

EDITORIAL



African Control of Hypertension through Innovative Epidemiology and a Vibrant Ecosystem (ACHIEVE): a holistic approach for hypertension control in Africa

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Over the last few decades, the burden of hypertension has been rapidly increasing in low-and middle-income countries (LMIC) including African countries due to population growth and ageing [1]. In Africa, the cumulative estimated prevalence of hypertension is ~30.8%. With rising urbanization, unhealthy lifestyles such as malnutrition and low physical activity, high blood pressure will likely continue to increase [2]. Over the years, insufficient progress has been made in implementing high blood pressure awareness and control programs on a population-wide scale in Africa [3]. According to a systematic review and meta-analysis, the overall rate of hypertension control was estimated to be only 7.3% in Africa [4, 5]. Several factors contribute to the low rates of hypertension control in Africa, including poor access to healthcare services, limited availability of affordable medications and inadequate health education and awareness programs [4]. The research conducted by Azuka S. et al indicates an association of socio-demographic and lifestyle factors with hypertension, accordingly, interventions such as counselling, health education and policy development and execution directed toward these factors are essential in the prevention and control of hypertension [6]. To improve awareness, treatment and control of hypertension in Africa, a comprehensive approach is needed that includes increasing public awareness, strengthening healthcare infrastructure, improving hypertension screening, implementing task-shifting, improving medication adherence and addressing social and cultural factors [7].

The present study by Owolabi et al. proposed ten key strategic actions to be implemented to reduce the burden of hypertension in Africa. A team consisting of 34 experts with a wide range of expertise from Africa in conjunction with the international advisory panel of experts in hypertension control from the World Hypertension League, World Health Organization (WHO) and Resolve to Save Lives, was assembled to design these strategic actions. From a narrative review, Owolabi et al. identified the key barriers and facilitators for hypertension control in Africa at different levels such as population, healthcare workers, government and policy makers. Information obtained from this review led to the development of a list of recommended key points, which were shared with other team experts. Subsequently, all the experts independently assessed and ranked the key strategic actions for hypertension control in Africa.

Consensus from this hypertension experts suggested to prioritize the implementation of hypertension quadrangle as the most important strategy to accelerate hypertension control in Africa. This strategy includes surveillance, prevention,

treatment and rehabilitation of those with hypertension complications. This key point corroborates with the hypertension guideline reported by the American College of Cardiology and the American Heart Association Task Force on Clinical Practice Guidelines [8]. This strategy is important since many hypertensive Africans were unaware of their hypertension status, rarely treated and poorly controlled. This malady put them at the highest risk of developing stroke, heart and kidney disease [9]. Early detection and taking measures to control blood pressure may be a cost-effective way to reduce hypertension-related complications [10]. Routine blood pressure measurement is needed for all adults especially for those who have other cardiovascular risk factors. Active promotion of preventive measures such as a healthy diet, physical activity and abstinence from smoking and alcohol drinking will translate this strategy into an effective way to control hypertension. Furthermore, for those who develop complications from hypertension, improving the availability and accessibility of rehabilitation services in Africa is needed to optimize the patient's functional capacity and reduce the risk of disability associated with hypertension. Figure 1 shows a schematic diagram of ACHIEVE on hypertension control in Africa.

The present innovative approach by Owolabi et al. claimed that in an effort to reduce the burden of hypertension in Africa, the ecosystem will utilize an iterative implementation cycle that involves the development and deployment of pragmatic solutions. This will be achieved through contextualizing interventions to address barriers and enhance facilitators, while also ensuring effective communication and active participation of all stakeholders in the implementation environment. The World Health Organization (WHO) created the HEARTS technical package as a guideline for managing hypertension and other cardiovascular disease risk factors in resource-limited settings with the aim of reducing the burden of cardiovascular disease [11]. Swift and decisive action is required to tackle this issue by deploying and expanding the WHO-HEARTS strategy in a comprehensive and coordinated manner. The key strategic actions proposed by the experts are promising for implementation to achieve maximum impact in hypertension control.

Owolabi et al. also reported that the development and implementation of task-sharing policies are important key strategic actions for hypertension control in Africa. Furthermore, they emphasized the implementation of task-sharing policies that authorize appropriately trained non-physician healthcare professionals such as nurses, pharmacists, public health practitioners and community healthcare workers to conduct screening, diagnosis, treatment and management of uncomplicated mild-moderate hypertension, with supervision according to approved protocols that include multi-directional referral systems [12].

