

Ethical Considerations And Science Diplomacy On Coronavirus Disease (Covid-19) Pandemic In Nigeria.

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Abstract

The study investigated ethical considerations and science diplomacy on coronavirus disease (Covid-19) pandemic in Nigeria. The outbreak of the coronavirus disease (Covid-19) in Nigeria has spread quickly to about 34 states out of the 36 states and over 5000 persons have tested positive as at the time of this research after the first index case of an Italian and there is a projection that in coming days and weeks the number of infected persons and states will increase. The study was guided by two objectives and also adopted the normative ethical theory. The study employed the methods of exposition and critical analysis to explain better the ethical issues and science diplomacy of Covid-19 pandemic in Nigeria. Data was sourced from secondary sources such as journal articles, newspaper, books and internet sources. The findings of the study showed that the citizens have some obligations that will aid the containment of the virus and as well as the government. The study also found out that science diplomacy was used, which has led to Nigeria collaborating with China to get medical aids to effectively fight the pandemic. Consequently, the study recommended amongst others that the Ministry of Health and the Nigeria Center for Disease Control (NCDC) should adopt and enforce the World Health Organization (WHO) Guidance for Managing Ethical Issues in Infectious Disease Outbreak as a working document in crisis like the Covid-19 pandemic that has ravaged Nigeria and the government should involve more in science diplomacy with other countries so that it will help in the fight against Covid-19 and other diseases that may occur in the future.

Keywords: Coronavirus, covid-19, pandemic, normative theory and science diplomacy.

Introduction

Infectious disease epidemic is always featured by scientific skepticism, social and institutional interruption and a total atmosphere of fear and distrust. Hence, public health professionals and those who make policies may have it imposed on them to weigh and rate possibly contending ethical values at the point of severe time and resource restriction or constraints. The name coronavirus comes from the Latin word *corona* which means *crown* or *halo*. Under an electronic microscope, it looks like it is surrounded by a solar corona (WHO, 2020). According to the WHO, coronaviruses are a family of viruses that cause illnesses varying from the common cold to more severe diseases such as Severe Acute Respiratory Syndrome (SARs) and the Middle East

Respiratory Syndrome (MERs). Many known coronaviruses are circulating in animals that is yet to infect humans (WHO, 2020).

According to the WHO, coronavirus disease also known as (Covid-19) is an infectious disease caused by a newly discovered coronavirus. Hence most people that are infected by coronavirus usually experience mild to moderate respiratory illness and get better without getting any special treatment. It is also noted that older persons with respiratory issues like cardiovascular disease, chronic respiratory disease are likely to develop serious illness. The coronavirus is basically contacted through droplets of saliva or discharge from the nose when a carrier coughs or sneezes, thus it is important that people practice respiratory etiquette i.e. like coughing into a flexed elbow. Currently, there is no vaccine or treatment for coronavirus disease (Covid-19). Nevertheless, there are many researches and ongoing clinical trials looking at potential treatment or vaccines (WHO, 2020). The coronavirus was unprecedented and the crisis is hitting many societies, economies, and cultures on a range and scale that has not been seen before. Serious issues put heavy stresses on the capability of our society to act expeditiously and efficaciously to protect lives, health and social well-being. Scientists from a wide range of disciplines are caviling for structuring an effectual response to this type of crisis. Their input is very important in shaping and fathoming the accessible options and passing on that information to decision-makers (Roig, 2020). Science diplomacy is seen as the use of scientific technological and academic collaborations among countries, regions and societies to look into common issues and now is more important than ever (Roig, 2020). In this work, we examined how Nigeria tries to apply science diplomacy in other to arrest the current pandemic ravaging the country and the world as a whole. The problems this work tries to address are the ethical issues that arises in situations of pandemic; such as the current one being faced by most countries in the world. Also, the issue of the neglect of science diplomacy in health crisis like this. The aim of the work is to help health care providers, researchers, policy makers and all those directly or indirectly involved on how to prepare for a pandemic situation by projecting and getting ready for important ethical issues that may arise. However, the objectives of this study are to; (1) sensitize all involved on how to act while there is a pandemic like the Covid-19 (2) use some ethical views to analyze and evaluate the coronavirus disease pandemic; and, (3) alert the Nigerian government on the need to adopt the usage of science diplomacy.

