

Perspective

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COVID–19 in Nigeria: Why continuous spike in cases?

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1. COVID–19 in Africa

The global emergence of the novel coronavirus disease (COVID-19) in December, 2019 became a major turning point in the global health system. As at 4th May, 2020, the Republic of South Africa, Egypt and Nigeria had 6 783, 6 465 and 2 558 confirmed cases of COVID-19, respectively[1]. Surprisingly, the number of cases in South Africa has risen to 563 598 cases with 10 621 deaths, and the number of cases in Egypt has increased to 95 666 cases with 5 035 deaths while Nigeria has 46 867 cases with 950 deaths[2]. Many African countries that were not having any reported cases of COVID-19 before now have confirmed cases while some experienced a huge spike in the number of confirmed cases due to SARS Coronavirus 2 (SARS-CoV-2). As at 10th August, 2020, the situation report of the African COVID-19 cases have surpassed the record of 1 million (1 055 964) and deaths stood at 23 582 with 744 438 recoveries[3]. The top five countries in terms of the number of confirmed cases (10 August 2020) are South Africa (563 598), Egypt (95 666), Nigeria (46 867), Ghana (41 212) and Algeria (35 156). Sadly, most African countries were inadequately prepared to combat this virus. Poor health infrastructures lead to poor disease surveillance and response systems, and the health facilities are often ill-equipped for efficient management of cases[4–6]. Hence, the inability to carry out continuous tests on suspected COVID-19 patients led to low number of cases reported from Africa in the early weeks of the spread of the virus. Most African countries shored-up capacity for testing and management of cases in view of enormous internal and externally-generated relief funds from relevant stakeholders, international, non-governmental and corporate organizations, hence, the epidemiological events show a significant increase in numbers of COVID-19 cases originating from Africa.

2. Country–specific example: COVID–19 Pandemic in Nigeria

In Nigeria, COVID-19 was first reported on the 27th February, 2020 in a 44-year old Italian diagnosed of the virus in Lagos State. As of this day (27th February, 2020), a total of 85 403 confirmed cases were reported in 49 countries globally (95.5% of the cases in China) with 2 924 deaths while only three African countries (Egypt, Algeria and Nigeria) have been affected[7]. According to the Nigeria Centre for Disease Control (NCDC), the number of COVID-19 confirmed cases rose gradually but consistently to 46 867 with 950 fatalities and 33 346 recoveries by 10th August, 2020 (Figure 1). Table 1 shows the number of cases, recoveries, fatalities and total number of active cases in the country for 20 April and 10 August 2020, respectively. Lagos State remained the epicenter of this disease in Nigeria with the highest number of cases, recoveries, deaths and total active cases[3,8].

Table 1 also reveals an unprecedented rise in the number of COVID-19 cases in each state in Nigeria. Lagos State recorded 1 845 cases on 10th May 2020 but had increased to 15 957 as of 10th August, 2020[8,9]. However, in all the 36 states and the Federal

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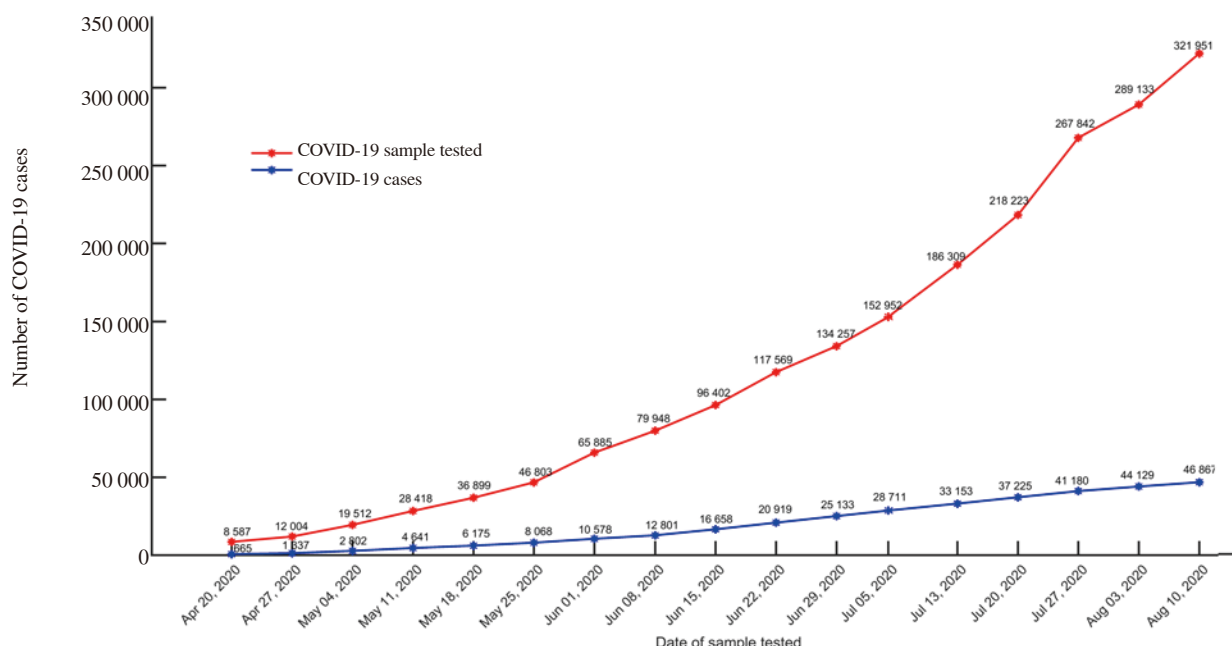


