www.iiste.org IISIF

Telemedicine During Covid-19 Pandemic: The Need for A Regulatory Framework on Telemedicine in Nigeria

IBRAHIM SHEHU Phd (Senior Lecturer) Faculty of Law, Usman Danfodiyo University, Sokoto

Abstract

The outbreak of COVID-19 has exposed the weakness of the healthcare system of many countries around the world. Corona virus is an invisible enemy of humanity, it spread like a world fire. The internet revolution has forced some countries to change their healthcare system from traditional to telemedicine. The methodology to be adopted is doctrinal. The application of telemedicine in Nigeria and it will also unravel some of the challenges relating to telemedicine and the role played by telemedicine during the COVID-19 pandemic in Nigeria. The paper will conclude by making possible recommendation on how to improve telemedicine in Nigeria.

DOI: 10.7176/JLPG/120-09

Publication date: April 30th 2022

INTRODUCTION

The internet revolution has forced many countries around the world to adopt telemedicine as a new way of addressing the problems of their system healthcare system. The use telemedicine has been increasing exponentially they well before the COVID-19 pandemic Nigeria as the most populous country in Africa was not left behind in embracing telemedicine into its healthcare system.

The emergence of COVID-19 pandemic is a wakeup call to government on the deplorable state of our healthcare system and the need for a comprehensive legal and regulatory framework on telemedicine in Nigeria. This paper intends to examine telemedicine and the regulatory framework in Nigeria. The paper will further look at the outbreak of the COVID-19 pandemic, and the role played by telemedicine during the COVID-19cases.

MEANING OF TELEMEDICINE

Telemedicine is defined as the use of ICTs for the transmission of medical information with diagnostics, therapeutic and learning purposes.¹ It is also defined as the delivery of healthcare and sharing of medical knowledge over a distance using telecommunication means.² Telemedicine can also be defined as the practice of medicine from a distance using information and communication technology.³

According to the World Health Organization (WHO), the term telemedicine signifies the use of ICT to improve patient outcomes by increasing access to care and medical information. The World Health Organization further defined it as the delivery of health care service where distance is a critical factor by all health care professional using Information and Communication Technology for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation and for the continuing education of healthcare provides, all in the interests of advancing the health of individuals and their communities.

It is important to note that, from the various definitions given above, telemedicine can be seen as a process that involved the use of information technology in providing health care service from a distance.

BRIEF HISTORICAL EVOLUTION OF TELEMEDICINE

Historically, the origin of modern telemedicine can be traced back to Europe. Willem Einthoven, a Dutch physician developed and electrocardiograms in 1905, and this was followed by a radio consultation from medical centers in Norway, Italy and France in the 1920s, 1930s, and 1940s for patients aboard ships at sea and on remote islands.⁵ In April 1924 radio news, magazine was introduced. The magazine depicted using television and microphone for a patient to communicate with a doctor including use of heartbeats and temperature

¹ Framework for the implementation of a telemedicine service by pan American Health organization and world health organization wishington D.C 2016.

² Ukaoha K.C and Egbokhane FA, Prospec and Challenge of Telemedicine in Nigeria. Department of Computer Science, University of Benin, Nigeria. <u>https://www.researchgate.net</u> access 10/9/20 ³ Amadu M L, Telemedicine, Law & Development a paper presented at the faculty of law, American university of Nigeria Yola.

https://www.edu.ng.ng access 10/4/20

⁴ World Health Organization: Telemedicine opportunities and development in member state. A report on the second global survey on health, global observatory for e-health series Vol. 2 https://www.who.int.access access 10/4/20

Rashud L B and Gary W S, History of telemedicine, evolution, context and transformation. https://www.ncbl.nlm.mh.govbook.access 10/04/20

indicators.1

Note that, the first use of telemedicine to transmit video images and complex medical data occurred in the late 1950s and early 1960s. In 1959, the University of Nebraska used telemedicine to transmit a neurological examination which is widely considered as the first case of real the video telemedicine consultation. 2

Recent advancement in, and increasing availability and utilization of ICTs by the general population have been the biggest drivers of telemedicine over the past decades, rapidly creating new possibilities for healthcare service and delivery. These advancements have led to the creation of a rich tapestry of telemedicine applications that the world is coming to use³.

