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COVID-19 in Nigeria: a disease of hunger



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For the **up-to-date number of COVID-19 cases** see
https://covid19.ncdc.gov.ng/

For more on **medical tourism** see https://www.voanews.com/ africa/nigeria-losing-1b-annually-

medical-tourism-authorities-say

For the **World Poverty Clock** see
https://worldpoverty.io/map

For the **full speech from Buhari** see https://nairametrics. com/2020/04/13/presidentmuhammadu-buharis-fullspeech-on-extended-covid-19lockdown/

For more on the rollout of palliative packages see https://businessday.ng/features/article/lamentation-still-trails-lagos-fgs-palliative-package-as-middlemen-hijack-programme/

For more on the **response of security forces** see https://www. bbc.com/news/worldafrica-52317196

For more on increased crime levels see https://www.aljazeera. com/news/2020/04/nigeria-lagosresidents-defend-homes-curfewbandits-200414165917113.html

For the response in Rwanda see https://africanbusinessmagazine. com/region/east-africa/rwandaunveils-social-protection-forthe-vulnerable-during-covid-19/

For more on **private sector initiatives in Nigeria** see **News** Lancet Respir Med 2020; page 553 With a population of over 200 million people, Nigeria is one of the most populous black nations worldwide. As with the rest of the world, Nigeria is currently dealing with the coronavirus disease 2019 (COVID-19) pandemic, but in a somewhat different fashion.

On Feb 27, 2020, the first official case of COVID-19 in Nigeria was announced. The patient was an Italian citizen, who had recently arrived in Lagos from Europe and who, a few days later, tested positive for the disease. In Ogun state, a neighboring state to Lagos, another patient was identified and was discovered to have been in contact with the first patient. Since then, the situation has developed with more cases occurring, regardless of measures initiated by the state and federal government to combat the virus and return to normalcy. As of April 22, there were 873 confirmed cases, 197 recoveries, and 28 deaths.

WHO has advised on several methods to help prevent spread of the virus and to save health systems across the world from a complete collapse—eg, health washing, social distancing, and staying at home. However, Nigeria's health system before the pandemic was nearly non-existent. In most of the cities', health systems are completely dilapidated as they have not received adequate attention, and some government officials have contributed to health system collapse by encouraging medical tourism.

The federal government of Nigeria enforced an initial 2-week lockdown on March 30, 2020, for three of 36 states (Lagos, Ogun, and Abuja) and, on April 13, extended it another 2 weeks. Shortly after the order was announced by the President, Muhammadu Buhari, there was an uproar among the citizens due to a myriad of concerns. Nigeria, in 2018, was announced by the World Poverty Clock to be the poverty capital of the world, with over 40% of its citizens living below the poverty line. Therefore, a large proportion of the population, especially in the commercial hub of Lagos, live on daily income with no savings to act as a financial buffer during the lockdown.



The prospect of staying at home could, therefore, lead to another problem: hunger. Several people, such as Osas, a young plumber who lives and works in the city, have commented on social media about how, despite being fully informed about COVID-19, they still cannot relate to it as much as the hunger being experienced across the country.

Buhari promised the citizens some palliative measures, which include disbursing of funds and food items to those most affected. But the reality on the ground is a far cry from the promises made; only a small proportion of the population attest to receiving any support. A large number of citizens have disobeyed the lockdown order in the hope of making sales or trying to earn money through other services, but they were apprehended by the police. The combined effort of the police and the military to enforce the lockdown may have caused more deaths than the infection itself.

As well as the other negative outcomes attributed to the lockdown, Lagos has seen a huge spike in armed robberies.

One has to question whether these aforementioned negative effects override the reasons for the lockdown in the first place: to flatten the curve of infections. According to news from other countries in Africa, the situation in Lagos is almost a perfect mirror of the situation across the whole continent, with the exception of a few countries (eg, Rwanda), where governments have been able to enact effective solutions to the pandemic and provide palliative measures.

There are some positives to consider; the private sector, churches, and non-governmental organisations have provided a lot of support to communities across Lagos and the rest of Nigeria. They have facilitated countless distributions of food items to some of the most deprived areas of Lagos. Also, there is hope that the health sector will finally receive the attention it needs from the government in response to the lessons learned from this pandemic. Despite the socioecomonic differences seen



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across Nigerian communities, there has been a sense of togetherness during this time.

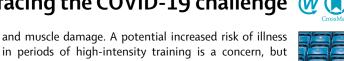
Irrespective of these positive aspects of COVID-19 and of lockdown, fears remain that the number of deaths as a result of lockdown measures will be greater than those due to

infection. The Nigerian government must aim to protect its citizens and provide them with the necessary commodities or funds to help mitigate the consequences of this pandemic.

