

IMPACT OF COVID-19 ON EDUCATIONAL SYSTEM IN NIGERIA: IMPLICATIONS FOR THE USE OF TECHNOLOGY

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ABSTRACT

Globally, the world is faced with the COVID-19 pandemic which has held the economy at ransom not exempting the educational sector. This pandemic has brought about recent changes and disruptions in the educational sector which serves as a catalyst for the development of any nation. Educational sector globally is seen to be shifting towards e-learning in order to cushion the effect of this pandemic. The challenges arise as a result of the varying degree of preparedness of the institutions, lack of infrastructures, paucity of funds and policy issues in the Nigeria education sector. It is in tandem with this prevailing issue that this paper examines the Nigeria educational system based on the global pandemic. This paper further discusses the necessity of e-learning; identifies and discusses challenges as well as opportunities. It was recommended that to minimize the impact on the continuity of learning for students, Ministries of Education in several Sub-Saharan African countries like Nigeria should expedite the campaign to adopt distance learning mode through radio lessons in FM radio stations and TV lessons in TV stations.

Key Words: Impact, Covid-19 Education, Implications and Technology.

Introduction

The spread of COVID-19 has sent shockwaves across the globe. The public health crisis, unprecedented in our lifetimes, has caused severe human suffering and loss of life. The exponential rise in infected patients and the dramatic consequences of serious cases of the disease have overwhelmed hospitals and health professionals and put significant strain on the health sector. As governments grappled with the spread of the disease by closing down entire economic sectors and imposing widespread restrictions on mobility, the sanitary crisis evolved into a major economic crisis which is expected to burden societies for years to come.

According to the Organization for Economic Co-operation and Development (2020), latest Economic Outlook, even the most optimistic scenarios predict a brutal recession. Even if a second wave of infections is avoided, global economic activity is expected to fall by 6% in 2021, with average unemployment in many countries climbing to 9.2%, from 5.4% in 2019. To ensure the continuity of education despite the lockdown, schools have sought to use technology and offer online classes and learning experiences as a substitute for in-class time. However, many Universities, Colleges and other schools struggled and lacked the experience and time they needed to conceive these new ways to deliver instruction and assignments. Examinations were also affected, causing disruption to students' learning trajectories and progression. Although many higher education institutions offered online courses before the pandemic, few students considered it as the sole alternative to physical in-person learning.

To remain relevant, universities will need to reinvent learning environments so that digitalisation expands and complements, but does not replace, student-teacher and student-student relationships. As the world becomes increasingly interconnected, so do the risks we face. The COVID-19 pandemic has not stopped at national borders. It has affected people regardless of nationality, level of education, income or gender. But the same has not been true for its consequences, which have hit the most vulnerable hardest complicating the work of school counsellors. In particular, spending on education may be compromised in the coming years. As public funds are directed to health and social welfare, long-term public spending on education is at risk despite short-term stimulus packages in some countries. Private funding will also become scarce as the economy weakens and unemployment rises. While teleworking is often an option for the most qualified, it is seldom possible for those with lower levels of education, many of whom have been on the front lines in the response to the pandemic, providing essential services to society. Throughout this crisis, education systems are increasingly looking towards international policy experiences, data and analyses as they develop their policy responses.

History of COVID-19

Corona viruses are a big family of different viruses. Some of them cause the common cold in people. Others infect animals, including bats, camels, and cattle. Experts say SARS-CoV-2 originated in bats. That is also how the corona viruses behind Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) got started. SARS-CoV-2 made the jump to humans at one of Wuhan's open-air "wet markets." They are where customers buy fresh meat and fish, including animals that are killed on the spot. Some wet markets sell wild or banned species like cobras, wild boars, and raccoon dogs. Crowded conditions can let viruses from different animals swap genes. Sometimes the virus changes so much it can start to infect and spread among people. Still, the Wuhan market did not sell bats at the time of the outbreak. That is why early suspicion also fell on pangolins, also called scaly anteaters, which are sold illegally

in some markets in China. Some corona viruses that infect pangolins are similar to SARS-CoV-2. As SARS-CoV-2 spread both inside and outside China, it infected people who have had no direct contact with animals. That meant the virus is transmitted from one human to another. It spread in the U.S. and around the globe, meaning that people are unwittingly catching and passing on the corona virus. This growing worldwide transmission is what is now a pandemic.

On January 30, 2020, the World Health Organization (WHO) announced that this outbreak had constituted a public health emergency of international concern (Mahase 2020). The novel corona virus was initially named 2019-nCoV and officially as severe acute respiratory syndrome corona virus 2 (SARSCoV-2). As of February 26, COVID-19 has been recognized in 34 countries, with a total of 80,239 laboratory-confirmed cases and 2,700 deaths (WHO 2020).

