



**REVIEW ARTICLE**

# Exploring the Impact of COVID-19 on Communities and the Mitigation Efforts

Okojie OH

Department of Community Health, College of Medical Sciences, University of Benin, Benin City, Edo State, Nigeria.

## Keywords

Communities;

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## ABSTRACT

**Background:** The Coronavirus disease 2019 caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has triggered a pandemic of a proportion that was only seen over a century ago when the Spanish flu ravaged the world in 1918. The focus of this review was to explore the impact of COVID-19 on communities and the mitigation efforts.

**Discussion:** The COVID-19 pandemic has triggered an enormous impact on various communities; including geographical, working, those who have fled conflict areas and academic/research communities with a global surge in the demand for health and social services. There are also some positive impacts such as the boom in research output and global collaboration while bringing to the fore the very important role of public health and community medicine specialty.

**Conclusion:** The COVID-19 pandemic has exposed the enormous deficiencies in health systems including the social and welfare support of various communities. There is need to sustain mitigation efforts that have been instituted and prepare for future pandemics as connected cycles while learning from the past ones.

## Correspondence to:

Prof Obehi Okojie  
Department of Community Health,  
College of Medical Sciences  
University of Benin,  
Benin City, Edo State, Nigeria.  
E-mail: [okojieobehi@yahoo.com](mailto:okojieobehi@yahoo.com)  
Phone number: 08023381084

## INTRODUCTION

The world paid little attention to Coronavirus disease 2019 (COVID-19) caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which was first reported in Wuhan, China in December 2019. This virus spread

across the world, necessitating the World Health Organization (WHO) to describe it as a Public Health Emergency of International Concern (PHEIC) on 30<sup>th</sup> January 2020 and declaring it a pandemic on 11<sup>th</sup> March 2020. This declaration is the WHO's highest level of alarm – a rallying call to all countries to immediately take

notice, and take action.<sup>1</sup> The SARS-CoV-2 virus has caused a pandemic of a proportion only seen over a century ago when the Spanish flu ravaged the world in 1918.<sup>2</sup> This virus causes an acute respiratory syndrome with varying involvement of other organ systems. Every individual can be infected by the virus, however, adults aged 50 years and above and those with underlying medical conditions like cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, or cancers are more likely to develop serious illness.<sup>1</sup>

The first case of COVID-19 in Nigeria, imported from Italy, was confirmed on 27th February 2020. Subsequently, there was an increasing number of COVID-19 cases with the peak of the first wave at 790 cases on 1 July 2020 and the second surge as high as 2,314 on January 22, 2021, with total confirmed cases of 143,516 and total deaths of 1,710, as of February 12, 2021. These figures are considered to be a significant underestimation due to sub-optimal testing of the population for COVID-19. Lagos State remains the epicenter with almost a third of the country's total number of cases, and there has been progressive spread to all the other states of the

country. The rapid rate of spread during the second and third waves in many countries, including Nigeria, has been alarming.<sup>3</sup>

COVID-19 is a disease that is still being studied with several unanswered questions. While it is now known that the immunological and inflammatory responses in the pathophysiology of the disease are the core drivers of the severity of the illness, controlling these have been more problematic in individuals with pre-existing morbidities. There is no known definitive drug treatment nor was there a vaccine for the disease until December 2020 when the WHO gave Emergency Use Authorisation for the Pfizer/BioNtech vaccine.<sup>4</sup> The various pharmaceutical measures to prevent and/or cure the disease have not produced total and prompt elimination of SARS-CoV-2. Prior to this, some non-pharmacological interventions (NPIs) were proposed and widely recommended in the battle against COVID-19, mainly to prevent its spread.<sup>5</sup> These were the mainstay of response being used across the world to flatten the epidemiologic curve with some successes in reducing the incidence and mortality of the disease. These NPIs measures

include physical (social) distancing, hand hygiene with soap and water or alcohol gel, cough etiquette, use of face masks, isolation and quarantine, closing schools and banning crowds, among others. These measures are best used in combination and simultaneously. The evidence is that they should be instituted early in the pandemic and for sustained periods.<sup>6</sup> In order to respond to COVID-19, many countries including Nigeria introduced lockdown measures such as travel restrictions, closures of borders and places with large gatherings such as educational institutions, workplaces, churches/mosques, etc. These measures were instituted to reduce and curtail the spread of the virus. The direct effects of the disease in terms of morbidity and mortality as well the indirect effects due to countries' responses such as the lockdown measures can impact on individuals, groups and communities everywhere.