TYPES OF TELEMEDICINE

Convenient access to doctors nurse practitioners and medical services is the during force behind the growth of the telemedicine industry, which has expanded to include a full code of vital health care services. Basically there types of telemedicine:

a. STORE AND FORWARD (ASYNCHRONOUS)

This involves acquiring medical data (Like medical images, bio signals etc) and then transmitting this data to a doctor or medical specialist at a convenient line for assessment offline⁴. It does not require the presence of both parties at the same time. Dermatology, Radiology and Pathology are common specialties that are conducive to asynchronous telemedicine. A properly structured medical record preferably in electronic form sold be a component of this transfer⁵ for example, the patient or referring health professional sends an email description of a medical case to an expert who later sends bake an Opinion regarding diagnoses and optimal management.⁶ This type of asynchronous platform is used by patient to solve minor medical issue

b. REMOTE PATIENT MONITORING

Another type of telemedicine is called remote patient. This allows healthcare provides to monitor patient health data from a far usually while the patient is at their own home. Note that, remote monitoring is spaces effective for chronic condition such as heart disease to diabetes to athsma.⁷ The benefit of remote monitoring include cost effectiveness, more frequent monitoring and greater patients satisfaction.⁸

c. REAL TIME INTERACTIVE SERVICES

This require both the health professional practitioner and the patient to be in contact at this same time.⁹ Interactive services can provide immediate advice to patients who require medical attention. There are several different mediums utilized for this purpose including phone, online and home visit. A medical history and consultation about presently symptoms can be undertaken, followed by assessment similar to those usually conducted in face to face appointments.¹⁰

AN OVERVIEW OF COVID-19 PANDEMIC

The 20th century witnessed 3 notorious pandemic that shaped the history of humanity. These pandemics are the Spanish flu of 1918-1919, the Asian influenza of 1957 and this Hong Kong flu of 1968. Among this three the Spanish flu was this most devastating pandemic in human history.¹¹ This is because the influenza virus infected 500 million people worldwide. Among these infected as estimated 50 to 100 million were killed.¹²

However, the first influenza pandemic of the 21st century was the 2009 swine flu which originated from Mexico and the United State in March and April 2009 and has swept the globe with unprecedented speed as a result of airline travel.¹³

The pandemic lasted from April 2009 to August 2010 and 2009 pandemic dead toll might be as high as 400,000 people.¹⁴

¹History of telemedicine <u>https://www.mdportal.com.education&history</u> access 10/04/20

² Ibid

³ Above ⁿ⁴

⁴ Medisys, Different types of telemedicine. <u>https://blog.medisys.ca</u> assess 12/10/20

⁵ Mamvannan et al, Role of Telemedicine in healthcare system: A review, international journal of recent advances in pharmaceutical research april 2010. Access 12/4/20

⁶ WHO^{above n4}

⁷ E Visit, what types of telemedicine can I chose from <u>https://evisit.com.ng>resources</u> access 12/4/20

⁸ Yolanda s, types of telemedicine. <u>https://www.nws-medical.net</u> access 12/04/10

⁹ Hassan A and Hiba A telemedicine journal of American society for medical technology 2018 <u>https://www.telemedicine-reseachgate.net</u> assess 12/04/10

¹⁰ Yolanda Aboveⁿ¹³

¹¹ Britanics, influenza pandemic of 1918-1919 written by the editors of encyclopedia. https://www.britanuca.com assess 12/04/20

¹² Srikanth Reddy "Spanish fhi" fhi infamous pandemic of the 20th century. <u>https://www.research.net</u> assess 12/04/20

¹³ Sam A H and Kenneth M, the first influenza pandemic of the 21st century annals of Saudi medicane 30(11) www.saudiannals.net assess 12/04/20

¹⁴ Bahar, 2009 swine flu toll 10 times higher than thought. <u>https://www.livesgewe.com</u> assess 12/04/20

It is important to note that, the world is currently facing another global outbreak of a deadly influenza viruses known as the COVID-19 pandemic. This deadly virus spread around the world like a wildfire and it is the most devastating pandemic of the 21st century. It is therefore, referred to as an invisible enemy of humanity.

This mysterious disease emerged form a seafood whole sale wet market in Wuhan, Huber, China. The disease is characterized by fever, dry cough and fatigue and occasional gastrointestinal symptom. The initial outbreak was reported in the market in December 2019 and involved about 66% of the staff there.

