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Africa should set its own health research agenda

To transform health systems, local experts—not rich-country donors—must design and control studies, says **Francisca Mutapi**

In a controversy reported last month, critics accused a UK institute of using African people's DNA inappropriately, without sharing benefits with African partners. But the biggest lack I see in cross-continental partnerships goes deeper. It involves inequity in the control of funding, research agendas, outputs, training and infrastructure. At a meeting I led in Accra, Ghana this year, funders, policy-makers and researchers agreed: "safari science" is ineffective. Inequitable partnerships that task African scientists as data gatherers for western research agendas are unlikely to make a difference for health issues that really matter.

I've seen this play out for decades. For over 20 years in Zimbabwe, I have led a program on human schistosomiasis. For most of that time, international donors concentrated on treating school children. Our team's persistence led to extending treatment and monitoring to pre-school children, a policy now endorsed by the World Health Organization (WHO). In 2017, I began co-leading a new UK-funded partnership, Tackling Infections to Benefit Africa (or TIBA, the Swahili word for curing infection). TIBA brings together world-class researchers from Botswana, Ghana, Kenya, Rwanda, South Africa, Sudan, Tanzania, Uganda and Zimbabwe, plus colleagues from the University of Edinburgh. One project studies Chikungunya virus, a global public health problem that is largely ignored in its original home in Africa, though our researchers *[ok? Was this a TIBA finding?]* found it was linked to almost 30% of fever cases in one Kenyan hospital. Another examines silent human carriers of human sleeping sickness, an under-researched problem that could thwart WHO-backed efforts to eliminate the disease in Uganda. *[mb ok? Do we need to mention WHO here? If so, is there a reference]*

Four principles are crucial for TIBA. *[mb I'm worried that saying "TIBA's success" will come off as self-promotional, and these are easy words to cut]* First, our research activities are led from Africa, chosen to reflect local priorities and not dictated by outside agencies. One example is TIBA's work on the autoimmune disease systemic lupus erythematosus, a disease more common and more severe in people of African descent. Its international diagnostic criteria, set by the American College of Rheumatology (ACR), were derived from non-African patients presenting predominantly with inflamed joints and mucosal membranes. A study of Zimbabwean patients identified a variant of this disease in Africans that present predominantly with rashes and skin lesions.

[/https://gh.bmj.com/content/3/5/e000697.info](https://gh.bmj.com/content/3/5/e000697.info)

Second, the bulk of our work-- and 80% of our spending-- takes place in Africa. I have seen too many projects in which most research funds go to labs in the global north or to the salaries of ex-pat researchers.

Third, we strive to be equitable. African experts form the majority of our directorate, steering committee and external advisory group. African-based researchers are first authors of 10 of 14 papers we published in the past 2 years.

Fourth, we aim for inclusivity. Each partner engages stakeholders—affected communities to national health ministries—at the outset of each project. All our partners have access to our training and capacity building activities (e.g. our workshops on intellectual property -- requested by the African Union Development Agency and held in South Africa, and workshops in viral genome sequencing and evidence synthesis, both held in Ghana). We explicitly ask how outputs from a project will guide local decision-making and benefit local populations.

Such principles are usually expressed more in word than in deeds. I have sat through panels reviewing funding applications on global health or human scientific research in Africa that did not include anyone from an affected country. Even when local experts are given appropriate responsibilities, anti-corruption and documentation requirements often go far beyond what is expected in funders' home countries. The obviously low expectations of African researchers and research institutions are as big a burden as the extra bureaucracy. While the paradigm is beginning to shift, the pace of this change needs to accelerate.

Of course there are struggles. Africa cannot (yet) fund this research itself. Nor does it have enough researchers. And few research institutions there are capable of managing large grants or providing the governance oversight that international funders typically expect.

The four principles apply to building institutional capacities as well. Most funders impose their own approaches to issues such as ethical review [mb ok?>, financial management or data security. Finding out what systems are already in place and strengthening research institutions as needed would be more efficient. The Good Financial Grant Practice Tool, launched last year by the African Academy of Sciences, is an exemplar of productive, respectful partnering.

Going forward, the international community should focus on the strengths that African-led research offers: a distinct culture structured around knowledge gaps and desired impact, which western science often struggles with. This mindset leads naturally to collaboration and high-quality science. My work on schistosomiasis, for example, requires me to collaborate with local scientists, government officials, village health workers, school teachers, mothers and other caregivers.

African-led research also builds sustainability. Local support must transcend any one project or funding scheme. My work in Zimbabwe has been supported by several funders. I am grateful to them all but recognize that continuity and ultimate impact require local commitment. Fortunately, it is self-reinforcing. Our collaborative approach has brought invitations to contribute to strategic initiatives like the formulation of the African Union's Health Research and Innovation Strategy (HRISA 2018-2030) to be launched this month, the WHO roadmap to strengthen national health research systems in African countries, and the roadmap for an African Vaccine Policy.

Locally led partnerships are essential to producing relevant knowledge and sustainable change. The health of Africa, and the world, depends on making these happen.

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Pull quote: “safari science” is ineffective.

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