COVID-19, Culture and Public Health Conditions in Developing Countries:
Prevention Is Better Than Cure

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Abstract
The virus that is spreading worldwide today has made every society to be cautious about their public health system. Death reports and infection from the virus come in everyday from many parts of the world. But a signal is obvious about the outbreak of this disease which points to modern food culture. The alert focuses on sub-Saharan Africa as of today, given that it did not appear for the first time in any these countries. The worry is that these societies may not have adequate facilities to contain the scourge. The nature of the society and their response to the outbreak, first of all depends on the reality of information communication method. The reaction often exposes the culture and characteristics of the people’s perception, quality of education and development. Public health concern should be the utmost in these regions by the international health institutions to help prevent its spread in such regions. It started from an environment to spread. The concern points to public health conditions. Health institutions and medical experts have provided approaches to detection, symptoms and treatment. As at the time of this writing, no cure has been determined scientifically. Thus this exposé encourages sustenance through preventive measures coupled with suggestions that have already been stated by WHO and other world health experts with the conclusion that modern culture can be guaranteed or determined by scientific screening.

Key words: COVID-19; Prevention; Environment; Nutrition

INTRODUCTION
The story of Corona virus seems to be overwhelming the medical and scientific aptitude of public health institution. It is a recent challenge to medical intelligence. The threatening condition is that while most of this disease outbreak has been contained by the developed world no matter how wild its spread, the fear is that the third world will be worst hit if it penetrates the tenets of its public health systems. Africa has been under the watch of WHO. One wonders what would have happened if it had first started in Africa given the condition of healthcare systems in most of these countries. Thus these texts call for profound caution on the developing societies in Africa because of their living condition and lifestyle. The virus continues to move on a daily bases and given its nature, it has not been able to be controlled or destroyed presently or permanently by health experts. Thus every preventable measure should be a positive strategy until its wildfire is quelled down. It has already been declared a respiratory disease and the symptoms identified; also some preventive measures have been suggested yet the treatment has not been fully confirmed. While these measures of control and treatment are going on, what will be the nature of the peoples control and measures than prevention? There is also the Lassa fever which one may term , “home grown.”It has been linked to multi-mermaid rat. The measure has been to wipe out anything rat in the environment. But, firstly, the reality is that the measure has not been specific in implementation. Secondly, information communication has not been maintained to educate the grassroots comprised of a majority of non-literate population. However, Lassa fever cannot be equated with corona virus in the sense of its state of contamination, spread and mayhem. Art in public health would have been most ideal in this situation to cover information for those who cannot read and write. It becomes worse considering cultural lifestyle. Most persons might want to maintain tradition despite its
exposure to such disease. Also, most religious individuals might want to maintain lifestyle of which contrary situation might mean profane the faith.

One of the sickening characteristics of an average individual in these societies is ignorance. Carelessness or negligence is often a habit. Many may blame it on mentality or poverty. The most striking trait is that some call such occurrences like corona virus, a scam or use a negative appellation to dispel its reality or attack it to some spirituality. There is also always a stigma. And most of these speculators are regarded as educated. This is the worry of the environment.

THE RECENT VIRUS, ITS PANDEMIC NATURE, LIFESTYLE AND CONTAMINATION

The pandemic scourge that has enveloped the world environment recently, is not a surprise to public health concern worldwide because before now there has been series of other infectious viruses that have been with the society in recent times. The signal is that as the world evolves such occurrences are inevitable because of changes in human lifestyle, industrialization and the global nature of the society which has been heightened by the introduction of the digital platforms and the new dieting systems. The production of plastics has created another need for control because they are causing mayhem to the aquatic life which affects human habitation and health especially in Africa where health systems are not adequately maintained or guaranteed. The type of food humans eat in recent times in the name of dieting is often surprising. Nothing is wrong with the food type provided it goes down well with the body. Most illnesses or sickness can often be traced to food types over a long period or with a short period. Illness can also be defined according to its geographical background or environment. Food type or environment could determine body structure or its development. Also food type could provide immunity to disease causing agents. One could say that one’s food is ones health or drug or healing element. This often depends on the lifestyle and environment. This state of health also fight diseases or reduce the rate of contamination. When the body immune system is very low, bacteria or viruses are amenable to penetration. These are challenging conditions in the lifestyle of most individuals in the third worlds countries. But the most defeating position of all is the peoples ignorance or knowledge gap in the area of public health and adequate health care facilities.

