

Western



The Africa Institute

Upcoming Events

Rwanda Course Exhibition

Dates: January 7 to 16, 2021

Location: Satellite Project Space, 121 Dundas St.

Open Wednesday to Friday 2 pm to 7 pm, and Saturday 12 pm to 5 pm

Free Admission

In celebration of ten years of Community Engaged Learning in Rwanda – The Land of A Thousand Hills, as it is commonly known – we are mounting an exhibition of photography, video and art as a recognition of this important program that has positively affected many lives. Our project intends to showcase the amazing work that the UWO students have put into their learning, and the true relationships that were developed with our Rwandan partners.

Holiday Greetings from the Africa Institute

Dear colleagues,

I just want to convey my sincere gratitude to all of you for your engagement and participation over the last few months since my appointment as new Director of the Africa Institute. Among other initiatives, we had a successful and productive strategic retreat on December 3rd, which was enlightened by the inspiring presentation by Dr. Alex Ezeh, Professor of Global Health at Drexel University and founding executive director of the African Population and Health Research Centre in Kenya. We will soon produce a summary document of the new vision, mission and priorities of the Africa Institute, which will reflect the feedback received by all of you following our strategic retreat.

I would like to acknowledge the crucial contribution of Dr. Melanie Katsivo, who was recently appointed as Associate Director for Partnerships and Programs of the Africa Institute, who brings her expertise, networks and deep knowledge of the African society and research landscape, as we move forward to establish strategic partnerships with key organizations within the African continent. In addition, we are fortunate to have an administrative assistant of the caliber of Aislinn Adams, who will continue working with us until end of April. These new developments have been possible thanks to the strong support and vision of Britta Baron, who was recently appointed as Vice-Provost and Associate Vice-President (International) at Western University.

I would like to praise as well the outstanding work and

scientific leadership of Dr. Isaac Luginaah, Professor of Health Geography and member of the Africa Institute, who led a recently submitted application for the Queen Elizabeth Scholarships, which will focus on Climate Change, Food Security and Health in West Africa, including a number of scholars of the Africa Institute across different disciplines and faculties.

Thanks again for your great contributions, wishing a peaceful holiday season to all!



Saverio Stranges

Africa-Western Collaborations Day

Thank you to all who participated in this years Africa-Western Collaborations Day: Nurturing Excellence by Advancing Academic Diversity. In the end we had over 40 graduate students and recent graduate students participate in six panels ranging in topic from water security and water quality to education, gender and migration. You can learn more about the presentations at our [Scholarship@Western](#) page, and proceedings from the day are currently being created and will be added to the page in the New Year. We also had two illuminating special panels, the first being a graduate student led panel on African, or more broadly international, students and their experiences during the COVID-19 pandemic. This panel brought important topics to light and we hope to continue these conversations moving forward. Secondly, we had Dr. Isaac Luginaah's keynote on "Why Inclusion, Equity, and Diversity Matters at Western". His keynote can also be found on our [Scholarship@Western](#) page, and is well worth a watch if you missed it.

Finally, a huge congratulations to all of our participants. We had a full day of amazing research presentations. We are extremely pleased to announce the winner of the Best Presentation Prize for all of AWC Day 2020: Congratulations, Ebenezer Martin-Yeboah!

Best Overall Presentation Winner:

- ◆ **Ebenezer Matin-Yeboah**, *Through the lens of egocentric design: Do AYA males' social networks influence or shape their SRH literacy and information behaviour?* ([Gender Technology and Health Care Panel](#))

We are also extremely pleased to announce the other six winners of Best Presentation Prize for their panels. Congratulations!

Best Panel Presentation Winners:

- ◆ **Jemima Baada**, *Experiences of Social Reproduction among Migrant Women in the Brong-Ahafo Region of Ghana* (Education, Migration and Development Panel)
- ◆ **Ryan Grilli, Dami Lawal, Yasmina Gaber, Riddhi Nandola, Josephine De Leon**, *Ecoland Solutions* (Water Security & Water Quality Panel)
- ◆ **Ayah Karra-Aly, Adaku Ohuruogu, Georgia Leigh Raithby, Jasandeep Sehra**, *The Power of Poop* (Public Health Panel)
- ◆ **Aimable Nkarunzina**, *Assessment of the medication interruptions among nurses working in paediatric unit at university teaching hospital of Kigali* (Health Systems & Health Management Panel)
- ◆ Co-Winners: **Kamaldeen Mohammed**, *Intra-household decision making arrangements and food security in semi-arid Ghana* & **Eunice Annan-Aggrey**, *The Conundrum of Vanishing 'Gold' in the African Savannah* (Agriculture, Food Security, and Climate Change Panel)

CONGRATULATIONS AND THANK YOU TO ALL PARTICIPANTS!

Advisory Board Updates

The Advisory Board has had a busy few months since our last update. In November, we had Africa Institute members share brief research highlights, from which we have compiled their slides in this newsletter to demonstrate just some of the work being done by members of the Institute. In December, we had our Strategic Renewal retreat, with a keynote talk by Dr. Alex Ezeh, on the current social needs and research priorities within Africa. This talk will be up on our website soon so stay tuned!

Grants and Partnerships Updates

Grants submitted in October/November 2020:

1. **Achieving Research and Knowledge Translation Capacity for Climate Change Resilience, Food Security and Sustainable Livelihoods in West Africa** – Benin, Ghana, Liberia, Nigeria and Senegal (QES II Advanced Scholars West Africa Program) Led by Isaac Luginaah and participation by researchers from Geography and Environment (Soc/Scie.); Arts & Humanities (Gender and Women Studies); FIMS (Information Science); OneHealth Program and Public Health (Schulich); Health Scie (Knowledge Exchange); Ivey Business School (Enterprises); University of Waterloo (Program Evaluation); Western International (Partnerships). 3 year Project/22 scholars. **IDI follow-up?**
2. **Western Outbound Student Mobility Pilot Program** focusing on testing the feasibility of a student Anglophone and Francophone Network activities – Benin, Cameroon, Ghana, Liberia, Nigeria and Senegal (Outbound Student Mobility – Innovation Fund Program by Universities Canada /IDRC) Submitted by the Africa Institute researchers at Soc/Scie; Schulich; FIMS; and Arts & Humanities. 3 month project all virtual.
3. **COVID-19 grant** to CIHR led by Michael Silverman. Researchers are from Schulich and are working with partners from Ghana, South Africa, Kenya, US, and the African Centers for Disease Control and Prevention; and University of Toronto.
4. **Early Detection of Treatable Breast Cancer (Proof of Principle)**. Led by Narinder Paul and participation by researchers at Schulich collaborating with partners at the Muhimbili National Hospital in Tanzania. **IDI follow-up?**

Partnerships to be explored/established with the **Pan African University** (African Union); Regional Research and Education Networking Organisation for Eastern and Southern Africa, West and Central African Research and Education Network and the Arab States Research and Education Network for Northern Africa and Middle East Arab countries, that work together to establish the **Pan African Research and Education Network**



Dr. Akbar Saeed

Associate Professor
Business Technology Management
Lazaridis School of Business and Economics
Wilfrid Laurier University
asaeed@wlu.ca

Tshepo Institute for the Study of Contemporary Africa

- <https://researchcentres.wlu.ca/tshepo/index.html>
- Founded in 2003 on the Brantford campus of Laurier
- Now a University Wide institute with internal funding
- 20 Fellows across 3 campuses, External Fellows and Community Members
- **Our mission is to promote global awareness and excellence in knowledge development on issues in Contemporary Africa and the African Diaspora in Canada and beyond**
- **Activities**
 - Mandela Lecture Series - open to public
 - Essay Awards
 - Travel and Research seed funding
 - Compete for external grants
 - Student events on campus - African culture and highlight issues
- I was the Director for the last 4 years Now Dr. Stacey Wilson-Forsberg

My research in Africa

- My interests:
 - **Social Entrepreneurship (Uganda)**
 - Caring Hands Uganda - business education to micro-entrepreneurs
 - African Rural University (Uganda) - 'epicenter managers'
 - **Technology Entrepreneurship (Ghana)**
 - Energy Security in Africa: Fostering small-scale solar energy enterprise in Ghana
 - Findings from Focus Groups: Solar installation marketplace is different compared to fixed wiring market- requires more of an entrepreneurial approach

Recent Scholarly Activity in Africa

Isola Ajiferuke, Faculty of Information and Media Studies

Bibliometrics and Research Impact Summer School

- Aim: to develop the skills and competencies of Africa academic librarians in the provision of bibliometrics and research impact services
- 113 applications received from 15 countries
- 15 participants selected from 12 countries
- Summer school originally scheduled for Western University from August 10-14, 2020
- Due to Covid-19, tentatively rescheduled for June 28 – July 3, 2021

39 Country Initiative

Overview

The 39CI aims to contribute toward poverty reduction by helping improve management education in the world's lowest income countries (there were 39 countries in mid-2010 that had per capita income of less than US \$2000/year). To achieve this, the 39CI seeks to address a dire shortage of educational materials by promoting a business school-to-business school model where schools in wealthy countries help those in low-income countries.