Figure 1. Increasing number of COVID-19 cases and samples tested in Nigeria.

Capital Territory (FCT), Kogi, Sokoto and Kebbi are the states with zero active case as of 10th August, 2020[9]. The number of cases rose, nationally, from 4 399 to 46 867 cases within three months. The number of deaths also increased from 143 to 950 while the number of those that have recovered increased from 778 to 33 346 within the same period[8,9]. It should be understood that the epidemiology of COVID-19 remains dynamic in Nigeria, hence there is a need for regular update as events unfold. With consideration to gender distribution, the total number of confirmed COVID-19 cases in Nigeria as of 10th May, 2020, was 2 998 (69%) males and 1 401 (31%) females. By 10th August, 2020; significant increase in total cumulative case had occurred totaling 30 117 (64%) for males and 16 750 (36%) for females[8,9]. The COVID-19 fatality rate in Nigeria, remained 3% for 10th May, 2020 but has dropped slightly to 2.0% on 10th August, 2020[8,9].

3. Why is Nigeria experiencing continuous spike in COVID-19 cases?

Nigeria is the most populous country in Africa, with approximately 200 million individuals and over 95 million people living in extreme poverty as at 14th April, 2020[9]. The continuous spike in cases of COVID-19 in Nigeria comes with a different “outlook”. It is a situation of “crisis within crisis” because, Nigeria currently battles with the challenges of being the country with highest population of poor people in the world, poor infrastructure, poor service delivery in terms of health and nutrition and a host of other challenges[10–12]. Majority of Nigerians live on daily income with meagre or no savings. The pandemic and the attendant lockdown measures in the states of the federation disrupted the livelihoods of most citizens. Although no specific empirical data exists however, anecdotal

evidence suggests an increase in the number of poor and hungry people in the country[12]. In such situation, breadwinners in the family and heads of households were under intense pressure to break the lockdown rule and go out to look for means of livelihood. This situation intensify COVID-19 transmission dynamics with implications on the increased number of cases.

Till date, a significant percent of Nigerian population does not believe that COVID-19 exist because they are yet to see infected and hospitalized persons. The erroneous speculation that people may drop dead in the streets also did not happen which further emboldened doubters on the non-existence of the virus and fueled the hypothesis that the COVID-19 pandemic was just a mere political gimmick[12]. In addition, the situation of increased extreme hunger and abject poverty in the country made many Nigerians to avoid compliance with the WHO and NCDC guidelines[10–12]. These non-pharmaceutical guidelines have previously given prescriptions on the observation of personal and respiratory hygiene including social (physical) distancing, regular washing of hands with running water or using alcohol based (over 65% alcohol) hand sanitizer, avoiding crowded spaces and the use of face masks.

Using the scale of livelihoods and public health, while people believe in health and personal safety, many Nigerians’ perceived hunger as a much dire issue that needs immediate attention in comparison with the COVID-19 pandemic[12]. Hence, we have observed the loss of personal sense of responsibility with regards to taking cognizance of the health guidelines. In addition, the enforcement of the guidelines by law enforcement agents has largely been ineffective including the ban on interstate movements as unscrupulous persons allegedly bribe the officers to conduct unpermitted inter-state travels with implications on community spread of the virus in the country. More so, we believed that the increase in testing capacity must have contributed to the observed

Table 1. Nigeria COVID-19 situation report of states with reported laboratory-confirmed COVID-19 cases, recoveries, deaths and active cases from 10th May-10th August 2020.

