

Global Population Studies in the 21st Century: Priorities & Challenges – Mortality

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Berlin Demography Days 2021

New Challenges Require New Data. The Experience of the Global South.

24 March 2021
Berlin, Germany via Zoom

My background

Nano bio:

- Professor at The Ohio State University, Columbus, Ohio, USA
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- Born in Kenya, grew up in East Africa, parents American → mixed identity
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 - methods to improve coverage and accuracy of mortality estimates

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Questions

Questions guiding a quick discussion of mortality (and population health in general) with respect to the Global South

- Why?
- What?
- Where?
- Who?
- How?
- When?

Incomplete list in responses to *why?*

Health

- **understanding**
- monitoring
- overall risks and differentials
- causes
- changes by time, place, ...

Equity – differentials in:

- risks of dying
- years of life lived
- years of healthy life lived

Population structure & dynamics

- age structure
- forecasting

Development – SDGs

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What?

Measures – minimally by sex, age, time, and place:

- risk of dying
- lifespans (e_x)
- cause
- burden of disease

Processes

- measurement systems
- data
- methods
- reporting systems

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Where?

Everywhere!

- **Global North has this under control**
- Global South is complicated situation with much to be done, particularly Africa
- **roughly 60% of global deaths not registered at all** (Mikkelsen et al., 2015), and of the 40% that are registered, many do not get an accurate cause

Vital Statistics Performance Index (VSPI) – single number to capture (Mikkelsen et al., 2015):

- completeness of death reporting,
- quality of death reporting,
- level of cause-specific detail,
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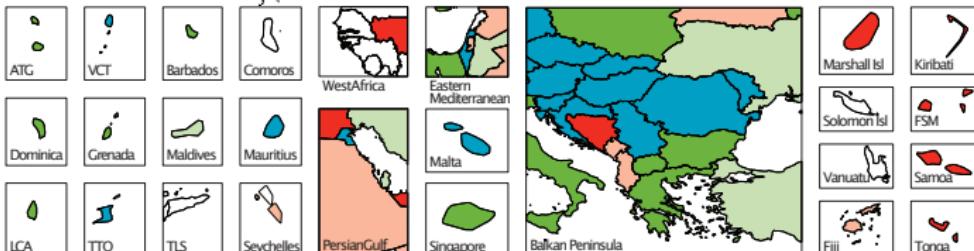
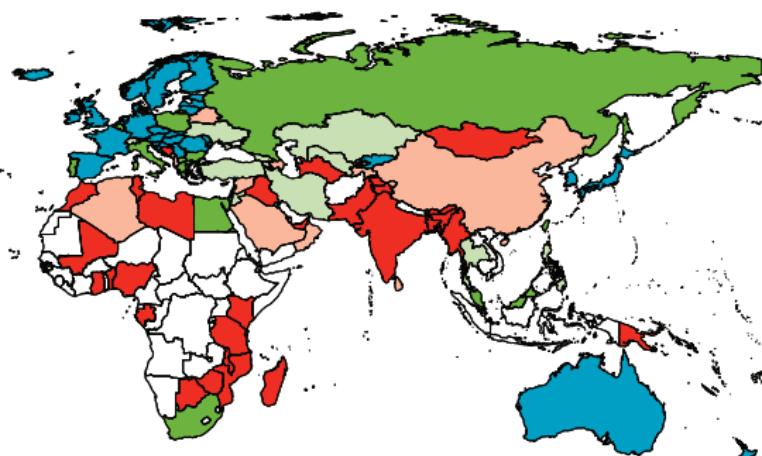
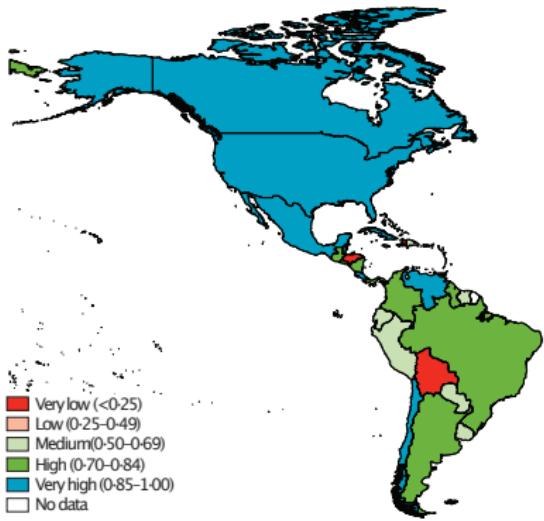
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Global VSPI (Mikkelsen et al., 2015)



