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# Easing of lockdown measures in Nigeria: Implications for the healthcare system



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#### ABSTRACT

The year 2020 was ushered in with a historical novel virus (COVID-19) pandemic in a manner that the world has never witnessed before. The human-to-human transmission rates of the virus are not only alarming and worrisome but also, the respiratory dysfunction and unwavering deaths it caused have risen global concerns. We employ the daily situation data on reported cases of COVID-19 to explicate the implications of the lockdown lifting in Nigeria using both qualitative and descriptive statistics. The study is particularly motivated by the urgency of need to inform policymakers and the government on the pending danger of an unplanned phased lifting of lockdown, which contravenes medical standards at the local and international fora. Of the three episodes of COVID-19 identified in Nigeria, the easing up phases witness the highest cases of the virus with the addition of over 32,000 in just 73 days. Besides, there are clear indications that the pre-planning processes that led to easing the lockdown did not adhere to the global practices and guidelines as stipulated by WHO. Every day of the easing phase of the lockdown has witnessed an increasing number of cases indicating the possibility is that the COVID 19 cases may escalate in future dates. By implication, the healthcare system is at the risk of being overwhelmed and thus unable to rescue the situation which could further aggravate the number of untimely death afflicting the citizens.

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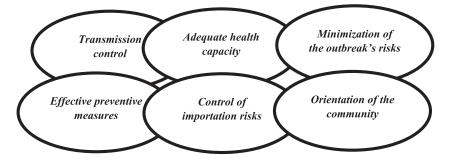
#### Introduction

The last two decades have recorded unprecedented challenges from various infectious diseases. At the early period of this millennium, the outbreak of SARS was reported in China, followed by the resurgence of Ebola in the mid-millennium in Guinea, after its earlier occurrence in 1976 in South Sudan and DR. Congo. Unexpectedly, the year 2020 was ushered in with a historical novel virus (COVID-19) pandemic [1], in a manner that the world has never witnessed before. The human-to-human transmission rates of the virus are not only alarming and worrisome but also, the respiratory dysfunction and unwavering deaths it caused have risen global concerns. Hence, COVID-19 was declared a global pandemic on March 11, 2020, by WHO [2,3] after having initially recognized it as a "Public Health Emergency of International Concern (PHEIC)" on January 30, 2020. While several measures have been executed to either halt the ravaging impacts of the novel virus or minimize them significantly, the option of lockdown seems to be mostly adopted globally. With Nigeria facing the most challenging stage of

COVID-19 virus, the government adopted the lockdown as a measure to address the situation. However, the economic consequence of this decision forced the government to make an unconditional turnaround in easing the lockdown despite calls from practitioners and health organizations on the frontline to review the decision painstakingly considering the danger to the lives of the populace. More so, there are mixed feelings that the decision to ease the lockdown gradually may further aggravate the current situations of COVID-19 in the country while others perceived the opposite. To enhance adequate decision on whether to revise the phased lifting of lockdown or not, there is need for empirical justification in the light of the country. Consequently, this study seeks to fill this lacuna by assessing the impacts of the gradual easing of lockdown in Nigeria on the daily cases of COVID-19 and the ensuing effects on the healthcare system. It aims to answer the question of whether the country was ready for the easing up of the lockdown or not before embarking on it in the light of the global practices and standards. We employ the daily situation data on reported cases of COVID-19 to explicate the implications of the lockdown lifting in Nigeria using both qualitative and descriptive statistics. The study is particularly motivated by the urgency of need to inform policymakers and the government on the pending danger of

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**Fig. 1.** Six steps for easing lockdown. *Source:* authors' conceptualization based WHO (2020) guidelines.

an unplanned phased lifting of lockdown, which contravenes medical standards at the local and international fora.

According to daily situation reports, six months after the first case of COVID-19 was reported in Wuhan, China, the novel virus has infected over 12,000,000 people in 216 countries, linked to the death of almost 570,288, while about 7, 814,689 recovered from the infection [4,1]. The inability of medical personnel, and international health organizations on the frontline to provide globally acceptable vaccine or drugs for curtailing the ravaging impacts of the novel virus prompted the inevitable option of lockdowns globally. The declaration of lockdown in over 100 countries since April 2020 becomes an inevitable and tough decision to make despite the associated fears of unwanted macroeconomic shocks that could be triggered by the lockdown.