Clinical Symptoms, Diagnosis and Treatment

Most of patients with COVID-19 represent relatively serene cases. According to recent studies and relevant data from the National Health Commission of China (2020), the proportion of severe cases among all patients with COVID-19 in China was around 15% to 25%. Majority of patients experienced fever and dry cough, while some also had shortness of breath, fatigue, and other atypical symptoms, such as muscle pain, confusion, headache, sore throat, diarrhea, and vomiting. Among patients who underwent chest Computed Tomography (CT), most showed bilateral pneumonia, with ground-glass opacity and bilateral patchy shadows being the most common patterns. Among hospitalized patients in Wuhan, around one-fourth to one-third developed serious complications, such as acute respiratory distress syndrome, arrhythmia, and shock, and were therefore transferred to the intensive care unit. In general, older age and the existence of underlying co-morbidities (e.g., diabetes, hypertension, and cardiovascular disease) were associated with poorer prognosis.

The diagnosis of COVID-19 can be based on a combination of epidemiologic information (e.g., a history of travel to or residence in affected region 14 d prior to symptom onset), clinical symptoms, CT imaging findings, and laboratory tests (e.g., reverse transcriptase polymerase chain reaction [RT-PCR] tests on respiratory tract specimens) according to standards of either the WHO (2020) or the National Health Commission of China (2020). It should be mentioned that a single negative RT-PCR test result from suspected patients does not exclude infection. Currently, the approach to COVID-19 is to control the source of infection; use infection prevention and control measures to lower the risk of transmission; and provide early diagnosis, isolation, and supportive care for affected patients. A series of clinical trials are being carried out to investigate interventions that are potentially more effective (Lopinavir, Remdesivir; Del Rio & Malani, 2020). On January 8, 2020, a novel corona virus was officially announced as the causative pathogen of COVID-19 by the Chinese Center for Disease Control and Prevention.

Brief History of COVID-19 in Nigeria

Following WHO declaration, the Corona virus Preparedness Group was constituted on January 31 in Nigeria (a country with 36 states and a Federal Capital Territory [FCT]). WHO categorized Nigeria as one of the 13 high-risk African countries with respect to the spread of COVID-19. Nigeria is also among the vulnerable African nations, given the weak state of the healthcare system (Marbot, 2020). In Nigeria, there are still communities without healthcare facilities, apart from the scarcity of health workers (Amzat,2011). The projection is that Africa could bear the final burden of the COVID-19 pandemic if the countries do not institute effective measures to combat the pandemic.

According to the Nigerian Centre for Disease Control (NCDC), the training of the rapid response teams across the 36 states in Nigeria was concluded in December 2019. On January 28, the NCDC further revealed that a Coronavirus Group had been set up to activate its incident system to respond to any emergency. Additionally, the NCDC worked with 22 states in Nigeria to activate their emergency operations centers to manage and link up with the national incidence coordination centers (Ihekweazu,2020).

Although the government had strengthened the surveillance at the airport since January 2020, Nigeria recorded its COVID-19 index case that was imported from Italy, on February 27. This raised concerns about the effectiveness of airport surveillance and, by extension, the country's general preparedness. The index case (an Italian) had visited some other states of the federation before testing positive for COVID-19. The pre-COVID-19 preparedness was grossly inadequate.

Nevertheless, the onset of COVID-19 sent waves of panic across Nigeria, like in every other country. Due to globalization, the health risk of communicable diseases could be pandemic (Martin, 2005). Trade and travels facilitate the flow of people, who incidentally could move, carrying a health risk (in this case: the coronavirus). From one imported index case, many countries (including Nigeria) face tremendous health challenges with multiple cases and deaths. Since the first index case in Nigeria, the number of cases has been increasing, although recently at a snail pace due to public health interventions.

Within the first 30 days, the NCDC observed that 70.0% of the individuals tested positive for COVID-19 were male, and 30.0% were female. Their ages ranged between 30 and 60 years. People aged 31-50 years were the most affected (39.0%). About 44.0% (101) of the cases were imported, some 41.0% (96) had incomplete epidemiological information; the sources of their infections were unknown. Thirty-five (15.0%) patients were known contacts of positive cases (NCDC, 2020). The number of new infections has been undulating since the outbreak started in Nigeria. Currently, over 64,000 cases of COVID-19 have been recorded in Nigeria, with over 50,000,000 confirmed globally. One of our NCDC's key responsibilities as Nigeria's National Public Health Institute is to provide Nigerians with timely and accurate information to reduce their risk of infection. This has been done through a website dedicated to the COVID-19 pandemic as well as an ongoing communications.