Methodology

The work employed the methods of exposition and critical analysis to explain better the ethical issues and science diplomacy on coronavirus disease (Covid-19) pandemic in Nigeria. The analytic method is also used to explain clearly the concept of Coronavirus (Covid-19). Hence, the work extracted from secondary sources which includes journal articles, newspapers, books and internet sources relevant to the work.

Conceptual Review

Concept of Coronavirus

The term virus is gotten from a Latin word which means *venom* and explains a tiny agent that causes infectious disease. Coronavirus is said to be a family of viruses that is said also to have gotten its name from its looks or appearances. According to Time (2020) the term corona means

crown. The scientist who in 1968 came up with the word coronavirus thought that, under a microscope lens, the virus was looking like or resembled a solar corona: the bright crown-like ring of gasses hovering around the sun that is visible or shows during a solar eclipse. The virus is presently spreading so fast around the globe. Covid-19 is another name for coronavirus. It is really a disease caused by one type of coronavirus: SARs-CoV-2. As dictionary.com explains it clearly the term COVID-19 was gotten from the year it was first noticed or detected in 2019 and using letters from CO-rona-Vi-rus D-isease (Time, 2020). With the current pandemic caused by coronavirus there is a serious clamor for self-isolation, and then people who have been confirmed positive are said to be quarantined. The word quarantine, explains Merriam-Webster Editor-at-large Peter Sokolowski, originally referred to a period of 40 days. According to The Editors of Encyclopedia Britannica coronavirus is any virus that belongs to the family of coronaviridae. Coronaviruses have enveloped virions that measures approximately 120nm (1nm= 10^{-9} metre) in diameter club-shaped glycoprotein spikes in the envelope give the viruses a crown like or coronal appearance. The nucleocapsid, made up of a protein shell known as a capsid and containing the viral nucleic acids, is helical or tubular. The coronavirus genome is made up of a single strand of positive-sense RNA (Ribonucleic acid) (Encyclopedia Britannica, 2020).

Theoretical Framework

This study adopted the normative ethical theory. Just as the name implies normative ethics is that area of ethics which deals with or has to do with the norms, standards or principles of human behavior. The basic question that arises in normative ethics is the question as to the moral standard. What is the moral standard? It is said that many ethical theories in western philosophy such as egoism, hedonism, natural law theory, categorical imperative and utilitarian theory etc. are all attempts to provide answer to this central question (Omogbe, 2012). According to Howe (1990) Normative ethical theory provides guidelines for deciding what makes right acts right. It is a part or branch of philosophy or ethics that is mainly concerned with the yardstick of what is morally right or wrong. Consequently, it brings about the framing of moral rules that would have direct implications for what human actions institute and how ways of life are supposed to be like. The primary question of normative ethical theory is to determine or ascertain how basic moral standards are arrived at and justified. Furthermore, the usance of normative theories or standard to pragmatic moral issues is basically the concern of applied ethics. In summary, normative ethical theory involves reaching at moral standards which are seen as a yardstick to control right and wrong actions. In other words, it is a search for an ideal litmus test of proper way of behaving. The Golden Rule by Confucius is a foundational example of a normative theory. According to Confucius (500 B.C.), “Never impose on others what you would not choose for yourself”. If we also expect for people to love us, we too should love others and also, we should not hurt others as we do not expect others to hurt us. If this is been applied then we can actually ascertain whether any possible action is right or wrong. In other words, the golden rule is an instance of a normative theory that brings about a single principle against which we judge all actions. Normative ethics here basically has three strategies which are virtue theories, duty theories and consequentialist theories. According to Encyclopedia Britannica (1998), normative ethics seeks or tries to set norms or standards for human conduct. This theory is used in reference

to the deliberation of general theories about how one is expected to act. An important question that is raised about normative ethics is if actions should be judged right or wrong only because of their consequences. Traditionally, theories that only judge actions based on their consequences are called “teleological” and then theories that judge actions based on if they conform to a particular rule are called deontological.