The prime aim of lockdown is to flatten the COVID-19 curve through a persistent reduction in the confirmed cases, and ensuring that infected persons quickly recover from the virus. During lockdowns, people are expected to stay at home. Also, location of contacts such as schools, universities, hotels, clubs, and religious houses are closed, social gatherings involving above 20 people are prohibited and economic activities involving physical interaction are halted [1,5]. The impacts of the novel virus are nothing but highly overwhelming in Nigeria since the index case was confirmed on 27 February 2020. Following the global practice, a nationwide lockdown was thus announced in Nigeria on 30 March 2020 with immediate effects in three states of the Federation namely: Lagos, Ogun, and Abuja. This was further extended for two weeks with the inclusion of Kano on 27 April 2020. The lockdown in the country saw a dragging record of new cases, which are mostly attributed to interstate movements in the form of community transmission. However, the unbearable economic consequences of the lockdown in the country prompted the government to announce a phased and gradual easing of the lockdown in FCT, Lagos, and Ogun with effective on 5 May 2020. Since then, the reported cases of COVID-19 have returned to its usual exponential rates in the country. For instance, the daily cases reported for the first day of the easing out on Monday, May 4, 2020, stood at 245, which are the highest since the index case in the country [6].

Although, the decision on easing of lockdown is not out of place as many countries have adopted the practice, the move is taken after full consideration of the guidelines stipulated by WHO for every country seeking partial or full reopening of the economy. These guidelines are elicited in the next section.

#### WHO Guidelines for easing of lockdown

According to the media briefing on COVID-19 of WHO on 19 April 2020, all nations seeking to reopen the economy either partially or fully must follow six steps. These steps are presented in Fig. 1 below. First, there should be a total assurance that the transmission is well under control which involves both individual and

community transmission channels. Second, there is a crucial need to ensure the health system is at its full capacities to detect, test, isolate, and treat every reported case and trace the associated contacts. Third, the major health facilities centers, and nursing homes should be capable of minimizing the pandemic. Fourth, conscious plans and implementations should be in place to prevent infection transmission in workplaces, schools, houses of worship, and other essential places. Fifth, adequate plans should be in place to ensure the risks of COVID-19 importation are well monitored. Sixth, aggressive education, engagement, and empowerment in the light of the "new norm" should be taken as a priority [7].

The above steps are not fully in place in Nigeria despite the call for easing of the lockdown. The economic implications of the novel virus mostly drive the decision to embark on phasing out the lockdown. The phases of the lockdown are exposited in section three below.

#### Phases of the lockdown in Nigeria

Phase One: As of July 15, 2020, Nigeria has completed two phases of its gradual easing of the COVID-19 lockdown and edging towards completing the third phase. The first phase of the lockdown was announced by the President on 27 April 2020 with effect from May 4 to 17 spanning two weeks in FCT, Lagos, and Abuja. In addition to the gradual easing of the lockdown, a nation-wide curfew of 8 pm to 6 am was equally announced. Two weeks extension of the first phase was further declared which lasted from 18 May to 1 June 2020.

Phase Two: The second phase of the gradual easing of the lock-down commenced on 2 June 2020 and lasted for four weeks, which ended on June 29 according to the officer in charge, the Secretary to the Government of the Federation (SGF) [8]. Further measures detailed in the second phase include the following.

- i Modification of the nationwide curfew from the initial 8 pm 6 am to 10 pm –4 am daily. The curfew however does not apply to journalists and healthcare workers.
- ii Banks are now to resume their normal operations.
- iii Work to resume in government offices on Mondays through Fridays from 9 am to 2 pm.
- iv Interstate movement remains restricted. However, essential services, agricultural produce, manufactured goods, and petroleum products are exempted.
  - The ban on airports to remain for both domestic and international travel with the exemption for emergency flights. There is intending consideration for reopening airports for domestic flights by June 21, 2020, provided all modalities be met.
- v Kano State to begin phase one of eased lockdown.

  The wearing of facemasks remains compulsory in public settings.

