



Local Perception of Coronavirus and Disease Care in Southwestern Nigeria

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Research Article

Volume 5 Issue 3

Received Date: May 16, 2020

Published Date: July 24, 2020

DOI: 10.23880/apct-16000179

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Abstract

In this study, we have advanced cultural categorization of illness and disease as an insight into the understanding of people's behaviour and attitudes towards COVID-19. Relying on data generated through rapid research approach in some Yorùbá cities of southwestern Nigeria, where phoning, WhatsApp, Facebook, and quick in-depth interviews, ethnobotanical survey/analysis of some anti-microbial herbs and case analysis were held. The study reveals opposing and contrasting perceptions of COVID-19, which informs different regimes of care and prevention. Such includes, biomedical against preternatural causation and utilization of local herbs versus globalised western health care strategies. The study therefore suggests that within the context of globalised health culture accommodation of local traditions is imperative in proper understanding and invention of care and preventive strategies against COVID-19.

Keywords: COVID-19; Yorùbá of Southwest Nigeria; Local Perception; Globalised Health Behaviours; Biomedical and Preternatural Causation

Introduction

The emergence of Coronavirus and Disease (COVID-19) has thrown the whole global system into deep health and economic crises that are beyond the consequences of previous global pandemics like HIV/AIDS and Ebola. While the incidence of COVID-19 is not the first epidemic and pandemic that has ravaged the global community, COVID-19 has caused more global fear and panic, due to the virulence of its spread and attack. The most recent Ebola epidemic failed to cause global mass hysteria which COVID-19 has unleashed on the globe since Ebola did not have global coverage, but limited to few countries in Africa [1].

Within the first five months of the outbreak of COVID-19 no continent is spared of the infection, thus the disease has caused global economy to shrink as morbidity and mortality

due to the pandemic are on daily increase. Besides, there is a global fear and panic accompanying the pandemic due to its global spread and attendant damages to humanity. Beginning from November 2019, when the first index case was discovered in Wuhan region of China, up till March 30th 2020, morbidity due to the pandemic has risen to 703,485 with United States of America (USA) leading the morbidity prevalence with 164,248. As at the April 1st, 2020, confirmed cases of COVID-19 around the world was 915, 525 [2], while the global death toll has hit 45, 541. An active case in various countries around the world has hit 675,198. Mortality due to COVID-19 in the United Kingdom (UK) according to British Broadcasting Corporation (BBC) news on April 1, 2020 was 2,352, with not less than 22,000 tested positive to the virus. In France, mortality due to COVID-19 was 4032. The USA recorded 4,100 mortality rate accrued from COVID-19

as at April 1st, 2020, with confirmed cases of 205,036, thus, putting USA the most affected country. Italy had the highest number of mortality numbering 13,155 deaths out of 110,574 confirmed cases. The Africa narrative is not different. For instance, 1,380 confirmed cases and five deaths were reported in South Africa, while only 52 cases recovered from COVID-19 as at April 1st, 2020 [2,3].

In Nigeria, the first case of COVID-19 was confirmed on the 27th of February 2020 through an Italian citizen who entered Nigeria on 25 February 2020 from Milan, Italy for a brief business visit. The Nigeria center for disease control (NCDC) Covid-19 case update shows a total confirmed case to be 174, while 2 deaths were recorded. Although treated cases were reported to be 9, it indicates no gain as the case continues to rise on daily basis. For instance, on April 1, 2020, 23 new cases were confirmed. The University of Ibadan (UI) data analysis and management Covid-19 group predicted that if the number of cases continue to rise in same manner without any urgent intervention, the total confirmed cases in Nigeria is likely to hit 312 by the first week of April, 2020. Despite this projection, Nigeria has insufficient test kits, inadequate isolation centers, and slow treatment of the COVID-19 patients¹.

The fear and panic caused by the disease suggest diverse approaches engaged in containing and reducing the rate of the disease spreading. Significantly border closure against immigrants and refugees, social distancing, self-isolation, lockdown and quarantine has been globally employed to contain the virulent spread of the disease. In the absence of drug delivery for the disease, palliative measures, using different drugs like Chloroquine, vitamin C, among others and alternative therapies are engaged in caring for the COVID-19 patients. While each of these approaches has its peculiarity, with reference to social structures of society where they were invented, every society currently experiencing COVID-19 have applied these strategies in mostly similar context, despite local peculiarities that may affect optimal results in application of these strategies. While border closure may be observable in some West Africa countries. For instance between Ghana and Republic of Togo in Aflao border, porosity in Nigerian international land borders with Benin Republic, Niger, Cameroon and Chad may frustrate the success of border closure. Similarly one may wonder how border closure can be observed between Germany and Switzerland in Konstanz/Kreuzlingen where international border is loosely kept. Social distancing may also be better applicable in society that have imbibed the culture of individualism as obtained in many European societies, whereas in many African societies where large family sizes characterized by face to face relationship and interpersonal contacts are still prevalent; community relationship is communal and people hustle for daily livelihood without strong social investment,

social distancing and self-isolation may be difficult to apply, with quarantine imposing the suspicion of punishment and danger of stigmatization. Challenges against those intervention strategies have made the control of COVID-19 very slow in many African societies. In addition, many African societies like Nigeria have denigrated their local traditions of healing viral and bacterial infections and rely mostly on western medical approaches which are poorly serviced. Thus, with the slowness of the global system to invent vaccine against COVID-19, economic implication of accessing western medical care in Nigeria is higher and leaving the disease very difficult to deal with even with Nigerian government enforcing social distancing and self-isolation against COVID-19.

In southwestern Nigeria, there exist two contrasting local perceptions of COVID-19. Influenced by education, income, and religion, COVID-19 is seen as disease of the rich, mostly the corrupt politicians who had ran down the country economy and failed to develop the country. Thus, the disease is a punishment against corruption. It is also seen as disease against the Diasporas and returnees since the spread of COVID-19 to Nigeria is linked with international travel. This belief is held among the low income and low-educated people who are mostly of traditional religious system. Mostly educated, high income elites mostly associated with Christianity and Islam hold on to the narrative that the disease is a biological weapon being used in supremacy fight between USA and China on economic domination of the global system. The disease is therefore biological and has no restriction of any class of people. The peculiarity of control approaches and the complexity of the disease perception relating with prevention and care for the disease similarly suggests localization of medicine and limitation of globalized health care strategies.

Localization of disease and illness suggest that illness and disease are culturally shaped. Thus, "how we perceive, experience and cope with illness and disease are based on our explanations, specific to social position we occupy and the system of meaning we employ" [4]. Put differently, illness and disease are shaped by culture. This perception influences illness behaviour in the case of COVID-19, as many Yorùbá in south western Nigeria see it as 'common cold' or 'flu' that can easily be dealt with, as such, it does not necessitate the idea of 'isolation' or exaggerated 'social distancing'. The generally held belief is that the biomedical construction of COVID-19 does, not tally with the people's cultural perception governed in terms of labelling, explanation and the valuation of the discomfort being experienced.

The opposition to the biomedical explanation of illness behaviour informed the people's perception of the illness, the assessment of therapy and patterns of therapeutic regime.