DISEASE AND CULTURE

Culture lie side by side with disease condition, its development and environment. Most of the time culture or religion delays the growth of fundamental societies. This does not mean that diseases may not develop and where it does it may be attached to one myth or spirituality. There are myths about diseases. An Igbo proverb states that what one culture eats another may abhor. Most of these traditions are based on myth. But microbes, cells will always remain natural outside culture or myth. It is in this sense that this extract is reporting corona virus. There is culture shock when it comes to the nature of diet according to traditions. In a distant Igbo tradition, a particular community does not eat snail because they believe that it helped them win an ancient war and it has been deified. To this day some people from that community do not eat snail. It is also believed that if they eat snail, they will develop leg cancer. Corona virus has been detected in life animal market and traced to the bats. Who knows what; where the bat got it from or whether it is domicile in the bat originally; whether it is the bat that brought it to the life animal market; this puts the bat at both carnivore and herbivore stance. Traces may go far for researches in this direction while the symptoms are changing and is changing in recent times. This calls for the operators to exercise caution in what is brought to the table as food. There is rumor about synthetic food. These are aspects of modern culture which also may carry its pathogenic agents.

The Nature of Primates and Human Scientific Experience

All animals are the same in the sense of flesh and blood. This means that what affects a rat or lizard can affect a man or woman or child. All primates reproduce its kind. But when there is a cross-breed, a “strange” creature might be produced which can also be reproduced and the chain goes on. In the same way, metabolic transfers or transplant can create a new system or situation. This is not new to scientific exploration and exploitation. In the new world a lot of experimental agents are in operation. There is sex transfers and a lot of cross-breeding, plastic surgery and transplanting. Mutations often occur due to so many factors of which one is changes in weather conditions. It could be caused by the quality of the environment which has been altered by oil spill, pollution or disease. All these experiences and knowledge has contributed in one way or the other, positively or negatively. The evidence of the occurrence of these fatalistic developments has proven the reality of the negative result of some scientific explorations or providence. Caution should be exercised as part of scientific ingredient in any experiment in order not to introduce a situation that can be beyond the control of those producing it.

The Growth of Modern Viruses

AIDS, Ebola and Lassa fever viruses have taken and is still taking their toll of human life although it has been
controlled considerable first by scientific research and medical implementation and then medical education. Science has tried to control some of these unusual negative health occurrences. New diseases are growing everyday which creates the need for medical research to increase and improve its operations continually. Thus the need for continual update of medical education.

The human body need a level of bacterium to survive. But when the bacterium overpowers its environment it becomes a disease. Most primates in the developed world’s may not survive in some African city environment because of the unhealthy nature of its habitation. Nevertheless, the present viral spread is on a different pedestal and should be approached with caution. This text calls for concern for the African sub-region to excise caution and control while this scourge lasts and also to imbibe adequate healthy lifestyle.

**The Nature of Viruses and Bacteria**

Heinrich Herman Robert Koch, a German observed that bacteria is the cause of infection. He found the relationship between bacteria and disease. Dmitri Ivanovsky in 1842 observed that his “filters still show that sap from a diseased tobacco plant remained infectious to healthy tobacco despite having been filtered.” This discovery is the beginning of virology. Viruses and bacteria are both microorganisms but viruses are even smaller. Bacteria can live inside or outside the body or in our environment. But when they cause infection to man they are regarded as pathogenic bacteria. But Viruses need human cells to grow and so are parasitic. Once they are developed, they survive by spreading from one body cell to the other, eating away their host as food. They use human body to grow and multiply. They cannot survive for long without the animal cell. They end up destroying their host completely as an aspect of their life circle—until they kill their host; so is with every virus.

To know the type of organism that is causing your condition, tests are conducted of the blood, urine, sputum, stool, skin, cerebral spinal fluids. It is cultured. Bacteria contains a single cell. Common bacterial infection include, Urinary tract infection(UTI),some type of food poisoning, cellulitis, lyme disease, tuberculosis, bacterial meningitis, gonorrhea, tetanus; while viral infection include influenza, common cold, viral gastroenteritis, chickenpox, measles, viral meningitis, warts, HIV, viral hepatitis, west Nile virus and zika virus.