Note that, the disease is officially named as Corona Virus Disease, 2019 (COVID-19, by WHO on February 11, 2020),¹ the COVID-19 pandemic is continuously demonstrating a growing pattern of community transmission, even with effective social isolation.²

This mysterious pandemic has to date led to the greatest social, economic and health disruption the world has seen in peace time in living memory, the virus has established presence in 220 countries. The global order is shambles, the most economically successful nations in the world are facing recession, and the behemoths of big business are facing bankruptcy.³

This pandemic has exposed the deplorable of the health care system of different countries around the world. Countries are racing to slow the spread of the virus by testing and treating patients, carrying out contact tracing, limit travel, quarantining citizens and cancelling large gatherings such as sporting events, concerts and schools. ⁴ The pandemic has as at now affected 1,849,383 and the total of 114,053 died from this pandemic while 422,558 recovered. ⁵

THE NIGERIA EXPERIENCE

Information communication technology has been globally credited for changing the course of history and adding value to human lives in various ways. This is especially true in developing countries where years of under development has all but render human existence almost valueless.⁶

Note that, the initial entry of telemedicine into Nigeria was through mobile units or vehicles equipped with satellite receivers and operated by the Federal Ministry of Health.⁷ Nigeria has a population of more than 200 million people, a major percentage of which live in the remote rural area, whereas with the best equipped hospital and scarce medical experts are distributed in the urban cities. Considering the rough certain of the hinterlands in Nigeria coupled with floods, inadequate power supply and lack of qualified manpower to operate and maintain these units, it has become more imperative for a cost effective and better useful model to be evolved.⁸

Note that, few hospitals no doubt blazing the trials of telemedicine in Nigeria. The personnel of the hospital have over the year gained access to and interfaced with leading telemedicine practitioners beyond the shores of Nigeria and had the opportunity of attending training sessions through collaborative effort of partners.⁹

Since 2001 when the global system for mobile communication found its way into Nigeria, a lot of achievements had been recorded in ICT sector and services that are technological driven have been delivered via GSM network. In 2010, a telecommunication service provided pioneered the mobile doctor concept, whereby customers could with a qualified health personnel or medical doctor at the rate of N 100 per minute.

It is important to note that, Nigeria embraced telemedicine in 2007, when NASRDA (National Space Research and Development Agency) and the federal Ministry of Health inaugurated its pilot program in two teaching hospitals were the University College Hospital in Ibadan and the university teaching hospital, maiduguri, the Federal Medical Centers included those in Owo, Gombe Makurdi, Yenagoa, Birnin Kebbi and Owerri. Apart from the hospital, private organization such as this Lagos Hospital and the Igbedim University teaching hospital, Benin also embraced the use of telemedicine. In addition, a pilot prefect implementation that involved mobile units or vehicles equipped with satellite receivers was provided.¹⁰

THE NEED FOR A LEGAL AND REGULATORY FRAMEWORK

It is important to note that there are not specific law and regulatory framework on telemedicine in Nigeria.

¹⁰ Kingsley above ⁿ²⁶

¹ WU, Yi-chi et-al, the outbreak of COVID-19 and overview, journal of the Chinese medical association Vol83 issue 3 https://www.journals.com

² Charles RT, COVID-19: a brief overview of virus social transmission through atmosphere. <u>https://www.researchgate.net</u> assess 12/04/20

³ Femi O, COVID-19 and the Nigerian nation: an overview of the ongoing pandemic, the local response, and prospects for the functions. https://www.businessday.ng assess 12/04/20

⁴ United Nations Development Programme. <u>https://www.undip.org</u> assess 12/04/2020

⁵ Worldometer, COVID-19 Corona Virus Pandemic <u>https://www.worldometers.info</u> assess 12/4/20

⁶ Efam N, Nigeira: Transforming Healthcare delivery vis teleneicine <u>https://www.allafrica.com</u> assess 13/04/20

⁷ Kingsly C U. prospects and challengs of telemedicine in Nigeria. Formal of medicine and Biomedical science Vol 3 https://www.researching.net assess 13/04/20

⁸ Olumade S A, AN internet based telemedicine system in Nigeria international formal of information management the fowned for information professionals <u>https://www.dl.acm.org</u> assess 13/04/20

⁹ Allagoa et al, Telemedicine in Nigeria: a medium to this underserved communities. Yen med J. 2020, 2 (1): 135:144

Despite the absence of a direct law on telemedicine, there are however, some laws and regulatory framework that are related to telemedicine and these laws are:

a. The National Information Technology Development Agency Act (NITDA) Act 2007

This Act established NITDA as the clearly house for information technology in Nigeria. Since telemedicine has to do with information technology, it is therefore necessary to be related to NITDA.