Even when government is involved in controlling the spread of the infection and caring for the patients, the people found approach as 'intimidating' and 'punitive' in nature, and as such, they would not voluntarily made themselves available for tests and care. This partly gives an explanation to reported cases of the tested positive patients' attempts to escape from the facilities, since such act is regarded as 'captivity' of a sort. The fundamental issue here is the foreign (western) induced and globalized clinical interaction setting does not conform to the people's perception of care-giving as defined by their culture categorization and as such, utilization of the therapy becomes burdensome.

The cultural categorization of COVID-19 by the people on the one hand, and the government with clinical care givers, on the other, affects the general attitudes of all the parties involved and these have implications for differential cultural responses to coronavirus as a 'disease entity' and the valuation of the prescribed health behaviour for the people. As pointed out [5], biomedicine is a cultural system in itself. In the light of this, the clinical culture puts premium on the disease as a threat and as such, the need for treatment and cure and in the process, playing down the illness is considered as subjective. Similarly, the government followed the same thought pattern, largely motivated by the political economy of the disease regime.

Generally speaking, people's encounter of an illness episode and the consequent expression of illness in terms of pains, infirmity or disorder are the primary concerns. As such, pre-incubating period of a disease devoid of symptoms is not generally seen as significant to many people, as such, the clinical manifestation of a disease without illness is also never taken serious. All these have implications for people's prevailing health behaviour. As shown among the people of southwest Nigeria, the biomedical-influenced behaviours pertaining to the prevention and spread of COVID-19, generated culture 'opposition' and consequently, in spite of media hypes, it amounted to no remarkable positive embracement of 'self-isolation, 'social distancing', 'mask wearing', restriction of movement or lockdown among other care strategies initiated for COVID-19 among the people. All these are interpreted as a set of unwarranted social and economic burdens on the people orchestrated by the insensitive political class. Thus, in this paper, we seek to critically examine Yorùbá local perception of Coronavirus and disease in southwestern Nigeria, relying on data generated through ethnographic rapid research appraisal.

Methodology

The fieldwork was conducted among the Yorùbá of southwestern Nigeria between March 15th and April 5th 2020. Data collection was through Rapid Research Approach

(RRA) method, using online interview through Whats App, mobile phone calls and Facebook messenger to conduct qualitative interviews and short key informants' interviews limited in body contact with wearing of protective devices such as hand gloves, face masks and use of hand sanitizer. Case analyses were also carefully held in two places in Ibadan. This becomes imperative due to the possibility of infection of COVID-19 through physical contact. The Yorùbá predominantly occupy six federating states of Nigeria located in southwestern Nigeria. The states are Lagos, Ogun, Oyo, Osun, Ondo and Ekiti. As at April 1st 2020, Lagos had the highest incidence of COVID-19 cases (85 cases) with Osun having 14 cases. The two states in southwestern Nigeria had the first and third highest cases of the pandemic in the first three weeks of Nigerian incidence of the outbreak of COVID-19.

Forty-eight respondents were selected for interviews among which included twelve medical doctors, ten *Ifa* Priests and local herbalists, seventeen community leaders cutting across different social strata; three local herb sellers (Tewetegbo), and six government officials. Respondents were interviewed in Oyo, Ibadan (Oyo state) and Osogbo and Iwo (Osun) towns in southwestern Nigeria. The two states were selected due to their high prevalence of COVID-19 cases. Oyo had seven cases while Osun had three cases as at 31st of March 2020. Both states were in second and third places respectively following Lagos state with over 60 cases out of the identified 135 cases of COVID in Nigeria as at 31st of March 2020.

Apart from online interviews, we subjected the identified herbs to ethno-botanical analysis. The herbs mentioned as anti-microbial were categorized and we identified their botanical names; while the validation of the herbal recipes was done through ethno-botanical survey among the local herbs sellers that were interviewed in Bode central herb market in Ibadan, Oyo State, Nigeria. The focus of the survey was to investigate the indigenous knowledge of herbs sellers at the Bode market on the use of the mentioned herbs as microbial. A visit was made to the market to obtain informed consent of respondents and participants of the survey. The essence of the study was explained to the participants in clear terms, oral interviews were engaged to elicit information from the respondents and their responses were recorded on tapes.

Data analysis was through content, having recorded the interviews, transcribing them and generating interview scripts. Thus from the interview scripts like facts were collated against unlike ones. Through this extrapolation we were able to generate common opinions and counter-opinions which form the basis of our discourses as research findings and discussions of findings.

Research Findings

The Yoruba Conceptualization of Microscopic Disease

The Yorùbá belief system has a great deal of influence on the causation of illness as well as the caring and curing of illnesses. There are several preter-natural agents believed to be causal factors of these illnesses. Such as some local divinities - who according to Yorùbá cosmology were responsible for the creation of the world; the ancestors - the living dead in the spiritual world, that are viewed by the Yorùbá to have more power than the living; the spirits - who are apparitional entities called different names among the Yorùbá, such as *ẹbora*, *ànjònú*, *iwin* and *ọrọ-igi*. These agents are believed to have mysterious powers which are either good or bad. The ones with good intentions among them help humanity in solving some of the problems associated with all forms of sicknesses through the use of herbal medicine; of which they have more knowledge than any human being. The malevolent ones among them are believed to be part of disease causation in the life of humanity - individual, groups or even the whole world at large.

Since divinities, ancestors and spirits are believed by the Yorùbá to be sources of disease causations, they are controlled by the means of religion through veneration so that the Yorùbá can always have good health. Veneration is done through prayers of worship, offering of sacrifice, appeasement and supplication. They are also brought under control through the use of magic and medicine [6].

Although it is believed that all illnesses or diseases emanate from the spiritual before it is manifested in the physical, there are some diseases or illnesses that are believed to have natural causes. They include biomedical illnesses like headache, stomach ache, cough and so on - which are scientifically linked to poor nutrition, dirty environment, insect bites. These types of diseases are treated with herbs and sometimes incantations [7].

Preter-natural diseases like mental illnesses or obstructed pregnancy and some other difficult child labouring are believed to be caused or influenced by the activities of witches, wizards or sorcerers. Most of the time, some of the ailments with natural causes can become difficult to cure; they are then associated as spiritual diseases. These are cases of “*ẹ lọ fẹsẹ ilé tó*”² which defied scientific and medical solutions.

Mystical diseases or illnesses are also believed to be caused and influenced by evil spirits called *Ajogun*. Sometimes divinities and ancestors, as earlier mentioned,

can also afflict human with mystical diseases if their rules and regulations are violated or human refuse to hearken to their voices. However, majority of these diseases are caused by *Ajogun*. Such diseases if it affects individual or few people are referred to as *Arun*, *Àisàn* or *òjòjò*. However, if it affects a whole community, town city, or countries - like the case of bird flu, Ebola and coronavirus, it is called *Àjàkálẹ̀ àrùn*; a disease that is transmitted from one community, town, country to another. Thus, commonly referenced due to their frequencies of occurrence among *Àjàkálẹ̀ àrùn* are measles (measles virus), yellow fever (flavivirus) and smallpox (variola virus).