In all, they survive comfortably in humid, fluid-like conditions and can easily spread or multiply in that condition when they find a host and the human body or animal is the most likely living condition. They are called disease because of their mayhem in human or animal cells, although in most cases they may not pose a threat to the animal host. But it may act differently when they found a human cell. They attack and multiply using their host cell, altering and destroying its original function. They can spread through aerosol, contact with infected person or material. This manner of spread, growth or contamination should be a public health concern in most of these third world societies where it is ravaging the human population that have relatively poor healthcare facilities to contain the scourge or the spread.

**Danger light:** Treatment of viral infections involves treating symptoms while the infection runs its course, although in some cases antiviral medications may be used. (Schulman, J.; Reviewed by Biggers, A.2018). Covid-19 has been spotted to have originated from the bats. It is linked to seafood and live animal market which means that it is from animal to man transmission. Now it’s wide spread moves from man to man.

**Mode of Contamination**

- When one inhales droplets from infected persons cough.
- Handshake
- Touching infected objects like handkerchiefs, clothes or other infected objects
- Touching one’s body or face after touching infected materials or individuals who are ill.

**Challenges to Preventive Control**

A female student sitting in a bus was wiping her face and her chest with handkerchief. Soon she began to fan her face with the handkerchief, cleaning her nose, eyes and mouth. Soon she threw a little cough into the little yellow cloth. When the man sitting beside her asked whether she had heard about covid-19, she replied:

“Is it corona virus?”
“Yes,” the man answered
“And what about it?”
“It is spreading”
“And so..!”
“You watch it”
“That’s an old story”
“Is it?”
“Do you believe those stories?”
“There you are”
“What!”
“You are not to use your hanky by now. Instead use tissue”

“Story! How do I fan myself in this heat?. Of course, corona will not survive in this heat; in this environment.” She concluded and continued fanning her face with the handkerchief. This is the situation for most people. To them Corona does not exist and there is no need to be scared.

As is with the nature of some of these societies, some individuals take this pandemic with a pinch of salt. Others regard it as foreign gossip, rumor or gimmick of a kind to defraud the health institutions, despite the wide spread of information in the media houses, gadgets or social media which is on their palms as phone. Some are already cautious of fake news on the social media that
might threaten well meaning organizations like W.H.O. and others with negative stigma. Chloroquine has been mentioned as a treatment palliative. Some individuals have seen it as business opportunity. Others have started hoarding quinine. Quite recently Chloroquine is no more popular as it used to be in the treatment of malaria in medical environment. But with this declaration, some might go haywire with the drug, fake or real. This may be the nature of practice if not controlled. Many vehicles are now on the road with posters of free treatment although without being specific on what their mission is.

Public Health in Situ
The State of health affairs can be summaries with few examples of the situation prevalent in these societies. For example, it is like a scenario where the security agents are advising the children to eschew cultic acts without remembering or warning the parents who may be the initiators, sponsors or leaders of the acts. In the same way the health operators may be advising the public on Lassa fever epidemic; to maintain food and home hygiene where rats raid the kitchen and utensils. Meanwhile in the markets where the food like tomatoes, beans, rice, plantain, garri and other edible items are sold are already infested with rat’s feces, urine and saliva. The animals eat a good portion of the food before it gets to the kitchen where the food is prepared. Most individuals out of hunger may have eaten some of the edibles raw. Is it now at home that the hygiene will start when a portion of the raw food has been infested? The home is the secondary environment to such bought items like food stuff. This cannot be a realist measure to assure the safety of life and good health. Presently some people confuse the situation with some mental reasoning that the tropics are not amenable to such pandemic. Some argue that Africans, considering their metabolic nature cannot be susceptible to covid-19. All these are yet speculation without concrete evidence and one cannot continue to live anyhow in this condition but to take precaution. It is yet necessary to relate with health specialists but individual caution will be most ideal as reports come in everyday regarding those on danger list in the same environment.

