



Review Article

Pandemic and the Nigerian Private Health Sector: Covid-19 as a Case Study.

^{1,2}Adegbenga B. Ademolu, ²Akin Abayomi

¹Directorate of Clinical Services and Training. Lagos State University Teaching Hospital. Ikeja, Lagos. Nigeria.

²Lagos State Ministry of Health, Lagos, Nigeria.

Abstract

Global health problem is a summation of individual health challenges of communities, nations and continents. Notable pandemics in human history include, small pox pandemic, the plague. Influenza pandemic. HIV/AIDS pandemic and Covid-19 pandemic. This is a review article done by conducting a search on google and pubmed in English by typing the word pandemic, covid-19 pandemic, World Health Organization (WHO), human immunodeficiency virus, plague. The most recent pandemic was the covid 19 pandemic which has divided the health history of mankind to pre covid 19 pandemic era, covid 19 pandemic era and post covid 19 pandemic era. One of the route by which Nigerians got infected is through an Italian who came to Lagos and travelled to Abeokuta in Ogun State southwest Nigeria. Many private medical practitioners experienced a reduction in turnout during the pandemic. Covid 19 pandemic in Nigeria reduced medical tourism, increased healthcare funding and use of telemedicine. However, there was loss of manpower in health sector, stricter measure by health regulatory bodies, increased procurement of personal protective equipment, paucity of data on covid 19, viral mutation, malaria mimicry and endemicity etc. As a way forward, during pandemic period in Nigeria, information dissemination among private practitioners is key. The World Health Organization is hereby advised that a global body/center for pandemic preparedness and response is needed with regional and national branches as needed. There is a need by the WHO to enforce the implementation of budgetary allocation to health in countries that are yet to comply.

Keywords: Pandemic, Covid-19, World Health Organization, Private Practitioners, Nigeria.

Corresponding author*: Dr. Adegbenga Ademolu. ademoluab@yahoo.com +2348033575940.

How to cite: Ademolu AB, Abayomi A. Pandemic and the Nigerian Private Health Sector : Covid-19 as a Case Study. NJGP. 2024;22(1):58-65.

<https://doi.org/10.60787/njgp.v22i1.209>

Quick Response Code:



Introduction

Global health problem is a summation of individual health challenges of communities, nations and continents. A health problem in one part of the world can suddenly become a global issue. This is well typified in the case of Ebola virus disease outbreak in parts of West Africa, Guinea, Sierra Leone and Liberia in 2014-2016¹⁻³ that later spread to other parts of West Africa like Senegal and Nigeria. The spread of the Ebola virus disease then later spread to Europe, Spain and Germany to be specific, through air travel.

By definition, a pandemic is an epidemic of an infectious disease that has spread across a large region. For instance, multiple continents or worldwide, affecting a substantial number of individuals. A wide spread endemic disease with a stable number of infected individual is not a pandemic. A cluster of an infectious disease that occurs in numbers in excess of what is expected for a particular time and place defines an outbreak. Multiple outbreaks of a disease in different populations or places would constitute an epidemic. Similarly, an epidemic is the rapid spread of disease to a large number of host in a given population⁴.

Notable pandemic in human history include, small pox pandemic⁵, the plague-which killed an estimated 75 to 200 million people in the 17th century⁶. Influenza pandemic of 1918⁷, HIV/AIDS pandemic⁸ and Covid-19 pandemic⁹. In the 21st century, there have been tremendous advances in the area of, increase global travel and integration, organizational changes in land use, greater exploitation of the natural environment, Increase in scientific exploration, bio terrorism. All these led to increase tendency of pandemic in form of outbreak and rapid spread of infectious diseases across national borders.

The HIV/AIDS pandemic which was first identified as a new disease in 1981¹⁰, is majorly facilitated by human behavior. It was first described among young homosexual men who succumb to unusual opportunistic infections and rare malignancies and subsequently, heterosexuals and bisexuals are not left out. The anatomical features of the different genders also serve to increase the susceptibility of each gender to the HIV pandemic.

In some quarters, it is believed that AIDS has likely afflicted chimpanzees¹¹ long before the emergence of HIV. With time, a retrovirus now termed human immunodeficiency virus type 1, was subsequently identified as the causative agent.