New thinking and new doing are necessary – *Who?*

Fundamental shift

- **create another global pole:** for issues affecting the Global South, move center of gravity of population studies research and action from Global North to Global South
- Vienna, New York, Rostock, Seattle, ... → Nairobi, Dakar, Addis Ababa, Johannesburg ...
- create new human capital in place in Global South
 - training
 - apprenticeship
 - mentoring
- create new infrastructure in place in Global South
 - data repositories
 - computing
 - data collection systems
 - data amalgamation

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How?

Human capital development, to enable:

- **substantial in place innovation**
- take advantage of developments in data, computing, and methods
- develop novel methods/approaches to use new sources of data and amalgamate data from multiple sources

Data

- the Global North's solution to the lack of data in Africa and other parts of the Global South is to use models to infer, interpolate, extrapolate, and generally guess – *pragmatic, but not a good strategy in general*
- create focus on creating new, better sources of data that increase coverage, timeliness, accuracy, and accessibility – this is possible and we must not abandon this fundamental exercise!

Innovation - get the most from existing and new data

- new approaches to collecting data
- new sources of data
- data amalgamation
- making better, more timely use of data
- lots of new methods development

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- the Global North's solution to the lack of data in Africa and other parts of the Global South is to use models to infer, interpolate, extrapolate, and generally guess – *pragmatic, but not a good strategy in general*
- **create focus on creating new, better sources of data** that increase coverage, timeliness, accuracy, and accessibility – this is possible and we must not abandon this fundamental exercise!

Innovation - get the most from existing and new data

- new approaches to collecting data
- new sources of data
- **data amalgamation**
- making better, more timely use of data
- lots of new methods development

How?

Human capital development, to enable:

- substantial **in place** innovation
- take advantage of developments in data, computing, and methods
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Case studies

- The Institute for Health Metrics and Evaluation – IHME ([IHME, 2021](#))
- The African Population and Health Research Center – APHRC ([APHRC, 2021](#))
- The Consortium for Advanced Research and Training in Africa – CARTA ([CARTA, 2021](#))

Institute for Health Metrics and Evaluation – IHME

IHME

- Global North, privately-funded institution
- health intelligence data warehouse: burden of disease, estimates, forecasts, and much more
- little human capital development or transfer in/to Global South
- not transparent
- highly influential for Global South because one of very few comprehensive sources of health/population data and well connected to Global North funders and publishers and WHO
- apart from being key data providers and product consumers, hard for me to see how Global South plays an important role in the workings of IHME
- **my opinion: the world needs a move on from this model**

Possible remedies

- replicate elements of IHME in Global South and as part of multilateral organizations
- requires building human capital and infrastructure to support something like IHME