Fungi infection, most of the time is encouraged by the condition of the environment, especially body hygiene or contamination. Often in these societies the difference between the slum and the estates is not clearly defined because the wealthy yet build his mansion in the same vicinity, use the same road, drink the same water, eat the same food, breath the same air and eat in the same environment. The difference between a suck away and a gutter is often confused because they are often of the same content.

To add to public health is the reality of public health sanitation maintenance involving medical experts especially community medicine professionals. This situation may not be taken seriously because the people are used to the environment with abused atmospheric quality of air, poor sewage systems, poor waste disposal, body hygiene and dieting. Mutations occur. There is often little resistance to its occurrence because its control has no strategy beforehand. This is affecting public health influencing in most cases, malfunctioning, miscarriage, hormone imbalance, respiratory disease, cancer and other health problems. When all these conditions are prevalent and the case of covid-19 is the order of the day then there is more to it than meets the eye.

The social physiology of the environment in public health management system cannot be depended on for compliance to measures that it will need to survive these conditions without adequate monitoring with adequate technical support as this virus continue to spread. It is unfortunate that restriction of movement may stall the drive, yet technical assistance is possible, especially towards preventive conditions.

Regarding the definition of health, Fisk’s (1998) “findings seem to be in line with recent research studies that show that reference to socio-economic and environmental factors are associated with people in working-class groups and may well reflect their experience of adverse living conditions.” As She puts it, “However, there is evidence that policy-makers are being encouraged to take a wider view of the determinants of health and to be more active in influencing the social conditions which affect the health of communities.” Also as Armstrong puts it. “1. The presence of many biological causes of illness is strongly influenced by social factors.” People socialize and test new diets introduced by their friends or relations. Thus there are many conditions that affects the society.

Like cancer or every other eating agent, parasite or devourer, the human body is the oil Well of the disease. Without the living flesh it will not survive. This reveals that the chances of destroying it completely is 100%. The problem is that it got out of hand before it could be discovered and controlled, given its speed of spread or reproduction. Cancers, HIV AIDS or Ebola could take some time to kill its host but the corona virus takes a shorter time, given little time for diagnosis and treatment. The success that has been recorded is in reducing this time. That is why many inhabiting the virus are still alive in the hospital but the permanent cure has not yet been established as at the time of this writing.
From hand shake to touching. Some use handkerchief to wipe their sweat or face, sneeze, cough, hug, or even kiss or peck. There is aerosol in every cough, sneeze, or even yawning. Thus using of handkerchief will not be too ideal at this period. The covid-19 virus has a high survival metabolic nature which is for now beyond complete scientific control. The signal is that it is going to last for a while and while it lasts it is expected that the society be educated on the best possible ways of avoiding its endemic spread in order to sustain less casualty while it lasts.

Do not touch your face, eyes, nose, mouth, if your hands are not clean. Personal materials such as cups, spoons, or toothbrushes should not be shared. Old habits die hard. For those who have heard and are cautious, will still have to struggle to maintain body or environmental hygiene but those who are not cultured or educated may still find it difficult to cope. Thus it seems ideal that in some areas, schools are shut down. The children and the illiterates are of a great concern especially women and children.

**Dieting:** Healthy dieting systems is a viable option. Natural food system will be most ideal at this time.

**PROBLEMS OF ADEQUATE INFORMATION COMMUNICATION FACILITIES**

As has been stated, an aspect of the challenge is poor healthcare facilities. Adequate public art health intelligence should be priority attention. Posters and billboards are used for business advertisement more than the spread of public health concern. Public health education is not adequately communicated to the people. Some hear it as rumor. The grassroots are of greater concern because here, the news might not mean the same as it stands. It could be scary, but a lot of opinion about its deluge and spread stands as if it is far from the truth or far from where it is happening. There has been a close down by most well meaning organizations to dispel the dangers of contamination.

Mechanisms for mass screening at strategic places like the ports, motor parks and terms of the test to be made mandatory and not on the request of the individual. Individuals should be open to this screening without discrimination or embarrassment.

