



COVID-19 SPREAD, PREVENTION AND CURE: IMPLICATION FOR SCHOOL OPERATION AND COMMUNITY ADAPTATION

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Abstract

COVID-19 is a zoonotic disease, which is transferable from animal to human beings. Corona virus is highly virulent, and its unprecedented speed of transmission from one person to another resulted to the rapid spread globally, thus causing the pandemic. Covid-19 pandemic impacted almost all facets of human endeavor, disrupted normalcy in both education and economic sectors, causing so much pain and stress to vulnerable individuals, groups and systems. Some of the experiences in these notable sectors are discussed in this paper. One fact that is clear to educationists, economists, psychologists and among other stakeholders, is that there is always an aftermath of a disastrous event which could cause obvious shifts in many systems. It could be negative or positive. In the case of COVID-19, the devastation was unprecedented. Its negative impact left both physical and emotional injuries that need to be healed. Through desk research and researchers experience, this paper was written. However, the focus of this paper is to present the disruption in the educational sector as it affected school operations. The paper highlighted how the impact on the economic sectors influenced the shifts in the education system operations. The paper also explores some of the sustainable recovery strategies galvanized by some stakeholders to help countries and people mitigate the negative spillover effects of the covid-19 pandemic events on society.

Keywords: COVID-19 pandemic, School operations, education and economic sectors, individuals and communities.

Introduction

COVID-19 pandemic destabilized the world's economy in diverse aspects. In particular, it affected the education and economic sectors. COVID-19 negatively affected business activities of many people and increased hardship, especially vulnerable; youths and women who live on subsistence wages. During the pandemic, reports show that the Nigerian economy experienced some shifts in business and returns on investment. The same shift invariably impacted experiences in the education sector, because during the peak of COVID-19 schools remained shut and at post COVID-19 efforts at implementing the "new normal" modified the routine of schools and offices like banks and big shopping malls, this naturally led to issues of adjustment, adaptation and sustainable live practices among people. Economically, the cost of some essential commodities escalated while some goods were not available due to restrictions on international travels and cross border businesses. Livelihoods conditions were most impacted due to lockdown and curfews. Again, the hardship experienced was very severe for the most vulnerable groups that depend on street jobs for income. In particular are internally displaced persons living in camps, youths and women living in different difficult



terrains and communities. Palliatives from Government and some Aid agencies were disbursed to alleviate suffering but due to mismanagement by some individuals responsible for the distribution, the vulnerable were marginalized and denied access to the palliative items meant for them (Olawoyin, April 21, 2021). Also those whose businesses depended on importation and exportation suffered deprivation due to border closure at the peak of the pandemic. Many who did not have any meaningful skill became helplessly dependent on anyone who cared to extend hand of charity. There was also an upsurge of criminality in the society; rise in rape cases and domestic violence was unprecedented, which increased the issue of insecurity and public safety. In the light of the above, authors of this paper consider that the COVID-19 experience should be taken as an eye opener. Thus there is need to chronicle the effects of the pandemic and intensify advocacy for recovery strategies leading to proactive efforts. As this may embolden individuals and communities alike towards surviving future pandemics and other unplanned natural hazards. Similar influence is expected on the Nigerian government and other concerned stakeholders with especially in the education and economic sub-sectors. Thus, the present paper set out to highlight some of such recovery strategies. These strategies if followed through would improve the economy and help Nigerians recover from the impact of COVID-19 pandemic and stay strong.

COVID-19 Spread, Prevention and Cure in Nigeria

Corona virus-2-strain (SARS- COV-2) belong to the coronaviridea family . There are minute in size (65 - 125 nm in diameter),and contains a single stranded ribonucleic acid(RNA)as its main genetic materials. The disease caused by this novel Wuhan Corona virus(2019 -nCov) virus was named COVID-19 by the International Committee on Taxonomy of Viruses(ICTV).

The virus is highly virulent. The mode of transmission is through person to person or from contact with contaminated virus or infected surfaces (seats, tables door knobs, rails, bedding, clothing, and the likes).Transmission could occur in overcrowded room or public spaces from emitted aerosols from talking, and singing. In fact there is a greater chance of contagion when people are in very close contact, in group activity, a crowded vehicle, crowded classrooms, etc.

The prevention of (SARS- COV-2) or COVID-19 was basically personal hygiene and preventive practices of hand washing, use of alcohol-based hand sanitizers,,social distancing, and self- discipline of avoiding touching the nose,eye,and mouth.

