

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

Altruism Efficiency & Health Expenditure

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Abstract

In development economics, a key question is whether the link between clinical trial participation and healthcare spending reflects unequal global contributions to research. This study examined trials relative to healthcare spending in 53 countries using data from ClinicalTrials.gov and the World Bank. Africa's average healthcare spending is about \$41 per person, with 17.1 trials per million people, while the United States spends \$12,555 per person and has 578 trials per million.

When spending differences are considered, Africa's participation appears relatively high, suggesting communities engage in research beyond what available healthcare resources might predict. This pattern is particularly evident in East Africa, where countries like Uganda (809 trials) and Kenya (788 trials) maintain notable trial activity despite limited investment in health systems. These findings suggest that trial participation may represent an important but often overlooked contribution from low-resource settings.

However, caution is needed, as aggregated expenditure data may mask important variations within countries.

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/governance-justice/dashboards/altruism-efficiency.html>

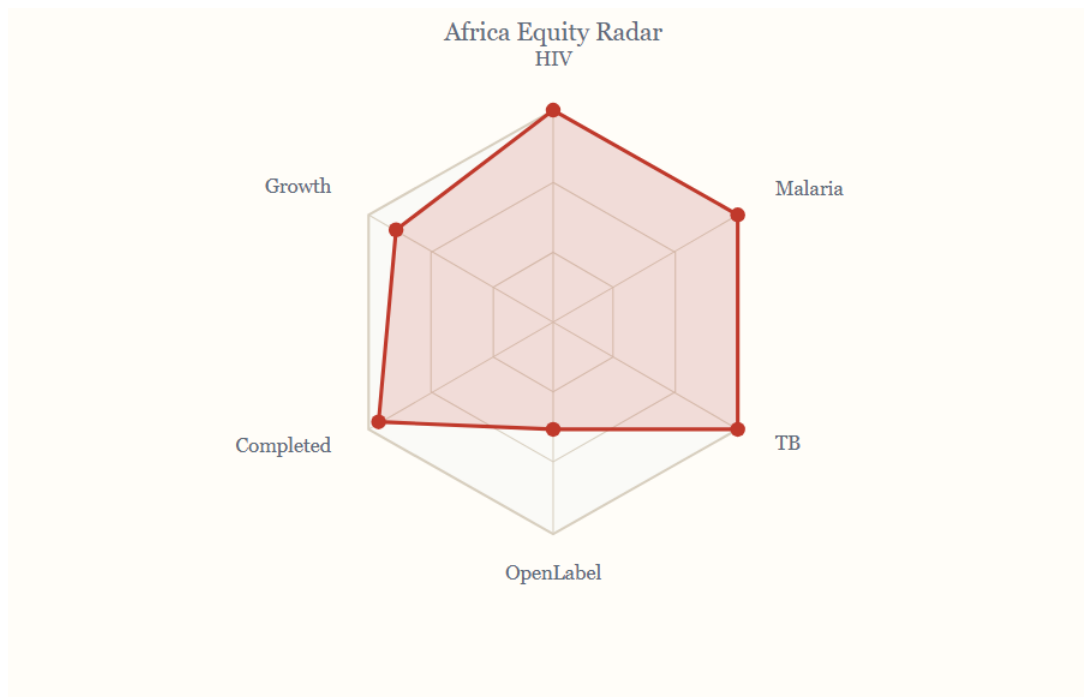


Figure 1. Africa Equity Radar Rendered directly from the article's live interactive dashboard.