In the past, before the advent of modern medical practices and provision of modern medical facilities in Nigeria, the Yorùbá had its ways of combating epidemics. In situation of a breakout, the first thing to be done is to consult *Ifá* oracle. It is usually the *Ifa* oracle that will direct its steps toward combating epidemics. In situation like that, *Ifá* would indicate the particular *Ẹbọ* -sacrifice to be offered to ward off the evil illness and herbs to be used in curing are inferred from *Ifa* verses. One of such can be found in *Odù Qwónrín Şogbe*³ where *Ifá* says:

<i>Bọyá awo wọn lóde Ìdò</i>	Booya the priest of Ido town
<i>Ọgòròngbòbì awo wọn lóde Ìjẹsà</i>	Ogorongobi the priest of Ijesa land
<i>Èringùndúdú awo ilú Ìşakin</i>	Eringundudu the priest of Isakin
<i>Àwọn gbinrin àjijà</i>	Gbinrin Ajija
<i>Àjijà gbinrin</i>	Ajija gbinrin
<i>Agogo ẹşin ní jí</i>	It is the gong of the horse that wakes up
<i>Ní kó gbinrin gbinrin hánu</i>	To place gbinrin gbinrin in its mouth
<i>A dífá fáwòdì</i>	Casts divination for Awodi (Hawk)
<i>Lójó tó nlo wòréré ayé şàkun şàkun</i>	On the day he was going to gaze into the world
<i>Agogoríre</i>	Agogorire
<i>Bẹ̀ni ò gbófá</i>	Has no knowledge of Ifa
<i>Bẹ̀ni ò moògùn</i>	At the same time has no knowledge of herbal medicine
<i>Ogún omòdé bá pé láró</i>	If twenty children stay in the blacksmith workshop for a long time,

<i>Kò lé mòdí àwòdiòkè í wò</i>	They cannot know the secret of Awodioke
<i>A dífá fún Olófin Òjémbělé</i>	Casts divination for Olofin Ojembele
<i>Èyí tó nbá nkan ibi sùn</i>	Who was sleeping with evil things
<i>Èyí tó nbá nkan ibi jí</i>	Who was waking up with evil things
<i>Èyí tí gbogbo aáburú ilé ayé filé rẹ şebùgbé</i>	Whom all evil things in the world were living in his house
<i>Wòn ní kó kára á lẹ</i>	He was advised
<i>Èbọ ni kó má a şe</i>	To be offering sacrifice
<i>Ó gbó rírú ebọ ó ru</i>	He heard and offered sacrifice
<i>Ó gbó ẹrù àtukẹşẹ ó tù</i>	He heard appeasement of Esu, he offered
<i>Ojó pé lóní o</i>	It is appointed date today
<i>Alápó ngbápó</i>	Those who want to carry Apo carried it
<i>Olórun ngbórun</i>	Those who want to carry Orun carried it
<i>Tó bá dìje ònì</i>	On the seventh day from today,
<i>Oun ibi á şi kúrò nílẹ̀ yí</i>	All bad things will move away from this land
<i>Èdú gbálé</i>	Edu swept the houses
<i>Èdú gbánà</i>	Edu swept the roads
<i>Ifá á gbá oun ibi dà sóşà.</i>	If a will sweep evil things to the lagoon.

In the reign of Olófin Òjémbělé, there was a breakout of an epidemic named *Efori tulu* - an equivalent of Corona virus - which started from his household. It was a terrible headache affecting both old and young. All efforts to curb its effects proved futile. *Òrúnmilà* was sent for, *Òrúnmilà* consulted *Ifá* and *Ifá* revealed that it was one *Ajogun*- a war lord of left side that resides in the air that caused the problem. Since *Èbọ* (sacrifice) was believed to work faster than medicine, an *Èbọ* - a big pot containing a head of an alligator, head of *Òká*- puff adder (a kind of snake), bitter leaf, *Òdúndún* leaf-, *Tètè* leaf-, *Rinrin* leaf - with plenty water was later prescribed. All the leaves were squeezed with the water. The pot was hung at the entrance to the town. Everyone who entered the town was expected to drink from it and rub some of the water on their bodies. This was believed to create an immunity against the disease. This sort of practice can be prescribed for individual homes to fight against any epidemic (*Àjàkálẹ̀*

àrùn). In addition to the above, the Yorùbá also send their appeal to the ancestors to help in situations of *Àjàkálẹ̀ àrùn*. Some divinities that the Yoruba believe can cause *Àjàkálẹ̀ àrùn* like *Obaluaye* - also known as *Sanponna* can be appeased for calm.

Information gathered revealed that a total fumigation of the entire village, town and kingdom can also be done by combining different leaves like *Òdúndún*, *Tètè*, *Wòròwò*, *Rinrin*, and *Èlà* to mention a few. These leaves, symbolically known as *ẹrọ* leaves are used to carry out the fumigation of the people and the houses in which such breakout had happened. This may sometimes base on the past experience of the priests and herbalists living in such communities or through the dictate of *Ifá* like the one mentioned above⁴, To do this, plenty of those leaves are gathered together, squeezed in pots, virgin boys and girls would carry the pots on their heads. In the mist of songs drumming and dance, like the one below:

<i>Ikú lọ nílẹ̀yí,</i>	Death has departed this land
<i>Işu lẹ̀lẹ̀ ikú lọ,</i>	Lolo yam, death has gone
<i>Àrùn lọ nílẹ̀yí,</i>	Disease has departed this land
<i>Işu lẹ̀lẹ̀ àrùn lọ</i>	Lolo yam, disease has gone

The concoction would be sprinkled on every road in the community, every home and people living in the house⁵. Besides, herbal recipes, can also be prescribed as a further and physical measure against such epidemic. For instance, after offering the prescribed *Èbọ* as mentioned above, the following herbs can be boiled for drinking and for inhaling: *Egbò tinúnpoşbẹ* (Unidentified), *Aporópewọ* (*Usteria guineensis*), *Egbò ìpẹta* (*Securidaca longepedunculata*), *Ewé and egbò òruwọ* (*Morinda lucida*), *Èşo àbèrè* (*Parinari* spp. *Chysobalanaceae*), *Akoşgun* (*Aristolochia repens*), *Eèpo awọpa* (*Sansevieria* sp. *Liliaceae*), *Egbò ègbèşì* (*Coelocaryon preussii*), *Egbò àtaparí òbúko* (*Heliotropium indicum*), *Egbò ifon* (*Dioscorea cayenensis*), *Ìrèşilẹ̀ ewé ipín* (*Ficus exaspera*), *Ewé dóşóşárò*, *Akoş kánún* (*Potash*) and *Bààrà* (*Citrullus lanatus*)⁶. Other herbs mostly mentioned by herb sellers in Bode herb markets include: Shea butter, Palm oil, Garlic, Lemon, Bitter-leaf, Efo Yanrin, Brown onion, and Ginger. They claimed that demand for these herbs has tremendously increased following the outbreak of COVID-19, suggesting their use as anti-microbial to prevent COVID-19. Their preparation are in different forms including boiling a combination of some of the leaves at once and drink. Some are dried, grind and added to palm oil or shea butter used as ointments, while some others are steamed and inhale for quick recovery⁷. Table 1 below present detail ethnobotanical descriptions of the commonly used herbs against microbial diseases like COVID-19.

