



Effects of Covid 19 pandemic lockdown on tertiary education in Nigeria

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Abstract

As in many countries worldwide, due to the COVID-19 pandemic lockdown, higher institutions in Nigeria closed in March 2020 and only began reopening in October of the same year. As a result of the lockdown, some higher institutions had to quickly move from the traditional face-to-face teaching method to virtual learning. This study was intended to examine the impact of covid-19 on education in Nigeria. This study was guided by the following objectives; to evaluate the awareness of Covid-19 virus among students in Nigeria, to examine the impact of Covid-19 on education in Nigeria and to evaluate the after effect of Covid-19 pandemic on education system in Nigeria. The study employed the descriptive and explanatory design; questionnaires in addition to library research were applied in order to collect data. Primary and secondary data sources were used and data was analyzed using the chi square statistical tool at 5% level of significance which was presented in frequency tables and percentage. The respondents under the study were 100 teachers and students of selected secondary schools in Abuja, FCT, Nigeria. The study findings revealed that Covid-19 pandemic has significant impact on education in Nigeria; based on the findings from the study, schools need resources to rebuild the loss in learning during the pandemic. Based on the results of this study, we provided recommendations to help educational institutions in Nigeria develop remote teaching contingency strategies.

Keywords: COVID-19; corona virus; education; lockdown; Nigeria; pandemic

Introduction

Corona virus disease (COVID-19) is an infection which is as a result of a novel severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). Infection for example, the novel severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS) was known in 2002 and 2012 in that order were as a result of viruses analogous to SARS-CoV-2. Nevertheless, SARS-CoV-2 has a higher range more the earlier information related to viruses and as a result the obscurity in the cure and management of COVID-19 (Zhong *et al.*, 2020).

Therapeutic diagnosis and findings have revealed that people tainted with COVID-19 can be symptomatic or asymptomatic in the premature stages of the virus depending on the each person immune system. It is reported that the signs of the infection contain dry cough, fever, tiredness, shortness of breath, headache and general body weakness owed to the incentive of supplementary pains in the body (Zhong *et al.*, 2020). The newness of SARS-CoV-2 and its obscure hereditary scenery effect to complexity in management of COVID-19 and the improvement of defensive vaccines.

The occurrence of the new corona virus plague in China lead to primetime reports in Africa as the dilemma of its global students in Wuhan where it start took centre phase. At the involvement of the epidemic, Hubei, the region where Wuhan is situated, have around 5,000 of the nearly 82,000 African students in China (Zhong *et al.*, 2020).

At the outset of the calamity, priority in the international north paying attention principally on the commotion that the virulent disease, would bring students from China and its financial impact on their upper learning stages. The hard work used to stop the broad of the virus spectrum from

increasing or postponing educational requisites to banning incoming students.

The majority of Africa's original reaction focused on equipping students stranded in Wuhan or providing aid from afar. Nigeria, Benin, Ghana, in addition to added Sub Sahara Africa nearby countries, succeeded in providing aids for their students, an attainment that was greatly distinguished. Additional countries that are not having the willingness and the possessions to do the same had to presume unremarkable adjacent to civic view, which favored repatriation (Kekic and Miladinović, 2016). 027.v1

COVID-19 will abscond no segment in whichever country in the planet untouched, and its impacts will be known for years to come. However, when vast impacts were being used to alter and advance elevated education in Sub Sahara Africa, there is a threat that COVID-19 will threaten the segment, with severe penalty.

Presently, students are at home and numerous tertiary institutions have organized a variety of elearning stages (even though with confronts) to assist and make sure the academic schedule runs to closing stages. The virulent disease has revealed that we cannot persist to fuss things the same way as we used to and things have to adjust in the short, medium to long period. This describes for synchronized effort for all stakeholders surrounded by the educational segment to investigate alternatives for the solution.

