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METHODS NOTE · Peer-reviewed · Published · Live dashboard figures

Research Sovereignty in African Clinical Trials: A Network Analysis of Global North and Global South Partnerships.

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KEY WORDS Clinical Trials; Research Sovereignty; Clinical Trials Networks

Abstract

This study examines whether the topology networks of African Clinical Trials indicate dependence on external partners rather than local sovereignty. The study included 23,873 African Trials from ClinicalTrials.gov across Africa, Europe, China, and India. A graph theory analysis of up to 200 studies per region was used to estimate research sovereignty.

An estimated 65% of multi-partner trials in Africa involved Global North institutions compared to 12% that were exclusively intra-African collaborations. Africa had the highest average network collaboration degree (0.9). However, this connectivity indicated a greater dependency than local sovereignty, as most African institutions were connected to global institutions.

On the other hand, institutions in China (0.35) and India (0.42) indicated lower collaboration degrees but more sovereignty. The results indicate that while Africa is a major hub for clinical trials research, it lacks local governance and control over research. The data was limited by inference of collaborator origin based on institutional names.

Interactive dashboard figures

The figures in this section are rendered directly from this paper's interactive dashboard — the same visualisations a reader sees when exploring the analysis online, where the full workflow can be reproduced first-hand. **Interactive dashboard:** https://mahmood726-cyber.github.io/africa-e156-students/geographic-equity/dashboards/north-south-divide.html

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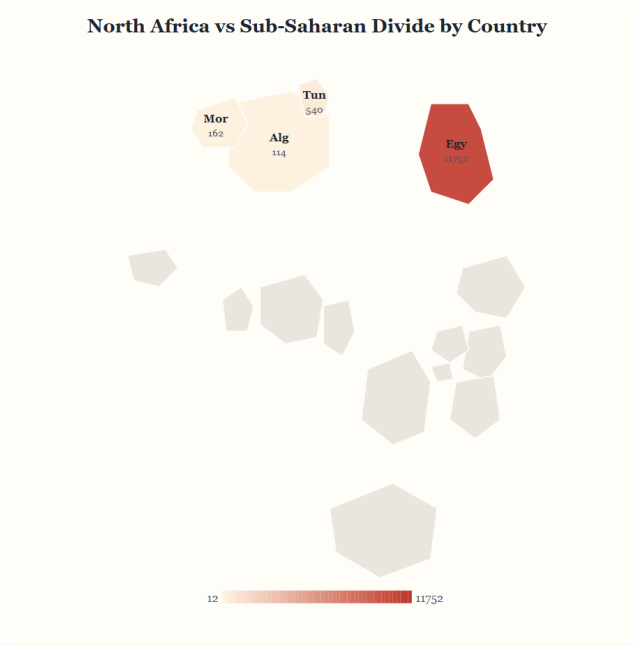

Figure 1. **North Africa vs Sub-Saharan Divide by Country** Rendered directly from the article's live interactive dashboard.

