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## The urban environment and leisure physical activity during the COVID-19 pandemic: a view from Lagos

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### ABSTRACT

We highlight aspects of the ordinary – known interactions between urban environments and physical activity – that are amplified by the extraordinary – the COVID-19 pandemic in Lagos, Nigeria. Leisure physical activity is shaped by local contexts, and pandemic-related changes may have altered existing trade-offs between the benefits and risks of undertaking Leisure physical activity in the city. We note the dynamic and inequitable ways that urban spaces are used during the pandemic and the urgent need for local evidence and solutions. Our reflections in this commentary illustrate the possibility of rethinking urban development and the reforms necessary to address health inequalities post-pandemic.

### ARTICLE HISTORY

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COVID-19; Lagos; physical activity

In this commentary, we highlight five aspects of the ordinary – known interactions between urban environments and physical activity – that are amplified by the extraordinary – an unprecedented societal response to the ongoing COVID-19 pandemic. Using Lagos, Nigeria as a case study, we illustrate the possibility of re-thinking urban development and the potential for urban (re)form to address health inequalities in African megacities in the context of post-COVID-19 pandemic.

Physical inactivity is a key risk factor for non-communicable disease (NCD) and premature mortality worldwide (World Health Organisation 2020). Dedicated and equally accessible public space infrastructure for leisure physical activity (LPA) such as parks and footpaths could support activity levels in urban populations. However, in African megacities like Lagos, Nigeria (particularly low-income) residents routinely appropriate other types of public space to be active, including roads, bridges and vacant land. A greater understanding of these behaviours could inform urban infrastructure interventions that support LPA, and more evidence on the experiences, motivations and risk exposures of residents engaged in these forms of physical activity is required. In 2019 (prior to the global outbreak of COVID-19), we initiated a study exploring the appropriation of public space for LPA in two African cities, Lagos and Yaoundé (Cameroon).

With the onset of the pandemic, total lockdown measures were implemented on 30 March 2020 in some Nigerian cities including Abuja – the capital city, and Lagos – the largest city and epicentre of the pandemic. These measures include movement restrictions for all residents and the closure of most markets. In the case of Lagos, the lockdown policies drastically changed the cityscape. Lagos, with a population of over twenty-one million people, experienced markedly reduced levels of motorised traffic and anecdotal reports of both perceived improvements in air quality in commercial areas and increased neighbourhood air pollution due to domestic use of generators for electricity. These changes to the natural and built environments have also been accompanied by behavioural changes in urban residents, with evidence of appropriation of formerly busy roads and motorways for LPA, presenting a trade-off between the benefits of LPA for health with the risks of increased transmission of COVID-19, especially in communities with limited spaces for activity.

The anthropologist Robin Fox coined the term ‘ethnographic dazzle’ to describe blindness to underlying similarities because it is difficult to see past striking surface differences. We propose that the uncommon event of a global pandemic has actually revealed something about the common: the fact that urban environments shape behaviours including physical activity. In this piece, we highlight five such aspects.

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## **Leisure physical activity is determined by complex and evolving contexts**

The determinants of physical activity are complex and occur in context. Individuals shape and are themselves shaped by the local political, socio-economic and built environments. Contexts are constantly evolving, and COVID-19 has accelerated the pace of change, with physical distancing measures altering the natural and built environments, and the way people interact with each other. In Lagos, the high population density in many low-income communities makes the very notion of physical distancing impractical and the risk of COVID-19 infection higher. As a result, these measures have triggered more people embracing physical activity on public roads and spontaneous group exercise in several communities, possibly motivated by the overnight creation of safe public spaces for physical activity engendered by the lockdown. The recognition of the ability of even complex contexts to evolve is a lesson to be remembered post-COVID-19 to influence the development of urban infrastructure that prioritises equitable wellbeing.

## **Leisure physical activity in megacities involves a balancing act between benefit and harm**

Physical activity in urban environments has health benefits but comes with attending risks of harm from injury, violence and/or exposure to pollution. In many high-income countries and more affluent parts of low and middle-income countries, the benefits of physical activity tend to outweigh these risks with access to safe spaces for LPA (Elshahat *et al.* 2020). However, for the lower socio-economic groups that comprise the majority of urban residents in megacities like Lagos, we observe LPA being undertaken in unsupportive and potentially harmful environments while navigating dangers such as air pollution and road traffic injury. The reduction in motorised traffic as a result of COVID-19 lockdown measures may have reduced these existing risks. However, the risk landscape has evolved with residents confronted with a new risk of contracting the infection particularly amongst groups congregating together to be active. This evolution of the tension between benefits of physical activity and associated harms means that while LPA would ordinarily be encouraged, the risk of infection when gathered in large groups outweighs the potential benefit during this acute phase of pandemic control. In this context, it is expedient to explore motivation and perceptions of risk, in order to understand how best to intervene in the short term (e.g. the need for physical distancing) as well as the long term (e.g. air pollution, injury risk), whilst preserving the core public health message encouraging physical activity.