The cure was said to be possible with the COVID-19 vaccination. However, when there is a case, isolation, quarantine, and stay home The efficacy of this treatment, came with a lot of myths, speculations ,and fake data

COVID-19 impact on Educational Sector of Nigeria

Schools are educational institutions, the agents for the implementation of society's curriculum. Also, through the school, socialization and human capital development is guaranteed for society. The society depends on the educational system for the continuous transmission of its culture, ideals, norms and values including the production of low, middle and high skilled labour for its workforce (Orji, 2021). This process was going on until the advent of COVID-19, which brought about shutting down of schools and the economy in general. Consequently, operation of schools was disrupted and shut down. There was much apprehension among education stakeholders, particularly about how teaching-learning activities would be managed without worsening or further spreading the virus. Some private schools that embarked on online teaching and learning realized the efficacy of online apps but the exorbitant cost needed to fund it made it not feasible. There was fear and apprehension among education stakeholders. The Nigerian Center for Disease Control (NCDC) and the World Health Organization (WHO) gave guidelines for prevention of spread of COVID-19 and this set the pace for the 'new normal' behaviour.

The already crisis-ridden Nigerian public education sector (Nwagwu, 2003) lacked the basic infrastructure and social support to foster adjustment of pupils and students (Orji, 2021). It became obvious that the state of infrastructure in the Nigerian educational system has not improved (Nwagwu, 2003). This is because the public schools are still lacking in basic infrastructure for teaching and learning. With COVID-19, the researchers noticed the lapses in the school system became very obvious, particularly as it relates to overcrowding caused by inadequate classrooms and space for healthy school activities and safety. Inadequacy of facilities and learning resources has been a characteristic feature of most public schools in Nigeria. Hence, the strain on the school system caused by COVID-19 pandemic has given a new narrative to be followed particularly as it concerns adjustment to social interactions, personal hygiene and school health. According to



the Federal Ministry of Education (FME, 2006) most schools in Nigeria have not met the minimum safety standard that will amply ensure sustainable safe setting for proper academic activities as enumerated in the National School Health Policy.

Based on the above observations, there was need for social support from government and non-government agencies to foster suitable school environment to ensure continued teaching and learning. The Impact of COVID-19 on educational systems resulted in school closures, learning gaps, and the need to adapt, by adjusting from face-to-face classroom interaction to remote learning classrooms, particularly for higher education institutions. This was a serious challenge. The expected shift was hardly achieved by many public primary, secondary and tertiary schools during the COVID-19 era. However, in post-COVID-19 era, adaptation was more developed, specially in the introduction and use of e-learning apps and low-tech resources; tapes, radio broadcast etc. The use of social media links were growing means of information sharing and dissemination. However, most classrooms were still operating on face-to-face level of teaching and learning across all levels of education. The reason, of course, was not far from the challenges of funding, digital literacy and lack of infrastructural development.

COVID-19 impact on the Economic Sector

Economy refers to the state of a country in terms of production and consumption of goods and services and the supply of money (Oxford dictionary). The Nigerian economy has faced countless challenges over the years, which have affected production, consumption, and circulation of money. Goods and services became very costly; fuel, gas, electricity became out of reach for the common man during the peak of the COVID-19 era. These sudden changes in food production and supply chain, including upsurge in prices of food are as a result of COVID-19 (Senaratne, Amaratunga, Mendis & Athukorala, 2021). Consequently, income-generating powers of low and middle-income families were negatively impacted, thus affecting their food and nutrition security (World Food Program, 2021). The crisis experienced was largely attributed to factors ranging from unarticulated economic policies, policy inconsistency, corruption, unstable political environment, as well as external political and economic influence (Oladeji, 2010) which made management of resources very poor, amidst the furore of the masses over marginality in many fronts.

The impact of COVID-19 pandemic on the economy was variously perceived to have positive and adverse outcomes. Recollecting the negative effects of the border closure by President Muhammadu Buhari in 2019 in response to the menace of smuggling and informal trade of goods across its borders. The shortlived border closure produced enormous hardship experience among some citizens. This, could be better imagined. With COVID-19 pandemic induced border closure, though a welcome Non Pharmaceutical Intervention (NPI) to stop spread of diseases, it was received with mixed feelings as the measure impacted adversely on the economy in several ways. It affected small and medium scale businesses surviving on importation and exportation. Poverty increased among the people who depend on daily paid jobs. This situation may have added to the already high poverty index in Nigeria. According to World Bank, if an individual lives below \$3 per day, he/she is considered poor. In short, COVID-19 pandemic has taken Sustainable Development Goal (SDGs) 1,2,3, & 4 beyond the reach of vulnerable people as economic recovery is yet to be achieved (United Nations, 2020). Also, social vices soared during the COVID-19 period and have continued in that trajectory in Post COVID-19 era, with increased insecurity, travelers along the roads move in fear. Also, at the peak of pandemic, medical and educational tourism reduced but now in post COVID-19, it has risen (The CBN Governor, Godwin Emefiele comment at the 4th Monetary Policy Committee Presentation Analysis during NTA News @9 Friday August, 5, 2022). However, the CBN Governor Godwin Emefiele at the 4th Monetary Policy Committee Presentation Analysis during NTA News @9 on Friday August, 5, 2022 has threatened to stop medical and educational tourism in Nigeria. Fights to reduce these social vices during and in Post COVID-19 period has continued to take toll on government's finances, hitherto budgeted for other economic development.