Since identification, the HIV pandemic has affected over 60 million people and caused more than 20 million deaths. According to UNAIDS, 1.5 million people were newly infected with HIV in 2021. 38.4 million people were living with HIV in 2021, 6500 people died of AIDS and related illness in 2021¹². The HIV/AIDS pandemic is still here with us.

Since pandemics are a public health issue that are generally devastating, we are going to examine the acute effect of Covid 19 pandemic on the private health sector in Nigeria as a case study of effect of pandemic on individuals, families, private healthcare providers and the nation Nigeria at large.

Methodology:

This is a review article done by conducting a search on google and pubmed in English by typing the word pandemic, covid-19 pandemic, world health organization, human immunodeficiency virus, plaque. Relevant literature were sorted out and reviewed. The website of international health organization and their scientific release like briefs were also searched for more information.

Discussion

The most recent pandemic that took the universe by surprise was the covid 19 pandemic which has divided the health history of mankind to pre covid 19 pandemic era, covid 19 pandemic era and post covid 19 pandemic era.

The Covid-19 Pandemic

Health wise, the story of the world changed in December 2019, when there was an outbreak of a disease causing acute respiratory distress syndrome among locals in Wuhan, China. This air borne disease has a symptomatic and an asymptomatic period with an incubation period of 14-21 days at onset of the pandemic. However, overtime series of variant emerged by way of mutation, causing different incubation period for different variants. A picture of the covid 19 molecular structure is shown in Figure

1.

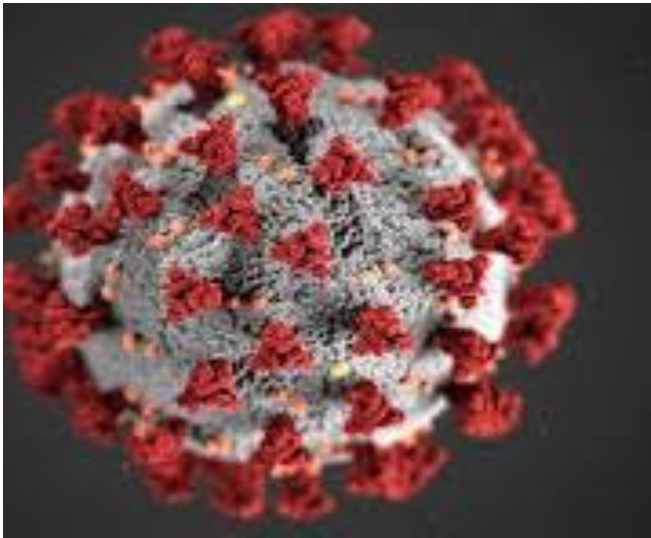


Figure 1: The Covid-19 Molecular Image

With intensive scientific research, the causative agent for the infection was identified as severe acute respiratory syndrome corona virus 2 (SARS-CoV-2)¹³⁻¹⁶.

The pandemic caught global healthcare unawares, created a serious public health menace with even the technological advanced countries like United States of America, United Kingdom being caught unawares with the United States being hit by the pandemic and having to bury thousands of people lost to the pandemic in a mass burial. In Italy, dead bodies of affected victims littered the streets at a time. Many emergency rooms in Europe became overwhelmed¹⁷.

Covid-19 Pandemic The Nigerian Experience

It is also notable that on record, one of the routes by which Nigerians got infected is through an Italian who came to Lagos and travelled to Abeokuta in Ogun State southwest Nigeria and then back to Lagos and in the process, he infected Lagosian and Nigerians on his route whom he came in contact with. That was the documented way the over 20 million Lagosian became exposed¹⁸.

In Nigeria, the other route of infection was when the Federal Chief of Staff to the Nigerian government, went for an official assignment in United Kingdom and came back already infected with the corona virus. The sequel in Nigeria was rapid spread of the virus in the country.

The global covid-19 pandemic resulted in national lockdown of different nations across the world. Nations like the United State of America, the densely populated India country, now the most populous country in the world, and many more across the world enforced a lockdown in their various countries. This resulted in global economic meltdown which affected both government healthcare delivery system and private healthcare delivery system including private healthcare practitioners in Nigeria.