Bernard Kalu

explore life and humanity, with special focus on raising awareness about environmental and social issues in his home country, Nigeria. You can find more of his work on www.bernardkalu.com

Respiratory health in athletes: facing the COVID-19 challenge



There are unique cohorts of individuals facing specific challenges during the current global coronavirus disease 2019 (COVID-19) crisis. When faced with a rapidly evolving pandemic associated with high morbidity and mortality in older people (>60 years), the respiratory health of a (predominantly) young and very physically fit population might, on the face of it, seem trivial or almost irrelevant. Yet, for athletes, para-athletes, and clinicians concerned with their health, it is important that targeted guidance is available to ensure the wellbeing of this population is considered.

Several specific issues are pertinent here, including questions regarding decisions to continue training, potential transmission of disease within teams, the potential effect of vigorous exercise on infection susceptibility, and the need for guidance regarding return to play, following COVID-19 infection. Additionally, there are considerable implications associated with the now almost complete and immediate curtailing of all employment activity for professional athletes. Indeed, virtually all major international sporting events, including the Olympic Games, have now been either cancelled or postponed. It is also recognised that there are cohorts of athletes and para-athletes with heightened susceptibility to viral respiratory tract infection and cohorts with known chronic medical conditions, such as airways disease (seen in approximately 20% of all endurance athletes).

Participation in some form of physical activity or sport is clearly a core component of maintaining a healthy lifestyle and is undoubtedly an important public health message for those residing in geographical areas enforcing isolation. There is general consensus that regular exercise training at what might be termed a moderate volume (30-60 min, 3-5 days per week) and intensity (60-80% of maximum capacity) is associated with a general decrease in the risk of respiratory tract infection, whereas low levels of regular physical activity appear to be associated with an increased risk of respiratory tract infection (ie, showing a so-called J-shape association). For competitive athletes, however, it is necessary to undertake vigorous or high-intensity sessions, to facilitate the higher forms of physical conditioning required. Very high intensity training workloads, with or without sudden increases in training load, have been associated with transient immune perturbations, inflammation, oxidative stress,

in periods of high-intensity training is a concern, but mainly in non-competitive recreational athletes. Evidence suggests that elite athletes can continue with highintensity training without a similar increased risk of illness, providing there is no sudden increase in training load (ie, the I shape relationship appears to plateau, or becomes more S shaped in elite athletes). Increased risk of COVID-19 transmission during training is more likely in certain athletic settings where athletes train in groups, engage in contact sports, do not adhere to universal guidelines for social distancing, make use of shared equipment, do not practice universal guidelines to maintain personal hygiene, and use common facilities such as changing rooms. There is, however, currently no specific data available regarding the prevalence, nature, and behaviour of COVID-19-related illness in athletic individuals.

A key concern in athletic individuals surrounds the timing or ability to return to full physical exertion (a return to play strategy), following an infection. Many young individuals with COVID-19 infection appear to develop relatively mild disease and recover almost completely over 5-7 days. However, an apparent heightened risk of further deterioration has been suggested to occur between days 7 and 9, with individuals developing more fulminant lower respiratory tract manifestations and thus requiring more intense medical care. In athletes, return to play decisions, in the context of respiratory illness, usually default to the socalled neck check, which dates back to the early 1990s and is still implemented today—ie, athletes continue to exercise if their symptoms and clinical signs are confined to the upper airway (eg, only coryzal symptoms). The scientific basis for this recommendation is weak, and there is long-standing concern of the potential risk of athletes with respiratory tract infection developing other complications from return to vigorous exercise. Of these risks, the most important is the risk of myocarditis or myocardial damage, which could be highly relevant in the current outbreak; published data from COVID-19 infection cohorts indicate a definite prevalence of myocardial damage, with troponin elevation, and an increasing number of cases with myocarditis. On this basis, and taking into account evidence of a risk of late



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For more on **respiratory conditions in athletes** see **Comment** *Lancet Respir Med* 2018; **6:** 8–10

For more on physical activity and immunology see

J Sport Health Sci 2019; 8: 201–17

For more on the effect of exercise on immune response see Front Immunol 2018: 9: 648

For more on **risk of illness in sport** see *Br J Sports Med* 2016; **50:** 1043–52

For more on features, evaluation, and treatment of COVID-19 see https://www.ncbi. nlm.nih.gov/books/NBK554776/

For more on the **neck check** see *Phys Sportsmed* 1993; **21:** 125–35

For more on **cardiac injury in COVID-19** see *JAMA Cardiol*2020; published online
March 25. DOI:10.1001/
jamacardio.2020.0950