It is common knowledge that Nigeria's economy depends to a very large extent on crude oil export, this is because the oil sector contributes about 65 percent and 90 percent to government and total export revenues, respectively (UNCTAD stat. data based, 2019). And the advent of COVID-19 has impacted on the revenue from this sector. For example, Nigeria experienced serious economic shock due to the decline in oil prices by 55% between the end of 2019 to March 2020 (UNCTAD stats data based, 2019). Statistics shows that as at 18th March 2020, the price of crude oil dropped to US\$29.62/barrel. And the federal budget estimates for 2020 pegged oil prices at US\$57/barrel and production at 2.18 million barrels per day. If prices

continue to remain at this level, it would translate to a decline in 48 percent of expected revenue from oil sales per month. This condition could reduce fiscal revenue by close to \$10B and export earnings by \$19Billion (Economic), impact of the COVID-19 in Africa (ECF, 2019). The decline in export revenues is projected to have a combined effect of 0.55 % points drop in GDP (Gross Domestic product). The above situation surely is frustrating and to contain this, government perceivably redirected this frustration to Nigerians through increment in pump prices of fuel, electricity tariff and import duties. These have greatly affected small and medium scale businesses within the local communities in many Nigerian states. Consequently, this move ignited negative emotions and reactions from many Nigerians especially the protest by Nigerian youths tagged 'ENDSARS'. The public called for a reversal in the increase and described the action of government as arbitrary, inhumane and ante-developmental especially as it will negatively affect small and medium scale businesses. In fact, some persons wondered on the wisdom of government in these increases in the midst of these pandemic and rising poverty, unemployment and inequality in the country. Statistics reveals that Nigeria is ranked as the poverty capital of the world with frightening 23% unemployment rate, where over 90 million citizens live in abject poverty and many more living on less than ₦ 500 a day (Ogunwale, Oladele, Adedeji, Nwokolo & Afolabi, 2020).

Reduced international relations due to border closures and lockdown on air, water and road travels had also had its impact on the economy. For example, international and local travels for conferences meeting various educational training activities were disrupted with attendant loss of time and resources. However, the use of telecommunication services increases among people as these social gathering and new gathering were made possible through webinar, zoom and video calls and conferencing. Import, export and tourism activities were also slowed down. Businessmen and women lost revenues and incurred debts and losses from levies, rents and taxes. In a bid to cushion some effect of these losses, the Central Bank of Nigeria in line with global practice announced a ₦3.5 Trillion stimulus package to weather the economic impact on COVID-19 pandemic. These include credit line of ₦ 1 Trillion to boost manufacturing and import substituting ₦50Billion package for impacted households and Small Medium Enterprises (SMEs). ₦100 Billion for healthcare loans, ₦ 1.5 trillion for building critical infrastructure (Onyekwena & Ekeruche, 2020). Similarly, the cut from 9% to 5% in the interest rate of CBN intervention programmes was generally embraced as a positive move that would impact the economy positively. Based on achieving the objectives of the Economic Sustainability Stimulus Package Plan to mitigate the effects of COVID-19 pandemic on Nigerians, federal government released ₦ 2.3 trillion to four major areas of the economy through which millions of small and medium scale businesses could be created. For example, ₦63.72 billion released to Agriculture is expected to provide 5,000,000 jobs, ₦152.4 billion released to the solar power project is expected to provide 250,000 jobs, the mass housing fund of ₦217.3 billion is expected to create 1,500,000 jobs while public works fund of ₦52 billion is expected to provide 500,000 jobs in the SMEs (Onyekwena & Ekeruche, 2020).

Generally, the consequences of COVID-19 pandemic on the economy had affected all components of aggregate demand as shown in the table below.

