

From silent surge to urgent priority: hypertension in sub-Saharan Africa

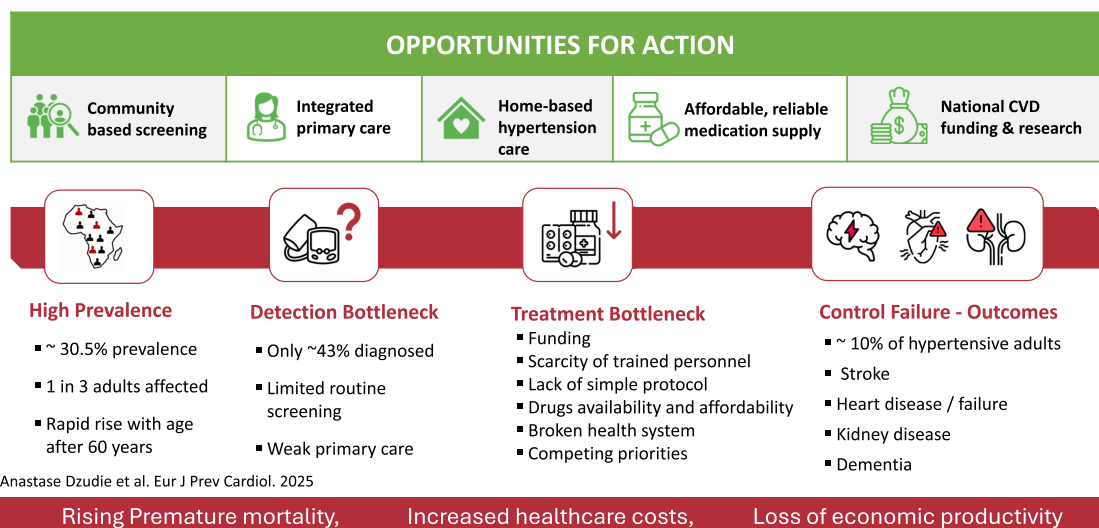
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Graphical Abstract

CENTRAL ILLUSTRATION: Hypertension Care Bottlenecks in Sub-Saharan Africa

From High Prevalence to Low Control



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This editorial refers to ‘Elevated blood pressure levels among 533,167 adults living in sub-Saharan Africa: a systematic review and meta-analysis’ by A. Chen et al., <https://doi.org/10.1093/eurjpc/zwaf706>.

Hypertension has rapidly emerged as the most urgent yet under-recognized public health issue in Africa. The study by Chen et al.¹ in this

issue of the *European Journal of Preventive Cardiology* offers a striking and timely synthesis of blood pressure (BP) data among more than half a million adults across 26 countries in sub-Saharan Africa (SSA). Through the rigorous review and meta-analysis of 170 high-quality studies, the authors estimated a pooled hypertension prevalence of 30.5%, confirming that at least one in three adults in this World Health Organization (WHO) region

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now lives with elevated BP. This burden now surpasses that seen in many high-income regions just two decades ago.²

An acceleration of the silent killer's advances

The findings from Chen *et al.* are consistent with the 2023 WHO global report on hypertension, titled 'The race against a silent killer'.³ The age-stratified data are particularly alarming, demonstrating that the prevalence of hypertension nearly triples between the third and fifth decades of life in individuals from SSA, exceeding 60% among those aged 70 years and above. Compared with women, men show systolic BP levels that are ~3 mmHg higher, underscoring the gendered behavioural and biological variations observed across most countries worldwide.² While the studies included in the meta-analysis showed high heterogeneity, the consistency of its findings across subregions strengthens confidence in the pooled estimates. Overall, the data indicate that while SSA is still struggling with an 'unfinished agenda of infectious diseases',⁴ the region is silently facing a surge of hypertension, beckoning the looming cardiovascular crisis as populations age and urbanize.