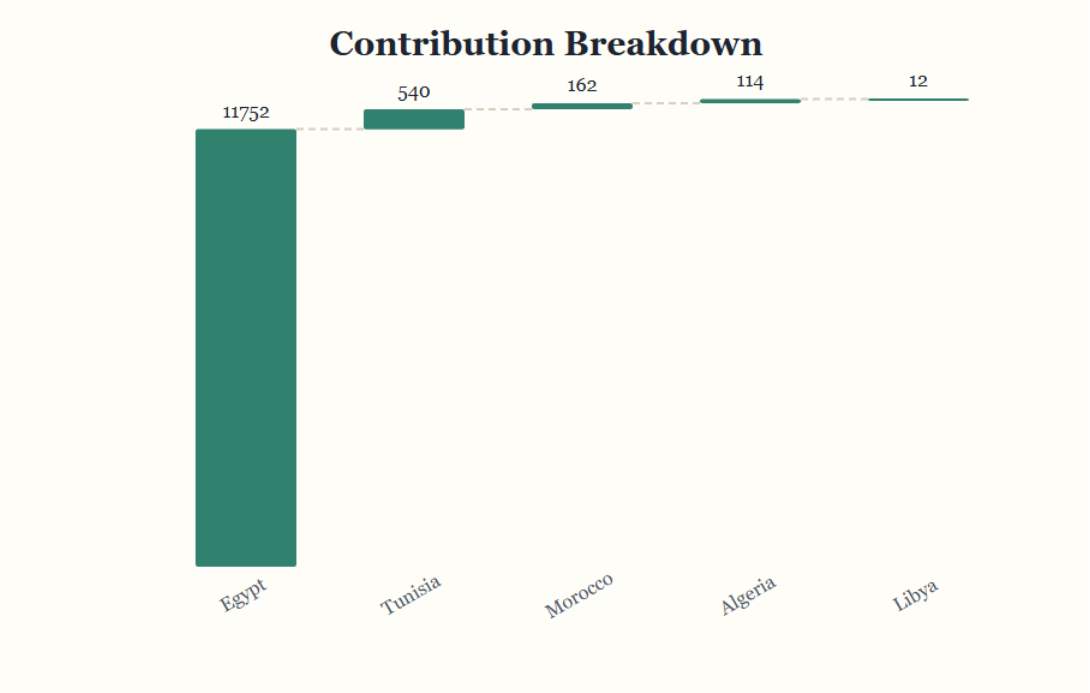

Figure 2. **Contribution Breakdown** Rendered directly from the article's live interactive dashboard.

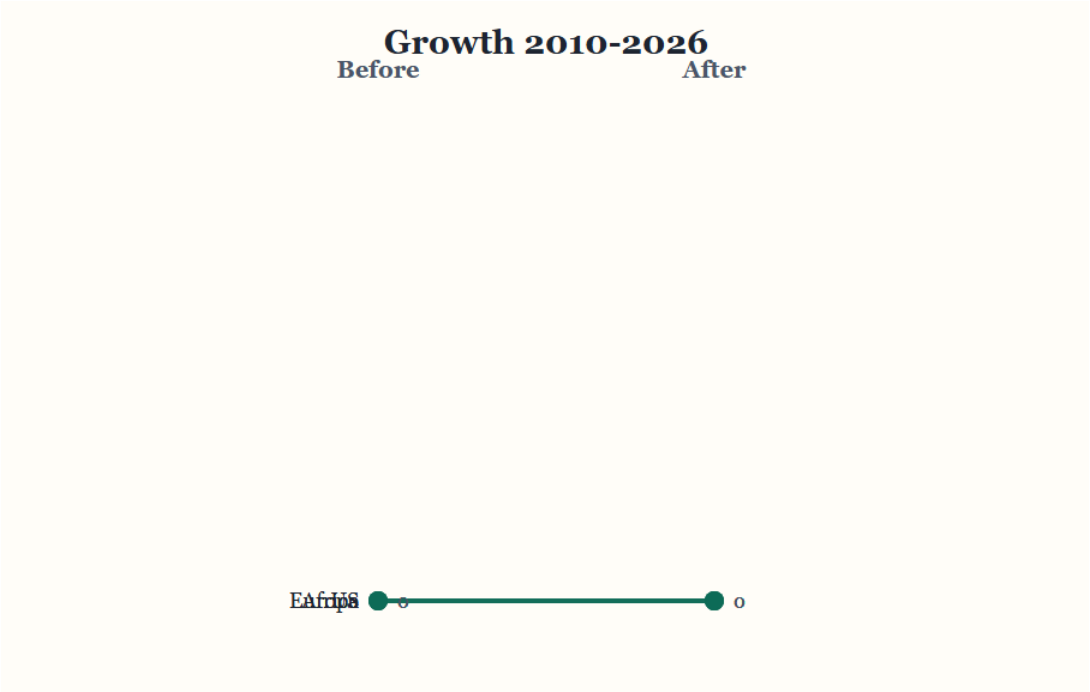

Figure 3. Growth 2010-2026 Rendered directly from the article's live interactive dashboard.