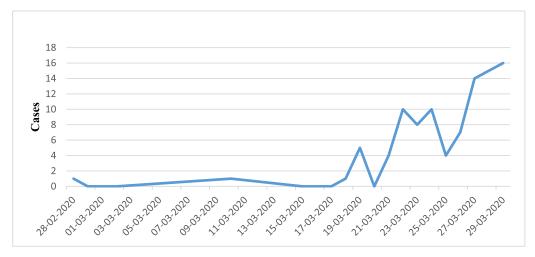


Fig. 2. Pre-lockdown COVID-19 cases.

- vi Hand washing/sanitizing practices are required for individuals and organizations.
- vii There is a ban on gatherings of above 20 people outside of the workplace.

Religious places to resume worshipping under the guidance of the PTF and State governments.

Phase Three: The phase three of the easing of lockdown in Nigeria was announced on 30 June 2020 following the approval of the 5th interim report of the Presidential Task Force (PTF) on COVID-19 by the Nigerian President. This phase is expected to last for four weeks from Tuesday, June 30 to Monday 27 July 2020. Few modifications were made on phase two which include the reopening of airports for local flights "based on close monitoring", resumption of schools for returning students in secondary schools with the graduating set to resume first, and the lifting of the ban on interstate travels. More so, the hours for the nationwide curfew were maintained from 10 pm to 4 am while the use of facemasks in public places also remains mandatory and now punishable by law [9].

## The three episodes of lockdown and the concurrent COVID-19 cases

This section presents the situational analysis for both lockdown reports and coronavirus cases for the three episodes experienced in the Nigerian context, which are pre-lockdown (Fig. 2), lockdown (Fig. 3), and easing up lockdown (Fig. 4). The various days for each period include 31 days for pre-lockdown (28 February – March 29, 2020), 35 days for the total lockdown (March 30 – May 3, 2020), and 73 days for the gradual easing up of lockdown (May 5 – July 15, 2020) as of the time of compiling pieces of evidence for this study. The summary of the three episodes as presented in Fig. 5 shows that the cases recorded in the easing up period outstripped both lockdown and pre-lockdown as a whole. Another insight from Fig. 5 is that the trend in COVID-19 cases has persistently maintained an upward slope, which further raises concerns about the ongoing easing up phases.

The pre-lockdown records witnessed a gradual increase in the confirmed cases with the highest being 16 cases. The lockdown period saw a close range of differences in the reported cases with a gradual increase in the early stage. However, in the latter part of the lockdown when people started flouting the lockdown order, there was a sporadic increase with the highest being 238 reported cases in a single day. The first day of the easing up saw 245 cases reported, which are the highest since the first incidence of the novel virus in the country. Since then, the cases have contin-

ued to increase sporadically with over 600 cases being repeatedly recorded. Fig. 6 presents the summarized cases for the three periods where the total aggregate for the easing up surpasses 32,434. The future days are likely to be more devastating if the trend continues thus calling for immediate cautious actions from the government and other frontline agencies.

Timeline analysis of the phased easing of the lockdown is presented from Figs. 7 to 9 comprising the phase one (27 April -May 4, 2020), phase two (May 5 - June 29, 2020), and the ongoing phase three (June 30 - July 27, 2020). Each phase has persistently recorded increasing cases of COVID-19 thus putting a question mark on the decision leading to the phased easing. For instance, phase one witnessed a total number of 8673 additional cases for the 35 days, which surpasses the aggregate cases both in the pre and during lockdown periods that summed 1183 cases for 48 days. This implies that the easing of the lockdown is doing more harm than relief for the general wellbeing of the populace especially those infected by the virus. Surprisingly, the number of days in the pre and during lockdown is 13 days more than phase one, yet COVID-19 cases in the latter are 7490 more than the former. Despite this alarming situation, the government still went ahead on a further easing in phase two for 29 days. Within the second phase period, the country recorded additional cases of 14,712, which are far higher than phase one despite the fewer days to it. 16 days to the third phase of the lockdown easing, the additional cases of 9049 was recorded. In all, there are clear indications of the escalating trend of high margins as the government continues to ease the lockdown.

Towards ensuring effective economic reopening: the way forward

The analysis of the ongoing situation in the Nigerian health system amidst the reported cases of COVID-19 indicates that the six criteria enlisted by WHO for countries to consider before lifting the lockdown have not been duly adhered to. In particular, there are still challenges revolving around issues like transmission control, diagnostic testing, contact-tracing, curtailing outbreak risks, and educating the populace. It, therefore, becomes imperative that, until these issues are addressed, the easing of lockdown will continue to compound the daily-confirmed cases and possibly the death cases. Consequently, we call on the government to swing into action in respect of the following.

