## Researchers warn about potential increase in COVID-19 cases and remind Nigerians to practice "physical" distancing this Easter period 11<sup>th</sup> April 2020

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Researchers from James Cook University (JCU) in Australia and Federal University of Technology in Akure, Nigeria (FUTA) Drs Oyelola Adegboye, Adeshina Adekunle and Ezra Gayawan have warned that Nigerians should practice "physical" distancing this Easter holiday. They warned that it is important to understand that the travel ban imposed by the Federal Government has prevented or reduced future importations according to their simulation study which found that the effects of the international travel ban imposed by the Australia Government resulted in an 80% reduction in COVID-19 importations. Hence, violating the social distancing intervention strategy could lead to an escalation of cases and all the gains as a result of the international travel ban would be lost.

The outbreak of Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) that emerged in the city of Wuhan, China has now spread to every inhabitable continent, but the attention has now shifted from China to other epicenters. The researchers said, "Although the epidemic trajectory in Nigeria has been slow compared to other countries, in part, due to public health interventions being implemented at the early stage, the government must intensify its effort." We have seen in the USA where COVID-19 cases jumped from 472 on March 10, 2020 to 425, 889 by April 10, 2020.

"As the epicenter changes, the dynamics of COVID-19 spread will change to reflect spatial proximities and Nigeria doesn't want to be one," said Dr. Adegboye. According to Adegboye, the economic and financial consequences of COVID-19 will be unbearable for many Nigerians, and he advocates for collective actions of private and public institutions. "A lot has been provided but more is needed because this is going to be a long haul."

According to Dr. Adekunle "if we assume international travel bans imposed on March 20 has similar effect as elsewhere, Nigeria would have observed more than 102 imported cases as reported on April 8, 2020."

On his part, Dr. Gayawan said "Human population movement plays an important role in the spread of infectious diseases and this is exacerbated when the disease is very contagious like the current pandemic." Until recently, most of the attention on the importation of infectious diseases such as Ebola, Tuberculosis and Malaria have been from Africa to the West, but most African countries have reported their first cases of COVID-19 as imported from European countries.

Dr. Adegboye said preliminary analysis shows the median (from February 27, 2020 to April 6, 2020) reproduction level was 2.34 and the latest value at April 6 was 1.17 (95% Credible interval: 0.97 - 1.41). It seems the imported cases have been halted; the focus should now be shifted to stopping local transmission.

Although the intervention in Nigeria has been timely, the efforts need to be doubled up. COVID-19 cases in Nigeria are evolving in a similar way to what was observed in the early days of COVID-19 in the USA where there was an increase from 0.2 to 70.51 cases per 100,000 in a month. With an estimated five hospital beds per 10,000 and four medical doctors per 10,000 people (compared to the US with 290 hospital beds and 25.9 medical doctors per 10,000), an outbreak of the magnitude observed in the US would be devastating. Consequently, there is the need for Nigeria to learn from countries such as South Korea and not to relent in the efforts to curb the outbreak. The setting up of nine fully functional COVID-19 laboratories across the country which increased the testing capacity to 1500 a day is a step in the right direction. The sooner all Nigerians practice "physical" distancing, the earlier the country will be able to get the outbreak under control. Unfortunately, to win the war against COVID-19, Nigeria cannot operate alone; success can only occur through international collective actions and global preventive measures.

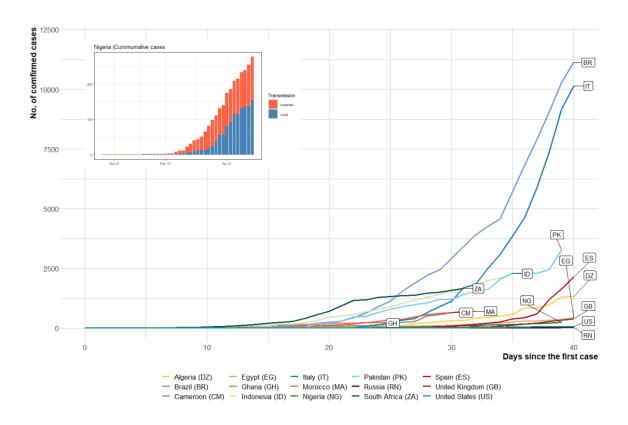


Figure 1: Cumulative number of confirmed cases of COVID-19 since the first day of importation to selected African countries and worse affected countries outside Africa. Inset: Cumulative incidence for Nigeria.

"Mass gatherings have been associated with increasing the transmission of virus, creating high-risk conditions for the rapid global spread of infectious diseases." Said Dr. Adekunle. We have seen cases of COVID-19 due to mass migration for religious purposes in clusters in Singapore, Malaysia and South Korea.

Additionally, Dr. Adegboye stated, "It is not surprising that for this year, most countries have cancelled religious activities including the cancellation of Umrah pilgrimage in Saudi Arabia."

Nigeria, being a nation with very peculiar religious tourism and where large social gatherings such as weddings are very common, needs to enhance "physical" distancing, Said Dr. Adekunle

Public gatherings such as religious and ceremonial gatherings need to be minimized and restrictions placed on movement for an extended period. The weekend of April 10-13, 2020 is Easter holiday when Christian faithfuls celebrate the death and resurrection of Jesus Christ sometimes in large gatherings. Dr. Gayawan concluded.

Dr. Adegboye and Dr. Adekunle from JCU's Australian Institute of Tropical Medicine and Health and Dr. Gayawan from Federal University of Technology, Akure are part of a collaborating research group working on the effects of travel on the COVID-19 pandemic in various capacities.

Details can be found on <a href="https://www.aithm.jcu.edu.au/research/research-projects-and-groups/covid-19/">https://www.aithm.jcu.edu.au/research/research-projects-and-groups/covid-19/</a>

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