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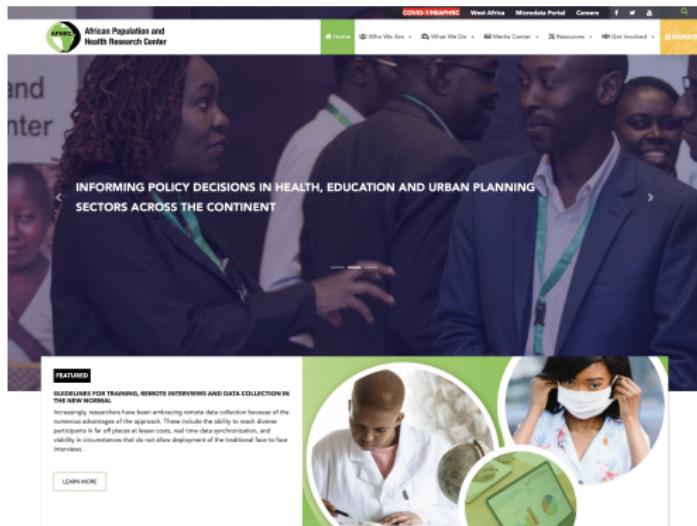
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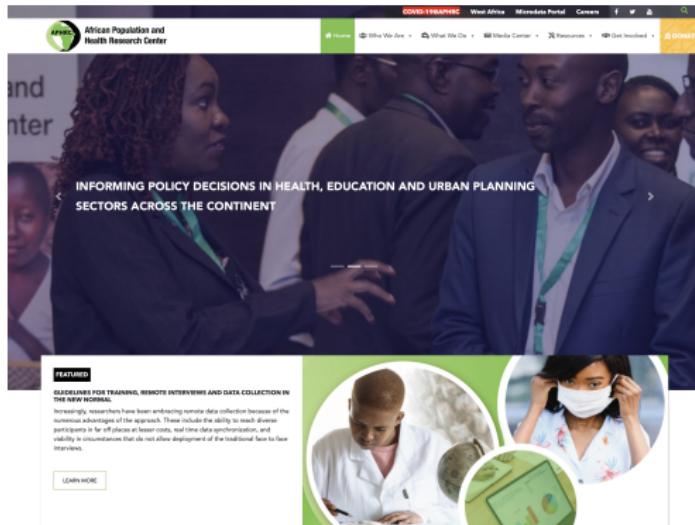
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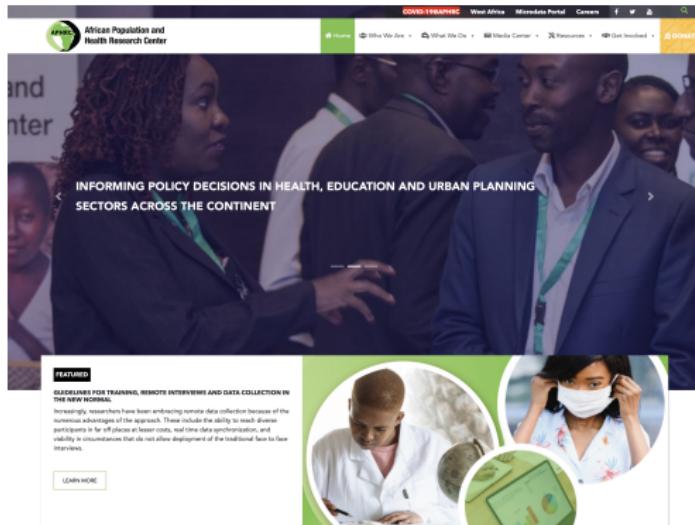
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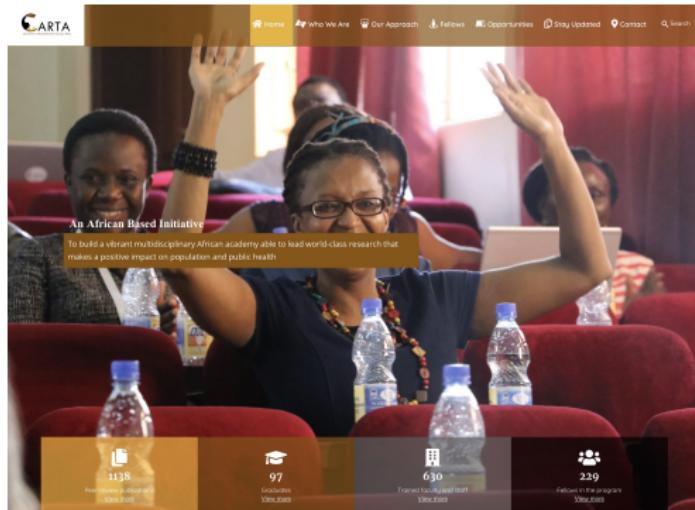
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Mission: Build high-level capacity for population and public health-related research in Africa