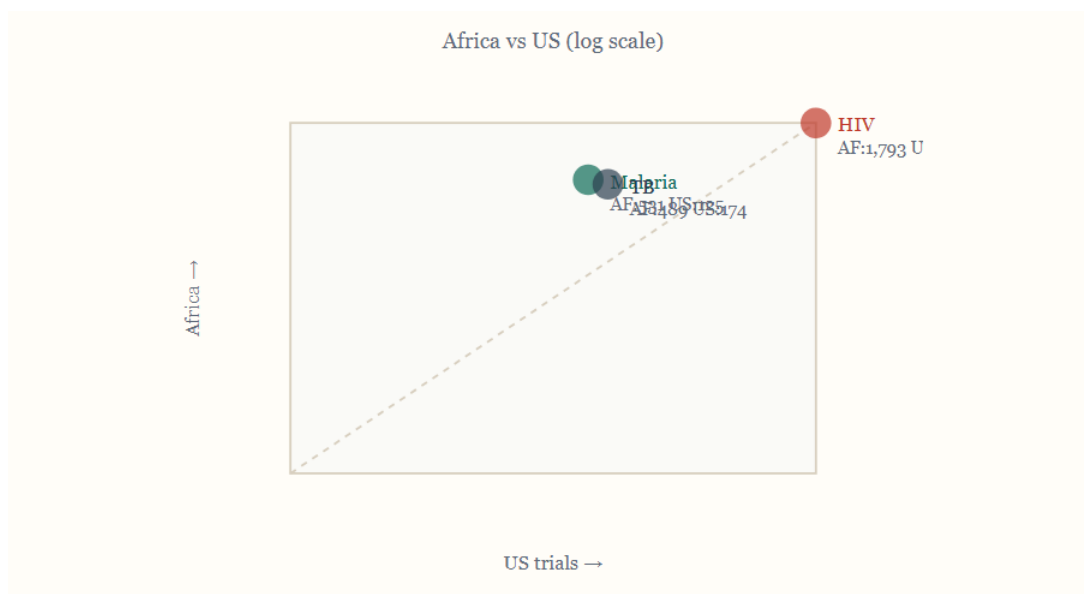


Figure 2. Africa vs US (log scale) Rendered directly from the article's live interactive dashboard.

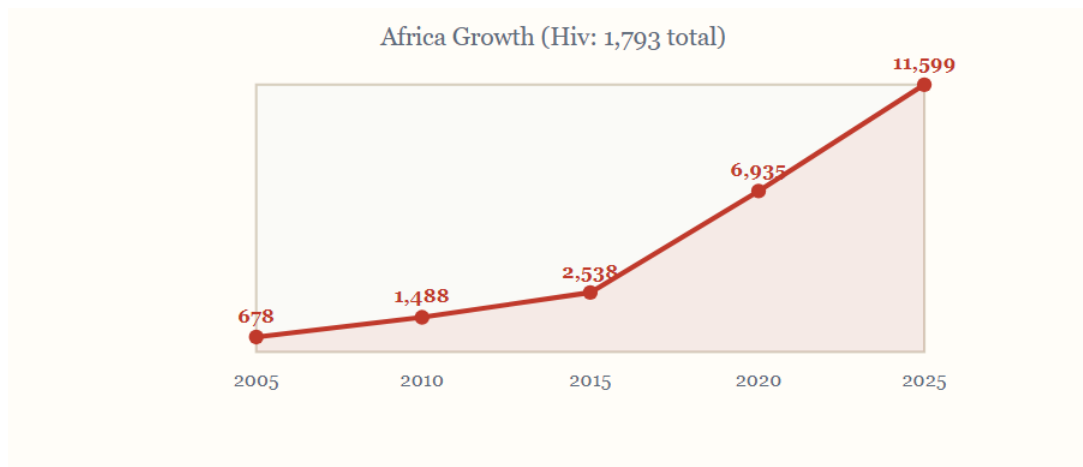


Figure 3. Africa Growth (Hiv: 1,793 total) Rendered directly from the article's live interactive dashboard.

