PHYSICAL ACTIVITY AND NON-COMMUNICABLE DISEASES

In South Africa (SA), non-communicable diseases (NCD) contribute to over 60% of total deaths\(^1\). Diabetes, stroke and ischemic heart disease are among the top 10 conditions leading to death and disability\(^2\). Physical activity is one of the five major modifiable risk factors for NCDs, yet almost 40% of South Africans are considered insufficiently physically active. The 2022 South African National Strategic Plan (NSP) for preventing and controlling NCDs highlights the importance of NCD prevention through multisectoral collaborations and holistic approaches. The NSP specifically recommends that population-level interventions, such as access to physical activity facilities and enhanced green spaces, should be offered.

PUBLIC HEALTH PROGRAMMES FOR PHYSICAL ACTIVITY ARE INADEQUATELY EVALUATED

To assess the effects of infrastructure and regulatory interventions for increasing physical activity, researchers from CEBHA+ conducted a comprehensive systematic review. The review included thirty-three published studies (10 countries) assessing the effects of introducing and upgrading green or other public spaces; infrastructure changes to increase active transport; and policy and regulatory interventions that provided free access to physical activity facilities and free bus travel to youth. The review found that there is lack of robust evidence regarding which population-level interventions work and which do not, and which interventions may be relevant for lower resource settings, such as SA.

In SA, population-level interventions to reduce NCDs are being planned and implemented, requiring significant investments in infrastructure and regulation. Research on national or provincial programmes targeting risk factors of diabetes and hypertension in SA reported that the impact of these interventions is not being robustly evaluated, resulting in a dearth of cost-effectiveness data which is critical to continued investments in these interventions\(^3\).

PREVENTING NON-COMMUNICABLE DISEASES IN SOUTH AFRICA: TIME TO EVALUATE WHAT WORKS!

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PRIORITY ACTIONS FOR SOUTH AFRICAN PROVINCIAL PROGRAMME MANAGERS

1. Ensure that the impact of public health programmes addressing physical activity are evaluated using appropriate comparative research designs

2. Partner with researchers and funders to ensure that planned and ongoing programmes are evaluated adequately to inform future cost-effective policies

“… the National Department of Health (NDOH) commits .... To support and coordinate activities to strengthen the evidence base for resourcing equitable and cost-effective interventions that will address the burden of NCDs+ in South Africa”

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**IMPLICATIONS**

Implementing the priority actions can increase understanding about what works or does not to increase physical activity for the South African context. This will further inform health policy and planning for cost-effective programmes to meet the NSP agenda.

Effective and efficient evaluations of population-level interventions to increase physical activity can help strengthen partnerships through collaboration between local government, international funders and global researchers.

Lack of evaluation of population-level interventions to increase physical activity has several implications for national, provincial stakeholders and communities:

**National and provincial NCD programmes**
- Inability to measure the success of programmes that have been implemented and whether strategic goals have been achieved or not.
- Waste of scarce financial and human resources on programmes that may not be effective or sustainable.
- Lack of knowledge about what works in the local context and what can be done to increase implementation effectiveness.
- Reduced ability to plan for the future implementation of cost-effective, contextually appropriate health policies and programmes to increase physical activity.

**Communities**
- Lack of improvement in number of people engaging in physical activity with continued contribution of this risk factor to burden of NCDs.
- Perpetuate inequities in access to facilities and spaces for physical activity across different socioeconomic strata of SA society.

**KEY FINDINGS**

1. What works for increasing physical activity remains unclear: studies identified were poor quality, had conflicting results, and had inadequate sample sizes.

2. Studies were generally from high-income countries, at times conducted in lower resource settings. Of the 33 included studies, only one was conducted in a lower- or middle-income country (Brazil).

3. Population-level interventions in South Africa are being planned and implemented nationally but robust evaluation or research to understand the impact of these is lacking.

**References**


**Pictures**

1. Health benefits of urban vegetation and green space: research roundup