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- PhD training across consortium
- support young researchers: PhD, postdoc, faculty
- build critical mass of locally-trained and highly effective researchers
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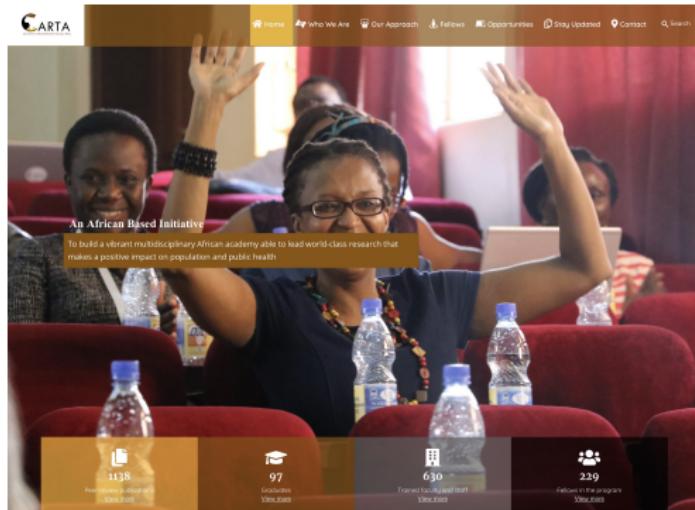
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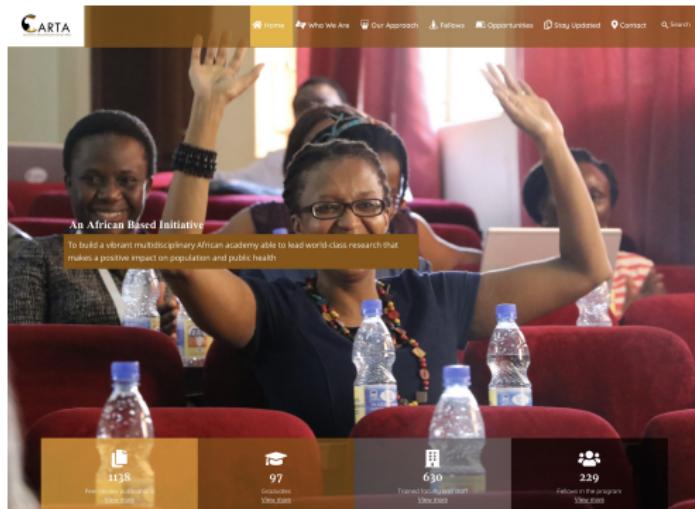
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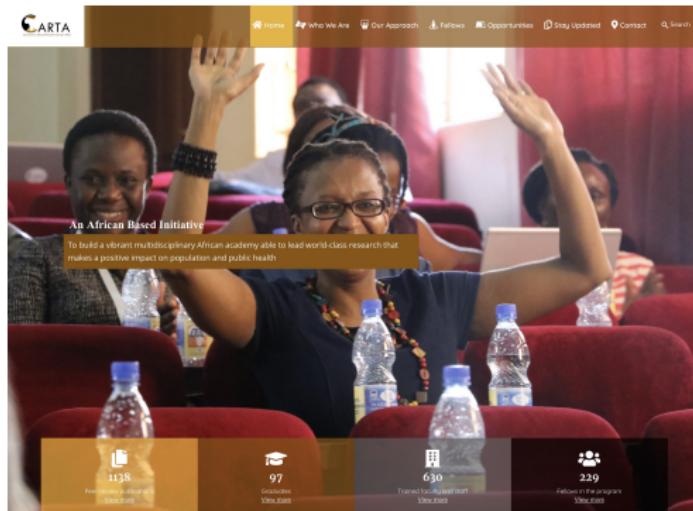
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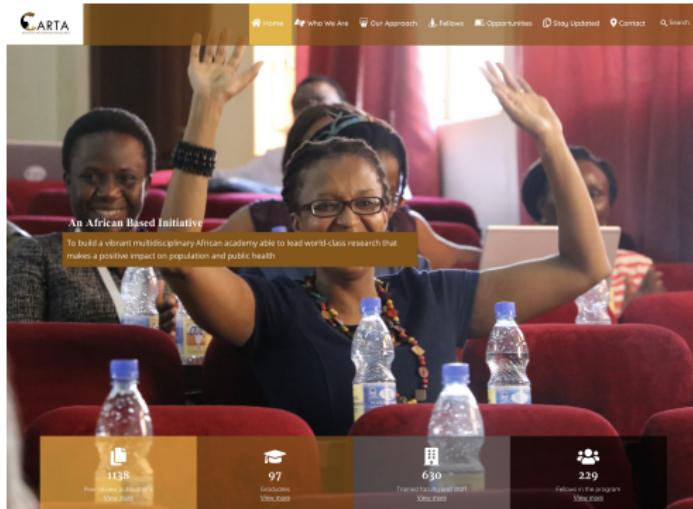
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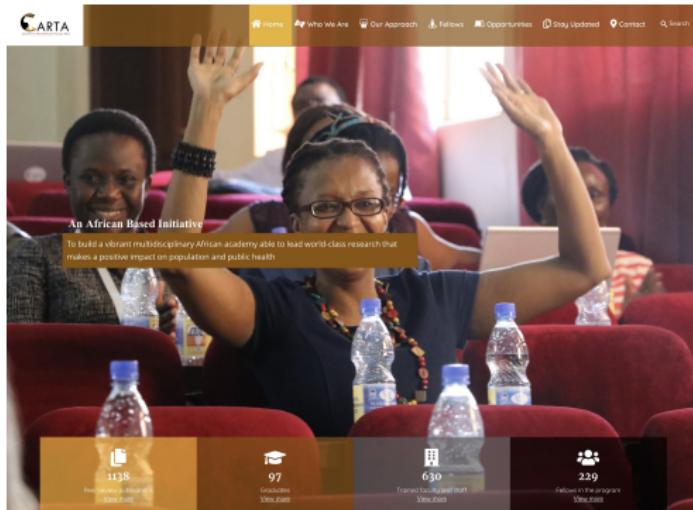
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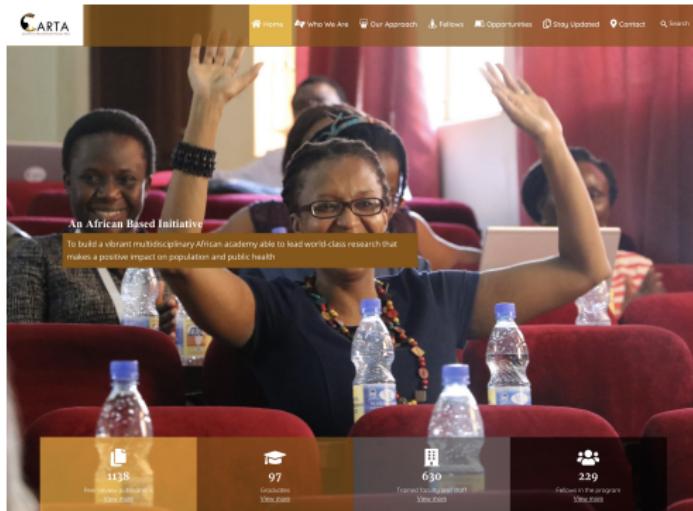
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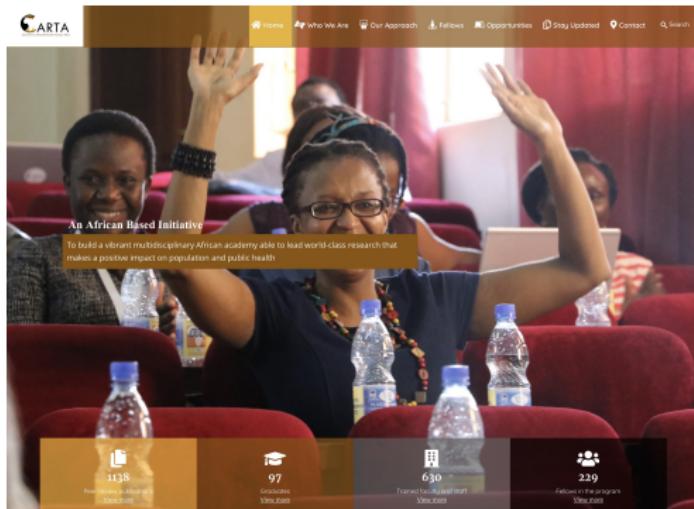
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Future

Thoughts on a way forward

- using APHRC & CARTA as examples, build and support in place **human capital development** and research capacity in the Global South
 - requires Global North to continue funding and supporting, but not controlling
 - *maybe*, instead of students from Global South training in Global North, researchers and instructors from Global North go to Global South for periods of time to teach and provide research mentorship
- prioritize investments in **data** over developing new models to substitute for data
- encourage **rapid innovation in methods** to utilize all data, defective or not
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 - vital statistics
 - surveys
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