Discussions of Findings

Ethical Considerations of Corona Virus Disease (Covid-19) Pandemic in Nigeria.

A pandemic is not just a test of our vigor and strength of our spirit but also our morals too. In this period of stay at home, lockdowns, and quarantines, closure of markets, churches, restaurants, borders and schools, the snare is always to bend the rules, banking on the familiar just this once or it could not hurt dodge. At a point that we try to behave well, there are difficult moral issues that present themselves. According to Kim (2016) ethical considerations are very important in planning for and responding to outbreak of infectious diseases. When there was an outbreak of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in the republic of Korea in 2015 serious problems came up or arose regarding pertinent ethical issues, such as transparency and protection of privacy. In Nigeria, over 5000 infected cases of coronavirus diseases (Covid-19) have been detected and the numbers keep rising everyday as the virus continually spreads around the world. The virus is presently spreading to different states in the country and about 180 deaths at the time of this research have been recorded. The first death was a 67 years old man who has a record to have returned from an index high country where he was receiving medical attention for other health issues and then contacted the coronavirus disease before coming back to Nigeria. Consequently, this resulted to his death because his health issues were quite complicated. Coronavirus currently can be said to have reached global proportions and the WHO is appealing and encouraging governments and the public in general to be ready. The way the world is acting towards the global crisis is raising some pertinent and fundamental ethical questions about both the responsibilities of the public and the government. Good enough we are living in a time that we have tested and as well created an effective medical and ethical framework that can guide response to this pandemic that has hit Nigeria.

Ethical concerns have been entrenched in plans made around the globe for outbreaks and pandemics. Lessons learnt from previous pandemics notifies that without ethical safeguards, public health standard can unintentionally encroach on human rights and values. Thus, bringing into cognizance of important ethical principles or theories in pandemic planning can aid and improve willful co-operation built on public trust, and lessen the unwanted consequences of public health measures. Furthermore, the pandemic caused by coronavirus (Covid-19) in Nigeria and the rest of the world has led to some ethical discussions. This work looks at the necessity for ethical values and principle not just in planning for but also in responding to outbreaks of infectious diseases like the Covid-19 pandemic. Just as pointed out in this work earlier, the normative ethical theory is very instrumental for the analysis of the work. Furthermore, normative ethics can be subdivided into teleological and deontological theory where the former is based on moral values, whereas the latter is based on moral obligations. Consequently, there

are some public obligations concerning virus containment which includes to; be informed and do not overreact, wash your hands, stay at home if you are sick and rationing use of resources.

Be informed and do not overreact: By this, it means that people have to be careful of where they get their information's from during times like this because some wrong information's can actually bring about or result to panic in the country. For instance, in Nigeria it was noted that the chief of staff to the president and three of his aids tested positive to the virus and then there was rumor and panic that the president must be positive since a very close ally i.e. his chief of staff tested positive. It was all over the social media that the president was sick and down but at this point the right source of getting information with respect to this coronavirus pandemic is the Nigeria Center for Disease Control (NCDC) which refuted the rumor and stated clearly that the president was tested afterwards and his result came out negative. In summary, in situations like this in Nigeria the right source to get information is the NCDC.

Wash your hand and get a flu shot: Washing of hands as frequent as possible is advisable in situations like this that involves spreading of virus. Our hands are very instrumental in all our daily activities and consequently or invariably the hand comes in contact with different viruses which could be very harmful to the health and which could be very contagious like the deadly coronavirus which has hit most part of the world including Nigeria. Also, after the hands have been washed with recommended soap it is also important to use hand sanitizers and also if the hand sanitizer is handy and one does not have an opportunity to wash his or her hands, only hand sanitizer can be used and the viruses will still die.