How the COVID-19 pandemic affected the components of aggregate demand

	Declining consumption <ul style="list-style-type: none"> Restrictions on movement such as social distancing and lockdowns Poor expectation of future income for work as in gig economy and the working poor in informal sector. Erosion of wealth and expected wealth due to a fall in the value of assets such as stocks and home equity
	Declining investment <ul style="list-style-type: none"> Uncertainty discourages forward looking decisions Poor expectation of future profitability of investment spending
	Increasing government expenditure <ul style="list-style-type: none"> Expansionary fiscal policy Increase in health care expenditure
	Declining net exports <ul style="list-style-type: none"> Disruption in supply chain for exports Border closure to non-essential trade Limited markets for exports due to fall in global demand
Keys	Decreasing Increasing

Source: Onyekwena & Ekeruche (2020)



COVID-19 Impact on Education and Sustainable Post COVID Recovery Strategy

A review of the challenges, recovery actions and targets estimated to be achieved by end of 2021 by three education development partners; UNESCO, UNICEF and World Bank. Three priority areas for sustainable recovery are discussed as follows:

1. School closures put children's learning, nutrition, mental health, and overall development at risk. Some students, particularly girls, are at risk of never returning to school. Recovery action is to support the design and implementation of school reopening strategies that include; comprehensive services to support children's education, health, psychosocial wellbeing, and other needs. The target is to bring enrolment back to pre COVID levels.
2. Most children lost substantial instructional time and this may affect their readiness for curricula that were age and grade appropriate prior to the pandemic. The pandemic also revealed a stark digital divide in the education system. Recovery action is threefold: (i) To support the design and implementation of large scale remedial learning at different levels of education. (2) To launch an open-access, adaptable learning assessment tool that measures learning losses and identifies learners' needs, and (3) To support the design and implementation of digital transformation plans that include components on both infrastructure and ways to use digital technology to accelerate the development of foundational literacy and numeracy skills, incorporating digital technologies to teach foundational skills could complement teachers' effort in the classroom and better prepare children or future digital instruction. The targets are also threefold; i) to ensure all schools provide remedial education. ii) to ensure all schools incorporate social-emotional learning into their teaching, iii) to ensure all schools incorporate digital technology to improve foundational literacy and numeracy skills. The partners noted that these strategies are aspirational targets that they plan to support countries to achieve during the year 2021 and beyond (Post COVID).
3. The pandemic also disrupted the teachers' routine. Many teachers found themselves completely behind schedule; they really need to make up for loss of instructional time. The health of teachers was also at risk during the pandemic, therefore, face-to-face (traditional teaching) became inadequate to support learning during the closure. Recovery actions mapped out include; Advocacy for teachers to be prioritized in covid-19 vaccination campaigns, after frontline personnel and high risk populations, and provide capacity development on pedagogies for remedial learning and digital and blended teaching approaches. The targets are: 1) Teacher is prioritized for vaccination. 2) All teachers receive training or other support to incorporate remedial education approaches and social-emotional learning into their pedagogy.

These education recovery plans enumerated above are the mission that the trio of UNESCO, UNICEF and the World Bank set out to help all countries achieve in post COVID-19 era.

COVID-19 Impact on the Economy and Sustainable Post COVID Recovery Strategies

COVID-19 pandemic in the world is adjudged an unprecedented crisis; therefore, it will require an unprecedented response through the collaborative effort of both the public and private sectors to contain the outbreak, save lives and protect livelihoods of the poor and vulnerable (World Bank, 2021). Based on the economic analysis of the impact of COVID-19 in Nigeria, the World Bank has outlined five critical areas that can help the country recover from the crisis. These are:

1. Containing the outbreak and preparing for a more severe outbreak.
2. Enhancing macroeconomic management to boost investor confidence.
3. Safeguarding and mobilizing revenues.
4. Reprioritizing public spending to protect critical development, expenditure and stimulate economic activity.
5. Protecting poor and vulnerable communities.

Based on the above, suggested reform areas to focus on, include:

1. A focus on addressing smuggling as part of a broader agenda around facilitating trade, improving security and preventing counterterrorism.
2. Investing in labour intense agriculture infrastructure to provide for short-term jobs.
3. Increasing the processing capacity of agricultural produce by farmers and producer organizations.



4. Encourage the return of skilled emigrants and improve channels for safe, regular and orderly emigration for Nigeria's development.

The World Bank, still on Nigeria's development update notes that if the reforms and strategies are implemented that Nigeria would be able to mitigate the negative effects of the pandemic, while generating more jobs and improved employment.