The act empowered the agency to develop guidelines for elective governance and monitor the use of electronic data interchange and other forms of electronic communication transaction as an alternative to paper based methods in government, commerce, education and the public and private sectors, labour and other fields where the use of electives communication may improve the exchange of data and information.¹

It is clear from the above that NITDA Act can by extension apply to telemedicine activities in Nigeria and the agency can also regulate some activities on telemedicine.

b. Nigerian Communication Commission Act (NCC) Act 2007

This act created the NCC to regulate telecommunication activities in Nigeria. The NCC under its guidelines for the provision of internet services (2007) published pursuant to sector 70(2) of the Nigerian Communication Act of 2003 that a service provider can escape liability as content intermediate under certain circumstance and that internet service provider must have in place procedure for receiving and promptly responding to content related complements including any notice to withdraw or disable access to identified content assure by the commission or other legal authority. ²

c. The National Space Research and Development Agency Act 2010

The Primary legislation governing space activities in Nigeria is the NASRDA Act 2010, which established the National Space Research and Development Agency. The agency was set up to encourage capacity building in Space Science Technology Development and Manage the development of settlement technology for various application and finally enhance the development and enhancement of research.³

Though this above act did not specifically mention telemedicine, but since it deals with satellite technology, it is by extension related to telemedicine.

d. Medical and Dental Practitioners Act 2004

This act establishes this medical and dental council of Nigeria. The act empowered the council to determine the standards of knowledge and skills to be attained by persons seeking to become members of this medical and dental profession and reviewing those standards from time to time as circumstance may permit. ⁴ The council shall have power to do anything which in its opinion is calculated to facilitate the carrying out of its activities under this act. ⁵

Note that, event through this Act did not mention telemedicine but the fact that it Appling to all medical and dental practices in Nigeria, it is extension related to telemedicine.

e. The 1999 Constitution as Amended 2011.

The constitution provides for right to health and that the state shall direct its policy towards ensuring fact there are adequate medical and health facilities for all persons. 6

By the above provision, it is clear that the activities of telemedicine have silently covered.

f. Standard Organization Act 2015

The above Act established this standard organization of Nigeria, and the organization is empowered to set standards for medical device technologies produce and important into the country which by extension relate to telemedicine.

g. The Nigerian Evidence Act 2011

The evidence act relate to telemedicine by virtue of the provisions of sections 258(1), 84,153(2), 86(3)(d), 33(1)(b), and sec 8 of respectively. These are provisions that deal with electronic evidence. Therefore, since telemedicine has to do with information technology therefore any issue that may arise from the activities of telemedicine can be prove and admitted through electronic evidence before a competent court of jurisdiction.

h. Cybercrime Act 2015

This act provide for the promotion of cyber security and the protection of computer system and networks electronic communications, data and computer programs, intellectual property and private

⁴ Sec 1(2) of the medical and dental practices act 2004

¹ Sec 6 (c) NITDA Act 2007.

² Adioye D.A, telemedicine and law in Nigeria need for proper legal framework. <u>http://www.lewaxis360degace.com</u> assess 13/04/12

³ Stephanie E, Space law in Nigeria – a call for this review of NASRDA Act. <u>http://oal.law&spacelawinnigeira</u> assess 14/4/20

⁵ Section 3(3) Ibid

⁶ Sec 17 of the 1999 constriction as amended 2011.

rights.¹ While section 8 & 9 of the act criminalizes system interfering and intercepting electronic messages.

The above act made mention of cyber security, computer system, data and network and electronic communicate which forms an integral part of telemedicine. Though the act did not mention telemedicine but the provisions highlighted above are related to the activities of telemedicine.

i. Nigeria's National Health Act 2014 (NHA 2014)

The above law was designed to provide a legal framework for the regulation, development and management of Nigerians health system. The act further provide for the establishment of national health system, health establishment and technologies, lights and obligations of users and healthcare personnel and national health resources for health among others. The act has the potential of significantly redefine Nigeria's health system by influencing practice by health professionals, healthcare quality, and healthcare outcomes.²

It is clear from the above legal and regulatory framework, we don't have adequate laws and regulatory framework that guide telemedicine in Nigeria, what we currently have on ground are crop of legislations and regulatory framework that are indirectly related to telemedicine. There is the need to have legal and regulatory framework which will enhance telemedicine and reposition the Nigerian health care system in line with international best practice.