State	Confirmed cases		Recoveries		Deaths		Total active cases	
	10 May	10 Aug.	10 May	10 Aug.	10 May	10 Aug.	10 May	10 Aug.
Lagos	1 845	15 957	469	13 122	33	193	1 343	2 642
FCT	356	4 485	53	1 298	6	46	297	3 141
Oyo	64	2 887	15	1 423	2	31	47	1 433
Edo	79	2 398	13	2 121	4	100	62	177
Rivers	21	1 944	4	1 675	2	54	15	215
Kano	602	1 634	48	1 308	26	54	528	272
Kaduna	98	1 613	14	1 380	3	12	81	221
Delta	17	1 596	3	1 409	3	43	11	144
Plateau	17	1 584	1	662	0	22	16	900
Ogun	117	1 478	33	1 245	5	24	79	209
Ondo	15	1 289	6	763	0	28	9	498
Enugu	10	914	2	500	0	19	8	395
Ebonyi	7	870	0	793	0	26	7	51
Kwara	34	865	9	460	1	21	24	384
Katsina	156	746	16	457	10	24	130	265
Borno	185	690	12	576	16	36	157	78
Abia	2	644	1	517	0	5	1	122
Gombe	112	631	10	560	1	23	101	48
Osun	39	628	30	341	4	13	5	274
Bauchi	181	577	6	528	1	14	174	35
Imo	3	479	1	161	0	10	2	308
Benue	2	409	0	109	0	9	2	291
Nasarawa	25	370	0	223	2	8	23	139
Bayelsa	6	346	0	311	0	21	6	14
Jigawa	118	322	0	308	2	11	116	3
Akwa Ibom	17	235	10	197	2	8	5	30
Niger	6	226	2	165	0	12	4	49
Adamawa	17	185	0	90	0	12	17	83
Ekiti	15	182	4	77	1	2	10	103
Sokoto	106	154	13	138	12	16	81	0
Anambra	1	142	1	119	0	18	0	5
Kebbi	24	90	1	82	3	8	20	0
Zamfara	72	77	0	71	3	5	69	1
Taraba	17	75	1	55	0	4	16	16
Cross River	0	73	0	42	0	8	0	23
Yobe	13	67	0	57	1	8	12	2
Kogi	0	5	0	3	0	2	0	0
Total	4 399	46 867	778	33 346	143	950	3 478	12 571

Source: NCDC, 2020. Note: States including FCT are arranged in descending order by number of total confirmed cases.

continuous spike in cases of COVID-19 in the Nigeria (Table 1). The cumulative number of samples tested increased from 8 587 on 20th April, 2020 to 321 951 on 10th August, 2020.

Furthermore, large social gatherings such as weddings and burial ceremonies, which does not enhance ‘physical’ distancing supposedly lead to spread of the COVID-19 which was very common in some states of the country. In addition, the spread of COVID-19 was perceived to be fueled by mass religious purposes in some parts of the country as most people share things and keep spreading the disease. Some hypothesis also states that there is political interference which is a very huge dimension that contributed to the spread of the disease. Diagnostic testing of the citizens in such a critical time remain an essential response strategy to interrupt the transmission for the COVID-19 pandemic by informing patient

management and identifying positive cases, which can then be isolated^[13]. Although the Federal Ministry of Health prioritized testing as one of the key interventions to the COVID-19 response; however, a significant effect of this intervention was not been felt in most part of the nation. Meanwhile, the shortage of diagnostic kits and laboratory consumables keeps increasingly impacting the optimal functionality of the laboratory system in Nigeria as most vulnerable persons, those at elevated risk, and those with super spreading potential had no access to testing hence, might get infected and keep spreading the disease and or die^[14]. We therefore reiterate that poor health structure-service delivery and nutrition, poverty, habits as identified in existing literature^[15-18] from Nigeria are major contributing factor to the spike in number of COVID-19 cases.

4. Conclusion

This present perspective contributes to the debate about the ‘unprecedented spike’ in the number of COVID-19 cases in Africa with special focus on Nigeria. The rising number of confirmed cases in Nigeria is a source of worry to the public health authority because the country situation of the virus outbreak is that of “concatenated crisis” due to crisis of hunger, poor service delivery, challenging governance and reduced revenues amidst COVID-19 pandemic. With the continued effort of the health sector in curtailing the virus spread and the political will of the Nigerian government in providing succour to the citizens in this critical period of the pandemic, it is hoped that the pandemic will be eradicated and controlled in Nigeria. We recommend continued adherence to personal and respiratory hygiene protocols based on the WHO and NCDC guidelines to keep safe during the COVID-19 pandemic period in the country.