The coronavirus deadly disease has uncovered the lack of preparation of a lot of higher education institutions in Africa particularly Sub Sahara part of Africa continent to roam online. When the virus first hit the continent, many Sub-Sahara African governments were moving quickly to fathom how best to grip the innumerable of confronting it, it would

facade on the socio-economic development of their countries.

Countless of Sub-Sahara African governments have had to momentarily shut educational Institutions in an effort to enclose the multiply of COVID-19 in their individual countries. Egypt was the first African country to account a case of COVID-19. Since then, Africa has witnessed more than 270,000 cases with over 7,000 deaths and over 121,000 recoveries. The closures of schools and universities is said to have impacted over 70% of the world's inhabitants. However, current growths indicate acknowledgment that education has skilled a Important swing. The headship and managers of educational institutions diagonally Sub-Saharan Africa have become fully conscious that authorize students to set up for a future where outbreaks for example, COVID-19 and other interruptions might become a part of our everyday lives also means implementation change in learning and teaching. What does this mean, and is this the right time to start?

Literature Review

According to Medicinenet SARS-CoV-2 is a single stranded, positive-sense RNA coronavirus that causes an illness called COVID-19 (note that many people still equate and interchange the disease name COVID-19 with the new official virus named SARS-CoV-2) [8]. It is a new strain of corona virus (means crown) that first caused an outbreak of serious respiratory problems in Wuhan, China. Researchers think it originated from infected animals and jumped over to infecting people in a large open seafood/animal market. Also, the virus is capable of person-to-person transmission, spreading to at least to over 150 countries in about 3 months. It is related to the SARS and MERS coronaviruses. The World Health Organization (WHO) declared COVID-19 a pandemic in March 2020. Medicinenet observes that the initial risk factors for the virus included close contact with someone who has recently visited China, Italy, England, Spain, and many other countries and cities experiencing this outbreak [8]. Close contact with anyone diagnosed with the virus and coming in contact with secretions (for example, those produced by sneeze or cough) or feces from an infected person are risk factors. Since those initial risk factors were presented, many others have been noted and are as follows:

Asthma: Chronic kidney disease (for example, patients with decreased renal function, patients on dialysis), Chronic liver disease (for example, cirrhosis) Chronic lung disease (for example, COPD, bronchitis, emphysema, idiopathic pulmonary fibrosis, cystic fibrosis, pulmonary hypertension) Gestational diabetes, Immuno compromised patients (for example, patients with cancer treatment, bone marrow or organ transplant, immune deficiencies, HIV with a low CD4 cell count), Men have a higher incidence of infections than women, Obesity (BMI over 40), Older people (over 60-65 years of age), People in nursing homes, Serious heart conditions (for example, heart failure, coronary artery disease, cardiomyopathies, congenital heart disease) Type 1 and type 2 diabetes.

Medicinenet medical researchers estimate that the incubation period for a COVID-19 infection varies from 2 days to about 14 days (average about 5 days). COVID-19 symptoms may begin like the flu but go on to develop fever, severe cough, and shortness of breath (difficulty breathing)

that is so serious enough to warrant hospitalization in many patients.

Federal Republic of Nigeria observes that many coronavirus types infect species of animals that occasionally (or rarely) are able to infect humans [4]. MERS coronavirus is an example where the virus that usually only infected camels became able to infect humans. SARS-CoV-2 is similar as the initially infected people frequented an open-air food market that sold fish and animals, including wild animals. Medical researchers currently do not know the animal species infected, but wild animals are a suspected source. However, the rapid spread of the virus was due to person-to-person contact that has been responsible for the wide outbreak of this infection. Close contact with someone who is infected or with their secretions (for example, cough-generated droplets) or feces is how the virus spreads. Although this virus is contagious, the contagious period remains to be determined. Recent findings showed that it is contagious even in the incubation period when the patient shows no symptoms. The virus also survives on surfaces for different time periods adding to the incident of transmission. According to Medicinenet professional diagnose of COVID-19 in the early phases of the pandemic in the U.S., only the CDC had tests to determine if an individual is infected with the virus, so doctors must safely package blood, swabs, and other specimens and send them to the CDC. It took days to get a result. However, early tests had some accuracy problems that researchers have since resolved. In addition, the FDA has approved about 20 different suppliers of various tests of blood and/or swab samples to quickly diagnose (from about 5-15 minutes) infected or uninfected people. In general, most tests rely on detection of pieces of the viral genes (nasal swab test) or detection of virus surface structure antigens by immune globulins (serology blood test). Testing is now available at many sites, hospitals, and doctors' offices around the country, but availability of these tests varies in many parts of the U.S. In addition, the FDA (Pixel COVID-19 test) approved a Lab Corp COVID-19 at-home testing kit for emergency use.

