Making the case for 'physical activity security': the 2020 WHO guidelines on physical activity and sedentary behaviour from a Global South perspective

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NOT JUST ANOTHER RESEARCH GAP

With relatively few exceptions, the majority of evidence concerning the health benefits of physical activity (PA) has been gleaned from high-income countries (HICs).¹ In the opening editorial to this special issue,² the editors suggest that under-representation of lower and middle-income countries (LMICs, often referred to as 'Global South') in the PA literature is more than 'just another research gap'. Arguably, this gap reflects very real differences in context, competing health and developmental priorities, available resources and undoubtedly, political will.

Juxtaposed against the clear benefits of PA, most LMICs are characterised by the coexistence of both non-communicable and infectious chronic diseases, such as tuberculosis and HIV/AIDS.³ Obesity often coexists with maternal and childhood undernutrition and household food insecurity and health disparities have been exacerabated by the COVID-19 crisis. Political circumstances

Correspondence to Professor Estelle Victoria Lambert, Research Centre for Health through Physical Activity, Lifestyle and Sport, Division of Exercise Science and Sports Medicine, Department Human Biology, Faculty of Health Sciences, University of Cape Town, Newlands 7700, South Africa; Vicki.Lambert@uct.ac.za are often adverse, with many LMICs experiencing conflict, humanitarian crises, and/ or social unrest and embedded inequalities (eg, the legacy of apartheid in South Africa). Lack of safety from crime and traffic, poorly designed and often overcrowded urban environments, low prioritisation of physical education in schools, and inequitable distribution of green space, are endemic to most LMICs.4 5 Thus, PA, even for transport, is difficult at best, and largely undertaken by necessity rather than by choice. Meanwhile, recreational PA is inaccessible for most in these settings.6 As such, and with rapid urbanisation in LMICs, often into poverty,⁷ we are required to view PA through the 'lens' of equity. This demands us to elevate the discussion for PA above health, and frame it as a basic human right that is central to sustainable development.

NEED OR CHOICE?

Despite clear constraints, the prevalence of PA in LMICs is higher than in other regions, mostly through work-related or transportrelated activity, as shown by the work of Strain et al (in this issue).⁸ And while studies in HICs have demonstrated strong associations between PA and attributes of the built environment, these relationships may be attenuated or even inverse in some LMIC and low-income settings.910 Similarly, crime and traffic indices are barriers to PA in high and upper middle-income countries (UMICs), but in low-income countries (LICs), there may be little or no association as many people have no other transport options.¹⁰¹¹ The unintended consequence of these circumstances is that LMICs spend up to 5% of gross domestic product on health expenditure for road traffic deaths and injuries, with 44% of these, for example, in the African region, related to walking or cycling.¹² And even children from UMICs, where large income inequalities exist, are more likely to walk to school, despite unsafe crossings, absent sidewalks and a high perception of crime. Taken together, this situation suggests a 'need versus choice' rubric¹³ for PA in LICs or disadvantaged settings, and greater dialogue on what comprises a 'walkable' community. As such, beyond the 'research gap', there is the need to translate what is known, to inform and mitigate the choice constraints for PA in LMICs, in order to 'level the playing fields'.

The new WHO Global guidelines recognise light activity as offering some health benefits,¹⁴ which has important implications for LMICs, where longer sessions or high volumes of light activity are often the dominant form of PA. And because much of the PA in these countries is utilitarian, messaging around the benefits of PA needs to be tailored, recognising the nature and context in which PA takes place, as discussed in Milton *et al.*¹⁵

GUIDELINES ALONE ARE NOT ENOUGH

While the 2020 guidelines¹⁴ have been designed to be inclusive, these alone are not sufficient to address the lack of change in global PA prevalence, or the potential decline in PA, associated with rapid urbanisation in LMICs. Guidelines need to be accompanied by intersectoral national plans and policies that position PA as a developmental and rights-based issue, one that promotes the co-benefits beyond health and ensures equitable access. Putting these policies in action is particularly challenging in LMICs, given the burden of inequality and the very real competing demands for resources. While there has been an increase in countries with national PA policies (standalone or embedded in non-communicable diseases (NCDs) policy),¹⁶ the proportion of operational plans in LMICs is lower.

There is need for a cadre of personnel. in public and allied health, sports science, sports and exercise medicine, who are trained to deliver PA programmes for health and social development. PA should also form part of the training for urban planners and transport engineers, who may require bespoke solutions to the more challenging urban environments of developing countries. We must also empower communities with PA 'champions', physical educators and coaches, to engage community members in social mobilisation and civil discourse with local policy-makers. Past experience suggests that these actions can be effective in creating culturally salient opportunities for PA in LMICs.¹

The recent COVID-19 pandemic has exacerbated many equity issues and COVID-19 quarantine restrictions in some countries have led to a decrease in PA and an increase in sedentary behaviour. Some LMICs may be hard hit particularly due to





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Editorial

urban overcrowding, lack of public open space and less access to the internet for online PA resources. Whereas in others, such as Lagos, Nigeria, the COVID-19 response resulted in a marked decrease in vehicular traffic, and improved air quality which has encouraged more people to engage in PA.¹⁸ In many countries, the COVID-19 pandemic was the first time that governments recognised the importance of PA for mental and physical well-being, and introduced any PA-related regulatory responses, even if these involved mobility restrictions. Indirectly, COVID-19 has presented a critical moment or 'a window of opportunity' to emphasise that access to safe and enjoyable PA should be a basic human right. The response of civil society ('pushback') and desire to seek opportunities for PA during local 'lock downs' highlight the urgency of this call to policy- and decision-makers at local, provincial and national levels.