What we Do

- 1) Provide free access to nearly 6000 Ivey cases for faculty members and students for use in university level classes in the 39 countries
- 2) Collect and ship large quantities of used text books and other quality teaching material to select universities in the 39 countries
- 3) Provide free case teaching workshops to faculty members in select 39 countries

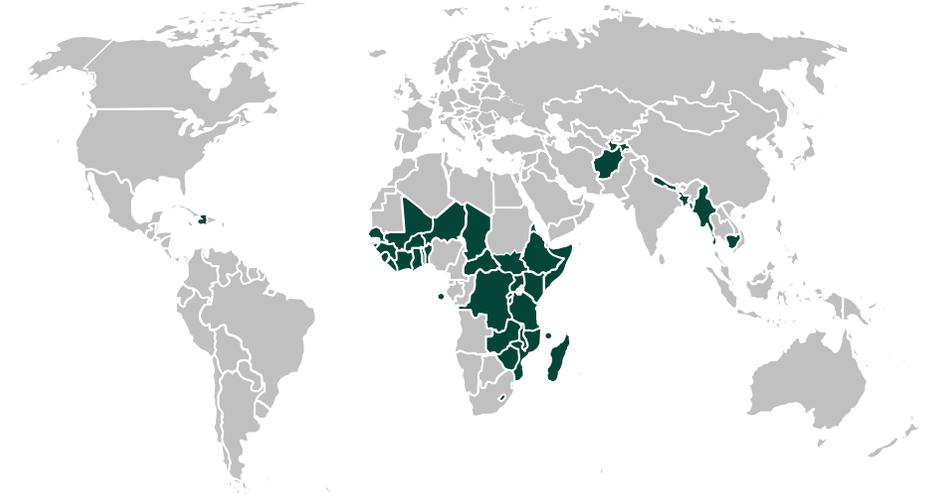
Relevance to the Africa Institute

- 1) 34 of the 39 countries are in Africa.
- 2) Ivey cases cover a wide range of topics beyond business/management and are relevant to many fields of study
- 3) Ivey has a growing collection of cases that focus on African organizations/context
- 4) We invite members of the Africa Institute to use this resource with partner schools in Africa

Learn More

View the project here: <https://www.ivey.uwo.ca/internationalbusiness/39-country-initiative/>
Contact the IBI Operation Manager Chris van den Berg: cvandenberg@ivey.ca

Where We Work



Afghanistan • **Bangladesh** • **Benin** • **Burkina Faso** • **Burundi** • Cambodia • **Central African Republic** • **Chad** • **Comoros** • **Cote d'Ivoire** • **DR Congo** • **Eritrea** • **Ethiopia** • **Ghana** • **Guinea** • **Guinea-Bissau** • **Haiti** • **Kenya** • **Lesotho** • **Liberia** • **Madagascar** • **Malawi** • **Mali** • **Mozambique** • Myanmar • Nepal • **Niger** • **Rwanda** • **Sao Tome and Principe** • **Senegal** • **Sierra Leone** • **Somalia** • **South Sudan** • Tajikistan • **Tanzania** • **The Gambia** • **Togo** • **Uganda** • **Zambia** • **Zimbabwe**

Hassle Factor

Overview

The Hassle Factor is a measure that investigates the difficulties of operating in different economies around the world. There is a panel dataset for 11 indicators across 180 countries over 7 time periods between 2006 to 2018. The project is relevant to academics and students in all disciplines, public/private practitioners and international travelers. We are committed to publishing updated scores on a biennial basis

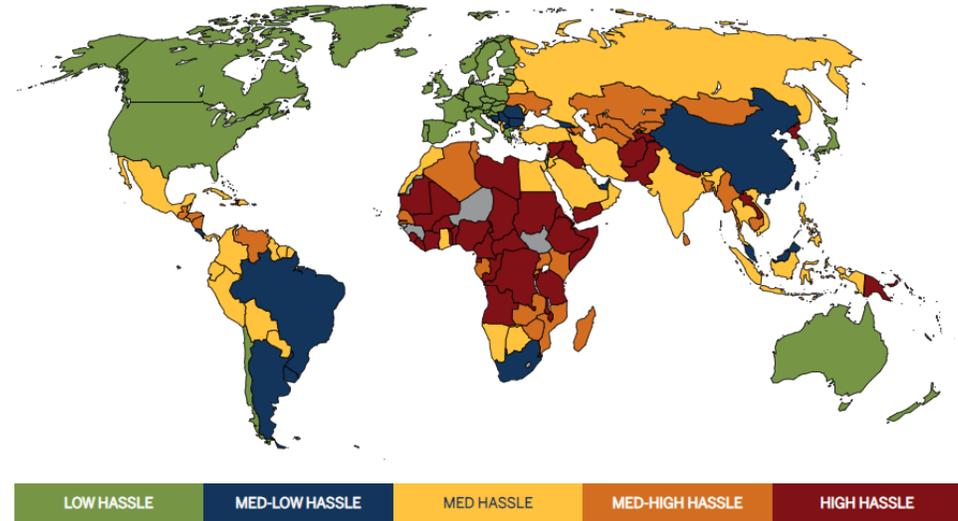
Relevance to the Africa Institute

- 1) The Hassle Factor data set covers 47 economies in Africa, 40 in Sub-Saharan Africa
- 2) Data can be used for academic or student research projects or in the classroom
- 3) Integrative visualizations can be used as teaching aids
- 4) Data and visualization are available for free to everyone, users only need to acknowledge the source
- 5) Project allows for country comparisons and comparisons over time

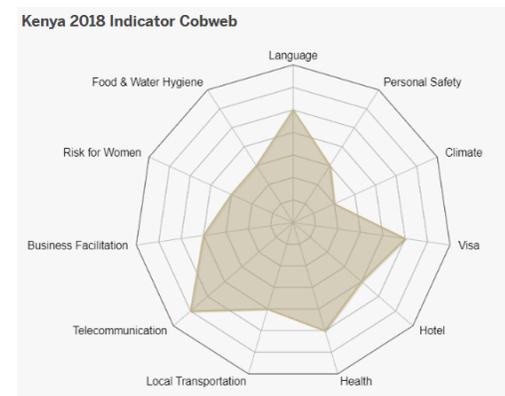
Learn More

View the project here: www.ivey.uwo.ca/internationalbusiness/research/hasslefactor/
 To obtain data set, contact the IBI Operations Manager Chris van den Berg: cvandenberg@ivey.ca

Interactive Visualization



Country Visualization



11 Indicators

1. Business Facilitation
2. Climate
3. Food and Water Safety
4. Health
5. Hotel Availability
6. Language
7. Local Transportation
8. Personal Safety
9. Risk to Female Executives
10. Telecommunications
11. Visa

Rwanda: 10 Years of International Experiential/Engaged Learning

Prof. Henri Boyi



Fundamentals of (International) Service- Learning

“This experience has eliminated any preconceived notions I had associated with Rwanda because of its past, and has therefore allowed me to become a better global citizen. I have been to 20 countries and five continents in my life and have yet to experience a place so filled with beauty, strength, perseverance, and kindness as Rwanda”
- Rachel Goldstein 2014



