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African countries must take control of their research agendas and coordinate collaborations with high-income country partners. Otherwise, African countries risk repeating history and becoming victims of ‘scientific colonialism’.

Global health partnerships and international research collaborations have enormous potential to improve health care and policy in Africa. These partnerships can also bring expertise, training opportunities and funding for African health research.

But power imbalances and inequity exist in these processes, especially when researchers from high-income countries work in low- or middle-income country (LMIC) settings. Researchers who collect blood samples in Africa and then return to their home country with the specimens have been called ‘mosquitoes’ or ‘vampires’.

Since high-income country investigators secure most of the funding for global health research, they often end up dictating the research agenda. Where this is different from the values and objectives of the African partners, local researchers can be left feeling like ‘prostitutes’.

However, it doesn’t have to be that way. This essay describes seven steps that partners in high-, low- and middle-income countries can take towards building more equitable programmes.

**1. Build local research capacity**

Few physicians in Africa are trained in research. Therefore, a key goal of any global health research collaboration is the transfer of research skills to African partners.

Institutions from high-income countries can provide their African counterparts with access to distant learning resources such as online libraries, protocol development, statistical expertise, database development, and management. For instance, the World Health Organization’s HINARI initiative provides free access to thousands of journals for LMIC institutions.

A growing number of open courseware continuing education programmes also make learning research skills more affordable than studying abroad. And finally, research capacity in certain African countries such as South Africa is more developed than others: local capacity can be strengthened through regional partnerships.

**2. Support a local agenda**

Africans need to set their own research priorities. Trusted long term high-income country collaborators who understand the context and needs of the region can teach agenda-setting skills and assist in agenda development.

Continued dialogue between stakeholders, such as local research institutions and their ministries of health, will translate local research into action. Regular communication with regional and international health policymakers is needed to understand global health issues and priorities.

**3. Pursue long-term collaboration**

Long-term partnerships facilitate equitable research collaborations. For example, the Rakai Health Sciences Program in Uganda began in 1987 as a collaboration between two Ugandan physician researchers, Nelson Sewankambo and David Serwadda, and a US colleague, Maria Wawer.

Similarly, the Kenya Medical Research Institute (KEMRI) came into being in 1979 through a personal working relationship between Allan Ronald of the University of Manitoba in Canada and Herbert Nsanze of the University of Nairobi, Kenya.

Twinning—a promising concept in global health—pairs high-income country health care institutions or medical schools with counterparts in Africa and other low- and middle-income countries.

**4. Support local coordination and monitoring**

The large influx of high-income country researchers wanting to work in African settings has to be limited to those who genuinely want to collaborate, build local capacity, address locally identified priorities, and treat local counterparts as equals.

Distinguishing these collaborators from those who are self-serving is essential and has to be regulated by African leaders. Local coordination and oversight would prevent research duplication and ensure that studies are in line with local policies and priorities.

Challenges arise, however, because some African hosts may be enthusiastic about twinning with ‘prestigious’ US universities. This creates a power dynamic that can be inherently unequal and make African institutions reluctant to say No to research requests and risk offending their new colleagues.

African countries need to engage their ministries of health and academic institutions to provide a monitoring mechanism with a clear set of guidelines. For example, local research committees can be required to screen and approve all projects conducted in the country.

**5. Build local ethics review boards’ capacity**

Some research in Africa has exploited local populations. Many high-income country researchers who conduct studies in African countries receive institutional ethics board clearance from their own institutions that do not represent the interests of the country where the research will be performed.

Local ethics review boards are needed to provide additional oversight and to ensure that all studies comply with international ethical standards, including protection against exploitation of vulnerable local populations. These boards should ensure that adherence to policies on intellectual property including data and confidential patient information are respected.

One unique consideration is the material transfer of body tissues from Africa for special tests. Performing these tests locally or at least regionally gives greater African ownership of studies. Lack of funding, expertise, and appropriate infrastructure to establish appropriate laboratories are current limitations. This needs to be combated by strengthening national health laboratory systems.

**6. Require local authorship and dissemination**

Africans are currently under-represented in writing up collaborative work for publication. Collaborative publications need principal investigators from HIC and African partner institutions who were involved in the design, conduct, analysis and manuscript writing of each individual project. Active engagement by local collaborators also encourages local ownership of projects, ideas and publications. Experienced high-income country researchers can encourage African co-investigators to present at international conferences, which often offer scholarships to fund travel expenses and therefore can encourage responsibility, accountability and ownership among local collaborators.

Additionally, local dissemination of results can be encouraged through presentations at national medical societies and institutional departmental meetings which would help a wider local audience to benefit from research methodology and results and increase opportunity to advocate for policy changes.

**7. Embed training in partnerships**

An exciting model of a global health partnership is the Human Resources for Health Program in Rwanda. Established in 2012, it twins 16 US institutions with the Rwandan Ministry of Health and its various medical institutions to improve the quantity and quality of health professionals.

The programme will run for seven years and pairs US physicians and other health care professionals with Rwandan colleagues to transfer clinical, teaching, and research skills. Each US faculty remains in Rwanda for at least one year, allowing time for trust to build with their Rwandan counterparts.

This relationship will hopefully be more successful in developing local research capacity and equitable research collaborations compared to previous models of visiting professorships of a few days or weeks. Skills such as how to set a local research agenda and coordinate other HIC international collaborators will be taught. Pitfalls such as token authorship will be avoided as increased data analysis and write-up capacity are developed.

These seven suggestions are some of the ways of ensuring that Africa’s research collaborations become more equitable. African countries must take control of their research agendas and coordinate collaborations with high-income country partners. Otherwise, African countries risk repeating history and becoming victims of ‘scientific colonialism’.

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