## **The form and functionality of both informal and formal spaces are dynamic**

While our ALPhA study is focused on exploring public spaces used informally for LPA, the COVID-19 pandemic has demonstrated the bi-directionality of informal appropriation of public space. On the one hand, we have noted new patterns of appropriation of public space for physical activity emerging as physical distancing policy evolves and the cityscape changes. On the other hand, the COVID-19 response has also necessitated the informal appropriation of (formal) spaces designated for physical activity such as sports stadiums as COVID-19 isolation and case management centres. This bi-directionality demonstrates the transience of both formal and informal spaces and lends support for the need to challenge the rigidity in the discourse on the formalisation of informal spaces as unidirectional or one-dimensional. It provides a glimmer of hope that recognition of the transience of space in cities like Lagos may enable embracing of innovative approaches to urban land governance to support physical activity and wellbeing to address this health need in under-served communities.

## **The unequal 'right to the city' is a social injustice**

The emerging scenario playing out in the Lagos lockdown highlights endemic socio-economic and health inequalities. Where you live to a large extent determines how much physical activity you can lawfully engage in. We observe that affluent-gated communities are able to access spaces for LPA especially in the communal playgrounds and along paved streets, while space constraints experienced by low-income communities compel residents to engage in physical activities in public spaces such as roads and highways in contravention of lockdown measures with punitive repercussions. The new COVID-19 reality starkly highlights existing inequalities in urban access and the right to healthy natural and built environments in the city. Here we focus on socioeconomic status, but other types of inequality may also exist, such as by sex or age. Post-pandemic, this rights-based approach should guide the development and implementation of urban infrastructure interventions for health and wellbeing.

## **There is a need for local evidence, and community-led networks have a key role to play in driving change**

The literature on LPA is skewed to cities in high-income countries. With spatial configurations in these places vastly different from what generally occurs in African cities, there is a need to generate

local contextually relevant evidence on how African urban dwellers engage in LPA. While there may be gaps in necessary infrastructure, the strength of citizen networks and associational life structures in effecting change at local levels is not adequately documented, either before or in response to this pandemic. For example, in the ongoing response to COVID-19 in Lagos, collaborative efforts by citizens have been effective in providing health messaging, ideas for indoor physical activity, materials for hand-washing and protective equipment to residents of low-income communities. In less extraordinary times, these community networks can and should play a key role in advocating for locally appropriate improvements to urban environments to facilitate LPA.

These five points illustrate the possibility of re-thinking urban development, and the potential for urban (re)form to address health inequalities in megacities like Lagos. The appropriation of (often dangerous) public spaces for LPA highlights a structural gap of insufficient infrastructure to support LPA, and the evolution of LPA behaviours during COVID-19 has further exposed this need for public spaces not currently afforded to all residents. It has also revealed the self-organising potential of citizens, and the ability to appropriate spaces – however temporary – to serve their needs for LPA and social engagement. Beyond the pandemic, there is an opportunity to re-imagine urban infrastructure in light of this unmet demand, to recognise the multiple uses of public space and to leverage citizen networks to ensure equitable access to opportunities for safe physical activity.

## Disclosure statement

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## References

- Creek City Lagos (@CreekCityLagos) April 23, 2020. (Tweet) Community led solutions to stop spread of #CONVID19 to slums/informal settlements. <https://twitter.com/CreekCityLagos/status/1253187993810198531>
- Elshahat, S., O'Rourke, M., and Adlakha, D., 2020. Built environment correlates of physical activity in low- and middle-income countries: A systematic review. *Plos One* 15:e0230454. 17 March 2020 <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0230454> Accessed 26 April 2020
- Gboyega Akosile (@gboyegaakosile) April 8, 2020. (Tweet) #StayAtHome but you MUST go out in the name of exercises. So the Nigerian security agencies including the Army, have swung into action to make it easier for them to burn the calories this morning on Gbagada Expressway. This looks like frog jump. #StayHomeSaveLives. <https://twitter.com/gboyegaakosile/status/1247807746772094976>
- OtiGBa Samuel:Blvck Apron (@SamuelOtiGBa) April 6, 2020. (Tweet)Gbagada this morning. We deserve our leaders.

(Tweet) 2. <https://twitter.com/SamuelOtigba/status/1247136937565093890>

Series Abiodun (@Engr\_Series) April 7, 2020. (Tweet) The gym moved to Ikorodu this morning, from Haruna down to Agric busstop... Is this really a lockdown? 3. [https://twitter.com/Engr\\_Series/status/1247458527263764481](https://twitter.com/Engr_Series/status/1247458527263764481)

Truppr (@truppr) April 23, 2020. (Tweet) Last Saturday, we partnered with @LeadwayInsure to host a live workout session to help you stay fit and active. <https://twitter.com/truppr/status/1253342281710440448>

World Health Organisation. Fact sheet on physical activity. Accessed April 15, 2020. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>.