1) Transmission control: The present figures show the case of COVID-19 is still significantly on the high side with the most cases recorded in the easing up phases of lockdown. This is a

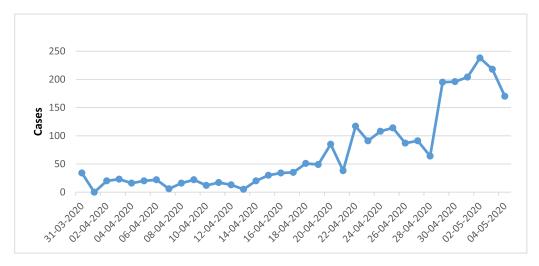


Fig. 3. Lockdown COVID-19 cases.

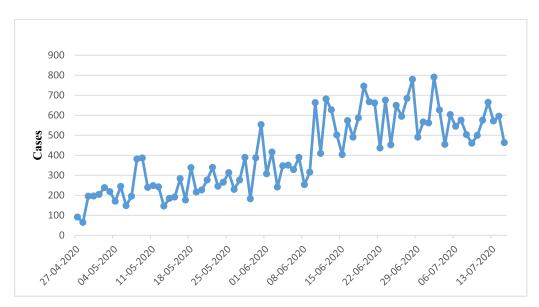


Fig. 4. Easing up lockdown COVID-19 cases.

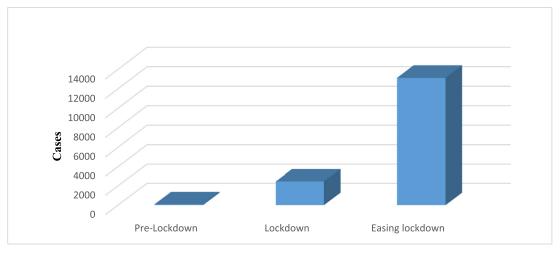


Fig. 5. Summary of COVID-19 Episodes.

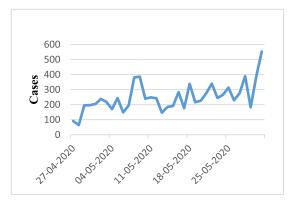


Fig. 6. Phase one of the lockdown easing.

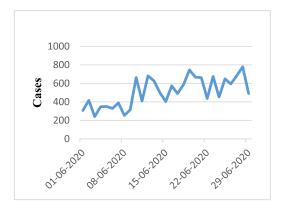


Fig. 7. Phase two of the lockdown easing.

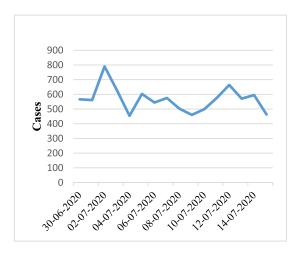


Fig. 8. Phase three of the lockdown easing.

clear indication that the country is not very ready for the lifting of lockdown before embarking on it. The period of the gradual easing of the lockdown in its first 41 days saw a record of the addition of over 13,000 cases to the existing numbers (see Figs. 3 and 4). This implies that healthcare workers and practitioners need to be more proactive and stand up to their responsibilities. This can however be achieved provided the government is giving full support in all angles. The recent move by the Nigerian Association of Medical Resident Doctors to embark on strike is of great concern, which calls for urgent intervention of the federal government [10].

2) Increase test capacity: One of the challenges embattling the healthcare system in combating COVID-19 cases in Nigeria is

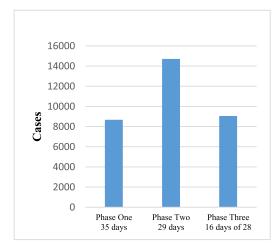


Fig. 9. Summary of the three phases.

the low level of test capacity despite the weeklong of lockdown. Following WHO guidelines, the need for quick response in ensuring testing capacity is sacrosanct before considering easing lockdown. The situation in Nigeria is a paradox of the reality because, as of July 15, 2020, the aggregate number of tests conducted still stands at 199,016 [11]. This figure is far below that of South Africa, which has conducted 2278,127 tests, Morocco, 924,695; and Ghana, 336,093 [4]. This is a great setback for a country with the most population density.