A community is a social unit (a group of people) with commonality such as norms, religion, values, customs, or identity. Communities may share a sense of place situated in a given geographical area (e.g., a country, village, town, or neighbourhood) or in

virtual space through communication platforms. Broadly speaking, there are, four different types of communities and these can be classified according to the purpose that brings them together. These include: Place - communities of people brought together by geographic boundaries; Practice - communities of people in the same profession or occupational group like health workers, military forces, oil workers, etc. Circumstance - communities of people brought together by external events/situations like Internally Displaced Persons (IDPs) or refugees; and Interest - communities of people who share the same interest or passion such as researchers, academic community, etc.

The focus of this review was to explore the impact of COVID-19 on these different community groups and the mitigation efforts.

## **IMPACT ON GEOGRAPHICAL COMMUNITIES**

The coronavirus pandemic has had a significant impact on the Nigerian populace due to the virus itself and the secondary effects of the lockdown measures introduced in March 2020. These measures such as travel

restrictions, lockdowns, and restrictions on economic and social activities, aimed at curbing the spread of COVID-19 affected the livelihoods and food security of rural and urban households in Nigeria. These lockdown measures resulted in an extended period of time when schools and businesses were closed, large proportions of those in employment either lost their jobs or had to work from home. There was also unprecedented disruption to community, recreational, cultural and religious gatherings and activities. Alongside the direct and immediate health effects from coronavirus, the pandemic has caused negative effects on communities e.g., increased levels of poverty and financial pressure, social isolation, and limited access to education and employment. The burden of impacts is higher in poor countries, and on certain groups within countries. The most susceptible groups include children, women and young girls; the disabled and the elderly.

Surveys of households across the country carried out by the National Bureau of Statistics (NBS)<sup>7</sup> and International Food Policy Research Institute (IFPRI)<sup>8</sup> in 2020 showed that

78% to 88% of the households reported that they lost their source of income due to the pandemic which resulted in reduction of food consumption in about 51% to 66% of them.<sup>7</sup> The COVID-19 pandemic significantly worsened the food security situation of many households in Nigeria, especially poorer households as more than 80% of surveyed households worried about not having enough food and 77% ate less food than they thought they should.<sup>7</sup> Due to lack of money, between 35% and 59% of households reported difficulties in purchasing staple foods like yams, rice, and beans in the seven days prior to the interview and 75% of households reported an adult in the household skipping a meal, while 58% reported the household running out of food in April/May 2020. Increases in food prices were felt by 85% of the households compared to only 19% of all households between January 2017 and January 2019.<sup>8</sup>

Even without the added impact of the pandemic, the world was not on track to meet Sustainable Development Goal 2 to end hunger and all forms of malnutrition. Reports from the United Nations Children's Fund (UNICEF) in the early months of the pandemic

suggest a 30% reduction in the coverage of essential nutrition services in low and middle-income countries.<sup>9</sup> More vulnerable children are becoming malnourished due to the deteriorating quality of their diets and the multiple shocks created by the pandemic and its containment measures. With these added shocks, children's dietary quantity and quality are expected to deteriorate below the already poor situation that existed pre-COVID-19, when only 29% of children aged 6 to 23 months were fed a minimally diverse diet and only 53% received the minimum meal frequency.

In July 2020, UNICEF, with the Food and Agricultural Organization (FAO), the World Food Programme (WFP) and the World Health Organization issued a Call to Action, warning of the pandemic's potential to worsen the pre-existing crisis of malnutrition and tip an additional estimated 6.7 million children over the edge to become wasted during its first year. It was estimated that 80% of these will live in South Asia and sub-Saharan Africa.<sup>10</sup> This is in addition to the 47 million children affected by wasting and 144 million affected by stunting in 2019 before the pandemic.<sup>9</sup>

To reduce the spread of the virus, educational institutions were closed in many countries including Nigeria, leaving more than one billion school children and youths out of school. The disruption in education and learning could have medium and long-term consequences on the quality of education, as well as the mental health associated with physical interaction, and networking with peers, colleagues and instructors. Though the efforts made by teachers, school administrations, local and national governments to cope with the unprecedented circumstances should be recognized.