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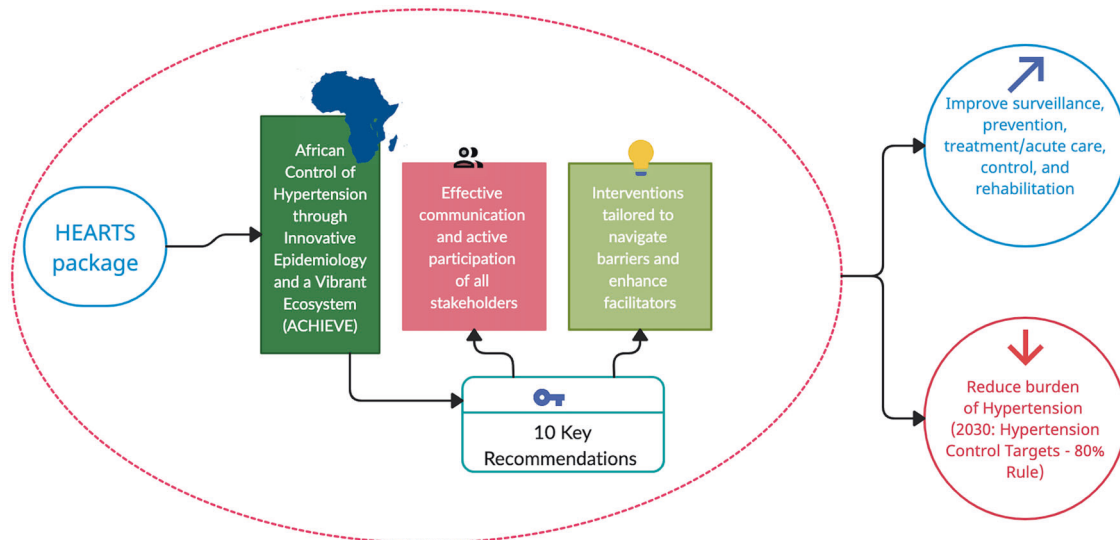


Fig. 1 Schematic diagram of ACHIEVE on hypertension control in Africa. The diagram illustrates the promising actions for hypertension control in Africa. Implementing ACHIEVE based on the WHO-HEARTS package will improve surveillance, prevention, treatment/acute care, control, and rehabilitation as well as reduce the burden of hypertension.

According to A Call to Action from the World Hypertension League by 2030, 80% of adults with high blood pressure (BP) in Africa will be diagnosed and ACHIEVE will promote the utilization of automated blood pressure monitors for home blood pressure measurement [7]. Enhancing the home-based BP measurements help to identify individuals with masked uncontrolled hypertension as well as white-coat hypertension and a holistic approach in hypertension control could be established.

To make these strategies realistic, multifaceted approaches that involve all professions from industries, researchers and government, as well as media artists and social media influencers, should work together with healthcare providers in controlling hypertension in Africa. On the other hand, the emerging technologies of telehealth in Africa provide an excellent platform to detect, treat and control of hypertension. Evidence from a systematic review and meta-analysis of randomized controlled studies shows that automated blood pressure devices with remote data transmission to electronic health records or healthcare providers are effective in improving hypertension control [13]. Telehealth facilitates the delivery of healthcare services regardless of geographical locations [14]. Telehealth provides opportunities for all people including those who are in remote areas and ageing population to communicate with doctors, nurses and laboratory technicians, minimizing the patient's visit to clinics or hospitals. Patients will have direct access to the healthcare services such as prescription medications, patient engagement and medical counseling. This technology is transforming healthcare access throughout Africa [14]. However, improving the internet connectivity, infrastructure, policy frameworks and increasing the number of healthcare providers are among the factors that should be focused earlier for the effective implementation of telehealth in African countries.

Efforts are being made to improve hypertension control in Africa, including implementing community-based hypertension management programs and increasing public awareness and education about hypertension and its risk factors. The key actions proposed by ACHIEVE are comprehensive and will provide significant impact on the hypertension control in Africa.

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AUTHOR CONTRIBUTIONS

Drafting of the paper by NB and NMA. All authors read and approved the final editorial.

COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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