PA SECURITY

Similar to food security, we encourage policy-makers, practitioners, urban planners, researchers and other key stakeholders, to recognise and adopt this definition of PA security:

When all people, at all times, have physical and economic access to sufficient, safe and enjoyable physical activity to meet, not only their health needs, but to promote physical and emotional well-being and social connectedness, for an active and healthy life.

The new WHO guidelines for PA were not solely designed to target individual health behaviour, but to provide systemic direction and guidance for what is needed, at a whole-of-government and whole-ofsociety approach, to ensure that communities and individuals can attain 'PA security' no matter where they reside around the globe. We applaud the inclusive 2020 WHO Global guidelines for PA and sedentary behaviour,¹⁴ and recognise that the proportion of persons meeting these guidelines is higher in LMICs than in HICs for the time being; however, the guidelines alone do not resolve the issues of equity and environmental justice.

In line with the WHO Global Action Plan for Physical Activity 2018–2030¹⁹, a regulatory response prioritising PA both for health and as part of the sustainable development agenda will go far towards creating PA enabling environments in LMICs and other highly inequitable settings. This will help to ensure that with rapid urbanisation and development in LMICs, societies are 'future proofed' to deliver the universal human right of PA security.

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REFERENCES

- Sallis JF, Bull F, Guthold R, et al. Progress in physical activity over the Olympic quadrennium. Lancet 2016;388:1325–36.
- 2 Stamatakis E, Bull F. The 2020 global guidelines on physical activity and sedentary behaviour: putting physical activity in the "must-do" list of the global agenda. Br J Sports Med 2020;54.
- 3 Oni T, Unwin N. Why the communicable/noncommunicable disease dichotomy is problematic for public health control strategies: implications of multimorbidity for health systems in an era of health transition. *Int Health* 2015;7:ihv040–399.

- 4 Oyeyemi AL, Adegoke BO, Sallis JF, et al. Perceived crime and traffic safety is related to physical activity among adults in Nigeria. BMC Public Health 2012;12:294.
- 5 Malambo P, De Villiers A, Lambert EV, et al. The relationship between objectively-measured attributes of the built environment and selected cardiovascular risk factors in a South African urban setting. BMC Public Health 2018;18:847.
- 6 Barr AL, Partap U, Young EH, et al. Sociodemographic inequities associated with participation in leisure-time physical activity in sub-Saharan Africa: an individual participant data meta-analysis. BMC Public Health 2020;20:1–3.
- 7 Simone A. Cities of the global South. *Annu Rev Sociol* 2020;46:603–22.
- 8 Strain T, Wijndaele K, Totaro Garcia L, *et al*. Levels of domain-specific physical activity at work, in the household, for travel and for leisure among 327,789 adults from 104 countries. *Br J Sports Med*.
- 9 Adkins A, Makarewicz C, Scanze M, et al. Contextualizing walkability: do relationships between built environments and walking vary by socioeconomic context? J Am Plann Assoc 2017;83:296–314.
- 10 Elshahat S, O'Rorke M, Adlakha D. Built environment correlates of physical activity in low- and middleincome countries: a systematic review. *PLoS One* 2020;15:e0230454.
- 11 Oyeyemi AL, Kolbe-Alexander TL, Lambert EV. Physical activity and safety from traffic and crime in Africa: case study. In: Siefken K, Ramirez A, Schulenkorf N, *et al*, eds. *Physical activity in low- and middle-income countries*. Routledge/Taylor & Francis Group Publisher, 2020.
- 12 World Health Organization. *Global status report on road safety 2018*. Geneva, 2018.
- 13 Salvo D, Sarmiento OL, Reis RS, et al. Where Latin Americans are physically active, and why does it matter? findings from the IPEN-adult study in Bogota, Colombia; Cuernavaca, Mexico; and Curitiba, Brazil. Prev Med 2017;103S:S27–33.
- 14 Bull FC, Saad Al-Ansari S, Biddle S, et al. World Health organization 2020 guidelines on physical activity and sedentary behaviour. Br J Sports Med 2020.
- 15 Milton K. Optimising the impact of physical activity guidelines through effective communication strategies. *British Journal of Sports Medicine* 2020.
- 16 World Health Organization. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey. Geneva, 2020.
- 17 Paez DC, Reis RS, Parra DC, et al. Bridging the gap between research and practice: an assessment of external validity of community-based physical activity programs in Bogotá, Colombia, and Recife, Brazil. *Transl Behav Med* 2015;5:1–11.
- 18 Lawanson T, Foley L, Assah F, et al. The urban environment and leisure physical activity during the COVID-19 pandemic: a view from Lagos. *Cities & Health* 2020.
- 19 World Health Organization. *Global action plan on physical activity 2018–2030: more active people for a healthier world*. Geneva, 2018.