Name of plant	Family	Common name	Yoruba	Part used
			Name	
<i>Newbouldia laevis</i>	Bignoniaceae	Tree of life or fertility tree	Akòko	Leaf, bark and root
<i>Pistia stratiotes</i>	Araceae	Water lettuce	Ojúoró	Whole plant
<i>Lagenaria breviflorus</i>	Cucurbitaceae	Wild colocynth	Tàgìrì	Fruit
<i>Zingiber officinale</i>	Zingiberaceae	Ginger	Atalè funfun	Tubers
<i>Launaea taraxacifolia</i>	Asteraceae	African lettuce	Yánrin	Leaf
<i>Vitellaria paradoxa</i>	Sapotaceae	Shea tree (Sheabutter)	Òrí	Fruit
<i>Citrus limon</i>	Rutaceae	Lemon	Osàn, Òrombó	Fruit
<i>Elaeis guineensis</i>	Arecaceae	Palm wine/ palm oil	Emu Òpe/ Epo pupa	Juice/Fruit
<i>Vernonia amygdalina</i>	Asteraceae	Bitter leaf	Ewúro	Leaf and root
<i>Allium cepa</i>	Liliaceae	Onion	Àlùbòsà	Bulb and leaf
<i>Allium sativum</i>	Liliaceae	Ginger	Áyù	Bulb

Table 1: Ethno-botanical descriptions of the commonly used herbs as antimicrobial in southwestern Nigeria.

In Yorùbá society of southwestern Nigeria, there are different terms used in qualifying diseases or sicknesses. The local term for a symptomatic ailment (disease) is *Arun*, while a phenomenological ailment (sickness) is referred to as *Aisan*. While distinction in both is very clear ethno-medically among the people, more often the two terms are interchangeably used. Thus, derogating from their analytical conceptualization. The interchangeableness neither implies confusion in identification of illness behaviours nor care strategies associated with the two. Synonyms like *Òjòjò*, *ailera*, *aigbadun* among others are common expressions of illness state with may generate metaphors like "*Òjòjò nṣògún, ara Ògún ò le*"¹⁸.

Àrùn is a general term covering many ailments irrespective of their causative agents. Particularly the Yorùbá describes ailments caused by unspecified biological organisms such as virus, bacteria and fungi as *arun* and contagious disease is called *Àjàkálẹ̀ àrùn*. The Yorùbá believes in existence of microscopic organisms that could cause ill health, yet analytic description of these organisms as done in modern science is absent. Thus, Yorùbá does not have distinctive classification among virus, bacteria and fungi. All these microscopic organisms are referred to as *Aifojuri*⁹ (inability to be seen with naked eyes). Their existence is linked with poor hygiene and sanitation, change in weather and affliction due to desecration of society. As exemplified by Ifakunle Awolowo, dirty environment can breed microorganisms. While this was generally supported by all the herbalists interviewed, they also stated that seasonal variations can also bring about breeding of microorganisms capable of causing illness in human.

Àrùn can afflict an individual. In if a chapter of *Ogbè'sé* [8] narrative of a hunter who was infected by disease caused by unknown microscopic organism due to his failure to propitiate Ifa is recounted as follows:

<i>Àbàṣẹ̀kẹ̀nṣẹ̀kẹ̀</i>	Abasekenseke
<i>Ló dífá fún Ọḍẹ</i>	Casts divination for a hunter
<i>Tí nlo sóde Ìwó</i>	Who was going to the city of Iwo
<i>Wón ní kó rúbó</i>	He was asked to offer sacrifice
<i>Kò ru,</i>	He reused
<i>Ó pawo léké,</i>	He called the priest a deceiver
<i>Nígbà tó dé ọ̀nà,</i>	On his way,
<i>Àrùn ẹ̀ṣẹ̀ kòlú</i>	A sickness afflicted his legs.

While disease as infection caused by microscopic organisms can afflict individual, it can also be an endemic infection affecting a whole family. In another Ifa chapter *Odu Ọ̀kànràn Méjì* [9] narrative of an infection caused on a husband, wife and children in a household was related as follow:

<i>Oye ni o san ara</i>	Harmattan does not produce thunder strike
<i>Kurukuru o ta monamona</i>	The fog does not produce lightning
<i>Ako aparo, abo aparo</i>	The male and female bush fowls
<i>Won o lagbe lori sanansan</i>	Do not produce comb on their heads

<i>A difa fun olofin</i>	Casts divination for Olofin
<i>Olofin nrunte</i>	Olofin was bedridden
<i>Won ni ko gbodo ku sinu ite</i>	They told him (his priests) he must not die in bedridden
<i>Onase aya a re nsojojo arun,</i>	Onase his wife was afflicted with a disease
<i>Won ni ko gbodo ku sinu arun</i>	She was told (the priests) she must not die with a disease
<i>Okanbi omo o re nsorengede,</i>	Okanbi his son was seriously sick
<i>Won ni ee forengede ku</i>	They said (the priests) he must not die with sickness
<i>Oni dudu gba dudu, oni pupa gba pupa</i>	Those who will collect black and red for offering did
<i>Alayinrin gbayinrin</i>	Those who will collect multi-colour did
<i>Barapetu,</i>	Barapetu (Orunmila)
<i>O ba mama koku o karun</i>	We wish you carry death and sickness
<i>Barapetu</i>	Barapetu

Another Ifa chapter, *Odù Ọsá Méji* as narrated by Ifalowo Alabi¹⁰ suggests that *Arun* can also afflict a group, village, town city, country. This chapter narrates as follows:

<i>Ifa ni won o k un mojo mojo</i>	Ifa ni won o k un mojo mojo
<i>Ifa ni won o ki un meji meji</i>	Ifa ni won o ki un meji meji
<i>Ifa pele mojo mojo</i>	Ifa pele mojo mojo
<i>Ifa pele meji meji</i>	Ifa pele meji meji
<i>Ifa pele</i>	Ifa pele
<i>Omo ologbaagbara eti ode Ofa</i>	The son of Ologbaagbara besides Ofa
<i>Orunmila loun kii sara ode Ofa</i>	Orunmila says he was not from Ofa
<i>O loun dode ofa</i>	He said he got to Ofa
<i>O loun bawon, ojojo kege kege ni nsewon</i>	He met them with various sicknesses
<i>Ori nfo won, edo ndun won</i>	They had headache, liver problem
<i>Lara won o piye</i>	They were not completely whole
<i>Oun ni won difa si</i>	They consulted the Oracle because of this
<i>Pe oun ti nse awon yi nko, o se le san?</i>	That with what afflicted them, would they be healed?

<i>Orunmila ni igba ako okuta, igba akuko adie,</i>	Orunmila says two hundred hard stones, two hundred cocks,
<i>Ki won ni egbeegbaa igba</i>	Two hundred cowries in two hundred places
<i>O ni ki won o rubo lode Ofa</i>	He said they should offer it as sacrifice
<i>L'Òrúnmilà bá gbá iyè Ifá sí àwọn òkúta wònyẹn</i>	Orunmila sprinkle Ifa powder on the stones
<i>O ni ki won lo ma jijagudu e</i>	He said they should scramble for the stones
<i>Eni ti o ba ti ri mu,</i>	Whoever did not get from it
<i>Tie tan</i>	His/her own has finished
<i>Nibi tawon marun mefa gbe nijagudu okuta kan,</i>	Where five or six people were scrambling for one stone,
<i>Ni gbogbo Àisàn ti nsewon lode of aba san</i>	All the sicknesses that afflicted them disappeared
<i>Oun ni eyi ti won se npe</i>	That was the reason why people said
<i>Ijakadi loro ofa</i>	Street fight is the Ofa Oro-festival

According to the chapter, a whole continent or the entire globe could also be affected by *Arun* [10].