Educational System in Nigeria before COVID-19

Education in Nigeria is based on these levels of institutional learning processes:

1. Pre primary level
2. Primary level
3. Basic/Secondary level;
4. Higher Education level

The emergence of Corona virus known as the COVID-19 pandemic devastated all sectors of the global economy. The educational system of the world was halted because of social distancing and the lockdown. The conventional paradigm of teaching fails and teaching/learning suffers a severe setback all over the world including Nigeria. Teaching and learning is evolving. Many decades ago in Nigeria, the conventional methods of teaching holds sway in the educational sector (Aina & Langenhoven, 2015). In recent times, teaching and learning had developed into an electronic paradigm (E-learning) that pervaded the entire schools of the world. However, in Nigeria's higher education context the issue of e-learning is not common (Ajadi, Salawu & Adeoye, 2008; Kyari, Adiuku-Brown, Abechi & Adalakun, 2018). The world is not static but dynamic and technology is changing human endeavour rapidly. Along with the changes are various challenges the human race is facing which makes our education fragile and weak such as the current problem of COVID-19 pandemic. The pandemic has exposed the weakness in teaching and learning in Nigerian schools because the typical teaching paradigm fails.

Outlook of Educational System during COVID-19

The corona virus which is popularly known as COVID-19 disrupted the global educational system as most countries around the world have resulted in temporary closure of all educational institutions in an attempt to contain the spread of the pandemic. According to the report by UNESCO (2020), the closure of educational institution has impacted over 91% of the world's student population. The ripple effect of this pandemic has been felt by both the educators and students in primary, secondary and tertiary levels as academic sessions were disrupted after the corona virus was declared a public health emergency.

This COVID-19 pandemic has shaped a new normal for the education sector across the globe by adopting technologies to transform the online learning platform, restructuring application processes, and stimulating crisis management strategies. The COVID-19 outbreak has opened up the importance of technology in the educational system and distance learning however; just a handful of institutions in the world use technology.

Implications for the use of Technology in Nigeria Education System

Opportunities applicable to use of e-learning: Despite the challenges posed by integrating and embracing the e-learning system, it has become the most preferred

platform to learn during global pandemic periods such as the COVID -19 where movement is restricted and institutions of learning are on lockdown. The adoption of e-learning system for Universities, Colleges and other school have enhanced the efficiency of knowledge as both students and lecturers have ease access to a large amount of information within the global village. In most tertiary institutions in Nigeria, class space for lectures is usually a problem as sometimes there is clash in timetable or overpopulated students.

The e-learning system will completely reduce the issues of insufficient classrooms for lectures as student can easily take the lectures online without any disruption at their convenience. Also, e-learning afford students and lecturers the opportunity to participate in class in their comfort zone with basic amenities they need when compared to the traditional teaching method where sometimes these basic amenities are unavailable for conducive learning. This is supported by the findings of Pingle (2011) that undergraduates in India have a higher acceptance level of comfort working with computers and other e-learning packages than the traditional face -to-face classroom.

E-learning provides a platform for students to interact with themselves through the discussion forum which eliminates the barrier of participation. It also allows for effective communication and fosters relationship between students and lecturers. It also allows students to study at their open pace and convenience as the lecture material is readily available and the content delivery of the lecturer is quite accessible to them. Hence, it increases satisfaction and decreases stress. The knowledge of e-learning will expose both lecturers and students to the reality of the world outside the classroom since the world is a global web. The e-learning exposure will ease the student's integration into organizations where such platforms are operational.

Conclusion

The outbreak of corona virus has shaken the educational sector of Nigeria off its strength. In fact. Looking at the trend of the pandemic, it could be something the world will live with for a long period of time. There is no doubt that there is going to be a serious set-back in the development of Nigerian educational system if the corona virus pandemic lockdown is not properly managed by the government and concerned personnel. Schools calendar have been disrupted, there is reduction in the economic development of the country which has affected the finance of education as well. Since the family income depends on the economic growth of any country, most of the families in Nigeria are experiencing economic hardship as a result of the pandemic lockdown; some of the vulnerable families having their children under the federal government free feeding scheme are being faced with the challenge of going in search of food for their children while they are with them at home. Unfortunately the illiteracy level of some parents in Nigeria is not helping the matter because not every parents or guidian could handle learning support of their children.

Recommendations

The government and concerned educational personnel should ensure that there are futuristic plans in place, in case of another similar experience. Nobody knows what other occurrences or pandemic will occur in future that may lead to the interruption of the educational system of Nigeria. Therefore plans are to be made in ensuring the future of the education system is secured

Teachers need adequate and continuous training or development in ICT

Nigerian Ministries of Education should employ experts in the area of ICT

The technology education experts should design teaching learning activities or packages that could be used through social media platforms such as Google Classroom, WhatsApp, Facebook, Zoom and the like.

ICT experts should be employed by educational institutions.

Ministries of Education in several Sub-Saharan African countries like Nigeria should expedite the campaign to adopt distance learning mode through radio lessons in FM radio stations and TV lessons in TV stations.

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