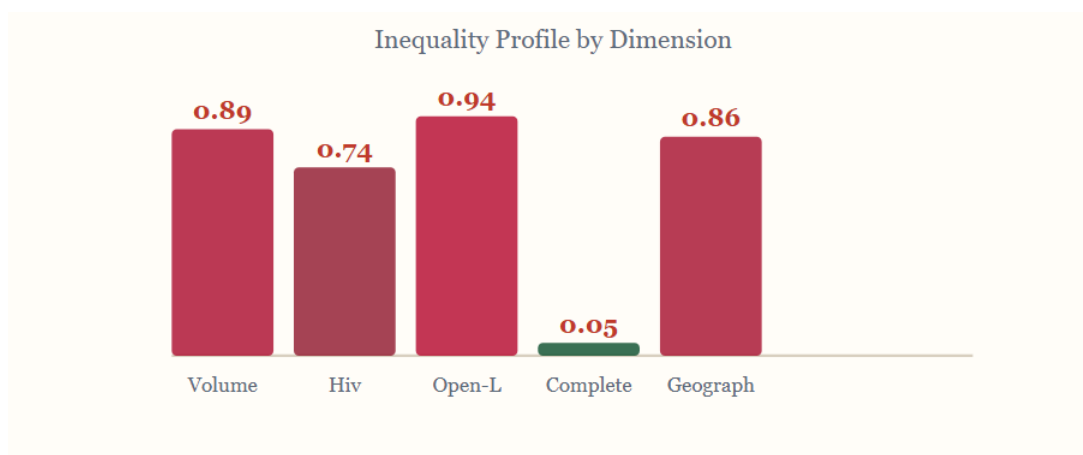


Figure 4. Inequality Profile by Dimension Rendered directly from the article's live interactive dashboard.

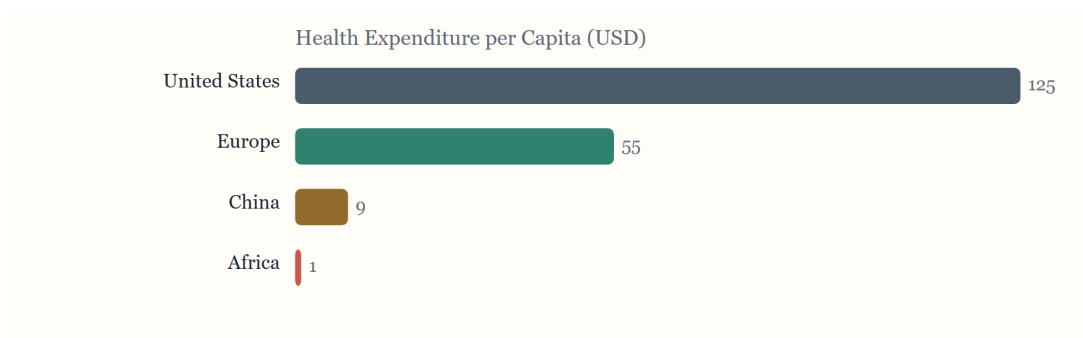


Figure 5. Health Expenditure per Capita (USD) Rendered directly from the article's live interactive dashboard.