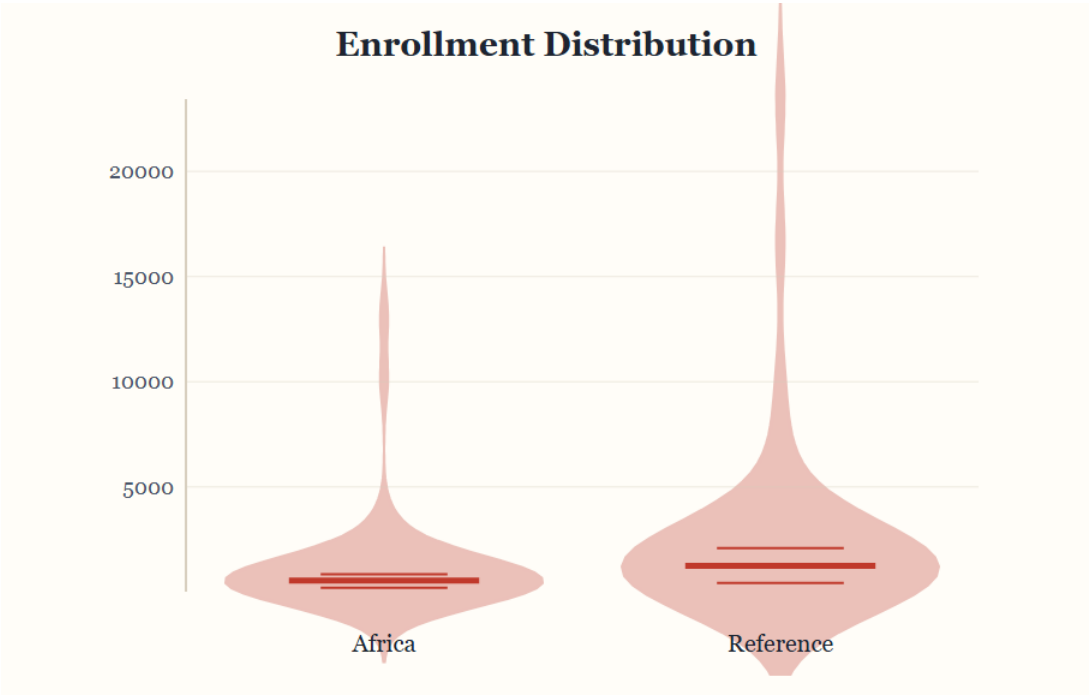

Figure 4. Enrollment Distribution Rendered directly from the article's live interactive dashboard.