Covid-19 Pandemic: The Nigerian Experience

The covid-19 pandemic eventually spread to Nigeria when the index case was reported on the 27th of February 2020. This was the case of the Italian citizen who worked in Nigeria and returned from Milan, Italy to Lagos, Nigeria on the 25th of February 2020. He was confirmed by the virology laboratory of the Lagos University Teaching Hospital which is part of the laboratory networking of the Nigeria Center for Disease Control. He was managed at the Infectious Disease Hospital Yaba Lagos. Subsequently, the disease spread among Lagosian and to the other part of the country. It would be recalled that the corona virus spread to Kano state northwest Nigeria through a Kano citizen who for the fear of covid-19 in Lagos, southwest Nigeria, travelled to Kano in order to avoid being infected, only for him to develop symptoms when he arrived in Kano. This happened during the restriction on interstate travel. The non-compliance to government regulation on interstate ban facilitated the spread to Kano state.

According to a united nation development program brief released on May 17th 2020, despite bans on the interstate travel by the Nigerian government, 8 states registered their first covid-19 case in the first 14 days phase of the federal lockdown and another 13 states registered their cases in the second phase of the lockdown⁽¹⁹⁾. This federal government imposed lockdown, affected the gross domestic product (GDP) of each state and Nigeria as a country including the contribution of Nigeria private medical practice to the gross domestic product.

Cross River state in south-south Nigeria was the last state to report its first confirmed case of covid 19 in June 2020.

Many private medical practitioners experienced a reduction in turnout during this period. Private facilities that benefit from patients outside their state were equally affected.

Some states notably Lagos, the former capital of Nigeria placed a restriction on mode of healthcare delivery by private facilities under their domain. Private facilities where covid-19 were treated were shut down for decontamination. Some facilities were barricaded by armed law enforcement agents/forces.

This period saw an increase in the neglect of some patients suspected to be having covid-19 which does not equate to negligence on the part of the medical practitioners at that time or period of our national history due to the global uncertainty surrounding the mode of presentation, diagnosis and transmission of the covid-19 at that early stage. Equally, the Medical and Dental Council of Nigeria, the regulatory body of medical practitioners in our country was not prosecuting registered medical practitioners at that time for negligence.

Unfortunately, some private practitioners were caught in the web of the covid-19 pandemic while trying to save covid-19 patients and subsequently they paid the supreme price with their life! This however was not limited to Nigeria as there were reports of practitioners demise in other parts of the world as a result of contact with Covid 19 infected patient, even the Chinese doctor that first alerted the public of the occurrence of the infection Dr. Li Wenliang also paid the supreme price at age 34years²⁰! Today, all the readers of this article, including the authors are survivor of the covid-19 pandemic. Therefore, we need to retrospectively think and consider and preserve health information on what are the advantages,

disadvantages and challenges of Covid 19 pandemic for our learning for this and future generation to learn from.

Advantages of Covid-19 Pandemic to the Private Medical Practitioners.

1. It reduced/reversed medical tourism: The millions of dollars lost to medical tourism in our country was reduced during this period as the leading countries in medical tourism market like United State of America, India and parts of Europe were worst hit by the pandemic and subsequently closed their international borders to foreigners. It would be recalled that Abar Kyari, in the wave of the lockdown was flown to a private hospital in Lagos southwest Nigeria for treatment instead of abroad due partly to the restriction of international travel.
2. It increased healthcare funding: The Central Bank of Nigeria devoted 100 billion naira to support healthcare financing in our country. In addition, some of our tertiary healthcare centers received fund from the federal government to establish, equip or upgrade their existing intensive care units. Some private facilities also had access to fund support from the government to build a state of the art, world class health facility in our country, Nigeria.
3. Increased use of telemedicine: During the lockdown, due to barrier in physical contact many doctor-patient relationship transformed from physical contact to electronic interactions by way of phone, e-mails, technologically or device assisted consultations in different ways, etc. Some private practitioners worked from home while consultation over the phone and other electronic media continued.

Disadvantages of Covid-19 Pandemic to the Private Medical Practitioners.

1. Loss of manpower: Some hospital staff retreated from being health workers during the covid-19 pandemic while some facilities went as far as almost shutting down during the period.
2. Reduced patients turnout: The federal imposition on lockdown and interstate restriction reduced patients turnout in virtually all facilities.
3. Stricter measure by health regulatory bodies: In some states, like Lagos, not all facilities were allowed to treat covid-19 patients as some private facilities were designated as covid-19 treatment center.

Challenges of Covid-19 Pandemic to the Private Medical Practitioners.