<sup>11</sup> Several schools have moved rapidly to transition various courses and programs from face-to-face to online delivery mode particularly in developed countries. However, in many developing countries there was reduction in educational activities at all levels since March 2020.

Girls are disproportionately affected and the pandemic threatens to undo decades of progress in gender equality.<sup>12</sup> Millions of girls might not be going back to school, putting them at risk of adolescent pregnancy, child marriage and violence. About 2.5 million girls will

be at risk of marriage by 2025 because of the pandemic - the greatest surge in child marriage rates in 25 years. Together with the 58.4 million child marriages taking place on average every five years, this amounts to a staggering 61 million child marriages by 2025.<sup>13</sup> The risk of adolescent pregnancy in 2020 was highest for girls in East and Southern Africa (282,000), followed by West and Central Africa (260,000) and Latin America and the Caribbean (181,000).

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The pandemic has also caused severe setback to religious practices and social activities. Many religious institutions were closed and their activities cancelled in efforts to prevent large gathering and limit the spread of virus. For example, the pandemic caused the cancellation of the annual pilgrimages of Hajj in late July 2020 and Pope John Paul had to address an empty hall at the Vatican during the Easter in April 2020.<sup>14</sup>

## **IMPACT ON WORKING COMMUNITIES**

The COVID-19 pandemic has triggered the deepest global recession since World War II. Developing countries are being hit hard, with as many as

150 million people at risk of being pushed into extreme poverty 2021. A joint statement by the International Labour Organization (ILO), Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD) and World Health Organization,<sup>15</sup> revealed that the COVID-19 pandemic presents an unprecedented challenge to the world of work. The economic and social disruption caused by the pandemic is devastating with tens of millions of people at risk of falling into extreme poverty. Nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. As breadwinners lose jobs, fall ill or die, the food security and nutrition of millions of women and men are under threat, with those in low-income countries, particularly the most marginalized populations, which include small-scale farmers and indigenous peoples, being the most affected.<sup>15</sup>

Informal economy workers are particularly vulnerable because the majority lack social protection and access to quality health care and have lost access to productive assets. For example, border closures, trade restrictions and confinement mea-

asures have been preventing farmers from accessing markets for buying inputs and selling their produce, and for agricultural workers from harvesting crops; thus, disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets.<sup>15</sup> With low or irregular incomes and a lack of social support, many of these agricultural workers are spurred to continue working, often in unsafe conditions, thus exposing themselves and their families to additional risks. Further, when experiencing income losses, they may resort to negative coping strategies, such as distress sale of assets, predatory loans or child labour. In the COVID-19 crisis, there is a convergence of food security, public health, and workers' health and safety. Therefore, guaranteeing the safety and health of all agri-food workers (from primary producers to those involved in food processing, transport and retail, including street food vendors) as well as better incomes and protection, will be critical to saving lives and protecting public health, people's livelihoods and food security.<sup>15</sup>

### **Working from home**

The COVID-19 pandemic has resulted in changes to the working arrangements of millions of employees who are now based at home and may continue to work at home (WAH), in some capacity, for the foreseeable future. The impact of this on health outcomes is strongly influenced by the degree of organisational support available to employees, colleague support, social connectedness (outside of work), and levels of work to family conflict.<sup>16</sup>

Overall, women were less likely to experience improved health outcomes when working at home. It is likely that WAH will continue to some degree for the foreseeable future; consequently, organisations will need to implement formalised WAH policies that consider work-home boundary management support, role clarity, workload, performance indicators, technical support, facilitation of co-worker networking, and training for managers.<sup>16</sup>

