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## Leadership training to accelerate progress in public health in sub-Saharan Africa: time for action



COVID-19 has highlighted the deep socioeconomic disparities worldwide. Fragile health systems, chronic lack of access to programmes and services, and structural barriers threaten socioeconomic development and good health in sub-Saharan Africa. The pandemic has highlighted the challenges that communities with few resources face, including health-care personnel shortages, overcrowded conditions preventing physical distancing in urban areas, and little access to clean water and hand sanitiser. The pandemic has also highlighted gaps in preparedness and response; effective leadership within public health programmes could influence outcomes in countries across the globe.

In 1996, WHO emphasised the need for investments in research capacity strengthening because investments in health research result in better health outcomes in high-income countries as well as in low-income and middle-income countries.<sup>1</sup> Funders responded with opportunities for individual training ranging from short-term workshops to doctorate programmes.<sup>2</sup> The most successful programmes demanded internationally recognised scholarship, so that trainees graduated with the ability to do research independently and mentor others.<sup>3</sup>

In the past decade, research capacity building programmes have evolved to emphasise institutional strengthening in addition to building the capacity of individuals.<sup>4</sup> Sponsors have encouraged research training models that promote institutional capacity building and the formation of networks among low-income and middle-income countries.<sup>5</sup> This evolution has enhanced global partnerships that focus on national and regional research priorities in disease prevention and health-care delivery.<sup>6,7</sup> Centres of excellence have also successfully contributed to strengthening institutional research capacity, although catalytic start-up resources are required and sustainability is not guaranteed. Successful centres of excellence such as the Infectious Diseases Institute in Uganda, the Noguchi Memorial Institute for Medical Research in Ghana, and the Academic Model Providing Access to Healthcare in Kenya have become trusted institutions that build national and regional research evidence, and translate

those findings into scale-up activities with impressive public health impact.

Despite academic productivity, there are major gaps in delivery of disease prevention and health care. The 2015 Sustainable Development Goals emphasised the need to strengthen implementation science and policy capacity in low-income and middle-income countries at both institutional and governmental levels. Research capacity strengthening models take time to mature and produce a critical mass of independent researchers.<sup>4</sup> However, few programmes provide public health professionals in ministries of health or clinicians on the frontline of health care with the situational analysis skills needed to bring research evidence to scale.<sup>8</sup> These skills are rarely included as part of research or clinical training and represent an addressable obstacle on the way to closing the know-do gap in low-income and middle-income countries, particularly in sub-Saharan Africa.<sup>9</sup>

With support from the President's Emergency Plan for AIDS Relief (PEPFAR) through the US National Institutes of Health Office of AIDS Research, and the US Health Resources and Services Administration, the Afya Bora Consortium was formed between eight African and US universities in 2009. This consortium was formed to strengthen health systems through an interdisciplinary leadership training programme targeting African health professionals in medicine, nursing, and public health from ministries of health, PEPFAR-implementing partners, and universities.<sup>10</sup> The goal was to train fellows who had competencies (critical thinking, problem solving, networking, using data to inform evidence-based practice) and experience to lead evidence-based public health programmes to fill the gap in African health leadership. The 1-year leadership training included didactic in-person and online modules with core content in leadership skills, programme management, public health, research, and policy, and two 4.5-month attachment site placements in ministries of health, PEPFAR-implementing partners, and non-governmental organisations. The goal was not research proficiency, but experience with predetermined leadership competencies that were tracked. Fellows developed and implemented projects through which

they could practise newly acquired skills, overseen and honed with on-site mentorship as well as facilitated in-country monthly meetings, during which fellows discussed progress and solutions to implementation barriers.

Afya Bora has resulted in a vibrant network of young leaders who have continued to excel post-fellowship in the public health arena, with more than 80% spearheading new initiatives and taking on enhanced leadership roles within their institutions, and approximately two-thirds receiving promotions or moving to new positions at local, national, and international public health organisations. All 161 fellows stayed in their countries of origin after completing the programme. The programme also empowered partnering universities to offer leadership training directly relevant to the needs of ministries of health and PEPFAR-implementing partners. Many of the fellows involved in the programme support the public health sector and are now on the frontline of the response to COVID-19.

By moving beyond research capacity strengthening, leadership programmes such as Afya Bora accelerate effective research use, prioritise public health problems, and foster links between ministries of health, non-governmental organisations, and academic institutions. Africa-centric leadership training that rapidly forges a network of young leaders who can identify locally relevant health priorities, scale up evidence-based solutions, and communicate and marshal resources is key to improving public health. Through rapid situational analysis and broad exposure to programmatic skills, future leaders must be able to design, implement, scale up, evaluate, and iteratively improve evidence-based research for policy and practice during health crises such as COVID-19. Future pandemics are inevitable and, therefore, investment in leadership beyond research

capacity building is needed to change the course of such health emergencies in low-income and middle-income countries.

We declare no competing interests. All authors are members of the Afya Bora Consortium Fellowship in Global Health Leadership Working Group and present this on behalf of its members and all public health professionals, faculty, staff and fellows who continue to support the mission of the Afya Bora Consortium.

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