Stay at home if you are sick: This is a very important rule to obey in times of pandemic. In a situation like the coronavirus that has hit Nigeria the federal government and also some state governors have invoked the part of the constitution that gives them the power to shut down activities in the states. This is because, at this time it is important to stay at home in other to avoid the spread of the disease. At this point those that also have the infection will be known and come out open because the virus has an incubation period of 14 days.

Rational use of resources: During this period, it is advisable for people to use the resources available rationally. For instance, the use of the face mask is not compulsory for everyone. It is basically important for those who have symptoms of the disease to use and also for health workers or for those who are providing essential services. This is because if all the populace request or gets a face mask then there will definitely be a shortage. In other words, this face mask will be scarce for even those that actually need them in this pandemic situation. Consequently, it is important to use the available resources rationally in other to avoid shortage. This is also applicable to other medical items like ventilator, PPE etc.

Just like the public have moral obligations during pandemic situations like the Covid-19 pandemic that has hit Nigeria; the government also have obligations to respond morally. Getting an ethical framework on ground for this type of issue is very important in other to promote, protect and make available for the health of all the populace in the community. However, some government obligations concerning virus containment and treatment are; restriction of individual liberty, closing or shutting down borders, allocation of medical equipment, party accusation of disease spreading.

Restriction of individual liberty: When crisis of this nature arises, this seems to be the first action or decision that the government takes. In Nigeria, for instance, state governors of affected states

have invoked laws that have restricted individual liberty. As a matter of fact, even the president has instructed the closure of borders of Lagos, Ogun and the Federal capital territory Abuja as at the time of this research. Furthermore, it has invoked the stay at home order for 14 days twice in these areas. All this, the Nigerian government has done to enable her fight the coronavirus pandemic. But the vast majority of the people are not happy with this decision and this is because the government did not put in place enough palliatives to cushion the effects of this tough decision and the effect it will have on its citizens. In summary, this decision by the Nigerian government has inexplicably affected the most vulnerable members of the society

Closing or shutting down borders: The government sees this as important to do in order to be able to affectively fight the virus. This is because the virus was brought into the country from abroad or travelers that came back from index high countries. Thus, the Nigerian government deemed it fit to close borders and also to stop international and also local flight from moving. The government of some states have also gone further to close their land and water borders therefore not allowing persons from other states to come in. This is done in order to curb this pandemic in their respective states and to manage the number of those who are already infected by this deadly Covid-19 virus. This decision has also affected the most vulnerable members of the society. This is because, there are so many items or things that come in from other states on daily bases. So, before the government makes this kind of decision some palliatives should have been put in place.

Allocation of medical equipment: It is the prerogative of the government to provide necessary medical equipment in situations like this. It is also a fundamental necessity for the government to provide good health care for its citizens. This pandemic that has hit the world has actually exposed the weaknesses of the world's health system. Here in Nigeria all medical equipment needed for managing the treatment and curbing the spread of Covid-19 pandemic are limited and scarce. Thus, this has led to politics or bias in sharing what is available. There are speculations that the test kits for Covid-19 are limited and as a result of this the Nigeria Center for Disease Control is bias on who and who they test for the virus. Consequently, Nigerians are calling on all relevant authorities to do what ought to be done and also to have a fair level ground; where everyone that have confirmed symptoms of the virus be given opportunity to be tested and also to be given proper medical attention.

Party accusation of disease spread: This is an issue that usually arises in pandemic situations like this. Using Nigeria as a case study, the governor of Oyo state, tested positive to the virus and came out to announce his result but still encouraged the people of Oyo state to stay put and cooperate with the government in this trying and difficult time. Few days later the opposition party in the state blamed the governor for testing positive and further accused him for not addressing the issue on time even when warnings came. They also blamed the governor for holding his party rally in the state amidst the warnings of the spreading of the virus. The governor was further accused of having gotten infected by the virus in that rally. The office of the governor has come out openly to debunk this information and further accused the opposition of carrying rumors that could bring about discord of which the state does not need at this challenging time. In times like this the state and everyone involve has to put heads together to win the fight against the Covid-19 pandemic. The virus does not discriminate and also does not care where one is from or the political party one belongs to.