### **Firms, jobs, and women's employment**

Containment measures have forced many businesses to close down during the pandemic. In the

developing world, many firms and workers, mostly women, operate in a large informal sector, often outside the scope of formal social protection, making them particularly vulnerable to restrictions imposed as part of the response to COVID-19. This has not only threatened the livelihoods that are dependent on this work, but also gender equality, with a disproportionate effect on women's employment.<sup>17</sup>

### **Reopening the economy and scarring effects**

Following the lifting of the lockdown, most traders and businesses have reopened. Despite businesses reopening, working hours have not yet recovered to their pre-pandemic levels. An estimated 11.1% of working hours were lost in low-income countries in 2020/Q2 compared to 2019/Q4. This reflected both shorter working hours and "being employed but not working", as well as unemployment or inactivity.<sup>17</sup>

In Lagos State, Nigeria the working hours of traders after the lockdown were at just 38% of the previous levels. Following the end of the lockdown, shorter working hours were reported by 35% of respondents in

Cote d'Ivoire, 29% in Ghana, and 15% in Colombia. Farmers in India and Kenya reported a decrease in labour activity, including not being able to work in their fields or other people's fields.<sup>17</sup> In addition, persistently low demand is contributing to low revenues and profitability, consequently slowing any corresponding recovery in labour activity and employment. In Lagos, revenues in May 2021 were about 72% of the levels in February 2020 and in Sierra Leone, weekly profits were about 50% lower than before the nationwide lockdown.<sup>17</sup>

### **Impact on healthcare workers**

It has been estimated that between January 2020 and May 2021, out of the 3.45 million COVID-19-related deaths reported to WHO, only 6643 were in HCWs. However, at the most conservative level, a population-based estimate indicates that about 115,500 HCWs (ranging between 80,000-160,000) out of the global healthcare workforce of 135 million people could have lost their lives.<sup>18</sup> It is clear that the number of deaths among HCWs due to COVID-19 is much greater than officially reported. To date, few countries are able to provide complete counts of HCWs deaths related to

COVID-19. Countries are urged to undertake retrospective audits of deaths through verbal autopsy methods to trace and record COVID-19 related deaths of HCWs.<sup>18</sup>

The shortage of personal protective equipment (PPE) which has been reported from several countries has put many healthcare workers at risks of contracting the virus. Healthcare workers have created unconventional solutions to make up for the lack of PPE by using the resources they do have in stock. They have used plastic bags as gowns and plastic water bottle cut outs for eye protection.<sup>19</sup> The shortage of PPE is even worse for hospitals in low-income communities where these items have always been scarce commodities and it has been reported that UNICEF was only able to acquire one tenth of the 240 million masks requested by these communities.<sup>20</sup>

Review of literature revealed consistent reports of stress, anxiety, and depressive symptoms in HCWs as a result of COVID-19 with female HCWs being disproportionately affected. The frontline healthcare workers are at risk of physical and mental consequences directly as a result of providing

care to patients with COVID-19. Even though there are few intervention studies, early data suggest implementation strategies such as shorter shift lengths and mechanisms for mental health support could reduce the chances of infections morbidity and mortality amongst HCWs.<sup>21</sup> Medical staff have been reported to have greater fear, anxiety, and depression levels than administrative staff. Additionally, HCWs working on frontlines in departments more impacted by COVID-19 (i.e., Emergency Department, Intensive Care Unit and Infectious Diseases Unit) were at greater risk for anxiety and depression and psychological disorder.<sup>22</sup> Further-more, it has been revealed that access to PPE resulted in improved physical health and job gratification and ultimately led to less distress among HCWs.<sup>23</sup> However, one study found frontline healthcare workers to have significantly lower levels of burnout and were less worried about becoming ill compared to those in the “usual ward” group. The authors noted two possible explanations: frontline HCWs may perceive more control over their situation and may appreciate a closer proximity to decision-makers (with

more timely provided information) compared with the other HCWs.<sup>24</sup>

Deaths among nurses and doctors due to COVID-19 have been reported from several countries. In March 2020, at least 50 doctors were reported to have died in Italy due to COVID-19. By April 2020, 119 doctors and 34 nurses have died; two of the deaths among the nurses were suicides due to unsustainable pressure at work.<sup>25</sup> The fear of transmitting COVID-19 led many health professionals to isolate from their families for months. Working remotely and being shunned by community members further contributed to loneliness. Many healthcare workers experienced lost earnings because of cancellations in outpatient visits and elective procedures. The training of healthcare workers (e.g., medical students, resident doctors, and allied health learners) was also interrupted, leading to loss of tuition fees, missed learning opportunities, missed examinations, and potentially delayed certification. Home healthcare workers experienced additional challenges that exacerbated the inequities they face as a marginalised workforce, including limited or no PPE, varying levels of employer

support, and the difficult choice of working with its attendant risk or losing wages and benefits.<sup>26</sup>