Local Perception of COVID-19

The Yoruba of southwestern Nigeria emphasizes two, often contrasting constructions of illness. The first being the modern, analytical and scientific construction based on knowledge generated from modern biological science that establishes germ theory of disease causation and care. The second construction is the local explanation of etiology and etymology of the disease, resting on local ethno-scientific understanding of illness. Social class featuring education, income and religion largely determine construction of illness among individual Yorùbá. Mostly the high income educated Christians and Moslems hold on to modern construction, albeit occasional swift to local explanation when considering the mode of the disease transmission and the severity of the illness with the attendant expression of panic and fear through which modern construction is mostly defied like the case of “*ẹ lẹ fẹsẹ ilé tọ*” earlier mentioned. The local construction of illness structures the perception of mostly non-educated low income traditional religious believers. These two constructions shape the local perception of COVID-19 among the Yorùbá of southwestern Nigeria.

At the onset of COVID-19 in the early year of 2020, just like initial Yorùbá perception of HIV/AIDS in the 1980s, due to the pervading knowledge of the disease, the Yorùbá disbelieved

COVID-19. Attaching the emergence of the virus and the disease with the cultural absurdity leveled against Asians especially the Chinese. Shortly before the global awareness of the disease, an online video showing some Chinese eating raw animals and insects went viral online through Facebook and What Sapp media images. In addition, over the years of Chinese invasion of Nigerian economy and technological development, a good number of Yorùbá perceived the Chinese as being shrewd and fake. So when COVID-19 was associated with Chinese origin, the Yorùbá had no excuse rather than linking the disease with cultural perception of the Chinese, disbelieving the reality of the infection based on Yoruba perceived shrewdness of Chinese international economic culture. Mode of the disease transmission further akin to Yorùbá perception that COVID-19 is foreign and could not infect locally resident people. Up till April 4th 2020, data released by Nigerian National Centre for Disease Control (NCDC) suggest that 75% of all Nigerian infected with COVID-19 were returnees from foreign countries like Italy, US, Ivory Coast, Italy and China and the rest 25% are those having contacts with foreign countries' returnees.

The dreadfulness of the disease in China claiming several lives, spread to other countries of the World with its attendant devastation especially on morbidity, mortality and international economy, the Yorùbá schism of disbelief started to decline. In February 2020, when the first incidence was noticed in Lagos, Nigeria; the reality of the disease was gradually dawning on the people. Albeit the perceived notion that COVID-19 is a disease affecting corrupt politicians and Diasporas who live abroad where the disease had heavy tolls. Many corrupt politicians in Nigeria are often in the habit of incessant traveling abroad for holidays and tourism, governmental meetings, and medical tourism in a bid to save their loots. Since the initial and majority (98%) of the disease contacts fell into these categories, the public sentiment was in line with God punishment for corrupt politicians and disease that can only affect the rich people.

As a defensive narrative against public transmission of the disease, high humidity, high temperature, low contact with diasporas and returnees from foreign countries were held as protective devices that could not make wider infection possible in southwestern Nigeria. Similarly the Yoruba believe that consumption of certain foods like hot pepper soup and local herbs which are common diets among the Yoruba would largely prevent the spread of infection.

Another contrasting view about COVID-19 commonly held among the local herbalists is that of biomedical construction and preter-natural explanation; and that of being a deadly viral disease and virulent catarrh which is treatable with the use of anti-microbial drug solutions. Since the local media information about the disease suggests

a biomedical infection which is alien to Yorùbá society, local herbalists tend to believe so, but treating the disease as microbial disease which shares symptoms of virulent catarrh and respiratory tract infections. They also weave the causative understanding of the disease around the general preternatural causative perception of diseases and illness. At first seen it as a punishment for societal desecration caused by the corruption of the political elites and also as affliction by preternatural forces of *Ajogun*¹¹. Thus, care patterns reflect these local perceptions.

Care Strategies

Informed by biomedical causation of COVID-19, care strategies include health promotion and education, 'stay safe', 'social distancing', 'limited contact', 'self-isolation', 'stay at home', lockdown and use of palliative drugs, while the use of local herbs is informed by cultural perception of the disease. Health promotion and education featured campaign for improved sanitation and propagating the preventive knowledge against COVID-19. Through health campaign, knowledge about the disease symptoms were made public and responses to the expression of the disease symptoms were related through online, electronic and print media. Health care infrastructures were improved upon to be able to cope with the outbreak of the disease. Research institutes like Nigerian National Centre for Disease Control (NCDC) and universities research centres were reactivated to generate data useful in controlling the outbreak of the disease. Specifically, in line with World Health Organization (WHO) NCDC set out basic information on the disease. Governments at all levels also set up committees dealing with management of the disease. Preventive measure of stay safe was also grossly engaged through regular washing of hands with detergent and ethanol solution; use of face covers and rubbing of hands with hand sanitizer.

Important aspects of preventive care in COVID-19 were social distancing and limited contact. Social distancing specifies limited number of people clustering together in places of worship, malls, schools, motor parks, night clubs and places of work. Gathering of people of more than five persons was prohibited to avoid disease contact and majority to allow for easy tracing of the disease infections. Based on the expression of social distancing, schools, places of worship, local markets (except those dealing with sales of food items and pharmaceuticals), motor parks and night clubs were shut down and curfew was imposed in Oyo state between 7pm and 6am. In three states of south western Nigeria (Lagos, Osun and Ogun) were imposed with lockdown and stay at home. Up till April 4th 2020, Osun and Oyo states had higher prevalence of COVID-19 cases in Nigeria (89 and 19 cases respectively). Although as at April 4th, 2020 Ogun state had low prevalence of four cases, but since Ogun state shares

borders with Lagos and has many international border outlets, lockdown and stay at home became imperative in the state. Lockdown emphasises closure of all land, air and water entries to Lagos, Ogun and Osun states and restriction of movement within the states. It also includes stay at home backed by state legislations whereby people are enforced by security operatives to stay in their homes.

Curative caring includes testing for COVID-19, self-isolation and use of palliative drugs. COVID19 test kits were acquired by each state government in south-western Nigeria. Upon tested positive, the patients were admitted in isolation-centres built by governments. The isolation centres were equipped with ventilators and provision of intensive care for the inmates who are patients of COVID-19. The use of palliative drugs mostly anti-malaria drugs, and vitamin C, were commonly administered since no drug has been invented specifically against COVID-19. Home remedies featured the use of locally-formulated anti-microbial drugs by Yoruba herbalists. Claimed to be very effective considering their use in previous outbreak of microbial diseases like Cholera, Lasa fever and small pox among others, the local

herbalists in south western Nigeria prepared these drugs locally and made case for government patronage, using them in treating COVID-19. While the call on government by herbalist's not yet yielding, unofficial patronage of local herbalists for anti-microbial drugs by individuals who used the drug as prevention increased. According to herb seller in Bode market "there is an increase in demand for garlic, ginger, lemon and lime due to the outbreak of Corona disease"¹². The increase is because, garlic, ginger, lemon and lime are anti-microbial agents.