**SOME PREVENTIVE APPROACH**

Being conscious of the virus, aware and alert and observing regular hygiene
- Regular washing of hands with soap or alcohol based sanitizer.
- Wiping surfaces with disinfectants.
- Social distancing
- Track contact

Mass education through seminars and workshops
- Isolation
- Improved surveillance

The key is to practice good hygiene. This is majorly in washing and handling of food and maintaining clean kitchen etiquette. One can go to the hospital to ask for the available vaccine and should stay at home when ill. Raw fruits and vegetables must be washed before eating. Meat must be cooked very well and left over food in adequate room temperature, otherwise refrigerate them.

To be wiped out completely, there must be mass screening for everybody and the animal trace should be determined to know whether it is dominant in bats alone or whether the bats are the real origin. this may not have been determined.

**SUGGESTIONS**

**Breaking the chain:** this is uppermost in the race to curb the movement of corona virus from one human to the other. Examples have been given above; to observe adequate and maximum hygiene based on the suggested approaches.

**Control in Scientific Exploration:** scientific experimentation is going beyond control. There should always be caution towards outbreak of results of experiments.

**Diet:** just like we have it in the Baroque or Rococo period of over florid ornamentation. A kind of over florid ornamentation if following the food-world recently and should be watched.

As More, Chapman, and Aiken puts it, “We must sleep, eat, go to the toilet, etc. However, human behavior is actually incredibly diverse. Biological influences are shaped by culture. Cultural values and norms determine how we eat,” or what we eat. Thus, Oke(1984) writes about “behavioral patterns,” which can be formed according to culture or the society one belongs. This also influences medical conditions or public health. For example, in some societies people kiss openly, mouth to mouth in public places. But in some societies, it is frowned at; while some religiously accepts it as a tradition outside the scope of immorality. These are behavioral patterns. In handshake, some cultures will feel offended if a hand is given out for a handshake and it is rejected. While smoking is frowned at in some societies, others don’t see it as abnormal. Thus behavioral conditions according to these cultures can help to determine the control of outbreak of viruses and diseases. While cultures places restrictions on some unhealthy habits, it leaves open areas of norms, values or traditions that may be open to unhealthy habits or contamination. Modern trends can place a watch on these, scrutinizing and screening out dangerous cultural habits.

And also the condition of class struggle or social stratification may place some people at a disadvantaged position. The work place condition or the management...
control may not put their subordinates into consideration. For example, the low income earners like cleaners, gatemen and private security operatives or general laborers. For their salaries to be paid, they have to work according to the specification of their managers. Here is a general concern of all authorities at the administrative level.

CONCLUSION

Nevertheless, closer watch is necessary and living conditions improved with public attentions drawn to the health workers and environmental sanitation operations. The thermometer for temperature reading is necessary and a good recommendation for all. Temperature screening is vital for anyone having difficulty in breathing using non-contact infra red thermometer or thermal camera. Nutrition is key by eating balanced diet. Covid-19 will come and go but we have to maintain our health culture from now on, especially in these regions. Until the source in bats is explored and destroyed and the rate of its development determined, the spread may continue even when the chain among humans has been broken.

RECOMMENDATIONS

Mass screening
Safe sex, especially to a single partner.
Animal or insect bites prevention
Thoroughly cooked food
Daily clean bath: most individuals perhaps because of their job, lifestyle or habit do not bath, or clean their teeth or mouth or wash their cloth for many days.

Alternative Medicine: should the spread continue unabated determined strategy must be employed. The society will not be on lockdown forever. Thus every weapon must be used to fight covi-19 if the cure is taking long to be found. Alternative medicine can be a gate way, too.

The masses have to be reorganized into movement pattern or strategies whereby isolation is maintained. For example social distancing, reduction of contact situations especially in work places, markets, schools and hospitals since the character of the virus has been defined and determined.

The digital systems can be employed to avoid crowd. This is possible. The underdeveloped worlds should key into the system. The digital schools must be made compulsory and the government has to sponsor the cyber wifi so that it will be available to the masses for free. Digital schools cannot progress in these societies if the poor is not carried along. Many less privileged children cannot afford the android let alone the money to buy air time.

Interactions that might involve people coming together have to be discouraged and strategically planned in such a way that contact will be minimal. In this way, covid-19 could be wedged until the cure is found which is certain. The cure will be found but it might take a while. The concept of cure varies in this instance. Cure could be avoidance or preventive. It must not be based on chemical concoction.

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