This is an alarming picture of the impact of the pandemic on HCWs and emphasizes the need for governments to provide HCWs with better protection (including access to vaccines, personal protective equipment, training, testing and psychosocial support) and decent work conditions (including adequate remunerations and protection against excessive workloads).<sup>18</sup> The pandemic has brought to the fore that the Nigerian government must increase investment in public health, from funding mass vaccination for COVID-19 to making the health system better prepared to prevent and respond to the next, inevitable, pandemic. At the heart of this is investing in universal health coverage to make health for all a reality.

### **IMPACT ON PEOPLE WHO HAVE FLED CONFLICT AREAS**

Over a decade of armed conflict in northeast Nigeria has resulted in large-scale population displacements and massive humanitarian needs. As the number of COVID-19 cases grows, many Nigerians feel the immediate

economic impact of the restrictions on movement. This is worse for the displaced persons, who have lost everything, including their social support networks. The COVID-19 pandemic has exacerbated the threats facing affected families, with lockdowns and other COVID-19 prevention measures disrupting the food system and impacting already weak basic service infrastructure. As a result, more than 800,000 children are expected to suffer from acute malnutrition in 2021.<sup>27</sup>

The impacts of this pandemic will be felt for years to come, but it is already clear that COVID-19 has exacerbated poverty and inequality in conflict-affected countries, adding massive pressure to already overwhelmed social and health systems. The result is more families without shelter, unable to meet even their most basic needs of food and water, and more children facing the prospect of becoming severely malnourished.<sup>27</sup>

In countries at conflict, millions already live with little or no health care, food, water and electricity, as well as volatile prices and destroyed infrastructure. COVID-19 pandemic could set in motion a vicious cycle of

lost income, deepening poverty and hunger.

In addition, the impact of measures to curb COVID-19 is bound to disproportionately affect certain groups, including victims and survivors of domestic violence, homeless women, older women and women and girls with disabilities. Women and girls who are deprived of their liberty, displaced, refugees, asylum seekers, migrants and those living in conflict-affected areas are particularly at risk. For example, evidence from refugee camps and humanitarian assistance zones confirms that where families or individuals are held or housed in close proximity for extended periods of time, rates of violence against women and violence against children are high.<sup>16</sup> As distancing measures are put in place and people are encouraged to stay at home, the risk of intimate partner violence is likely to increase. Staying at home is not the safest option for many women and children, as the home is often where they are at risk of sexual and other forms of violence, including homicide, physical abuse, sexual abuse, psychological abuse, economic abuse, neglect and/or coercive control. It is

important to recognize that children who witness abuse are themselves victims of violence.

Economic abuse is a prevalent correlative to other forms of gender-based violence against women and girls (GBVAWG). In the context of the unemployment and other adverse economic impacts associated with the COVID-19 pandemic, women and their children may be particularly vulnerable to economic abuse and associated deprivations during this time. There may be particular risks for women who cannot purchase essential goods (food and medicine) because they are prevented by an abusive partner from leaving their home, or fear leaving their children with the abusive partner, or are denied the funds for those purchases.<sup>28, 29</sup> In some cases, adolescents engage in violent behaviours in the home. Mothers are disproportionately targeted by this violence. Despite the prevalence of this form of violence, it is not always recognised by the criminal justice system. The risks to women's safety are likely to be greatly increased by the context in which a violent adolescent child is in enforced lockdown at home.<sup>28, 29</sup> Therefore,

without coordinated responses from governments, international institutions and humanitarian and development actors, economic hardships brought about by the COVID-19 pandemic could foster a new aid-dependent generation in countries at conflict.<sup>27</sup>