BENEFIT OF TELEMEDICINE IN NIGERIA

The modern medical practice at present is centered on the growing guest for technological advancement in health care delivery.³ Nigeria with population of over 200 million whom majority leaves in the remote area needs telemedicine to develop its health care system.

The emergency of telemedicine in Nigeria has connected our medical practitioners to the resources of the developed world thereby providing a network of professional interaction between health practitioners in Nigeria and experts in other countries.⁴

Telemedicine has been shown to reduce the cost of healthcare and increase efficiency through better management of chronic diseases, hired health professionals, staffing and reduce travel times in Nigeria.

It has also provide access to medical and health care delivery to the remote villages in Nigeria. Doctors can remotely attend to such patients, send health lips to them, and monitor their medical conditions and access feedback from them. 5

COVID-19 PANDEMIC IN NIGERIA

The rapid outbreak of the COVID-19 pandemic presents an alarming health crisis that the world is grappling with.⁶ The first confirmed cases of the pandemic of Corona Virus disease 2019 in Nigeria was announced on the 27 February, 2020, when an Italian citizen in Lagos tested positive for the virus. On 9 March, 2020, a second case of the virus was reported on Ogun state, a Nigerian citizen who had contact with the Italian citizen. Currently there are 3000 confirmed corona virus cases and 107 deaths in Nigeria's, while 601 people in the country have recovered after contracting the virus.⁷

Note that, from the outbreak of the pandemic and its first incursion into Nigeria, Lagos state, through the agency of its incident command center led by the governor the Ministry of Health have directly an in close alliance with the Nigerian centre for disease control (NCDC) and have been working hard to treat confirmed cases as well as to contain the disease and stop or slow its spread into the Nigeria population.⁸

In the course of time, travel restrictions were imposed on the recognized hot zones of COVID-19. There were total locked down in some major cities like Kaduna, Niger, Lagos, Ogun, Abuja, Kano, Plateau etc. ⁹ As the disease kept spreading more and more towns and cities were kept under lock.

The Federal Government in an effort to kick the virus out of Nigeria established a presidential task force charred by the secretary to the government of the federation.¹⁰ The presidential task force have been working round the clock and liaising with some state government and the center for disease control to curtail the spread of

8 Femi Above n22

¹ Sec 1 (1) Cybercrime Act 2015

² Osahon E and Emien E, Nigerians National Health Act: an assessment of health professional's knowledge and perception. Nigerian medical journal: journal of the Nigerians medical association med know publication https://www.nebl.nlm.neh.gov access 14/4/20

³ Okor afor et al, telemedicine and biomedical care in Africa: prospect and challenges, Nigerian journal of chemical practice, Vol. 20 no 1 January 2017.

⁴ Ibid

⁵ Kengsley Above ⁿ²⁶

⁶ John A, Coid 19: Economic impact & Pandemic planning <u>https://home.kpmg&home</u> access 15/4/20

⁷ Corona Virus live: Nigeria, total cases, death and updates <u>https://www.en.as.com</u> access 08/05/20

⁹ Ibid

¹⁰ Bola B, Nigerians on course to stamp out COVID-19 pandmeic. Presidential task force. <u>https://tribuneouhe.ng.am</u> assess 15/4/20

the disease.

Currently there are major isolation centers in Lagos, Abuja, Kano and virtually all the state of the federations. The private sector have donated huge amount of money to the federal and state government in their support against the fight of COVID-19 pandemic.

THE ROLE OF TELEMEDICINE IN FIGHTING COVID-19 IN NIGERIA

During the global pandemic, telemedicine is emerging as an effective and sustainable solution for precaution, prevention and treatment to stem the spread of COVID-19. Telemedicine is bridging the gap between people, physicians and health system, enabling to stay at home and communicate with physicians through virtual channels helping to reduce the spread of the pandemic.¹

In Nigeria, even though this government is yet to look the way of telemedicine in the wake of the COVID-19 pandemic, more people are turning to telemedicine platforms to complain about their symptoms and avoid going to the hospital as they observed social distancing.²

It is important to note that, tremendoc, Africa's leading telemedicine platform has announced this expansion of its operator team providing a pool of 200 doctors available round the clock to provide medical assistance to Nigerians, this tremendoc app is a platform that connects patients with licensed doctors who can consult, diagnose, prescribe medication and make recommendations on medial conductions and treatments, the app which is available on both the IOS and Google play store. This expansion has come at a time in light of the current battle Nigerians and the rest of the world is currently facing against the COVID-19 pandemic.