In the light of the plans above, the Organization for Economic Cooperation and Development (OECD) (2020) emphasized that sustainable recovery from COVID-19 seeks to balance human needs and economic well-being with cultural traditions and respect for earth's natural resources, stressing that a more resilient economy depends on a shift to sustainable practice. An overview of some sustainable practices to recover from covid-19 pandemic from the global front has been in the following areas; food security, Cooperatives and Mutual Enterprises (CMEs) and provision of decent work agenda.

Food security strategy

Food security can be defined as a condition when all people, at all times have physical and economic access to sufficient, safe and nutrition that meets their dietary needs and preferences for active and healthy life (FAO in Senaratne et al. 2021). Among the international organizations who responded to the call for World Food security is the World Bank. Their focus in Nigeria is to boost food and nutrition security, reduce risks, and strengthen food systems. The World Bank approved a \$570 million in September 2021, for regional programmes in West Africa to improve food system resilience, promote intra-regional value chains, and build regional capacity to manage agricultural risks (Senaratne et al. 2021).

Cooperatives

Cooperatives have proven to be a very important tool that can be used in the war against poverty, especially one exacerbated by a crisis like covid-19 pandemic (Mohit, 2021). According to Mohit (2021) Cooperatives and Mutual Enterprises (CMEs) in many crisis situations have the capacity to considerably enhance the ability of the affected population and the indirect beneficiaries to cope with crisis and to prevent or reduce the impact of a crisis by helping both to raise awareness on cooperatives (Mohit, 2021). For example, the Maldives Fishermen's Association professionalized the Maldivian fishery industry, setting in 2020 as the target for educating and certifying 30 percent of Maldivian fishing skippers. Their initiative is in line with global target 12.3 to half per capital global food waste at the retail and consumer level and reduction of food losses along production and supply chain, including post harvest losses, by 2030 for sustainable recovery from the impact of COVID-19. In Nigeria, the promotion of development association has as its objectives the creation of economically viable enterprises and individuals which can stand on their feet without perpetual subsidy and can make a positive contribution to the growth of real income and betterment of living standards (Ebonyi & Jimo, 2002). The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) was formed with a view to facilitating access to credit, technology and market for the development association, and small-scale enterprises. The participating banks are to liaise with SMEDAN to execute SMEs. This is a part of the economic development plan of adopting a private sector led development strategy (Egbon, 2004). A psychological counseling of the vulnerable groups is necessary to help promote their attitudes towards accepting self-reliant poverty alleviation initiatives instead of waiting for or depending on alms always (Orji, Attah & Adie, 2022).

Provision of Decent Work Agenda.

This has been initiated by many cooperatives supported by International Labour Organization (ILO) to provide work opportunities through training and education programmes, cooperatives make a strong contribution to economic and social rights. An example in the Indian Farmers Fertilizer Cooperative (IFFCO) which has pledged on the Co-ops for 2030 platforms implement afforestation projects on 29,419 hectares of wastelands, which will generate employment for rural populations and enhance sustainable recovery from deforestation. The importance of CMEs in economic recovery cannot be overemphasized. OECD (2020) opined that, for the economic recovery from the COVID-19 crisis to be long lasting and robust, a return to business as usual and environmentally destructive investment patterns and activities must be avoided. Economic recovery packages should be designed to build back better. This requires doing more than getting economies and livelihoods quickly back on their feet (OECD, 2020). Recovery policies also need to activate safety and developmental changes that will decrease the odds of future shocks and increase society's resilience when they do occur (OECD, 2020).



Conclusion

COVID-19 experience in Nigeria is an eye opener for all stakeholders. The educational and economic sectors were really challenged because critical adjustments in daily endeavours had to be initiated in order to cushion the effects of COVID-19 on daily work activities and living. In post COVID-19 era, the objectives of government; public and private sectors are to initiate policies that engender sustainable economic recovery from the ruins caused by covid-19 pandemic on society and people. This paper has made some useful suggestions on sustainable recovery strategies that will help Nigeria overcome the negative impact of COVID-19 on the economy and educational system.

Suggestions

Based on the preceding discourse, the following suggestions were made;

1. The Nigerian government at all levels should ensure that they implement the economic recovery plan and judiciously manage funds allotted to achieve the set plans.
1. Massive sensitization and disclosure of information to the public on plans set to help people and businesses recover from the harm done by COVID-19 pandemic disease outbreak.
2. Massive sensitization and counseling of the vulnerable groups on adaptive mechanisms that would enhance their adjustment in times of economic crisis.
3. The infrastructural decay in the Nigerian educational system which was made very obvious by the outbreak of COVID-19 should be addressed by governments at all levels to enhance quality teaching and learning and close the gaps in learning created during COVID-19 era due to closure of schools.

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