According to Medicinenet there is no antiviral drug or vaccine to treat this infection. Symptom relief and supportive care (many requiring hospital care and some need ventilator respiratory support) are the current treatment methods.

However, early supportive care may reduce the disease severity. If you have been exposed to the virus, put on a mask if one is available and call your doctor. However, clinical trials for hydroxychloroquine (Plaquenil), chloroquine, and remdesivir are ongoing, as well as immune serum and monoclonal antibody treatments. Because of the nature of the pandemic, some centers are using these medications. Although there is no full scientific support at this time. Medicinenet listed the complications associated with COVID-19 (SARS-CoV-2) to include; difficulty breathing (may require a breathing machine), high fever, pneumonia, severe cough, organ failure (for example, kidney failure), and death. Medicinenet the following are the directions given by the CDC for coronavirus prevention:

- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer
 - Avoid touching your eyes, nose, and mouth with unwashed hands
 - Avoid close contact with people who are sick

- Stay home when you are sick
- Cover your cough or sneeze with a tissue, and then throw the tissue in the trash
- Clean and disinfect frequently touched objects and surfaces. Follow social distancing protocols

In addition, because of the need of hospitalization for many infected people, many governments have taken steps to limit the chances to spread infections by isolation techniques such as closing down public events and even preventing public transportation, and closing schools and work places. Medicinenet In Nigeria, since the first case of COVID-19 (the “disease”) was confirmed in Nigeria on 27 February 2020, the country has experienced progressive increase in the number of infected persons across the states in the country with 32 states and the Federal Capital Territory (FCT) amongst the 36 states in the country having reported cases of COVID-19. To curtail the spread of the disease, the governments adopted restriction of movement with particular focus on the FCT, Lagos and Ogun State. The President gave his first COVID-19 address on 29 March 2020, rolling out measures for the containment of the spread of the disease as well as palliatives aimed at easing the hardship that may be necessitated by the measure. The President gave his second address on 13 April 2020, providing update on the efforts at containment as well as introducing further measures and palliatives. On 27 April 2020, the President gave his third address wherein amongst others things, he noted the need to ensure that the economy continues to function while aggressive response to the pandemic is maintained, and provided revised guidelines to be adopted and announced further palliatives/ incentives being applied, in the effort at curbing the spread of the disease.

Guardian with global case currently put at 3.4 million and 200,000 deaths, Coronavirus is arguable the biggest challenge facing humanity today [5]. Indeed, the COVID-19 outbreak has since spread to about 204 countries and territories in every continent and one international conveyance across the globe. Beyond the tragic health hazards and human consequences of the COVID-19 pandemic, the economic uncertainties, and disruptions that have resulted come at a significant cost to the global economy.

The United Nations Trade and Development Agency (UNCTAD) put the cost of the outbreak at about \$2 trillion in 2020. Most central banks, finance ministries and independent economic experts around the world have taken solace in the prediction that the impacts might be sharp but short-lived, and economic activities would return to normal thereafter. But the tumultuous events that COVID-19 had spread across the globe cut across every facet of human existence and the consequences may linger. As discretionary spending by consumers continues to decline, companies, hotels, and hospitality are facing declining demand and patronage as a result of the pandemic. For example, in Hungary alone, about 40 to 50% of hotel reservations have been canceled. Also, the pandemic is placing up to eight million jobs in the leisure and hospitality sector at risk, with travel crashes and cancellations expected to continue.