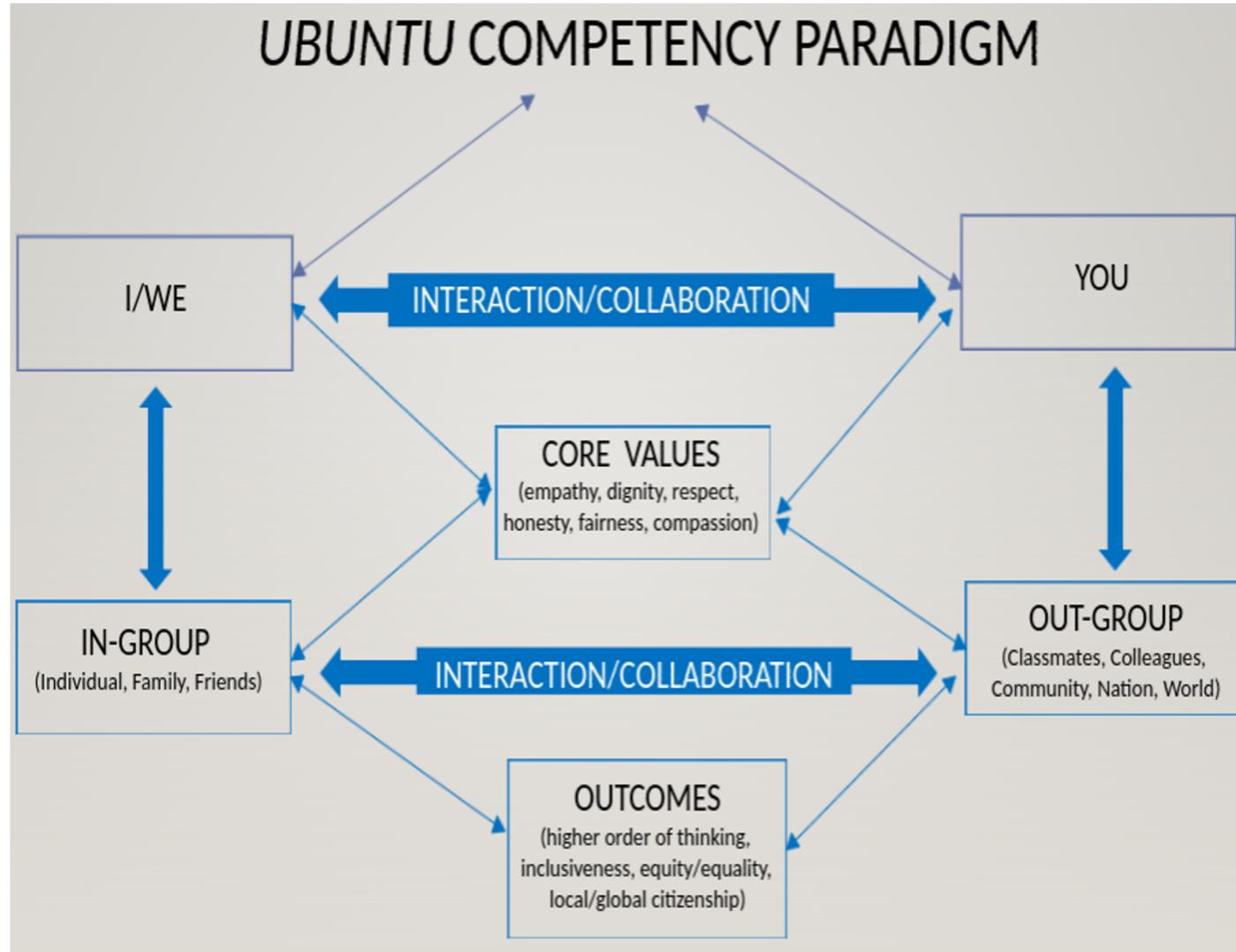
Morning Assembly at Gisimba Memorial Centre 2014

True Partnership: Responding to a Community's Needs



Rwanda, 2013

Ubuntu: The Boyi Theoretical Model



Abbas Jessani DDS, MSc, PhD

Assistant Professor (tenure-track), Restorative Dentistry, Schulich Dentistry

- Doctor of Dental Surgery, University of Karachi -2011
- MSc. in Craniofacial Science UBC 2016 → Population and Public Health → Vulnerable pregnant women in British Columbia (Jessani et al, 2016, JCDA)
- PhD. in Craniofacial Science UBC 2019 → Population and Public Health → Marginalized HIV- positive population in British Columbia (Jessani et al, 2017 JCDA, Jessani et al 2019 JPHD, Jessani et al 2020 JPHD)
- Research interest: Population and Public health → Marginalized population such as living with HIV, LGBTQ2S, Indigenous population, Low SES etc., → **access to medical, dental and supportive services, stigma and discrimination, unmet oral health needs, risk based patient management and interprofessional collaborations**

Unmet oral health needs of adolescents in Lesotho, Southern Africa.

- Maseru, Lesotho from August 10 to August 26 (2016).
- Household survey WHO, CHMS and clinical examinations were – 560 adolescents and their guardians
- Mean age 16.4, 68% females, 84% general health as good/excellent, 70% financial unaffordability, 67% having three meals/day, 90% regular medical doctor
- 23% reported oral health good/excellent, 70% no dental services or regular dentist, 35% tooth decay (one or more of molars), 1% had some form of restoration, 75% reported tooth sensitivity, bleeding gums, etc.
- Manuscript 1 is under review with the Journal of BMC oral health and two others are in preparation.

MEDICI Global

WHO Collaborating Centre at Western University

Janet Martin, Anesthesia & Periop Med; Epidemiology & Biostats

GLOBAL SURGERY • EVIDENCE • DECISIONS • IMPACT



Medical Evidence
Decision Integrity
Clinical Impact

MISSION: Ensure > 80% of the global population has access to safe, affordable, life-giving surgery and anesthesia by 2030

RESEARCH & IMPLEMENTATION:
Map the Gap; Explore the Gap; Fill the Gap

CAPACITY BUILDING: Internships, Workshops, Short Courses, Mentorship

Priority Setting
Studies

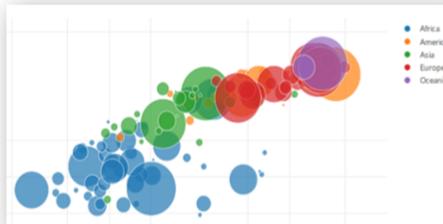
Epidemiologic
Studies

Interventional
Studies

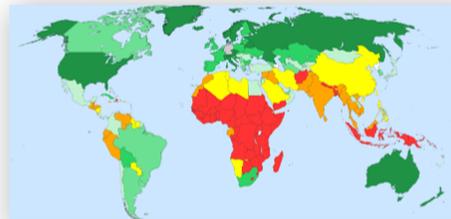
Guidelines &
Implementation

MEDICI Centre WHO Collaborating Centre at Western University

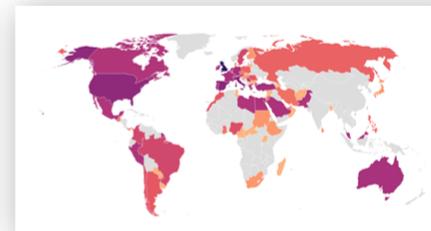
EVIDENCE DECISIONS IMPACT



Global Perioperative Mortality Rates (POMR)



Global Surgery Indicators (Access, Workforce, Volume, POMR, Cost)



Global Surgery Studies (epidemiologic & interventional)

Guidelines: 15 (surgery, ebola, CoV)

Global Surgery Indicators: In submission

Workshops/Capacity-Building: > 60

Publications: 20 in 2020 alone

Ongoing: GlobalSurg Study n > 55,000 patients

Ongoing: Global RCT of High vs Low FiO2

Upcoming: WHO Database of Indicators & Interventions



Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study

Articles

Summary

Background The impact of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on postoperative recovery needs to be understood to inform clinical decision making during and after the COVID-19 pandemic. This study reports in-hospital mortality and pulmonary complications rates in patients with perioperative SARS-CoV-2 infection.

Methods This international, multicentre, cohort study of 223 hospitals in 24 countries included all patients undergoing surgery who had SARS-CoV-2 infection confirmed within 7 days before or 30 days after surgery. The primary outcome measure was 30-day postoperative mortality and was assessed in all enrolled patients. The main secondary outcome measure was pulmonary complications, defined as pneumonia, acute respiratory distress syndrome, or sepsis requiring postoperative ventilation.

