Africa s Youth Researcher Pipeline and Structural Inequities in Clinical Trial Leadership: Implications for Uganda and the African Continent.: Youth Researcher Pipeline

BACKGROUND Africa is home to the world s youngest population, offering a powerful opportunity to nurture the next generation of scientists. In Uganda, this potential is especially important given the country s high burden of infectious and noncommunicable diseases. Yet, research priorities, funding, and leadership often remain externally driven. Evidence suggests that limited institutional support, constrained funding, and insufficient mentorship continue to restrict locally led research. AIM To explore whether gaps in the youth researcher pipeline reflect primarily a lack of training or deeper structural inequities in how research is funded, governed, and led. METHODS We conducted a cross-sectional audit of interventional trials registered on ClinicalTrials.gov through April 2026, comparing African countries with the United States. Registry data were analyzed to identify trends, and ARIMA forecasting was used to examine changes over time. RESULTS We identified 3,515 trials across Africa compared with 159,433 in the United States, highlighting a stark imbalance. Although trial activity in Africa grew 17.1-fold between 2000 2005 and 2021 2025, the gap with high-income countries remains substantial. CONCLUSION The findings suggest that the limited youth researcher pipeline is not only about training, but also about unequal systems that shape who leads research. Strengthening mentorship, funding access, and institutional support is essential for enabling African researchers especially young scholars to lead work that addresses their own health priorities. KEYWORDS Youth researcher pipeline; clinical trials; Africa; Uganda; research capacity; structural inequities; global health; research leadership; ARIMA forecasting.

References

1. ClinicalTrials.gov [registry]. Bethesda (MD): U.S. National Library of Medicine; primary data source for this analysis. https://clinicaltrials.gov