Utilization of Local Herbs against COVID-19

Local conceptualization of COVID-19 influences the use of local herbs against the disease. The Yoruba of southwestern Nigeria has local knowledge of extracting local herbs for medicinal purpose, mostly drawn from ancient Ifa verses and age long discovery in local medicine. According to Ifawole, a position corroborated by all interviewed Ifa priests, Orunmila refers to microbial infections as *Arun Aifojuri*, and in *Ejiogbe* and *Ofun-meji* chapters of Odu ifa, instructions on the care and preventions were coded.

Name of plant	Family	Common name	Yoruba	Part used	Active constituents
			Name		
<i>Newbouldia laevis</i>	Bignoniaceae	Tree of life or fertility tree	Akòko	Leaf, bark and root	Alkaloids, tannins and saponins
<i>Pistia stratiotes</i>	Araceae	Water lettuce	Ojúoró	Whole plant	Alkaloids, glycosides, flavonoids and steroids
<i>Lagenaria breviflorus</i>	Cucurbitaceae	Wild colocynth	Tàgìrì	Fruit	Octadecane and hexacosane
<i>Zingiber officinale</i>	Zingiberaceae	Ginger	Atalè funfun	Tubers	Terpenes (zingiberene) and essential oil: gingerol
<i>Launaea taraxacifolia</i>	Asteraceae	African lettuce	Yánrin	Leaf	Alkaloids
<i>Vitellaria paradoxa</i>	Sapotaceae	Shea tree (Sheabutter)	Òrí	Fruit	Fatty acids: palmitic, stearic, oleic, linoleic and arachidic
<i>Citrus limon</i>	Rutaceae	Lemon	Osàn, Òrombó	Fruit	Citric acid
<i>Elaeis guineensis</i>	Arecaceae	Palm wine/ palm oil	Emu Òpe/ Epo pupa	Juice/Fruit	Carotenes, tocopherols, tocotrienols, sterols and squalene.
<i>Vernonia amygdalina</i>	Asteraceae	Bitter leaf	Ewúro	Leaf and root	Saponins, vernodalinal, vernomygdin, alkaloids and anthraquinones
<i>Allium cepa</i>	Liliaceae	Onion	Àlùbósà	Bulb and leaf	Riboflavin, sulphur compound - n - prophyll disulphide
<i>Allium sativum</i>	Liliaceae	Ginger	Áyù	Bulb	Glycoside - allacin (A), sulphuric oils and phenols

Table 2: Ethno-botanical descriptions of the commonly used herbs as antimicrobial in southwestern Nigeria.

Although most microbial diseases are contagious and if not checked on time, they can cause population decline in community. Nonetheless they are curable. As narrated in *Ejiogbe* and *Ofun Meji*, common herbs used in preventing and curing microbial disease are *Oju oro* (water lettuce), *Ewe Ewuro* (Bitter leaf), *Omi Igbini*¹³. (*Cornu aspersum*), *Ori* (sheabutter), *Epo Pupa* (palm oil), *Oti* (wine) and *Emu* (Palm wine) among others. Also included are the blackseed oil, honey and carrot. Detail ethno-botanic descriptions of the herbs that have prevalent use among the Yoruba during the

era of COVID-19 are contained in Table 2 below.

Following the interviews held with local herbalists and herb sellers in southwestern Nigeria, and the validation of some of the mentioned herbs, Table 3 contains lists of local herbs commonly used to prevent and cure microbial diseases while Table 4 consists of the local herbs used in treatment of Respiratory Tract Infection among the Yoruba of southwestern Nigeria. The mentioned herbs are being subjected to further research for possibility of drug delivery.

Name of plant	Family	Common name	Yoruba	Part used	Active constituents
			Name		
<i>Phyllanthus amarus</i>	Phyllanthaceae	Stonebreaker	Eyin-olobe	Leaf	Phyllanthin, hypophyllanthin, tannins and saponins
<i>Phyllanthus niruri</i>	Phyllanthaceae	Stonebreaker	Arunjeran	Leaf	Phyllanthin, hypophyllanthin and saponins
<i>Lagenaria breviflorus</i>	Cucurbitaceae	Wild colocynth	Tàgìrì	Fruit	Octadecane and hexacosane
<i>Citrullus colocynthis</i>	Cucurbitaceae	Bitter apple	Bàrà	Fruit	Cucurbitacins and triterpene glycosides
<i>Andrographis paniculata</i>	Acanthaceae	King of bitters	-	Leaf	Andrographolide (lactone)
<i>Syzygium aromaticum</i>	Myrtaceae	Clove	Kànáfùrù	Seed	Eugenol
<i>Olox latifolia</i>	Olacaceae	Basra locus	Ifon	Root bark	Saponins
<i>Cassia fistula</i>	Caesalpiniaceae	Golden shower	Aridan-tooro	Leaf, fruit and root	Sennosides A, B, butyric acid anthraquinones
<i>Caesalpinia bonduc</i>	Caesalpiniaceae	Bonduc nut	Séyo	Stem and root	Bonducellin and β -caesalpin (seeds)
<i>Cleome viscosa</i>	Cleomaceae	Tickweed	Ekuya	Whole plant	Saponins

Table 3: Some herbal plants used for the treatment of microbial infection¹⁴.

Name of plant	Family	Common name	Yoruba name	Part used	Active constituents
<i>Securidaca longepedunculata</i>	Polygalaceae	Violet tree	Ìpèta	Root bark	Tannins, saponins and methyl-salicylate
<i>Abrus precatorius</i>	Fabaceae	Rosary pea	Ìwérénjéjé, Ojú-ológbò	Seed and leaf	Toxalbumin (abrin)
<i>Spondias mombin</i>	Anacardiaceae	Yellow mombin	Ìyèré	Leaf, stem bark and fruit	Tannins and resin
<i>Nymphaea lotus</i>	Nymphaeaceae	Water lily	Òsibàtà	All parts	Nupharine and nympeine

<i>Costus afer</i>	Zingiberaceae	Ginger lily	Tètè-ègún	Leaf, fruit, stem and root	Diosgenin and β -sitosterol
	Costaceae				
<i>Adansonia digitata</i>	Bombacaceae	Baobab or	Osè	Leaf, fruit, stem and root	Tannins and alkaloid-adansonine
		Monkey bread			
<i>Pistia stratiotes</i>	Araceae	Water lettuce	Ojúoró	Whole plant	Alkaloids, glycosides, flavonoids and steroids
<i>Xylopiya aethiopica</i>	Annonaceae	Ethiopian pepper	Èèrù Alámò	Fruit	Kauren-diterpenes
<i>Carica papaya</i>	Caricaceae	Pawpaw	Ìbépe	Leaf, fruit an seed	Protein and papain (sap)
<i>Crinum jagus</i>	Amaryllidaceae	Forest crinum	Ògèdè odò	Bulb and leaf	Alkaloids

Table 4: Some drug plants with plausible therapeutic effects in the treatment of respiratory tract infections¹⁵.