Findings This analysis includes 1028 patients who had surgery between Jan 1 and March 31, 2020, of whom 835 (74.9%) had emergency surgery and 193 (14.9%) had elective surgery. SARS-CoV-2 infection was confirmed postoperatively in 294 (28.7%) patients. In-hospital mortality was 21.9% (226 of 1028). Pulmonary complications occurred in 177 (17.2%) of 1028 patients. In-hospital mortality in these patients was 34.9% (127 of 363), according to the 95% CI of 30.2–40.0, p < 0.0001, age 70 years or older versus younger than 70 years 37.7% (95% CI 31.2–44.2, p < 0.0001), age 70 years or older versus younger than 70 years 38.0% (95% CI 31.2–44.2, p < 0.0001), American Society of Anesthesiologists grade 3–5 versus grade 1–2 (21.2% (95% CI 15.3–27.1, p < 0.0001), multiple versus single or absent diagnosis 25.1% (95% CI 19.2–31.0, p < 0.0001), emergency versus elective surgery 24.1% (95% CI 18.2–30.0, p < 0.0001), and major versus minor surgery 27.1% (95% CI 20.7–33.5, p < 0.0001).

Interpretation Postoperative pulmonary complications occur in half of patients with perioperative SARS-CoV-2 infection and are associated with high mortality. Thresholds for surgery during the COVID-19 pandemic should be higher than during normal practice, particularly in men aged 70 years and older. Consideration should be given for postponing non-urgent procedures and promoting non-operative treatment to delay or avoid the need for surgery.

Funding National Institute for Health Research (NIHR), Association of Coloproctology of Great Britain and Ireland, Royal Dutch Cancer Research, Royal Ontario Research Foundation, Association of Upper Gastrointestinal Surgeons, British Association of Surgical Oncology, British Gastrointestinal Cancer Nurses, European Society of Coloproctology, NIHR Academic Research UK, National Institute for Cancer Research and Ireland, and British Cancer Research.

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Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has now spread to most countries, with WHO declaring COVID-19 a pandemic on March 11, 2020. The pandemic has the potential to overwhelm health-care systems, including hospitals, which were largely unprepared for the scale of the problem. Triage during surgery or a similar group at risk of SARS-CoV-2 exposure in hospital and might be particularly susceptible to subsequent pulmonary complications. Due to the uncertainties around critical and non-urgent patients, access to surgery and mechanical ventilation. Evidence of the safety of performing surgery in SARS-CoV-2 exposed hospitals is urgently needed.

Before the SARS-CoV-2 pandemic, high-quality, multination observational studies established overall baseline rates of postoperative pulmonary complications (eg, in 9%) and in-hospital mortality (eg, in 7%). Other studies have reported higher rates of pulmonary complications in patients with SARS-CoV-2 infection, but they are based solely on report systems. The impact of SARS-CoV-2 on postoperative pulmonary complications and mortality needs to be established in order to evaluate strategies and policies to make evidence-based decisions during the pandemic. This study reports the clinical

Jessica Prodger, PhD



- Rakai Health Sciences Program in Uganda
 - Longstanding community cohort
 - ~20,000 individuals in 41 communities with questionnaire & blood draw for >30 years
 - NIH International Center for Excellence in Research
 - Well-equipped laboratory
 - Circumcision program- 150k since 2007; 40k last year
 - HIV Treatment program- 100,000 in care last year
 - Family planning, range of medical care, TB and malaria tracking, etc.
- My research interests- mix of epidemiology and cellular biology
 - Genital microbiome causes host inflammation and increases tissue-level susceptibility to HIV
 - Cellular HIV persistence and curing HIV in a sub-Saharan African context

Eric Arts, PhD



- Joint Clinical Research Centre in Uganda
 - Centre started in 1990 to deal with HIV crisis in Uganda and to provide health and research as a partnership between the Ministries of Health, of the Military, and Makerere University
 - Pioneered expanded access to cART in sub-Saharan Africa and were the principal architects of the PEPFAR program
- My research interests in Uganda since 1997
 - My lab together with NICHD and FHI360 and partners in Zimbabwe completed a 15 year cohort study on HIV-1 acquisition in women. We are focused on disease progression and treatment
 - We set up a WHO-certified reference lab for HIV drug resistance testing that have provide clinical reports for >20,000 patients
 - Our other projects in sub-Saharan Africa involve understanding treatment adherence, GIS, virulence, and viral evolution

Global Health Systems MMASc

- Collaborative program between Schulich and FHS
 - Current Director: Eric Arts
 - Incoming Directors: Jessica Prodger (Schulich)
David Reid (FHS)
- 1-year professional Master's degree
 - eight months of course work followed by an intensive three-week Field School in Uganda and summer practicum.
- Courses in communication and management (DAN School of Management & Organizational Studies) as well as specialty courses in Global Health Systems





3-week Field School and Summer Practicum

- Community Engaged Learning
- - daily site visits and lectures provided by local subject matter experts
- Site visits to Public Health organizations, Health clinics, Research Organizations, Mental Health Services, Agricultural Organizations, and UN Refugee Settlements