Quarantine is a basic response to the Covid-19 pandemic in Nigeria. According to Upshur (2003) four principles that ought to be met to justify this liberty-limiting practice. First is the harm principle in which it must be the case that obvious and measurable harms to others will emanate if exposure checked through quarantine or isolation. Secondly, is the principle of proportionality or of the least restriction means. To ensure a successful disease control one must apply the least restrictive measures. Thirdly, is the principle of reciprocity. Here, if the populace lay down their liberties for the general or common good of the society it is expected that the society in return has reciprocal obligations to make available for this populace with demands such as foods, psychological assistance, shelter and also to protect them from discrimination, damages or penalties resulting from quarantine. The last, is the principle of transparency. The principle opines that the authorities in charge of public health must communicate clearly and transparently the reason for the actions and make available a process of appeal. All these are ethical justifications for the use of quarantine (Upshur, 2003).

Another very important ethical issue raised this period is the ethical dilemma of rationing medical care also known as triage. Now, the big question is how do medical workers go about using the limited quantity of these resources? When services are overstretched in the course of a pandemic, health workers will put in place or develop systems of triage. According to the British Medical Association, triage is a form of rationing or apportionment of scarce resources under critical or emergency conditions, where decisions about who should receive treatment must be made instantly; since more individuals have life-threatening illnesses than can be treated at once. Triage selects or evaluates persons according to their needs and the possible outcomes of intervention. It can as well involve in identifying those who are so ill or badly injured that even with thorough treatment they may not survive. Hence, should for that reason receive a lesser priority for acute emergency interventions; while, nonetheless receiving the best available symptomatic relief (BMA, 2020).

Consequently, the ethical principle to apply when resources are limited are; fairness, duty to care, the duty to steward resources, transparency, consistency, proportionality and accountability. According to WHO, in the Guidance for Managing Ethical Issues in Infectious Disease Outbreak, ethical principles are important to apply in situations of pandemic like the coronavirus disease pandemic that has hit the world. WHO in this guidance document draws on variety of ethical principles, which are grouped into seven general categories. These presentations are just merely for the convenience of the reader. They are justice or fairness, beneficence, utility, respect for persons, liberty, reciprocity, solidarity (WHO, 2016).

Science Diplomacy on Corona Virus Disease (Covid-19) Pandemic in Nigeria.

Science diplomacy is seen as a general term to explain a number of formal or informal technical, research-based, academic as well as engineering exchanges (Nye, 2007). According to the Royal Society and the American Association for the Advancement of science, science diplomacy is linked to three main types of activities: science diplomacy which means science can make available advice to inform and support foreign policy objectives. Secondly, diplomacy for science simply means diplomacy can help bring about international scientific co-operation. According to Roig, science diplomacy can bring about collaborations within and among the scientific community, emergency response managers, government and private sector to better manage a global health crisis (2020). Numerous researches have been done with respect to the role of science in projecting and getting ready for pandemic. Amidst all this, little or no attention

has been given to bring together this knowledge into public health policy, diplomacy practice and global mitigation strategies (Roig, 2020). Just as a philosopher tries to test whether an epistemological statement is in conformity with the methods used by science, he must infer, whether he likes it or not, the laboratory of the scientist. More so, as a scientist tries to justify his method by epistemological considerations, he must infer, whether he admits it or not, the study room of the philosopher. Hence, this situation of the Covid-19 pandemic calls for a total and full co-operation among governments, scientific community, etc. Thus, this kind of collaboration should enhance our humanity and kill racial discrimination. The world has been shut down and this period has been noted by majority as the most disastrous time in the history of global medicine and economics. Many countries are going back into their national savings and the fight against the virus is based on peculiarities. Obviously, different countries have their peculiar health system and medical expert as well. Then, the big question is why, as the virus affects over a 100 countries, has there been no consistent, coordinated global approach to not only tracking, testing and limiting mobility but to openly learn from each other about our peculiar advantages of self-isolation, quarantine and physical distancing and also how can science diplomacy enhance virus mitigation and response strategies across boundaries? (Roig, 2020).

