is about its application in real-life situations. Cultural competency is more than participating in a cultural competency program or course on a specific culture. It encompasses more than the knowledge of cultural diversity and the respect of individuals' cultural backgrounds and values. It involves using such knowledge in a multicultural setting, avoiding stereotypes and bias.
competency will serve as a functional ingredient in reducing disparities and inequalities in healthcare access in a multicultural nation.\textsuperscript{203}

On the other hand, public health ethics is an excellent framework to address health disparity and violence that limits access to health care. It is an essential tool because justice is a focal and integral part of public health’s mission and activities. The notion of justice centers on equitable distribution of "common advantages and the sharing of common burdens; it captures the twin moral impulses that animate public health: to advance human well-being by improving health and doing so, particularly by focusing on the needs of the most disadvantaged."\textsuperscript{204} Moreover, public health objectives include reducing health disparity and balancing the controversy between population health and civil liberty, especially among the vulnerable populations and environmental health. These objectives of public health capture the social justice problems in Nigeria, as violence, pollution, environmental degradation, and scarcity continue to cause death, illness, and injury to the citizens. Public health can reduce the inequities in health and social status in the country and promote environmental health using these objectives. These objectives will reduce violence, insecurity, ethnic agitations, and environmental pollution and degradation that threaten health and security and promote human dignity and environmental sustainability.\textsuperscript{205}

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Chapter 8-Conclusion

Human beings can only have a healthy life in an environment that respects human dignity and human rights (right to health) and is toxin and violence-free. Pollution and violence are public health menaces and an affront to human dignity. They are the principal cause of death and illness globally. The reduction and prevention of pollution and violence of any type and form is a prerequisite for a healthy and happy life. Hence, this dissertation connects human dignity, non-violence, and the environment in Nigeria. Before its independence in 1960, Nigeria witnessed much violent-conflict, such as feudal, ethnic, and inter-communal wars that have maimed and claimed lives and properties. Even after its independence, violent-conflicts continue to make life precarious and frustrating for citizens. In recent times the violent-conflicts in the country have taken an environmental dimension - eco-violence, especially in the north-central and south-south zones. These two zones are witnessing serious environmental-related violence because of the scarcity of renewable resources (land, rivers, and sea) due to pollution, degradation, desertification, population growth, oil spillage, and gas flaring. The other zones are witnessing ethnoreligious, banditry, militancy, political crisis, and security agents' brutalization. Amid these crises, human dignity is not respected because violence is anti-human development and anti-human life. Each day, Nigerians wake up with ugly news of the brutal killing, maiming, and destruction of lives and properties. These make movement and exercise of other human rights difficult, especially access to health care. Environmental scarcity and degradation have worsened the situation as there is constant fighting between herders and farmers each or every other day. The battle between herders and farmers is causing food insecurity, displacement, and unemployment.
Additionally, ecological degradation and pollution are causing the destruction of species, contamination of land, rivers, seas, air pollution, and acid rain, making people sick and causing tensions and conflicts in the south-south zone. These situations undermine human dignity, human rights, and the environment. For human dignity and human rights to flourish, a toxic and violence-free environment is a sine qua non. Likewise, to have a healthy environment, pollution and environmental degradation must be prevented and controlled. Hence, this work proffers a solution to eco-violence as it relates to human dignity and the environment using public health ethics based on social justice. The analysis in this dissertation interprets and highlights the importance of a public health ethical framework based on social justice as a valuable tool in resolving and reducing eco-violence and other violence-conflicts, which have considerably weakened human dignity, healthy living, and access to health in Nigeria.

This work concludes that the relationship and connection between the environment and human dignity are inseparable because human life has no meaning unless the environment is toxin-free. After all, violence promotes human misery and affects human rights and access to a healthy life. Also, pollution and environmental degradation cause illness and scarcity of renewable resources. Therefore, violence is an affront to human dignity and the environment. It creates environmental (renewable resources) scarcity. It makes life difficult because violence of any type is a threat to human and societal development. It affects human beings and the environment by weakening social relationships, contaminating and polluting the land and atmosphere. It weakens human dignity and makes the environment perilous to live in, thereby exposing human beings to health hazards. Violence also causes human beings to be poverty-stricken, unhealthy, unemployed and displaced. It leads to the loss of life and property. This work considers public health ethics based
on social justice to address environmental and other violent-conflicts in Nigeria because violence prevention and ecological protection are goals of public health ethics and social justice.
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