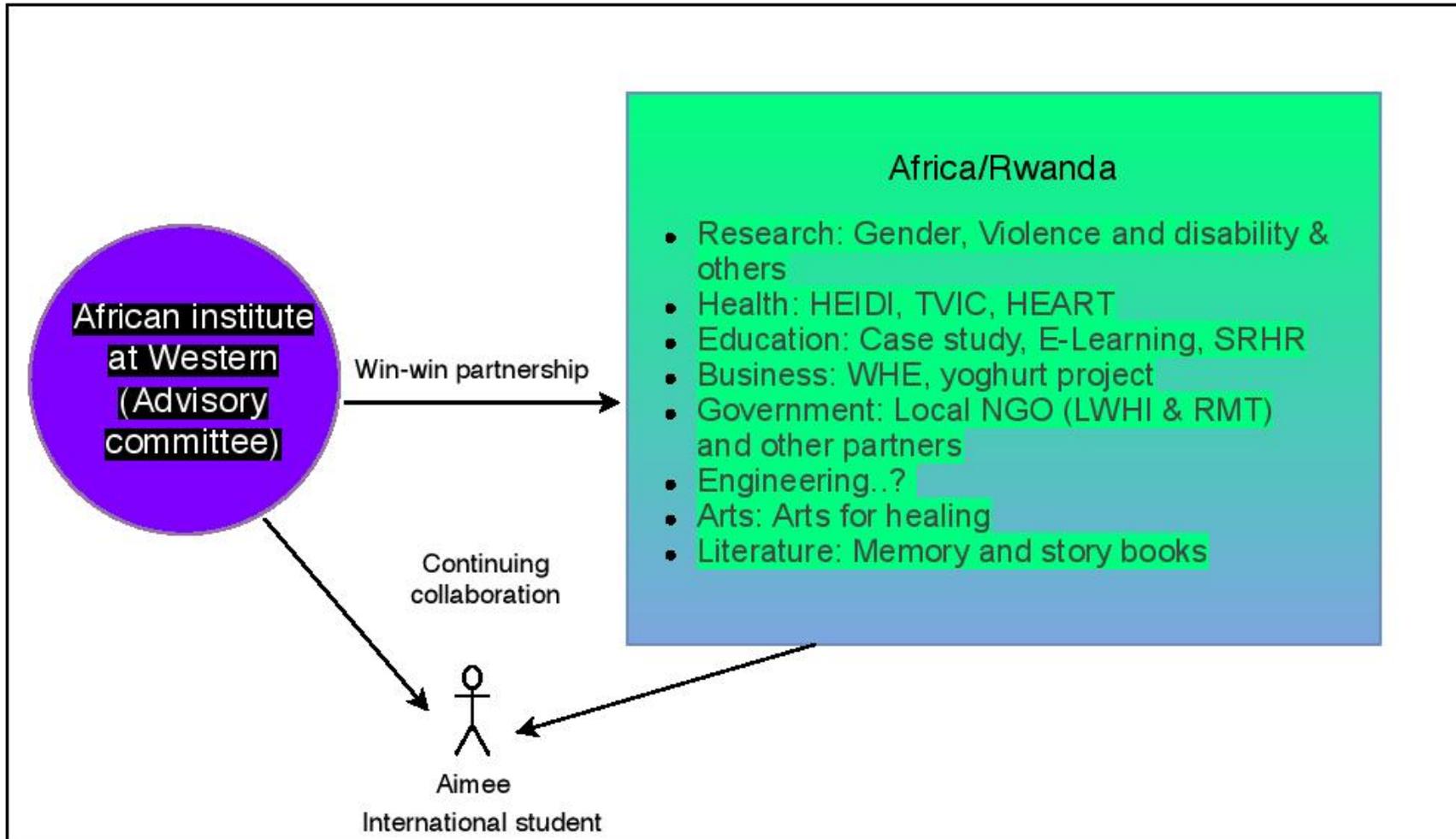
Lindsay Scorgie

Assistant Professor, Poli Sci, Huron College

- Courses taught re. Africa:
 - African Politics (POL3359F/G); Genocide, Famine, and Mass Atrocity (POL2293F/G); Rwanda's Recovery (POL3489F/G)
- Experiential learning course to Rwanda to study peacebuilding
 - 20-25 undergraduate students each February Reading Week
 - Meet with survivors, perpetrators, peacebuilding NGOs, government actors, diplomats, etc.
- Research:
 - Rebel conflict in borderland spaces (esp. Great Lakes region)
 - New book coming out: *African Borderlands: Rebel Resilience at the Edge of the Congolese State*
 - Comparative politics of genocide memorialization (Rwanda primarily)

Utuzza Aimée Josephine

PhD in Health Promotion



Andrew Walsh, Anthropology (awalsh33@uwo.ca)



DIY Foreign Aid and Local Initiatives



Background

- Jason Mulimba Were
 - Third Year PhD Student (Epidemiology and Biostatistics)
 - Supervisor: Dr. Saverio Stranges and Dr. Karen Campbell
- Research Interests: Nutrition related NCDs in Africa; Double Burden of Malnutrition
 - Coexistence of contrasting forms of malnutrition (Under- and overnutrition)
 - Shared drivers for this clustering
 - Double duty actions for nutrition by World Health Organization

Project Summary

Double Burden of Malnutrition in Sub-Saharan Africa

DBM Scoping Review

Mapping Extant Literature

1. Biomarkers for DBM
2. Physiological/theoretical links

Maternal DBM

Intra-individual DBM

1. Estimate the DBM burden
2. Predictors of DBM
3. Cross Country Comparison

Child DBM

Intra-individual DBM

1. Estimate the DBM burden
2. Predictors of DBM
3. Cross Country Comparison

Mother-Child DBM

Household DBM

1. Estimate the DBM burden
2. Predictors of DBM
3. Cross Country Comparison

Indigenous Governance: Inclusion, Role, and Influence

Karolina Werner
NEST Postdoc
Centre for Transitional
Justice and Post-Conflict
Reconstruction

What: Understand how governance works in African states, such as Botswana, Uganda, and Zambia.

Why: Assumptions about governance are made based on Western understanding of state government and institutions. This informs national and international policy and has been largely unsuccessful.

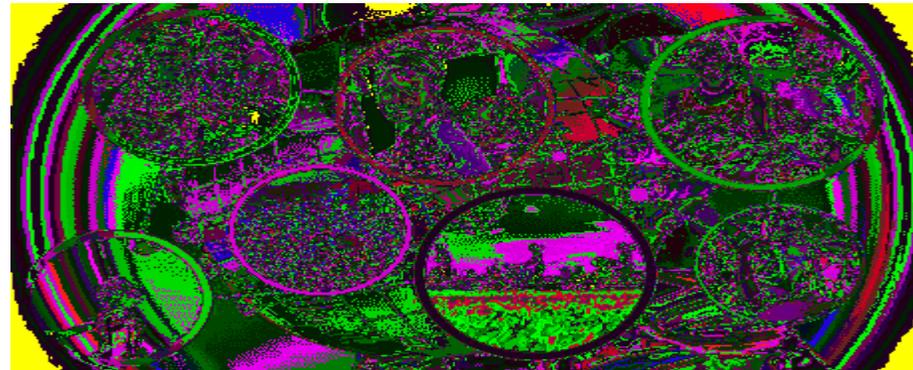
How: By exploring the influence and role of Indigenous governance structures, as well as the extent to which they have been included in state government through the creation of relevant institutions.

Expanding the lens: Creating a working group on Indigenous governance which includes Africanist scholars and Indigenous Studies scholars in Canada for knowledge exchange and a comparative perspective.