### **IMPACT ON THE ACADEMIC AND RESEARCH COMMUNITY**

The COVID-19 pandemic has resulted in unprecedented research worldwide. The race to understand and combat the coronavirus has led to a boom of research output and global collaboration on a scale that have ever been seen before.<sup>30</sup> For example, the Springer Nature COVID-19 resource centre provides researchers access to over 19,000 coronavirus-related articles and book chapters free of charge, and which were downloaded more than 62 million times between March and July, 2020.<sup>30</sup> COVID-19 mitigation and crisis resolution are dependent on high-quality research aligned with top priority societal goals that yields trustworthy data and actionable information. While the highest priority goals are treatment and prevention, biomedical research also provides data critical to manage

and restore economic and social welfare.

As at 3<sup>rd</sup> May 2020, 1133 COVID-19 studies, including 148 related to Hydroxychloroquine, 13 related to Remdesivir, 50 related to vaccines, and 100 related to diagnostic testing, were registered on ClinicalTrials.gov; and 980 different studies on the World Health Organization's International Clinical Trials Registry Platform (WHO ICTRP), made possible, at least in part, by use of data libraries to inform development of antivirals, immune-modulators, antibody-based biologics, and vaccines.<sup>31</sup> There were many outputs of research including different innovations from the great to the mundane, with researchers laying claims to all kinds of discoveries from drugs, vaccines and medical equipment. It was also observed that as prescriptive orthodox models fracture, previously hidden talent and ingenuity of Africa's youth were revealed.

At the start of 2020, it could not have been possible to imagine that sub-Saharan Africa would likely be home for inventions in drones, robots, contact tracing apps, non-invasive testing kits, portable hands-free

sanitation chambers, oxygen-making machines, genome sequencing, AI-powered healthcare chat bots and so much more. Africa is managing the complexity of the world's most denting pandemic and looking within for solutions against it; propagating a showcase of talent, investing in creativity, resilience, and resourcefulness.<sup>31</sup>

A community of African innovators stepped up support to the continent's fight against COVID-19 pandemic by collaborating with the World Health Organization (WHO) to develop solutions to help contain the spread of the virus. On 20 May 2020, the WHO Africa region hosted the first in a series of virtual sessions for innovators across the region to showcase home-grown creative solutions aimed at addressing critical gaps in the response to COVID-19. Eight innovators from Ghana, South Africa, Nigeria, Guinea and Kenya presented their pioneering solutions, all of which have already been implemented in their respective countries, with significant potential to be scaled up further across the region. The innovations ranged from interactive public transport contact tracing apps and dynamic data

analytics systems to rapid diagnostic testing kits, mobile testing booths and low-cost critical care beds.<sup>31</sup>

The University of Jos, on 11<sup>th</sup> January 2021 endorsed a herbal remedy allegedly effective in providing immunity against the deadly COVID-19 disease and advised staff to buy and use it. However, the National Agency for Food and Drug Administration and Control (NAFDAC) prohibited the university from further production, promotion and sale as the product failed to go through the required procedures.<sup>32</sup> The Malagasy Institute of Applied Research also produced Covid-Organics, a herbal mixture from the artemisia plant. Despite the World Health Organization's (WHO) warning against using untested remedies, President Andry Rajoelina of Madagascar launched Covid-Organics with great fanfare in April, 2020.<sup>33</sup>

### **Projected importance of Public Health & Community Medicine**

The pandemic also brought to light the importance of public health and community medicine. A specialty that has been largely misunderstood, at times disregarded and even disparaged and overlooked. The role of

public health is largely invisible and unrecognized by society, not money making but it is lifesaving.

Worldwide, public health specialists were at the forefront of curtailing this global crisis. In Nigeria, those at all levels of health care delivery - primary, secondary and tertiary including those in the Ministries, Department and Agencies (MDAs) were mobilised to prevent the spread of the disease. They became the only hope of stemming the disease as there was no known curative or preventive measures and the hope of finding one was slim. These included public health physicians and nurses, epidemiologists, biostatisticians, social scientists, among others. These are the people who have been working in the background to keep all healthy. They produce the statistics and models that track how the disease is progressing through countries, contact tracing and surveillance of contacts of the infected.