3) Intensive orientation and education: the emergence and increasing trend of the COVID-19 outbreak imply its elimination will take a long time, and the panic about reappearances cannot be doubted [12]. The implication of the escalating cases despite the initial lockdown implies there are lots to be done in terms of schooling the public on the pandemic. This is well stated in the briefing on lockdown, by WHO which submits that before considering easing of lockdown, communities should be educated, engaged, and empowered to adjust to a "new norm" [7]. Though the government is working assiduously on the angle of awareness, certain areas could be further explored. These include social media, engaging the private sectors more, and exploring the billboard options. Religious houses, places of works, and other important places of visits can be explored. The children's wing is still left out. Perhaps, fliers, games, and cartoon plays can be adapted to prepare the children before the reopening of school, which could happen anytime soon. The law enforcement agencies should be equally tasked to encourage members of the public on wearing of the facemasks and not exploiting them.

The potential implications of lockdown easing on the Nigerian healthcare system

There is no gainsaying that the gradual phase lifting of the lockdown in Nigeria has caused overwhelming destructions in all fronts of human lives, which has constituted major concerns on the capacity of the healthcare system in the country to salvage the situation. This is particularly worrisome as the pre-COVID-19 era is characterized by poor health infrastructure in the country. This include among others, inadequate emergency services, limited available ambulance, and first aid services, poor national health insurance scheme, prevalent brain drain syndrome, and lack of adequate numbers of health workers among others, all of which have been contributed to the escalating rates of infant and maternal mortality in country [12]. Concerns about these issues were previously highlighted in the Nigerian 2009 National Health Conference where it

was noted that the healthcare system in the country is not sturdy enough to provide adequate and quality services to the populace [13]. In addition, the conference identified ineffective and deteriorating infrastructure, inadequate workforce, substandard drugs, and ambiguity in the duties and functions among the different hierarchy of government to have escalated the challenges [13].

Considering the aforementioned issues in line with the persistent surge in the cases of COVID-19 virus since the gradual easing of lockdown in the country, one would say without any doubt that the situation will further deteriorate and if care is not taken, might result to a total collapse of the struggling healthcare system. The likely implications on the health indicators in the country may be unimaginable considering the pre-COVID-19 statistics. According to WHO 2019 statistics, Nigeria accounts for 19 percent of the global maternal deaths, which is among the highest [14]. Specifically, the infant mortality is estimated at 19 deaths per 1000 birth and the situation is more alarming at 128 per 1000 births among under age children [15]. In terms of life expectancy, the record stands at 55.4 percent (females), and 53.7 (males) with the average rate standing at 54.4 [16]. Intuitively, the ensuing negative effects of the phased lifting of the lockdown could further exacerbate the current state of the various health indicators.

Concisely, this study anticipates impending huge challenges on the healthcare system of Nigeria if the government and its relevant agencies do not re-evaluate the decisions motivating the ongoing easing of the lockdown in the country. While the consequences can be seen and felt by all in the present moment, the post COVID-19 era will most likely be more devastating. Hence, we call for an urgent scaling up of efforts from all fronts to address the effects of the novel virus in the country.

#### **Conclusion**

The existing health implications of the COVID-19 cases in the three phases of lockdown are not appealing to Nigeria from all indicators. Every day of the easing phase of the lockdown has witnessed an increasing number of cases. The country is now on an average record of between 500 and 600 cases for most of the reports since mid-June 2020. There are possibilities that these cases may escalate more in future days of phase three. This thus requires the government to go back to the drawing board to put up more plans towards adhering to the WHO outlined prerequisites as exposited in section two above. Until this is done, the future days may likely be more overwhelming for the capacity of the healthcare system contain.

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No fund was received in favor of this study.

#### **Declaration of Competing Interest**

The authors declare that there is no conflict of interest.

#### **Ethical approval**

This article does not contain any studies with human participants performed by any of the authors.

#### **Data statement**

Data will be made available upon request.

#### **Authors' contribution**

RLI conceived, designed, and wrote the paper. OOJ, proofread the manuscript. KBA, provide study materials and proofread the manuscript.

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