Epidemiological Transition in Africa

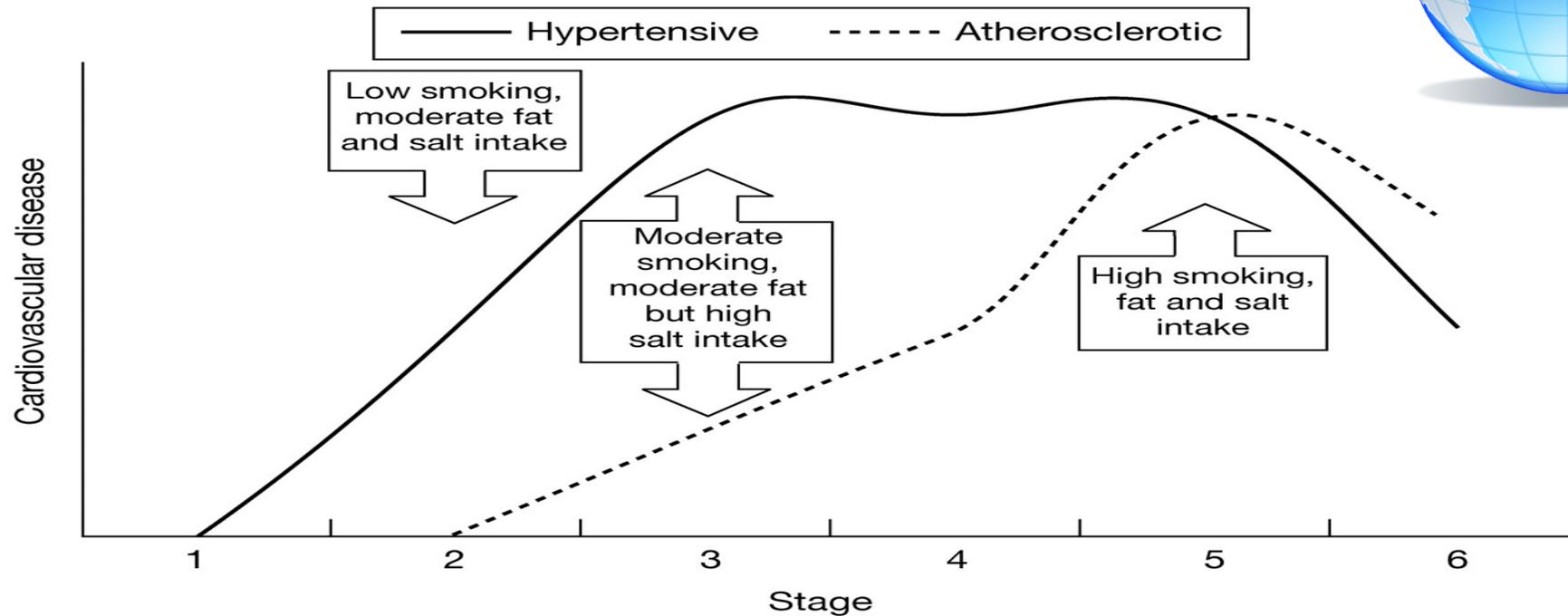
Saverio Stranges, MD, PhD, FAHA

Department of Epidemiology & Biostatistics

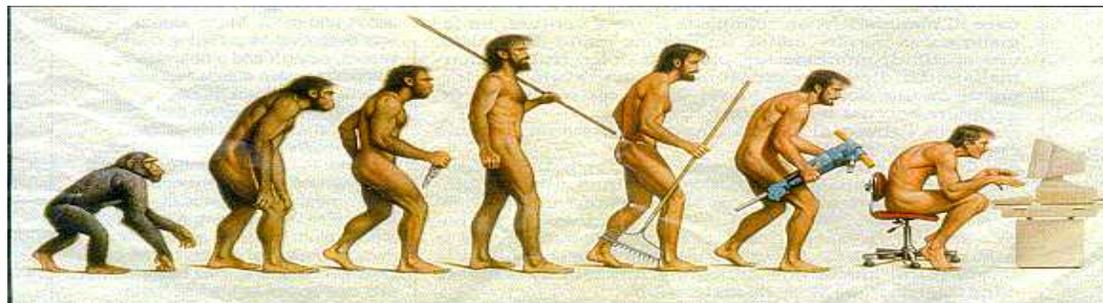


Africa Institute
November 5, 2020

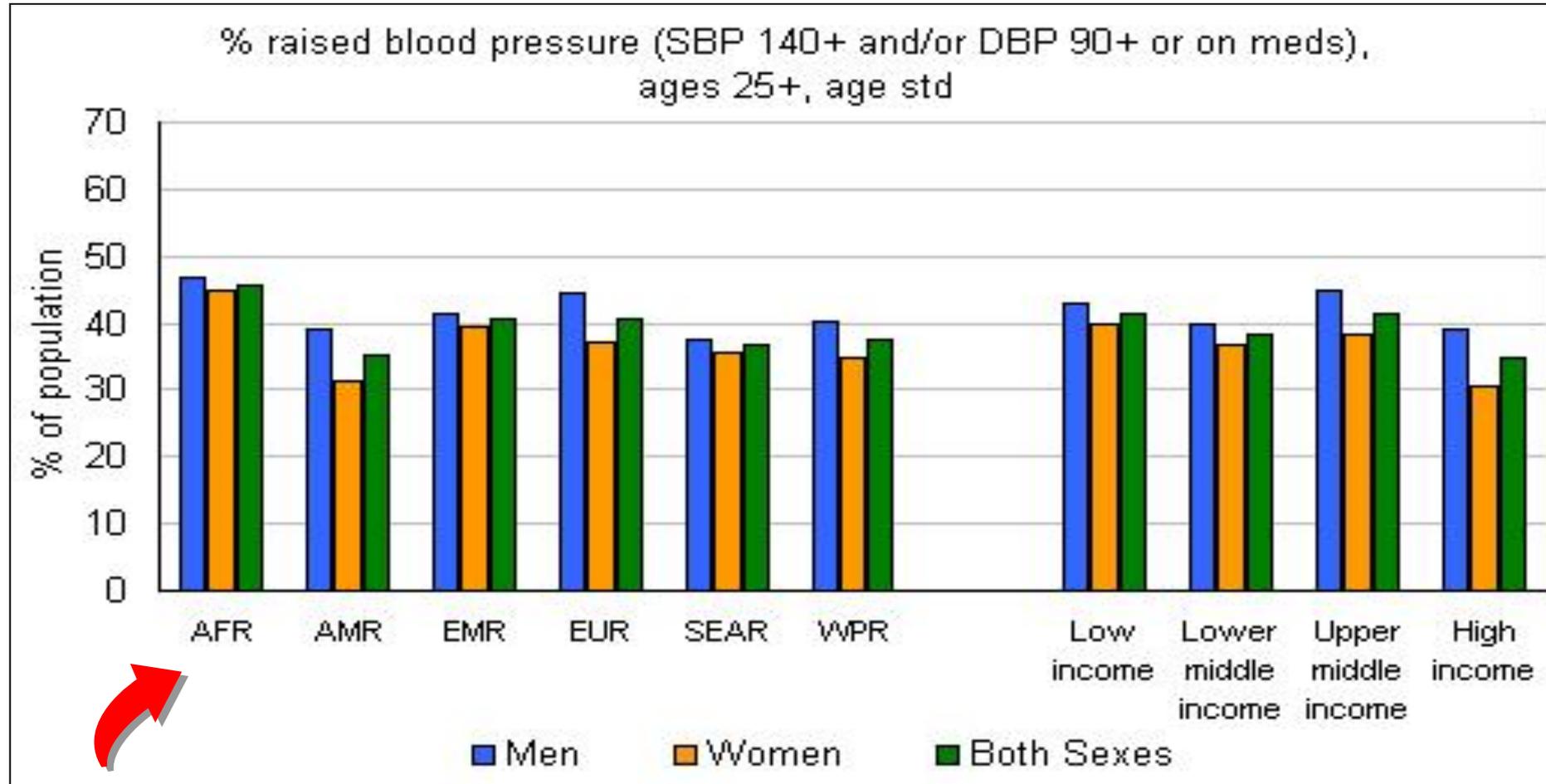
Epidemiological & Nutritional Transition: Impact on cardiovascular disease (CVD)



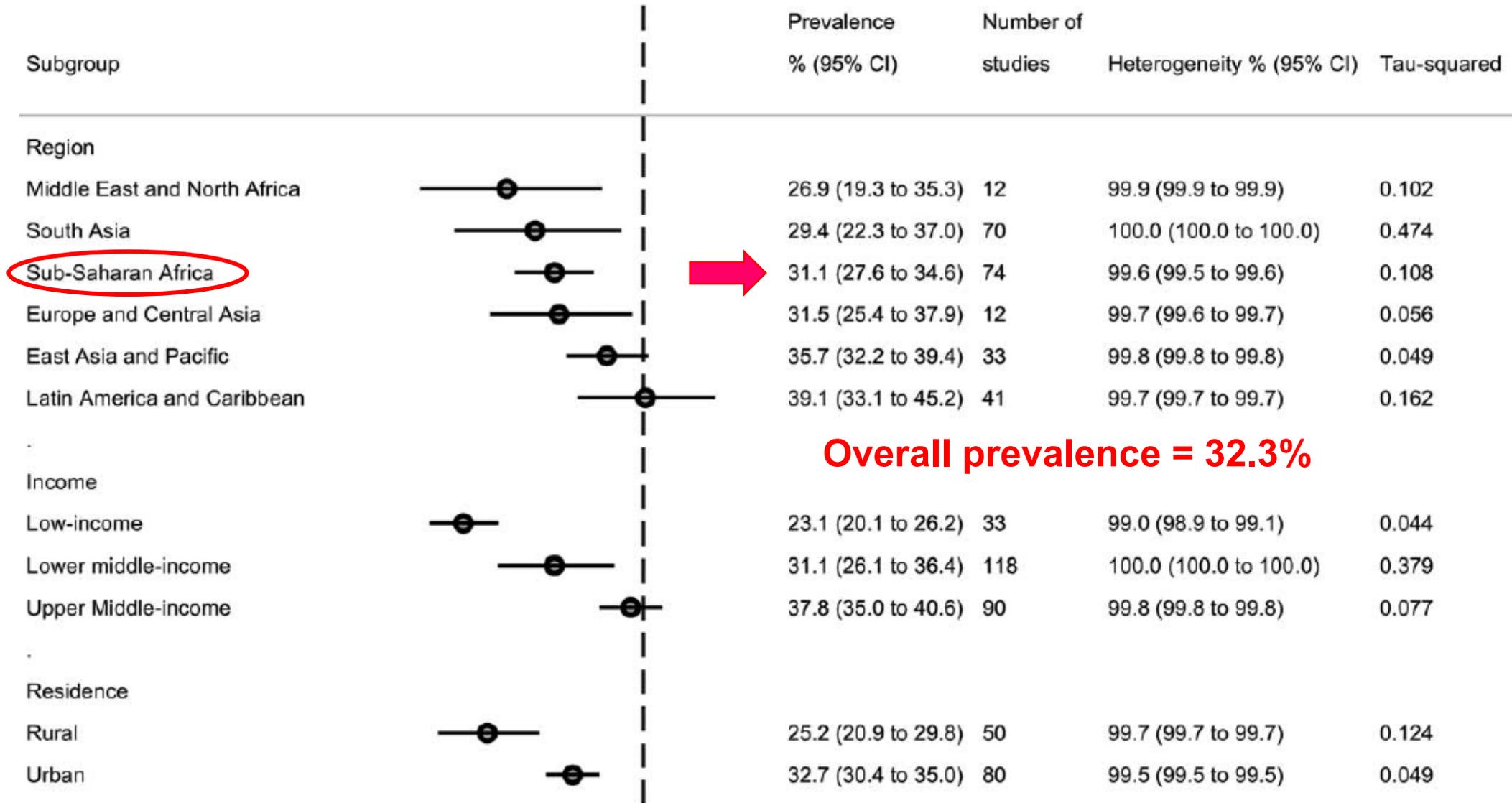
Increasing levels of acculturation, urbanization and affluence



Prevalence of Hypertension in WHO regions



Prevalence of Hypertension in LMICs



Research in Africa

- ✓ **Sleep & chronic disease in SSA, 2012-14**
- ✓ **Hypertension in South Africa (DHS), 2013**
- ✓ **Obesity in Nigeria (DHS), 2014**
- ✓ **HIV & CVD in SSA, 2014-17**
- ✓ **COVID-19 (CIHR application submitted)**
- ✓ **Double Burden of Malnutrition in SSA, 2020**



SLEEP PROBLEMS: AN EMERGING GLOBAL EPIDEMIC?