### **COVID-19 Infodemic**

The Coronavirus disease (COVID-19) is the first pandemic in history in which technology and social media are being used on a massive scale to keep people safe, informed, productive and

connected.<sup>34</sup> With growing digitization leading to an expansion of social media and internet use, information can spread more rapidly. This can help to more quickly fill information voids but can also amplify harmful messages. This infodemic which includes too much information, false or misleading information can undermine the global response and jeopardizes measures to control the pandemic.<sup>34, 35</sup> It causes confusion and risk-taking behaviours that can harm health. It also leads to mistrust in health authorities and undermines the public health response.<sup>34, 35</sup> Without the appropriate trust and correct information, diagnostic tests go unused, immunization campaigns (or campaigns to promote effective vaccines) will not meet their targets, and the virus will continue to thrive.<sup>34</sup> This has necessitated the WHO and other partners to call on Member States to develop and implement action plans to manage the infodemic by promoting the timely dissemination of accurate information, based on science and evidence, to all communities, and in particular high-risk groups; and preventing the spread, and combating, mis- and disinformation while respecting freedom of expression.<sup>34</sup>

## **MITIGATION EFFORTS AT COVID-19**

The governments of various countries have tried to mitigate the effects of COVID-19 on different communities. This has been done in collaboration and with the support of various international and indigenous partners.

### **United Nations Children's Fund:<sup>36</sup>**

The United Nations Children's Fund (UNICEF) is deeply concerned about the health and well-being of 10.4 million children suffering from acute malnutrition in countries or regions experiencing dire humanitarian crises while also grappling with intensifying food insecurity and the deadly COVID-19 pandemic. To save the lives of these children, UNICEF is supporting early detection at the household and community levels and providing treatment for the most serious forms of malnutrition in the communities and health facilities. UNICEF is also supporting preventive interventions, such as infant and young child feeding, counselling, growth monitoring, and vaccinations. In collaboration with the government, other United Nations agencies and non-governmental organizations, UNICEF

is targeting the most vulnerable populations in Nigeria in 2021, including internally displaced persons and host communities affected by conflicts and natural disasters. The strategies include continuous sensitization of communities, including training for mothers and caregivers on screening children for malnutrition.

**Central Bank of Nigeria:** <sup>37</sup> The lockdown and restrictions instituted to stem the pandemic shut down the economy and the worst hit were the Small and Medium-sized Enterprises (SMEs). In response to this, the monetary authority, the Central Bank, proposed to provide support to affected households, businesses, regulated financial institutions and other stakeholders in order to reduce the adverse economic impact of the COVID-19 outbreak. The Central Bank provided support in the following ways: Granted extension of loan moratorium on principal repayments from March 1, 2020; Offered interest rate reduction on all intervention loan facilities from 9% to 5% beginning from March 1, 2020; Offered a NGN50bn (US\$131.6m) targeted credit facility to hotels, airline service providers, health care

merchants, among others; Provided credit support to the healthcare industry to meet the increasing demand for healthcare services during the outbreak, though this was available only to pharmaceutical companies and hospitals; Provided regulatory forbearance to banks which allowed banks to temporarily restructure the tenor of existing loan within a specific time period particularly loans to the oil and gas, agricultural and manufacturing sectors; strengthened the loan to deposit ratio (LDR) policy which allowed banks to extend more credit to the economy.

It is also noteworthy that the fiscal authorities reviewed the 2020 national budget of N10.59 trillion (US\$28 billion) which was reduced by NGN1.5 trillion (\$4.90 billion) as part of the measures to respond to the impact of coronavirus on the economy and in response to the oil price crash. The new budget was benchmarked at US\$30 per barrel from US\$57 per barrel in the previous budget.<sup>37</sup>