Table 5 below further collated some herbal drugs preparations used in prevention and treatment of microbial infections among the Yoruba of southwest Nigeria. These

were collected from the interviewed Yoruba local herbalists and subjected to ethno-botanical analysis.

SN	Recipes	Method of preparation	Method of administration and dosage	Local medicinal use
1	The fruits of <i>Ananas comosus</i> (Òpe-Òyinbó) and <i>Cirullus colocynthis</i> (Bàrà) are pounded and filtered with a sieve	Juice	The juice (125 ml or ½ cup) can be taken orally once daily after food	antibacterial and antiviral remedy
2	<i>Olox subscorpioidea</i> (Ifon) root bark, <i>Chasmanthera dependens</i> (Ató) leaf, <i>Xylopiya aethiopica</i> (Èèrù Alámò) fruit, <i>Crinum jagus</i> (Ògèdè odò) root, <i>Allium ascalonicum</i> (Alubosa elewe) leaf, and <i>Tetrapleura tetraptera</i> (Aidan) fruit are soaked in clean water for at least 3 days	Infusion	The extract (100 ml) can be taken twice daily after meal	Antiviral (Measles), antibacterial and antifungal remedy
3	<i>Curculigo pilosa</i> (Epakun) rhizome, <i>Gladiolus dalenii</i> (Bakà) corm and <i>Cirullus colocynthis</i> (Bàrà) fruit are pounded and dried, then powdered	Powder	The powder (1/2 teaspoonful) can be taken with pap or any cereal once daily after meal	Antimicrobial remedy
4	<i>Anogeissus leiocarpus</i> (Àyin) root and <i>Terminalia glaucescens</i> (Idi) root are soaked in water or hot drinks	Infusion or tincture	The extract (1/2 teacup of the infusion or 2 tots of the tincture) can be taken twice daily after food	Antiviral and antibacterial remedy
5	<i>Uvaria afzelii</i> (Gbogbonse) root, <i>Allium ascalonicum</i> (Àlùbòsà eléwé) leaf, <i>Olox subscorpioidea</i> (Ifon) root, <i>Calliandra portoricensis</i> (Túdè) root, <i>Plumbago zeylanica</i> (Ìnábìrì) root, <i>Parkia biglobosa</i> (Irú) seed and <i>Capsicum frutescens</i> (Ata were) fruit are dried and powdered, Little salt is the added to the powder	Powder	The powder (1/2 teaspoonful) can be taken with pap or any cereal twice daily after meal	Antimicrobial remedy

6	<i>Phyllanthus amarus</i> (Eyin olobe) leaves are squeezed in water or dried and added to roasted Sorghum bicolor (Okà-bàbà) seeds as powder	Juice or powder	The remedy (½ teacup of the juice or one teaspoonful of the powder) can be taken once daily after meal	Antiviral, antibacterial and antifungal remedy
7	<i>Aristolochia bracteolata</i> (Akogun) root, <i>Calliandra portoricensis</i> (Tude) root and <i>Plumbago zeylanica</i> (Inabiri) root are dried and powdered or soak in hot drink	Powder or tincture	The remedy (½ teaspoonful of the powder or one tot of the tincture) can be taken once daily after meal	Antimicrobial remedy
8	The fresh leaves of <i>Momordica charantia</i> (Ejìnrìn), <i>Ageratum conyzoides</i> (Imí-èsù), <i>Senna alata</i> (Àsùnhàn) and <i>Vernonia amygdalina</i> (Ewúro) are either squeezed in water or dried and grind to powder	Juice or powder	The remedy (½ teacup of the juice or one teaspoonful of the powder) can be taken once daily after meal	Antimicrobial remedy
9	Plenty leaves of <i>Vernonia amygdalina</i> (Ewúro) are washed thoroughly and squeezed to extract the leaf juice. The extract is the added to pure honey in ration 1:1 and stored in a bottle	Juice	The extract (2 desert spoonful) can be taken twice daily after meal	Antiviral (Measles) and antibacterial remedy
10	<i>Garcinia kola</i> (Orógbó) seed and <i>Zingiber officinale</i> (Ata'lè funfun) rhizome are dried and ground to powder	Powder	The remedy (½ teaspoonful of the powder with pap) can be taken once daily after meal	Antiviral (Yellow fever) and antibacterial remedy

Table 5: Some indigenous broad-spectrum (Aparun) antimicrobial recipes used for the treatment of infectious diseases in Nigeria.

Discussion and Conclusion

In southwest Nigeria, the country's geo-political zone where coronavirus and disease is, so far, most prevalent, people's perceptions have been varied but largely influenced by the origin; nature and patterns of spread of the epidemic and class categorization of the infected population. As the generated data informed, there is general 'opposition' to the global definition of the illness episode, the prescribed illness behaviour and the people's health behaviour.

The origin of COVID-19, traceable to China and later, the spread to Europe and North America have been conceived as foreign based in nature, driven by the strength of globalization and its all-conquering rampaging effects that premised on the philosophy of the primacy of Western ideas and thought system relating to health care. As such, this thinking has provoked an attitude, unconsciously generated to resist the all-conquering nature of hegemony in the guises of globalization of western medical system, thereby marking its limits as shown by culture peculiarities, meanings and expressions that have accelerated the in-built 'opposition' or 'resistance', from local and indigenous health care as

exhibited in the people's attitudes. Southwest Nigeria is known for the preponderance of foremost elites in Nigeria in all spheres of human endeavours. This is complimented with traditional elites who are vast in the indigenous knowledge and practices that they used, over time, to make sense of, and utilized as ready-to-hand 'tools' to deal with the exigencies of their environment. To illustrate this, two lived-experiences gathered during the fieldwork on this paper are of great relevance here and important to relate.

The first experience was the University of Ibadan, Ibadan Teachers' Cooperative Society Commodity Allocation Scene in March 22nd, 2020. It is instructive to know that on this day, the official figure was COVID-19 cases was put at 56 in Nigeria and above 800,000 globally [11] and the Federal Government of Nigeria had imposed a partial lockdown by closing Nigerian borders. The University Teachers' Cooperative Society announced to its members who are lecturers teaching in the University of Ibadan, Nigeria to visit the cooperative store to source for some essential commodities to ease the biting economic backlash of the coronavirus epidemic that informed partial and selective lockdown of the country. Observations and participation led to query of the reality and

practicability of the globally acclaimed precautions against COVID-19 or prescribed health behaviour. Members of the University Teachers Cooperative Society are well-informed, knowledgeable intellectuals, they are scientists and by all standards, they are elites. They know about and preach 'stay at home', 'stay safe' 'social distancing', 'limited contact', 'self-isolation' and all sorts, by the virtue of their social positions.