With this telemedicine support that tremendoc provides, patients can gain access to quality health care services and professionals from the comfort of their homes and limit hospital visits to cases of absolute necessity. 3

Furthermore, one of the leading Nigerian telecommunication service provider in partnership with Mobihealth, an international telemedicine provider launch free COVID-19 online screening and teleconsultation service for all Nigerians this service is aimed at easing the impact of the lockdown and restricted movement as a result of the COVID-19 situation in the country. The partnership brought together qualified doctors across multiple specialists from Nigeria and across the world.⁴

However, this crisis makes telemedicine an indispensible tool as COVID-19 is spreads across communities. With the emphases on self-isolation and social dustings remote diagnosis becomes imperative further management of those in isolation or quarantine.

Meanwhile, the Federal Ministry of Science and Technology through its agency, the Nigerian Nation Space Research and Development Agency (NASRDA) has collaborated with the Federal Ministry of Health to launch the use of telemedicine facility for mobile testing of corona virus. The remote terminals which are equipped with basic diagnosis equipment are in Bayelsa, Kebbi, Oyo, Owerri etc.⁵

Note that, recently Dangote Foundation donated a multimillion naira telemedicine facility for mobile testing of Corona Virus to Kano State Government. BUA was also not left behind in this gesture.

Following the increase in the confirmed cases of COVID-19 in Nigeria, the Lagos University Teaching Hospital (LUTH) has introduced telemedicine to provide medical care for outpatients during this lockdown period⁶.

CHALLENGES OF IMPLEMENTING TELEMEDICINE IN NIGERIA

The discovery of COVID-19 in Nigeria has forced the government and private sectors to look the way of telemedicine. Though this new innovation is gaining acceptability all over the nation, there are however a number of challenges associated with its implementation in Nigeria. Some of these challenges are:

a. Organizational And Cultural Inertia

Most government entities are not known for their efficiently or willingness to adopt changes organizational equality and lack of clean communication channels or collaboration culture are some of the difficult problems to resolve in which the system can become successful.⁷

b. Little Or No Connectivity To Rural And Remote Communities There is need for expansion of telemedicine through education. The understanding of the telemedicine

⁶ Ifeoluwa A, Corona Virus: LUTH introduces telemedicine to cater for outpatents <u>https://www.premuntimesng.com</u> access 16/4/20

¹ Bill S, telemedicine during Coivd 19: Benefit, humutating adaptation. <u>https://www.healthcarenew.com</u> assess 15/4/20

² Titilola O, how the covid – 19 pandemic amplifies the need for telemedicine adoption in Nigeria <u>https://www.techpout.africa</u> access 15/4/20 ³ Ifeoluwa A, tremendoc on boards more medical doctors to provide telemedicine support to Nigerian <u>https://www.businessday.ng</u> access 15/4/20

⁴ Modupe A, 9mobile supports mobi health international to combat COVID-19, technology.ng <u>https://www.techecnmy.ng</u> access 15/4/20 ⁵ Nigerian space agency lauches telemedicine facility for COVID-19 testing in nigeirans <u>https://www.broadcastprime.com</u> access 15/4/20

⁷ Yisah OS, Design and implementation of a telemedicine in Nigeria. A theises submitted to the postgraduate school in partial fulfillment of the requirements for the award of the defue of masliens of science in computer science department of mathematics, faculty of science, ABU Zaria, 2018

technology is very important to the expansion of telemedicine.¹

- c. Poor Communication Network And Erratic Power Supply
- The problem of power supply and lack of good communication network has been a major setback to the implementation of telemedicine in Nigeria.
- d. Confidentially and privacy

This may be hampered by the use of communication gadgets that are not controlled by the individual and as such may result in seems invasion of patients privacy. In some cases there is rejection in the family when an ailment is disclosed through network that is unrestricted.²

e. Absence of legal and Regulatory Framework on Telemedicine in Nigeria

The absence of a comprehensive legal and regulatory framework on telemedicine is affecting the development of telemedicine in Nigeria currently there are no legal and regulatory frameworks on telemedicine what we have on ground are laws that by extension relate to telemedicine.