The Nigerian government has been able to put in as much as they can in curbing the coronavirus pandemic. The number of positive cases has risen to over 5000 persons and is projected to increase more in coming weeks as at the time of this research. This health crisis has exposed the weaknesses of the health sector. Thus, the government of Nigeria sees it necessary to apply the use of science diplomacy in other to achieve better result in the fight against Covid-19. The Nigerian government is currently collaborating with the Chinese government through its indigenous company China Civil Engineering Construction Corporation (CCECC) to aid in combating the coronavirus pandemic in Nigeria. The Chinese government showing concern to the request of Nigeria have decided or agreed to send medical expertise in infectious disease, respiratory illness, intensive care, cardiology, neurology, general surgery, anesthesiology and also these 15 medical experts have relevant experience in the prevention and diagnosis of coronavirus disease (Vanguard, 2020). Taking note of the fears of Nigerians, all members of the working team have been tested before coming and are all negative to Covid-19 and would start their stay here in Nigeria by undertaking a 14-day quarantine. It points out that the aim was “supporting Nigeria in its fight against the Covid-19 pandemic that is adversely affecting livelihoods and economies across the world by making available necessary medical equipment and health consumables” (Vanguard, 2020). The items the Nigerian government got are face masks, test kits, disinfection machines, rubber gloves, goggles, protective gowns, face shields, infra-red thermometers and other relevant items. In addition, under the order of the Chinese embassy and in response to the Nigerian government request, the medical team may also share with the Nigerian medical teams’ effective methods on the containment of the Covid-19 and give advice on the necessary use of necessary medical equipment (Vanguard, 2020). In conclusion, it is the hope of the Nigerian government that this science diplomacy with China will yield positive result in the fight against coronavirus disease in Nigeria.

Conclusion

The study concluded that many citizens of Nigeria have refused to obey government directives with respect to the Covid-19 pandemic even when there are some obligations that are expected of the citizens to carry out. The study exposes that these obligations include to be informed and not overreact, washing of hands regularly, using of sanitizers, staying at home if there are symptoms of being sick and rational use of resources. Consequently, the obligations of the government include the restriction of individual liberty, closing all borders and allocation of medical equipment. The citizens of the country have not fully complied with the directive of the government and this is as a result of the government's inability to take proper measures by providing palliatives on ground before giving some stringent directives which the citizens ought to obey. The study also points out that the right or proper source for Nigerians to get information with respect to this Covid-19 pandemic is the NCDC. Thus, it is expected of NCDC not to be biased with giving information. Also during this time NCDC should adopt ethical principles to guide them on how to go about their work in achieving the best possible result in curbing this unavoidable pandemic that has ravaged Nigeria. In addition, the work brought to light the idea of science diplomacy as a way of collaborating with other countries on how to go about fighting diseases in situations like the Covid-19 pandemic that has ravaged the world. It further acknowledged the Nigerian government for adopting science diplomacy by requesting from the Chinese government some medical aid and collaboration in fighting against Covid-19 in Nigeria.

Recommendations

Based on the findings of the study it was recommended that;

- 1) The ministry of health and the Nigeria Center for Disease Control should adopt the WHO Guidance for Managing Ethical Issues in Infectious Disease Outbreak as a working document in crisis like the Covid-19 pandemic that has ravaged the country.
- 2) The government of Nigeria both at the federal and state level should sink moneys into the health sector in order to build hospitals as well as equipping them to standard to be able to handle similar future crisis.
- 3) The government should put in funds to build standard laboratories and also funds and grants for research purposes.
- 4) The Nigerian government should adopt the use of science diplomacy in pandemic situations like this Covid-19 that has ravaged the nation recently.

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