However, it was noticed that very few, in fact, less than five out of an estimated crowd of 40 members present at the point in time, donned masks and almost everyone came without hand gloves. The Cooperative officials recording requests and giving out and taking back the requisition forms were wearing neither masks nor gloves. They were crowded around, practically choked by anxious co-operators who were struggling to get their portions before the stock got thinned out. So much for social distancing! The argument here is that, given the circumstance, these highly informed people, have been transformed into social actors, who were, unconsciously, exhibiting their opposition and resistance to the western prescriptions and subtle dictates, so 'un-natural' to them. They were acting out a way of life, an imbibed culture of survival, so 'naturally' applicable in their peculiar social environment, in spite of their scientific status as University researchers.

The second is Bodija and Oje Market Scenes in Ibadan. Bodija and Oje markets are commodity goods markets in Ibadan city of southwest Nigeria. While Bodija is a popular modern lockup market, serving as the major foodstuffs and commodity depot for the whole of geo-political zone and beyond, Oje market is more of a traditional Yoruba open market in the centre of Ibadan City mainly known for foodstuffs, fruits and other domestic procurements. Our observation in the two markets space, revealed the composition of the social actors, mainly buyers, sellers, beggars and service providers like truck drivers, assistants and carriers cuts across all social strata. The roles were varied, well-defined but structurally interconnected. In these African market scenes, actors were in necessary close contact situations and extended intensive interactions characterized by body contact and prolonged, often agitated, verbal exchanges. The idea of 'social distancing' or 'self-isolation' was non-adaptive, non-relevant, impracticable, inconsequential, unthinkable and even stupid in a fast moving, high density overcrowded containing and constraining space where people bumped into each other uncontrollably.

On the above areas of opposing social behaviour, we are confronted with some pertinent questions that challenge the globalized health behaviour on COVID-19. One wonders, how do we suggest the norms of 'social distancing' or 'self-isolation' in a culture that thrives on intensive, constant and

sustained face to face interactions? How do we maintain social distance in a socio-economic setting where transaction is based not on price tags but generally, on prolonged exchange of price haggling and negotiations as well other non-economic considerations? Apart from the traders, what about the 'Alabaru' or load carriers, that one needs to assist or join, while offloading the goods into one's vehicle? How do we prevent contact in a contact-prone environment and circumstances? How do we prevent the usual spontaneous grabbing of clothing and scuffles between the highly informed elites or 'Alakowe' (educated elites) and the *Okada riders* (Commercial motor cycle riders) who are prone to denting the former's highly valued personal cars and the ensued milling contacts from the 'good Samaritans' trying to restore peace?

All these scenarios are, in a way, unconscious culture resistance or opposition to Western 'truths' about the interpretation and appropriate response that the all-conquering globalized healthcare tendencies have made to bear on the people. Logically, the insight into probable remedy or action response lies in the understanding of the culture logic that explains or brought about and sustained this opposition in spite of the varied social identities of the two sets of actors. Shared fundamental cultural core values and a familiar prevailing environmental reality, has conditioned a shared response to similar social encounter, albeit, in different social settings and circumstances. In this case, people's culture has become a resource, a subject and object.

This two-case scenario challenges the pandemic nature of COVID-19 in Nigeria and the validity of the acclaimed mode and rate of infection as well as the relevance the Western inclined health behaviour in the eyes of the people, on the one hand. Similarly, it challenges the familiarity of the government with nature and understanding of cultural peculiarities of the people of Nigeria. At this juncture, culture categorization in illness and disease is relevant in expatiating on the place of culture in health, illness and disease. Culture has been seen "as a set of practices and behaviours defined by customs, habits, language, and geography that groups of individuals share" [12]. Culture is, no doubt, a system of shared ideas and symbol. This goes to show the symbolic construction of illness and disease to be cultural phenomena. Further, while noting that the symptoms of illness and disease as expressed universally are biological, culture illuminates that the language and communication of illness episode and attitudes towards the meanings and expression of illness-related behaviours as well as beliefs, are essentially cultural constructions.

Each cultural group interacts and relates with specifically defined cultural environment and this informed

how they are going to survive. In this case, culture is both the subject and the object, as people are the outcome of cultural patterns prevailing in their society and these have been engrained in them through the processes of enculturation and socialization. As such, over time, they tend to use these as resource, to interpret, ascribe meanings and construct reality through sustained and didactic social interaction.

Thus, culture now becomes the object of making the individuals normative social actors. As social actors, they acquire and replicate the principles that guide the ideal patterns of valued and qualified types of action and behaviour, including definition of illness episode, illness behaviour and therapy-seeking behaviour. As such, this becomes the lens through which the world is viewed, organized and appropriate way of relating to it [13,14].

Arising from this, a people's cultural practices would not only affect their health but at the same time, all aspects of their life, covering social relationships, and their contributions to social functioning of disease. This is as a result of the fact that humans are wired to survive in an interactive environment, they are thus affected and influenced by what happens in the environment and from which they derive culturally appropriate way/s of reacting to them. Along this line of thought, culture now largely accounts for the etiological theories of illness and disease. This partly explains the rejection of biological explanations of COVID-19 by the Yoruba people of south western Nigeria and thereby advanced the idea of 'divine retribution' for the 'evils' or 'sins' of political and economic corruption as the etiology, particularly in relation to the affected population especially, the politicians and elites that are deemed to be largely infected. Along this line, therapy is therefore, not seen in the realm of biomedicine but in appealing and appeasing the preter-natural, informing localization of disease and therapy.

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Endnotes

- 1 The Punch, April 2nd, 2020
- 2 Opinion expressed by Priestess Adedoyin Talabi (Osogbo) in a phoning interview, 28th March 2020 @4pm
- 3 Awosola Fatoosin, Personal Interview, Ologuneru area, Ibadan, 29th of March 2020.
- 4 Olayemi Yokelepeku, an Ifa Priest, Personal Interview, Apete, Ibadan, on the 1st of April 2020
- 5 Tope Ajayi (Babalawo Olosanyin), Personal Interview, Inalende Oniyanrin Area, Ibadan, 30th of March 2020.
- 6 The herb lists were compiled from among the Ifa priests interviewed. They claimed that some of these herbs are mentioned in some Odu Ifa.
- 7 Opinion gathered from Ifakayode Ifawole in an interview held on 29th March, 2020 in Oyo town.
- 8 Expression from a key informant, priest Ifaseu Edu interview from Oyo, 31st March 2020 @3.00pm
- 9 Opinion from a key informant, Ifakunle Awolowo, interview from Osogbo on 30th March 2020 @ 11am.
- 10 In an interview in Ikire on 30th March 2020 @3.00pm.
- 11 Ajogun are unseen preternatural forces that often cause Arun(Disease); Egba (misfortune); aini (poverty), oran (antisocial behaviours) among others.
- 12 Interview held with Mrs. Wulematu Olayinka on 27th March 2020.
- 13 Components of snail water: Hyaluronic acid, glycoprotein, proteoglycans and antimicrobial and copper peptides
- 14 See Oliver-Bever, B. 1986 for further works on medicinal plants in West Africa. Oliver-Bever, B. (1986) Medicinal Plants in Tropical West Africa. Cambridge University Press, Cambridge London, New York, New Rochelle, Melbourne, Sydney.
- 15 Gill, L.S had earlier mentioned some of these herbs. See Gill, L.S (1992) Ethno-medicinal uses of plants in Nigeria. University of Benin Press. Benin City, Nigeria.