**Coalition against COVID-19:** <sup>38</sup> In the wake of the COVID-19 pandemic in Nigeria, the Coalition against COVID-19 (CACOVID) was formed by

private sector leaders to support the Nigerian Government's efforts to ease the economic hardship imposed on the poor masses by the lockdown. The ultimate objective of CACOVID was to work with the government in providing support in areas that would result in improved health and societal outcomes. They sought to aid the government in improving testing capability, and management of positive cases of COVID-19 in Nigeria. In addition, CACOVID was expected to provide palliatives to vulnerable members of our society, particularly those who earn daily incomes, and had been severely affected by the lockdown. As a result of these objectives, CACOVID requested and indeed received an outpouring of support from over 200 well-meaning Nigerians and corporate organizations, who provided in kind donations, as well as funds to the tune of ₦39.6 billion in support of the fight against COVID-19. In order to ensure that these funds were judiciously utilized, a transparent and accountability framework was put in place by highly rated firms of chartered accountants. KPMG Professional Services as book keepers and Messrs Ernest and Young as Auditors.

**Federal Ministry of Health:** In recognition that HCWs are among the highest population at risk of the infection, the Nigerian government put together a package for all health workers as hazard or inducement allowance for managing COVID-19 cases.<sup>39</sup> The Federal Ministry of Health (FMOH) in its Integrated Federal Health Sector COVID-19 Pandemic Response Plan intended to mitigate the effects of the pandemic by assessing and upgrading IPC capacity of all identified isolation/treatment centres in all the 36 states and FCT through training of health workers, providing Infection Prevention and Control (IPC) materials to all the isolation/treatment centers in the 36 states and FCT. It also included provision of mental health and psychosocial support for health workers as well as incentives for COVID-19 case management teams.

There was also a collaboration between the Ministries of Health and Humanitarian Services to provide palliatives to the poor and vulnerable to serve as incentives necessary for them to obey the social distancing plan. In the post COVID-19 phase, collaboration between the two ministries will provide the opportunity

for extension of health security to the poor and vulnerable by covering them in the National Health Insurance Scheme.<sup>40</sup>

Another major mitigation activity was the deployment of vaccines globally to control the pandemic.<sup>41</sup> On the 31st of December 2020, the WHO issued its first emergency use validation for a COVID-19 vaccine, making the Pfizer/BioNTech vaccine the first to be available for use. The emergency validation was seen as a positive step towards making COVID-19 vaccines globally available - a necessary step to ending the pandemic. Since then, the Moderna vaccine and the Oxford/Astra Zeneca vaccine have also been approved for use and national vaccine rollout initiatives have begun with full force. As of the 27th of April, 2021, 1 billion COVID-19 vaccine doses have been administered. The continued roll-out of vaccines in all countries is vital to bringing the pandemic under control and preventing future outbreaks.<sup>42, 43</sup>

## **CONCLUSION**

In conclusion, the COVID-19 pandemic has triggered an enormous impact on communities with a global surge in demand for health and social

services. There were positive impacts as highlighted above but these paled into insignificance when compared to the negative ones. The pandemic has exposed the enormous deficiencies in health systems globally particularly in resource poor settings like Nigeria, in addition to poor social and welfare support for these communities. Many communities are still recovering from the impact of COVID-19 and there is need to sustain mitigation efforts that have been instituted. Epidemics are hardly ever isolated events, so we must prepare for them as connected cycles and learn more from the past ones.

## **THE WAY FORWARD**

Communities are the units of any society and so their health and welfare must be planned for and safeguarded. COVID-19 came to reveal the underbelly of a self-built and self-engineered national decadence and underdevelopment in virtually every aspect of our national life. Nigeria quickly responded to the pandemic by instituting a lockdown and within a short period of time testing centres and isolation wards sprang up in different parts of the country.

It is very crucial that the gains be sustained; these should not be closed down as was the case after the Ebola pandemic, rather they should be updated, upgraded and followed up with molecular laboratories where sequencing and other top-notch tests can be done in readiness for other pandemics that may arise. The behavioural and attitudinal changes like handwashing, cough etiquette, etc. introduced should also be sustained.

To protect various communities, the government needs to invest more in research and encourage innovations in collaboration with researches and seek relevance in serving and meeting the identified needs of the communities. In addition, as members of different communities, we must demand, as a right, a better and improved standard of living from the government and our leaders that is in line with the World Health Day theme of 2021, “Building a fairer and healthier world for everyone.”

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