THE EFFECT OF COVID-19 PANDEMIC IN NIGERIA

The emergence of COVID-19 and its increasing incidence in Nigeria has called for the need of a drastic measures and proactive policies in our health and economic sector, it also calls for the need of a legal and regulatory framework on telemedicine. Some of this effects can be seen below:

Health Care System

One of the effect COVID-19 pandemic is the health care system. This pandemic has exposed this weakness of Nigerians health care system. Nigeria health sector has suffered from gloss under fondly that has led to the poor state of the infrastructure, lack of equipment, scarce and inadequate protective gear for health personnel, poor remuneration and avoidable brain drain. The thought of this horrid state of Nigerian hospitals sends jitters through the spines of the ruling class, now that they, cure the masses, world have to contend with this reality on the ground, especially with the option of medical tourism closed to them for now.³

Economic Effect

The COVID-19 pandemic has had a supplying effect on the global economy, Nigeria Inclusive. The pandemic effect on economic activities and business in Nigeria will be dire and reflect in three significant ways. First the virus has led to the crash in global oil price which account to 90% of Nigeria's revenue. Secondly, the pandemic has led to lockdowns which have crippled economic activities in most cities in Nigeria and Thirdly, it implies that global supply chains have also been materially disrupted with large consequences on the Nigerian economy.

Note that, this pandemic has affected every sector of tele-economy, schools are closed, markets are locked up, only few personnel's are allowed to move around.⁵

Therefore, the odds of sliding into another recession are gradually expected as the global pandemic outbreak put severe pressure on the nation's economy. The Federal Government recently announced a reduction in the 2020 budget by over N320 Billion to N 10.27 Trillion from initial 10.59 Trillion, the new budget proposal, already sent to this National Assembly for consideration became imperative in view of this devastating effect of the ongoing COVID-19 pandemic.⁶

Religious and Socio Cultural Effect

The arrival of COVID-19 pandemic into the country has forced government both at the federal and state level to suspend all religious and socio-cultural activities, all this are geared towards curtailing the spread of the virus. Five daily prayers, Juma'at prayers, Sunday services, Ester Festivals, Weddings, Partying, Clubbing, Sports and Naming Ceremonies were all suspended in virtually all the state of the federation.

Judicial and Legislative Effect

The outbreak of COVID-19 Pandemic have led to the closing of all courts and other judicial activities throughout the country, the Chief Justice of Nigeria gave the directive that all courts and judicial activities be suspended till further notice.

The legislative arm was also not left behind, this leadership of the two chambers have also suspended all legislative sitting till further notice. These suspensions have negative consequences on legislative business and the dispensation of justice.

CONCLUSION

The COVID-19 pandemic is truly an invisible enemy of humanity. It no respecter of life and doesn't

⁴ Augusto & Co, Covid – 19 in Nigeria: economic perspective and miligating the risk. <u>https://www.augsto.compublication</u> access 18/4/20

¹ Kingsley Above ⁿ²⁶

² Okafor Above ⁿ³⁸

³ Oke O, the impact on Nigeria of the Corona Virus pandemic: socio-economic pandemic. <u>https://www.masxist.com</u> access 16/4/20

⁵ Damel B, Economic effect of COVID-19 on Nigeria economy <u>https://www.opening.com</u> access 16/4/20

⁶ Helen O, Menimising impact of COVID-19 criseis on Nigeria, economy. https://www. Guardia.ng access 16/4/20

discriminate between the rich and the poor. At the medical experts on most developed countries are working tirelessly to come up with a vaccine on this pandemic, the only quick response to curtail the spread of this invisible enemy, is through, test, isolation, quarantine and social distance.

It is clear that telemedicine which require delivery of Medicare from a distance is just the major steps to take against the further spread of this pandemic. For Nigerians to succeed in arresting this pandemic, we should completely upgrade and transformed our healthcare system to telemedicine.

The National Assembly as a matter of urgently should also come up with a legal and regulatory framework on telemedicine this enhance this implementation of this innovation. The government at will level should after the COVID-19 embrace on public sensitization on telemedicine to all Nigerians. Telemedicine is the only answer to our deplorable health care system and the only way people from the remote areas can get a quick medical treatment.