

Coronavirus Pandemic

COVID-19 Sustainable lockdown exit plan - the Nigerian Model

Bamidele Tolulope Odumosu¹, Ahmed Babangida Suleiman²

¹ Department of Microbiology, Faculty of Science University of Lagos Akoka-Yaba, Nigeria

Key words: COVID-19; pandemic; SARS-CoV-2; lockdown; Nigeria.

J Infect Dev Ctries 2020; 14(8):836-837. doi:10.3855/jidc.13004

(Received 09 May 2020 - Accepted 14 June 2020)

Copyright © 2020 Odumosu *et al.* This is an open-access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was declared that outbreak constituted a public health emergency of international concern by the World Health Organization (WHO) on January 30, 2020. Prior to this, only a few cases were reported in Africa [1]. COVID-19 first case in Africa was reported in Egypt on 14 February 2020 [2] while Nigeria reported the first case two weeks later [3]. SARS-CoV-2 belongs to β – coronaviruses, a large class of viruses prevalent in nature, with many potential natural hosts and high transmissibility which poses great challenges to public health [4].

Ever since the first reported case, as of March, 2020 South Africa has reported the highest case numbers so far with 8, 232 confirmed cases and a total of 161 deaths, followed by Egypt (7,981), Morocco (5,548), Algeria (5,182), Nigeria (3,145), Ghana (3,091), and Cameroon (2,267) with 2, 061 deaths in total [5]. Most of the early COVID-19 cases in these African countries were imported from Europe, considering high rate of business and tourism travels between African countries and Europe [6]. The control strategies for this pandemic according to the WHO recommendations have been combination of multiple preventative measures including contact tracing, quarantine, social-distancing and handwashing [7]. Many African governments have adopted the WHO recommendations in addition to total lockdown and "stay at home to save lives campaign" as seen in Europe and in some Asian countries [7]. Our comment draws an observation from our experience in Nigeria and provides recommendations on the lockdown measures and subsequently easing these measures in Africa countries. From an economic and social point of view, citing Nigeria as a case study,

confinement measures in Africa are not sustainable in the long run – due to economic slump and social tension as a result of prolonged confinement [8]. Many people rely on daily income, living in overcrowded settlements; thus, a well-planned exit strategy from the lockdown is crucial, even though there is no scientific consensus on how and when to relax some of these measures. There are also arguments that many countries in Africa are not carrying out enough testing and it may be just at the start of its peak.

Nigeria is currently experiencing a climb on the number of new cases which is expected to rise further as testing capability increases. When the lockdown was initiated in Lagos, Abuja and Ogun states of Nigeria, the number of cases were already substantially low, before new cases sprung up in many other states the lockdown was implemented almost across the country. However, 2-3 weeks delay is expected to see a decline in new cases. In most States of the federation there continues to be a steep increase in the number of cases, offering a cautionary call. Decline in new cases will depend on the faithful observation of present public health measures including social distancing and contact tracing. The basis for decision making for lockdown exit to maintain Effective Reproductive number (R_o) below < 1. Once the curve is flattened, States can try to relax restriction responsibly and gradually while keeping R wafting around 1, when each infected person on average infects one other person, keeping the number of new cases steady.

Recommendation

We recommend the following measures which may be translatable to other African countries:

² Department of Microbiology, Faculty of Life Sciences, Ahmadu Bello University, Zaria, Nigeria

- 1. Enlightenment on social distancing measures should be increased and enforced to reduce transmission of the virus until the epidemic curve is flattened;
- 2. Effective diagnostic capacity and isolation centers need to be increased; by getting qualified personnels that can conduct accurate molecular diagnosis and training of more health workers for effective response as well as establishing isolation centers all over the country;
- 3. The importance of testing centers in all parts of the country cannot be overemphasized, this is to enable us to get a good picture of the COVID-19 status within the populace;
- 4. Implementing robust manpower and resources for systematic tests and contact tracing;
- 5. Only recommended masks should be worn at all times;
- 6. Strict adherence to public health measures should be ensured, especially the WHO guidelines, in aspects that are peculiar to our region;
- 7. Overcrowding should be discourage to allow good ventilation so that people will not be easily infected with the virus; Government must campaign for increased personal hygiene to reduce the rate of contamination
- 8. High quality surveillances must be put in place to trace sources of infection and detection of suspected cases;
- 9. A highly train responsible team of experts most be put in place to initiate triage in the event of overwhelmed pressure on our thin health care system without any form of biasness.

In conclusion, ending coronavirus lockdown is a dangerous trial and error, therefore, with a strategic although formidable plan, we hope to be successful.

References

 World Health Organization (WHO) (2020) Director-General's opening remarks at the media briefing on COVID-19-11 March 2020. Available: https://www.who.int/dg/speeches/detail/whodirector-general-

- s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020 Accessed 7 May 2020.
- Egypt Today (2020) "Egypt announces first Coronavirus infection" Available: https://www.egypttoday.com/Article/1/81641/Egypt-announces-first-Coronavirus-infection Accessed 7 May 7 2020
- British Broadcasting Corporation (BBC) (2020) "Coronavirus: Nigeria confirms first case in sub-Saharan Africa". Available at https://www.bbc.com/news/world-africa-51671834. Accessed 7 May 2020.
- Wang LS, Wang YR, Ye DW, Liu QQ (2020) A review of the 2019 Novel Coronavirus (COVID-19) based on current evidence. Inter J Antimicrob Agents. In Press.
- British Broadcasting Corporation (BBC) (2020) "Coronavirus in Africa tracker" Available: https://www.bbc.co.uk/news/resources/idt-4a11d568-2716-41cf-a15e-7d15079548bc Assessed 7 May 2020.
- World Health Organization (WHO) (2020). Coronavirus disease 2019 (COVID-19) situation reports. Available: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situationreports Accessed 7 May 2020.
- Walker PGT, Whittaker C, Watson O, Baguelin M, Ainslie KE, Bhatia S, Bhatt S, Boonyasiri A, Boyd O, Cattarino L, Cucunubá Z Perez Z. (2020) "Report 12: The global impact of COVID-19 and strategies for mitigation and suppression. Imperial College London". Available: https://dsprdpub.cc.ic.ac.uk:8443/handle/10044/1/77735 Assessed 7 May 2020.
- African New (2020) Nigeria to revise 2020 budjet due to oil price slump. Available https://www.africanews.com/2020/03/11/nigeria-to-revise-2020-budget-due-to-oil-price-slump// Accessed 11 March 2020

Corresponding authors

Email: sulybabs1@gmail.com

Bamidele Odumosu, PhD
Department of Microbiology, Faculty of Science
University of Lagos, Akoka-Yaba 100213
Lagos 100001 Nigeria
Phone: +2348034515048
Email: bodumosu@unilag.edu.ng

Ahmed Suleiman, PhD Department of Microbiology, Faculty of Life Sciences Ahmadu Bello University, Zaria Kaduna 800211Nigeria Phone: +2348036127111

Conflict of interests: No conflict of interests is declared.