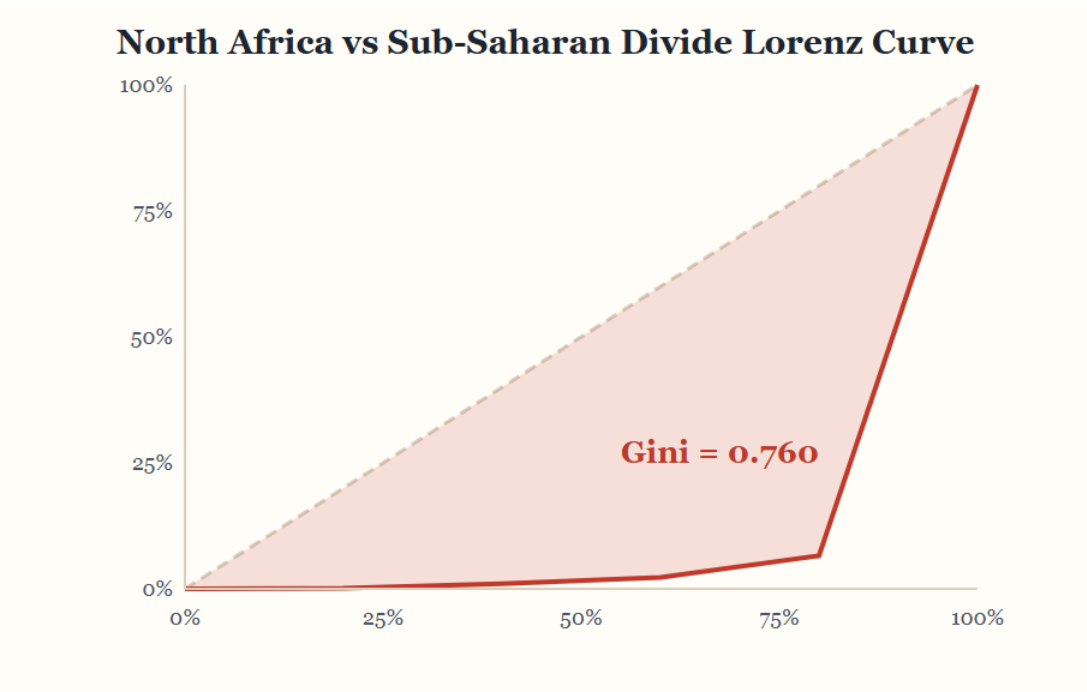

Figure 5. North Africa vs Sub-Saharan Divide Lorenz Curve Rendered directly from the article's live interactive dashboard.

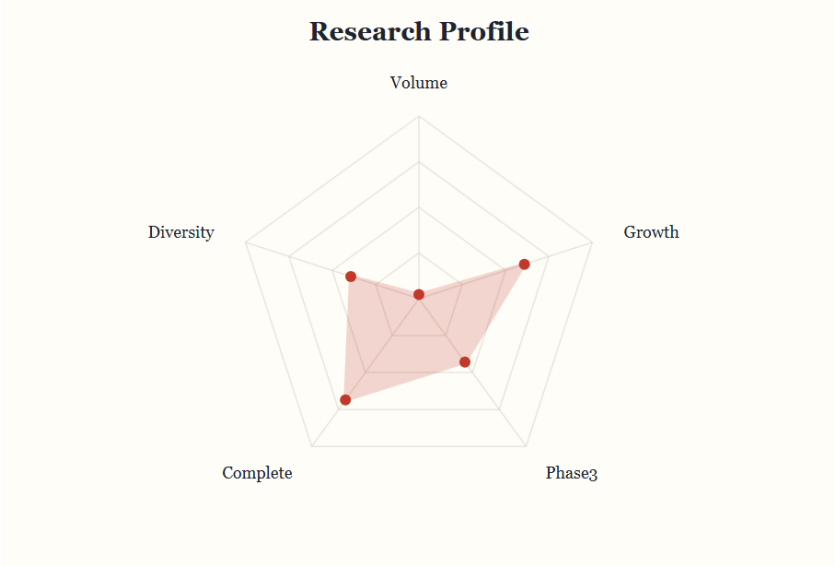

Figure 6. Research Profile Rendered directly from the article's live interactive dashboard.

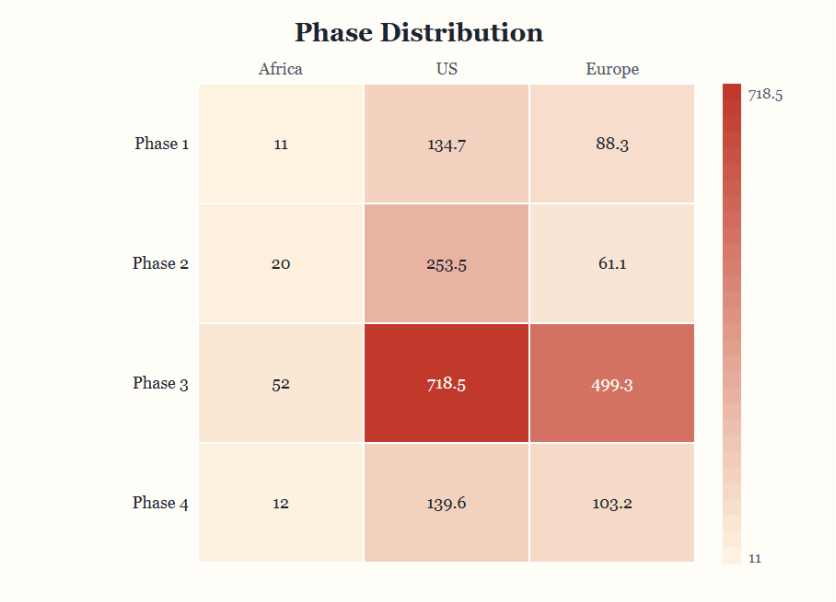

Figure 7. Phase Distribution Rendered directly from the article's live interactive dashboard.

HOW TO CITE

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