<http://dx.doi.org/10.5665/sleep.2012>

Sleep Problems: An Emerging Global Epidemic? Findings From the INDEPTH WHO-SAGE Study Among More Than 40,000 Older Adults From 8 Countries Across Africa and Asia

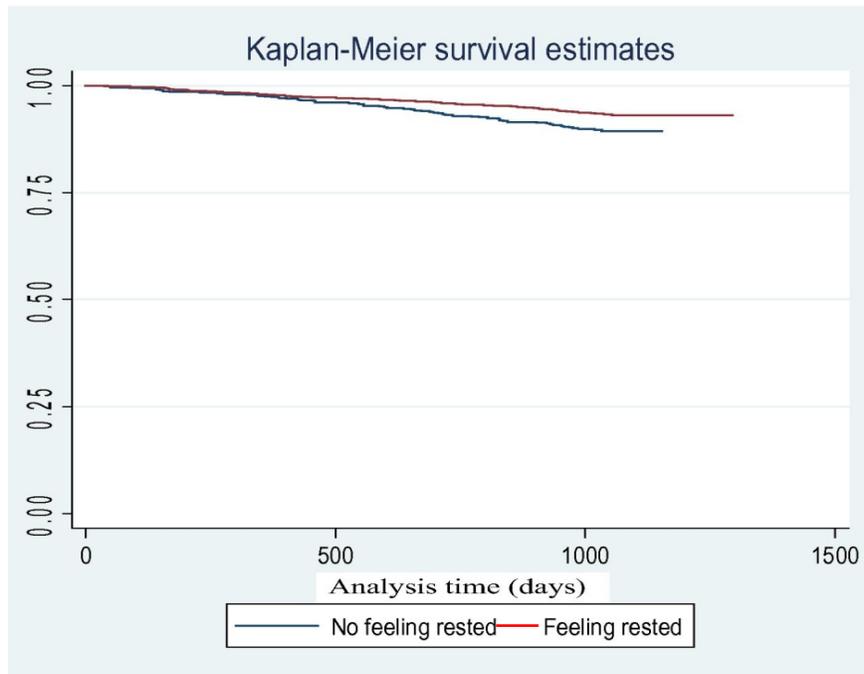
Saverio Stranges, MD, PhD¹; William Tigbe, MD, PhD¹; Francesc Xavier Gómez-Olivé, MD^{2,3}; Margaret Thorogood, PhD^{1,2,3}; Ngianga-Bakwin Kandala, PhD¹

¹*Division of Health Sciences, University of Warwick Medical School, Coventry, UK;* ²*MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa;* ³*INDEPTH Network, Accra, Ghana*



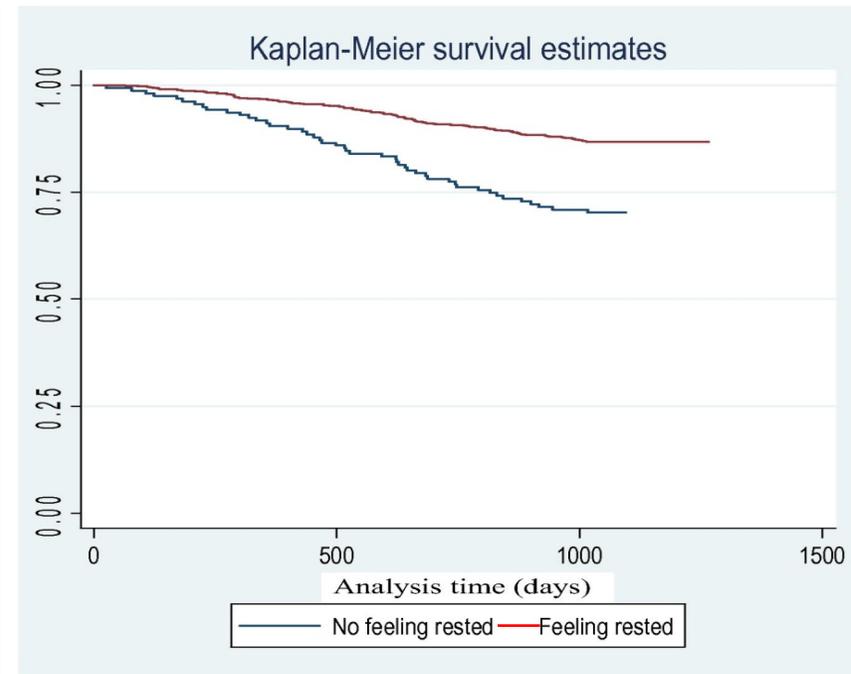
Sleep problems & mortality in South Africa: Agincourt Study, Health & Demographic Surveillance System

Women



Log rank test $P < .001$

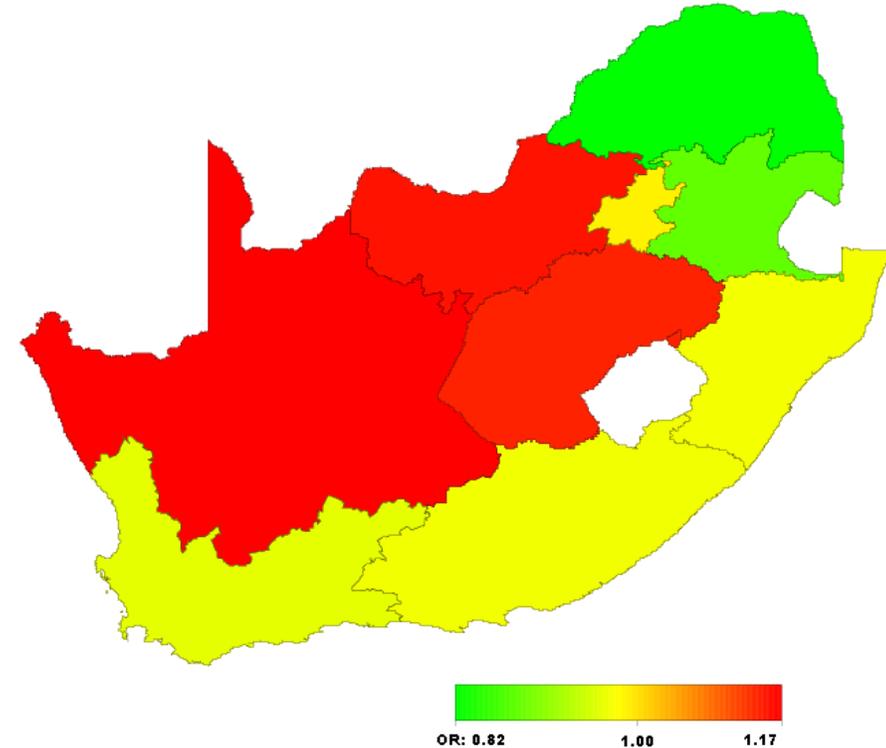
Men



Log rank test $P < .001$.