Beyond hypertension prevalence in sub-Saharan Africa: the systemic blind spots

While this meta-analysis highlights the rapid escalation of hypertension prevalence and BP levels in SSA, it also unearths the frightening reality of an underdiagnosed, undertreated, and poorly controlled disease in this region. The 2023 WHO report indicated that although ~78% of adults with hypertension live in low- and middle-income countries, Africa has among the lowest rates of diagnostic coverage (43%) and effective treatment coverage, with just ~1 in 10 individuals with hypertension achieving BP control.³

The structural challenges exacerbating this situation include poorly organized and fragmented health systems, the scarcity of trained personnel, weak primary care facilities, and limited access to care, especially antihypertensive medications, given the competing priorities for infectious disease control. Consequently, Africa has experienced >50% rise in the prevalence of cardiovascular diseases (CVDs) in the last three decades, with the increasing incidence among the youth contributing to excessive disability-adjusted life years.^{2,5} The economic consequences of this crisis are expected to add further strain to the already resource-constrained health budgets in SSA if appropriate actions are not undertaken.

Reshaping prevention and implementation in Africa by Africans

The study by Chen *et al.* not only sheds light on the epidemiology of hypertension in SSA but also acts as an urgent call to reverse the sudden progression of hypertension in this region and reduce its impact on the human resource pool, economy, and continental productivity in Africa. Preventing CVDs in SSA requires a paradigm shift from current sporadic screenings during hospital visits to regular integrated, community-based risk detection and management strategies embedded within primary healthcare. Leveraging existing health platforms, such as maternal and human immunodeficiency/acquired immunodeficiency

syndrome programmes, could improve reach and cost-effectiveness. Meanwhile, innovative strategies such as home-based hypertension care, which have proved more effective in controlling BP than standard, clinic-based care, can also be implemented.⁶ Furthermore, the lower prevalence observed among healthy-weight adults in this analysis reinforces the urgency of addressing urban nutrition transitions, sedentary lifestyles, and tobacco and alcohol consumption drivers that have outpaced policy response.

In the strategic battle against CVDs in Africa, the African cardiovascular community has a central role to play. Partnerships across African, North American, and European research networks could accelerate locally led trials and implementation research to identify scalable models of hypertension control. Some immediate priorities include investment in awareness and education, accessible and affordable healthcare services and medications, a skilled healthcare workforce, clinical BP management guidelines, and robust surveillance systems. These steps will improve early detection and treatment rates and enhance effective treatment coverage, ultimately reducing the burden of CVDs across Africa. Meanwhile, allocating enough and sustainable funding to CVD prevention in Africa is equally important. Most SSA countries currently dedicate far below 2% of the health budget to health research and innovation, limiting our ability to adapt proven interventions like the WHO Technical Package for cardiovascular disease management in primary health care to local contexts despite well-established roadmaps.^{7,8}

An urgent call for national and international funding and scientific commitment

We expect that this meta-analysis will serve as an epidemiological benchmark and a regional warning. Without urgent action, the number of deaths and major cardiovascular events will continue to increase dramatically in SSA, potentially reaching catastrophic levels within the next two decades. Economically, the failure to invest in prevention and control will translate into massive direct and indirect costs. The direct costs could stem from expensive emergency care, hospitalization, and the long-term management of severe complications, which are far more costly than routine BP management. Meanwhile, indirect costs could arise from lost productivity due to illness, disability, absenteeism, and premature mortality, disproportionately affecting the workforce. In contrast, an effective action plan could prevent millions of strokes, heart failures, and premature deaths within the next two decades. The sustainable development goal of reducing premature non-communicable disease mortality by one-third by 2030 will remain elusive in Africa unless hypertension prevention and control emerge as a political priority.

Since the comprehensive synthesis by Chen *et al.* provides unequivocal evidence, we call for policymakers, clinicians, and researchers to transform evidence into coordinated action on the African continent. Whether human, economic, or societal, the cost of inaction will be far greater than the investment required to implement action plans. It is time to act, right now!

Author contributions

Anastase Dzudie Writing—original draft [lead], Writing—review & editing [lead], Marcel Yotebieng Writing—review & editing [supporting], and C. Venkata S. Ram Writing—original draft [supporting], Writing—review & editing [equal]

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