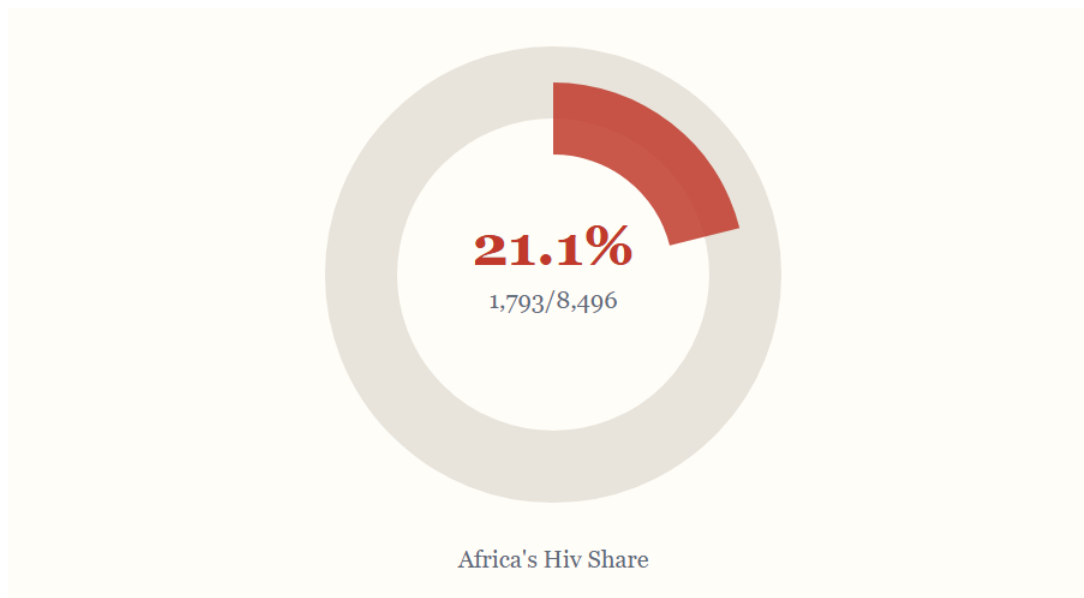


Figure 6. Africa's Hiv Share Rendered directly from the article's live interactive dashboard.

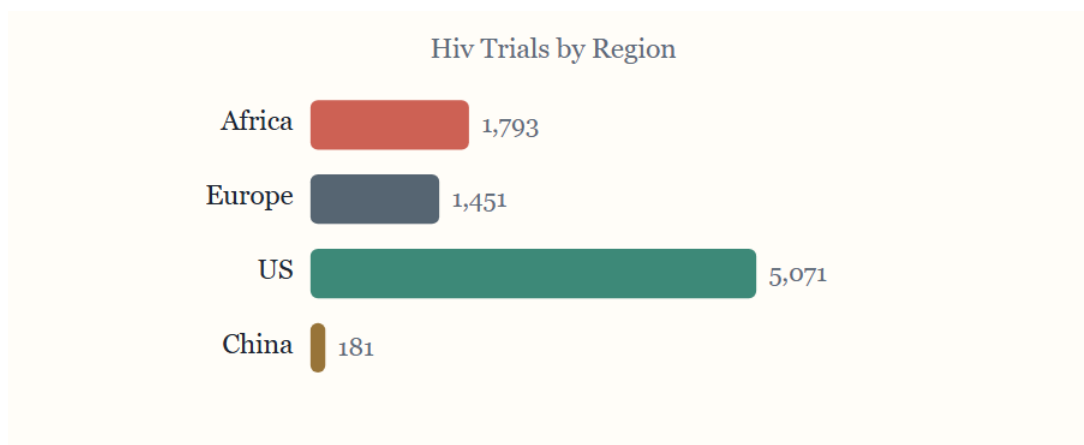


Figure 7. Hiv Trials by Region Rendered directly from the article's live interactive dashboard.

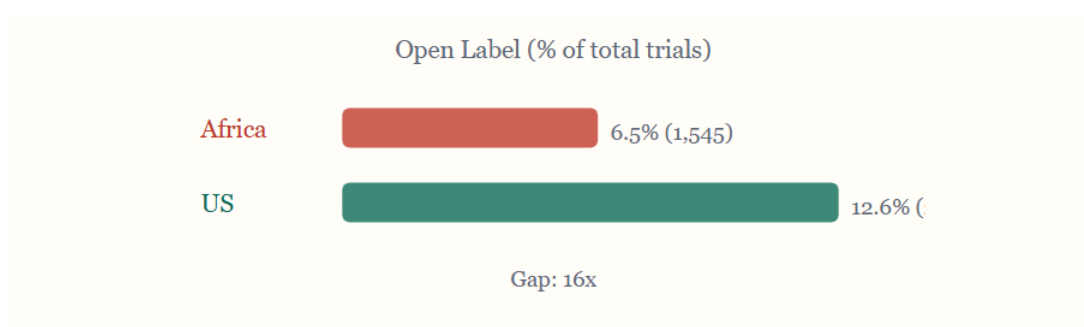


Figure 8. Open Label (% of total trials) Rendered directly from the article's live interactive dashboard.

HOW TO CITE

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Reproducibility & data provenance. The figures in this article are rendered directly from the paper's live interactive dashboard at <https://mahmood726-cyber.github.io/africa-e156-students/governance-justice/dashboards/altruism-efficiency.html>, where the complete analysis — data, methods and every estimate — can be explored and reproduced. This open path from published figure back to the underlying analysis is part of how the journal works. The article's text, authors, abstract, issue and licence follow the journal's published record.

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