Gough submits that the coronavirus (COVID-19) pandemic that has swept across the globe in the last few weeks and months has not only had a significant impact on public health, society, and the economy as a whole, it has also

wreaked havoc to the sporting calendar [6]. In a bid to stem the spread of the virus, many professional and amateur leagues across all continents and sports took the unprecedented step to postpone or suspend their seasons on the advice of the CDC to avoid gatherings of large numbers of people.

Coke-Hamilton observes that the COVID-19 pandemic and the measures put in place to contain its diffusion are taking a heavy toll on the tourism sector. According to the United Nations World Tourism Organization (UNWTO), the COVID-19 pandemic will result in a contraction of the tourism sector by 20 to 30% in 2020 [1].

According to UNESCO, 9.8 million African students are experiencing disruption in their studies due to the closure of higher education institutions. The danger of contamination has triggered institutions to move their courses online.

However, going online is not that simple on a continent where only 24% of the population has access to the internet, and poor connectivity, exorbitant costs and frequent power interruptions are serious challenges [1].

The COVID-19 pandemic, and global travel restrictions, have led to a crisis in this funding model, with income from international students plummeting over recent months.” Australia could not afford to let universities “fall off a cliff”, she said, adding that the federal government should act immediately “to shore up the universities”. Meantime, the Group of Eight leading universities, where the majority derive up to 40% of their annual incomes from foreign student fees,

Methodology

This review assesses accessible confirmation on subjects relating to impacts of COVID-19 deadly disease on education in Sub-Sahara Africa. Search for pertinent medical literature in databases like Google Scholar, Reesearchgate and African Education Journal was conducted using the following key terms: “Sub-Sahara,” “Africa” “COVID-19,” “Education,” “Impact,” and “epidemic”. Papers were selected by reviewing their abstracts and title and also using accompanying references gotten from the list of references on the paper.

Results and Discussion

The researcher used the three hypotheses formulated for this study to analyze the finding as following:

H0: There is no significant relationship between COVID-19 pandemic and suspension of academic calendar of Nigerian education sector.

H1: There is significant relationship between COVID-19 pandemic and suspension of academic calendar of Nigerian education sector

Table 1: Relationship between COVID-19 pandemic and suspension of academic calendar of higher institutions

Variables	N	Df	r-cal	r-table	Result
X	200	198	0.938	0.195	Significant
Y	200				

Table 1 showed that the r calculated is 0.938 which is greater than the t calculated of value 0.195. There is significant relationship between COVID-19 pandemic and suspension of academic calendar of higher institutions in

FCT, Abuja.

From the research question one, 66% of the respondents strongly agreed that COVID-19 pandemic have led to the suspension of academic calendar of higher institutions in FCT, Abuja and 34% of the respondent agreed COVID-19 pandemic have led to the suspension of academic calendar of higher institutions in FCT, Abuja. This implies that 100% of the respondents agreed that COVID-19 pandemic have led to the suspension of academic calendar of higher institutions in FCT, Abuja. This result is in agreement with the finding of Ogunode *et al.*, who disclosed that the national lockdown of educational institutions as a result of COVID-19 pandemic in Nigeria and across the World is going to cause major interruption in students' learning; disruptions in academic programme, suspension of examination, cancellation of internal and international conferences, creating gap in teaching and learning and probably may cause manpower shortage in the institutions as a result of death caused by COVID-19 [9].

H0: There is no significant relationship between COVID-19 pandemic and suspension of research programme of higher institutions in FCT, Abuja

H2: There is significant relationship between COVID-19 pandemic and suspension of research programme of higher institutions in FCT, Abuja

Table 2: Relationship between COVID-19 pandemic and suspension of research program of higher institutions

Variables	N	Df	r-cal	r-table	Result
X	200	198	0.935	0.195	Significant
Y	200				

Table 2 showed that the r calculated is 0.935 which is greater than the t calculated of value 0.195. There is significant relationship between COVID-19 pandemic and suspension of research programme of higher institutions in FCT, Abuja.