1. Increased Procurement of personal protective equipment (PPE): Procurement of PPE to effectively manage covid-19 patients during the pandemic constituted an additional cost to the recurrent expenditure of private medical practice in Nigeria, this resulted in overall increase in healthcare cost borne by the patient in our country where significant healthcare financing is by the patient out of pocket effort/practice. Even our counterpart in the government sector went into industrial dispute with their employer so as to procure PPE for their use and safety.
2. Limited Scientific Information/Paucity of Data: Little was known about the virus at the onset of covid-19 pandemic as our generation of private medical practitioners were already out of school before the outbreak of the pandemic, therefore we had no formal training on the management modality of the covid-19 infection and at that time, there were no local workshops addressing this issue though internationally, India, despite being in lockdown organized a series of lectures addressing different aspects of management of covid-19.
3. Viral mutation: Various mutants of the virus came up e.g. Alpha, Beta, Gamma, Delta , Omicron, each having both unique and overlapping amino acid substitutions that have affected transmissibility, disease severity, and susceptibility to natural or vaccine-induced immune responses and monoclonal

antibodies with different incubation period that constituted management challenges not only in Nigeria but globally²¹.

4. Malaria endemicity and Malaria Mimicry: The endemicity of malaria in our environment constituted a diagnostic dilemma in the diagnosis of covid-19 as Covid 19 mimics malaria in presentation in some individuals and also there is possibility of Covid 19 and malaria co-infection, it was a challenge in some cases to us as private medical practitioners practicing in a malaria endemic geographical region of the world²².

5. Some colleagues at the onset of the covid-19 virus, did not believe that the SARS-CoV-2 exists and some that believed underrated the virulence of the organism.

6. Creating new/dedicated covid 19 Isolation ward: There was also the challenge of creating an isolation ward/room in private facilities where covid-19 patients will be managed as such isolation wards will have to be decontaminated after use periodically. There is also the challenge of using isolated/dedicated equipment in managing covid-19 patients e.g A dedicated dialysis machine for covid-19 patients only.

7. Medical technique: It is on record that some of our colleagues that infected themselves did so during donning and doffing of PPE which is largely because it is not a common practice among private medical practitioners in the pre-covid-19 pandemic era.

As a way forward, during pandemic period in Nigeria, information dissemination among private practitioners is key, since the index case of a pandemic or infectious disease outbreak can start/emerge in a private hospital as was the case in the case of Tom Sawyer, the Liberian with Ebola that was admitted in a private medical facility in Lagos southwest Nigeria. At such time, the synergy between private medical facilities should be strengthened and also the inter-sectorial collaboration between private healthcare delivery and government healthcare delivery should be accentuated¹.

In all, doctors should not be used as sacrificial lamb during pandemics. Every disguising patients who don't reveal their status should be tactfully/professionally fished out through an high index of suspicion on the part of the private medical practitioner. Hence, it is advisable that at such a time, the private practitioner should update his knowledge as a way of continuous medical education on the pandemic at hand so as to stem the tide of progression of the disease in a world that is fast becoming a global village.

Post Covid-19 Pandemic Era.

In the book titled Multinational perspective on healthcare delivery: Pre and post covid 19 era, medical tourism, public private partnership series 3¹⁸. The World Health Organization was advised that there is need to find ways and measures to enforce the implementation of the WHO recommended percentages of national budget of all nations that should be devoted to health. Presently, most nations are not following this not even Nigeria. Even in Lagos, the budgetary allocation on health is only about 10% which fell short of the 15% recommended by the World Health Organization.

Secondly, the World Health Organization was advised that a global body/center for pandemic preparedness and response is needed with regional and national branches as needed. This global pandemic preparedness and response center should be separate from center for disease control and prevention of each country. This is an act of being proactive in global healthcare delivery.

Conclusion

The covid-19 pandemic has taught the average Nigerian private medical practitioners a serious lesson which must not be forgotten. In the wake of any pandemic, doctors should not be used as a sacrificial lamb to service the pandemic. There is a need by the World Health Organization to enforce the implementation of budgetary allocation to health in our country and others that are yet to comply.

Similarly, a global body/center for pandemic preparedness and response is needed with regional and national branches all over the world. This is a proactive step to be taken in global healthcare system because health is wealth.