Conflict of interest statement

The authors of this paper declare that there is no conflict of interest.

Authors’ contributions

O. A. O., F. O. F. and O. A. O. conceptualized the work, O. A. O. wrote the draft manuscript with input from F. O. F., A. O. O., O. A. O. and M. A. All authors read through the work and are satisfied with the content herewith.

References

- [1] Africa Centre for Disease Control. *Africa CDC COVID-19 dashboard* (4 May 2020). [Online]. Available from: <https://africacdc.org/covid-19/> 2020a. [Accessed on 5 May 2020].
- [2] Africa Centre for Disease Control. *Africa CDC COVID-19 dashboard*. (11 August 2020). [Online]. Available from: <https://africacdc.org/covid-19/> 2020b. [Accessed on 11 August 2020].
- [3] Nigeria Centre for Disease Control (NCDC). *COVID-19 situation report* (10 May 2020). [Online]. Available from: <https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20of%20COVID-19%20outbreak%20in%20Nigeria> 2020b. [Accessed on 11 August 2020].
- [4] Otekunrin OA, Otekunrin OA, Fasina FO, Omotayo AO. Assessing the Zero Hunger Readiness in Africa in the face of COVID-19 pandemic. *CarakaTani J Sus Agric* 2020. doi: <http://dx.doi.org/10.20961/carakatani.v35i2.41503>.
- [5] Adegboye, OA, Adekunle AI, Gayawan E. Early transmission dynamics of novel coronavirus (COVID-19) in Nigeria. *Int J Res Public Health* 2020; **17**(9): 3054.
- [6] Gilbert M, Pullano G, Pinotti F, Valdano E, Poletto C, Boelle P, et al. Preparedness and vulnerability of African countries against importations of COVID-19: A modelling study. *Lancet* 2020; **395**(10227): 871-877.
- [7] Nigeria Centre for Disease Control (NCDC). *COVID-19 situation report* (29 February 2020). [Online]. Available from: <https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20of%20COVID-19%20outbreak%20in%20Nigeria> 2020a. [Accessed on 15 June 2020].
- [8] Nigeria Centre for Disease Control (NCDC). *COVID-19 situation report* (10 August 2020). [Online]. Available from: <https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20of%20COVID-19%20outbreak%20in%20Nigeria> [Accessed on 11 August 2020].
- [9] World Data Lab. <https://worldpoverty.io/index.html> [Accessed on 14 April 2020].
- [10] Otekunrin OA, Otekunrin OA, Momoh S, Ayinde IA. How far has Africa gone in achieving the Zero Hunger Target? Evidence from Nigeria. *Glob Food Secur* 2019; **22**. doi: <https://doi.org/10.1016/j.gfs.2019.08.001>.
- [11] Otekunrin OA, Momoh S, Ayinde IA, Otekunrin OA. How far has Africa gone in achieving the sustainable development goals? exploring the African dataset. *Data Brief* 2019; **27**:104647.
- [12] Kalu B. COVID-19 in Nigeria: A disease of hunger. *Lancet Respir Med* 2020; **8**(6): 556-557.
- [13] Shaker MS, Oppenheimer J, Grayson M, Stukus D, Hartog N, Hsieh EWY, et al. COVID-19: Pandemic contingency planning for the allergy and immunology clinic. *J Allergy Clin Immunol Pract* 2020; **8**(5):1477-1488.
- [14] Ibeh IN, Enitan SS, Akele RY, Isitua CC, Omorodion F. Global impacts and Nigeria responsiveness to the COVID-19 pandemic. *Int J Health Med Sci* 2020; **6**(4): 27-45.
- [15] Omotayo AO, Oggunniyi AI, Tchereni BH, Nkonki-Mandleni B. Understanding the link between households’ poverty and food security in South West Nigeria. *J Dev Areas* 2018; **52**(3): 27-38.
- [16] Omotayo AO. Economics of farming household’s food intake and health-capital in Nigeria: A two-stage probit regression approach. *J Dev Areas* 2017; **51**(4):109-125.
- [17] Omotayo AO. Economic synergy between rural off-farm income and households’ poverty in Ekiti State, Nigeria. *J Hum Ecol* 2016; **56**(1-2): 99-106.
- [18] Omotayo AO, Aremu BR, Alamu OP. Food utilization, nutrition, health and farming households’ income: A critical review of literature. *J Hum Ecol* 2016; **56**(1-2) :171-182.