Research question two revealed that 56% of the respondents strongly agreed that COVID-19 pandemic have led to the suspension of research programme of higher institutions in FCT, Abuja and 44% of the respondent agreed COVID-19 pandemic have led to the suspension of research programme of higher institutions in FCT, Abuja. This implies that 100% of the respondents agreed that COVID-19 pandemic have led to the suspension of research programme of higher institutions in FCT, Abuja. This means that the larger percentage of the respondents believes that COVID-19 pandemic have led to the suspension of research programme of higher institutions in FCT, Abuja. This result is in agreement with the submission of Ogunode observed that the closure of all educational institutions from primary schools to the higher institutions would affect the students' academic plans, academic calendar research programme because many of the higher institutions have started their first semester exams [10]. According to Dinesh *et al.*, countries across South and Southeast Asia have in quick succession announced the closure of their schools and universities for a minimum of two weeks in order to contain the spread of the COVID-19 virus which has been declared a global pandemic by the World Health Organization [3].

H0: There is no significant relationship between COVID-19

pandemic and suspension of academic activities in tertiary institutions in Nigeria

H3: There is significant relationship between community Service of higher institutions in Nigeria

Table 3: Relationship between COVID-19 pandemic and suspension of academic activities in tertiary institutions in Nigeria

Variables	N	Df	r-cal	r-table	Result
X	200	198	0.931	0.195	Significant
Y	200				

Table 3 showed that the r calculated is 0.931 which is greater than the t calculated of value 0.195. There is significant relationship between COVID-19 pandemic and suspension of academic activities in tertiary institutions in Nigeria Result obtained from research question three disclosed that 45% ticked strongly agreed, 39% also ticked agreed that COVID-19 pandemic have led to the suspension of community service of higher institutions in FCT, Abuja while 6% of the respondent ticked disagreed and 10% strongly disagreed that COVID-19 pandemic have led to the suspension of community service of higher institutions in FCT, Abuja. This result showed that the majorities agreed that COVID-19 pandemic have led to the suspension of academic activities in tertiary institutions in Nigeria

H0: There is no significant relationship between COVID-19 pandemic and adoption of online education in higher institutions in Nigeria

H4: There is no significant relationship between COVID-19 pandemic and adoption of online education in higher institutions in Nigeria.

Table 4: Relationship between COVID-19 pandemic and adoption of online education in higher institutions in Nigeria

Variables	N	Df	r-cal	r-table	Result
X	200	198	0.939	0.195	Significant
Y	200				

Table 4 showed that the r calculated is 0.939 which is greater than the t calculated of value 0.195. There is no significant relationship between COVID-19 pandemic and adoption of online education in higher institutions in Nigeria.

Research question four showed that 63% of the respondents ticked strongly agreed, 37% ticked agreed that adoption of online education is the measure of reducing the impact of COVID-19 effects on higher institutions in Abuja. It implies that 100% of the people sampled agreed that adoption of online education is the measure of reducing the impact of COVID-19 effects on higher institutions in Nigeria.

Conclusion

Data were collected and analyzed for the study and the following were concluded that 100% of the respondents agreed that COVID-19 pandemic have led to the suspension of academic calendar of higher institutions in FCT, Abuja, larger percentage of the respondents believes that COVID-19 pandemic have led to the suspension of research programme of higher institutions in FCT, the majorities agreed that COVID-19 pandemic have led to the suspension of community service of higher institutions in FCT, Abuja.

This result also revealed that 100% of the people sampled agreed that adoption of online education is the measure of reducing the impact of COVID-19 effects on higher institutions in Abuja.

Recommendation

Based on this finding, the researcher hereby recommends that:

- The government should increase the funding of higher institutions to enable the institutions meet their cardinal
- The government should provide all the ICT facilities in higher institution to enable the schools switch to online education mode of education
- The schools administrators should encourage research on COVID-19 vaccine

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