Acknowledgements: Dr Adegbenga B. Ademolu thanks the president of Association of Nigerian Private Medical Practitioners, Dr Kayode Adeshola, national executives and local organizing committee of the 45th International Annual conference and scientific meeting of the Association of Nigerian Private Medical Practitioners held in Warri, Delta State, who gave me the opportunity to present this paper at the conference as a guest speaker.

Reference

1. Bolanle AA. Multinational perspective on health care delivery: private versus government. *J Appl Biotechnol Bioeng*. 2018;5(1):1–9.
2. World health organization. Ebola Outbreak in West Africa. Center for disease control and prevention, India: WHO; 2014.
3. World Health Organization. Ebola Outbreak in West Africa: Case counts. Center for disease control and prevention, USA: WHO; 2014.
4. Riley LW. Differentiating Epidemic from Endemic or Sporadic Infectious Disease Occurrence. *Microbiol Spectr*. 2019;7:10.1128/microbiolspec.ame-0007-2019.
5. Rolleston JD. The Smallpox Pandemic of 1870-1874: (Section of Epidemiology and State Medicine). *Proc R Soc Med*. 1933 Dec;27(2):177-92.
6. Glatter KA, Finkelman P. History of the Plague: An Ancient Pandemic for the Age of COVID-19. *Am J Med*. 2021 Feb;134(2):176-181.
7. Taubenberger JK, Morens DM. The 1918 Influenza Pandemic and Its Legacy. *Cold Spring Harb Perspect Med*. 2020 Oct 1;10(10):a038695.
8. Sharp PM, Hahn BH. Origins of HIV and the AIDS pandemic. *Cold Spring Harb Perspect Med*. 2011 Sep;1(1):a006841.
9. Eunbyul Cho, Sujeong Han, Jae-ryun Lee, Hyejin Lee, Bumjo Oh Effects of the COVID-19 Pandemic on the Medical Use of Elderly Patients with Hypertension: A Nationwide Cohort Study in Korea. *Korean Journal of Family Medicine* 2024;kjfm.23.0129. Published online: March 4, 2024.
10. Ayala G, Spieldenner A. HIV Is a Story First Written on the Bodies of Gay and Bisexual Men. *Am J Public Health*. 2021 Jul;111(7):1240-1242.
11. De Groot NG, Bontrop RE. The HIV-1 pandemic: does the selective sweep in chimpanzees mirror humankind's future? *Retrovirology*. 2013 May 24;10:53.
12. Global HIV & AIDS statistics — Fact Sheet. UNAIDS. Accessed on November 10th 2024.
13. World Health Organization. Severe Acute Respiratory Distress Syndrome (SARS). Accessed on November 10th 2024.
14. Managing COVID-19 Pandemic in the Community: A Primary Health Clinic Experience. *Korean J Fam Med*. 2022;43(4):220-224.
15. Sharma A, Tiwari S, Deb MK, Marty JL. Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2): a global pandemic and treatment strategies. *Int J Antimicrob Agents*. 2020 Aug;56(2):106054.

16. Synowiec A, Szczepański A, Barreto-Duran E, Lie LK, Pyrc K. Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2): a Systemic Infection. *Clin Microbiol Rev.* 2021 Jan 13;34(2):e00133-20.
17. Corpuz JCG. A dignified death: management of dead bodies during COVID-19. *J Public Health (Oxf).* 2022 Jun 27;44(2):e281-e282.
18. Ademolu AB. Multinational Perspectives On Healthcare Delivery: Pre and Post Covid-19 Era.: Medical Tourism, Public Private Partnership. Series 3. Lambert Publishers. May 2022. <https://www.morebooks.de/shop-ui/shop/product/9786200236869>
19. United Nation Development Program. The Covid-19 Pandemic In Nigeria. Citizen Perception And The Secondary Impacts Of Covid-19. Brief 4, May 19 2020.
20. Ing EB, Xu QA, Salimi A, Torun N. Physician deaths from corona virus (COVID-19) disease. *Occup Med (Lond).* 2020 Jul 17;70(5):370-374.
21. Jacobs JL, Haidar G, Mellors JW. COVID-19: Challenges of Viral Variants. *Annu Rev Med.* 2023 Jan 27;74:31-53.
22. Konozy EHE, Osman MEM, Ghartey-Kwansah G, Abushama HM. The striking mimics between COVID-19 and malaria: A review. *Front Immunol.* 2022 Aug 23;13:957913.