Geographic variation of hypertension in South Africa

Demographic & Health Survey, N=13,596

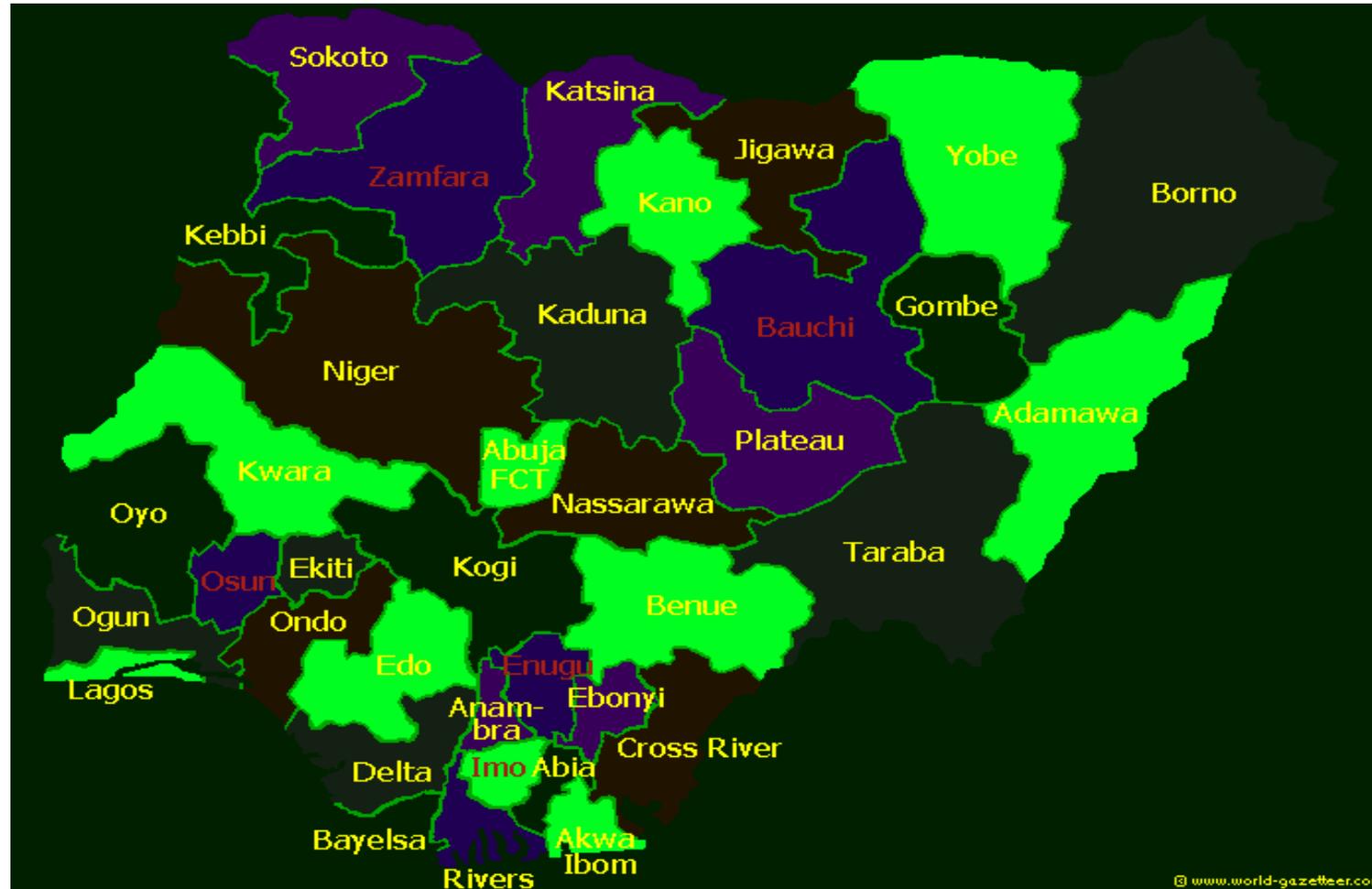


Prevalence of hypertension = 30.4%

Red coloured – high risk
Green coloured – low risk

Geographic Variation of Overweight/Obesity in Nigeria

2008 Nigerian Demographic & Health Survey (NDHS)



“The primary determinants of disease are mainly economic and social, and therefore remedies must also be economic and social.”

Geoffrey Rose



Making cost-effective decisions in resource poor settings

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Research focus

1. Which interventions should we fund at community-level?
 1. Identifying **community-based cost-effective strategies** to reduce the burden of disease
 - a. Malnutrition
 - b. Maternal and child health
2. Which interventions should we **scale up**?
 - a. Identifying intervention groups and packages that offer value-for-money
3. How should we **finance** them?
 - a. Health financing, particularly, community-based health insurance

The health economic approach

		Health gains (DALYs averted)	Economic benefits (US\$)
Mortality	Child lives saved	<p>YLL averted in those who died: Years saved by avoiding premature childhood deaths</p> <p>YLD averted in those who died: Years saved by avoiding disability before childhood death</p>	Reduced mortality, leading to direct contribution to the economy through increased labour supply
	Maternal deaths averted	<p>YLL averted in those who died: Years saved by avoiding premature maternal deaths</p> <p>YLD averted in those who died: Years saved by avoiding disability before maternal death</p>	Reduced mortality, leading to direct contribution to the economy through increased labour supply
Morbidity	Child stunting cases averted		Reduced morbidity, leading to increased functionality and cognitive development, and hence, increased future earnings
	Child wasting cases averted	YLD averted in those who survived: Years saved by avoiding disability from wasting	Reduced morbidity, leading to saved losses in terms of the social value of a human life
	Child iodine deficiency cases averted		Reduced morbidity, leading to increased functionality and cognitive development, and hence, increased future earnings
	Anaemia cases prevented in pregnant women	YLD averted in those who survived: Years saved by avoiding disability from maternal anaemia	Reduced morbidity, leading to increased functionality, and hence, increased future earnings

Examples of recent/ongoing work

Cost-effectiveness of the WINNN Programme

Operations Research and Impact Evaluation

Working to Improve Nutrition in Northern Nigeria (WINNN) program

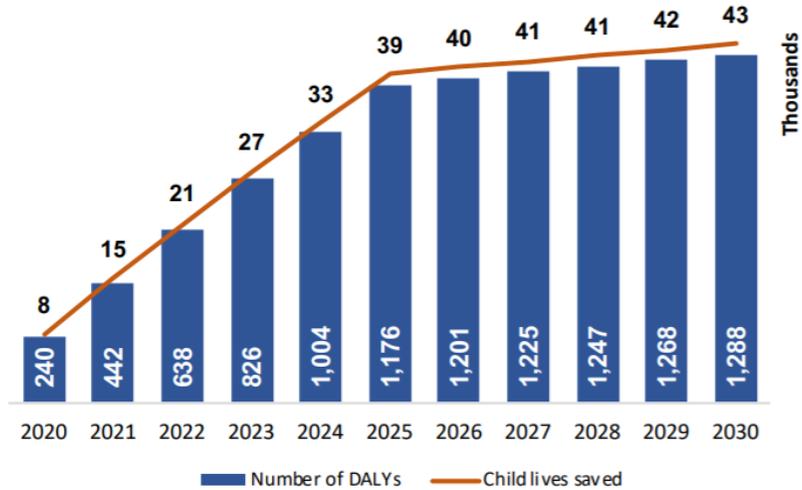
Shehzad Ali, Paola Vargas and Sarah Keen



https://www.heart-resources.org/wp-content/uploads/2017/08/Cost-Effectiveness-of-the-WINNN-Programme_ORIE_OPM.pdf

Scaling up to meet WHA nutrition targets in 6 SADC countries

Figure 3: Annual additional child lives saved and DALYs (from child lives saved) averted, six countries aggregate



Annual additional maternal deaths averted and DALYs (from maternal deaths and maternal anaemia cases) averted, six countries aggregate

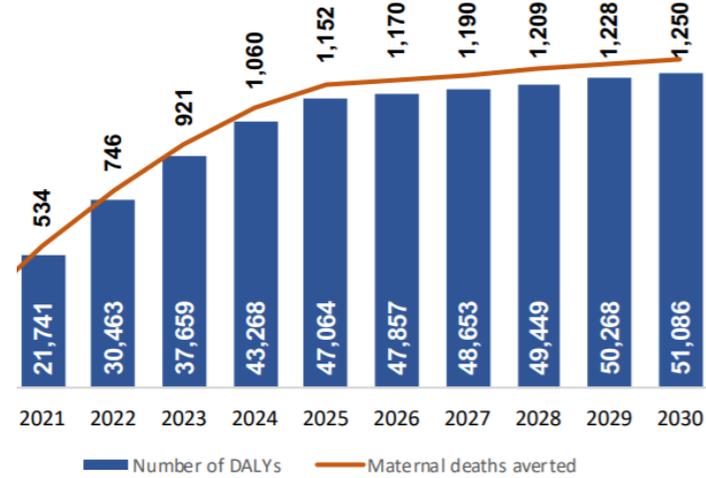
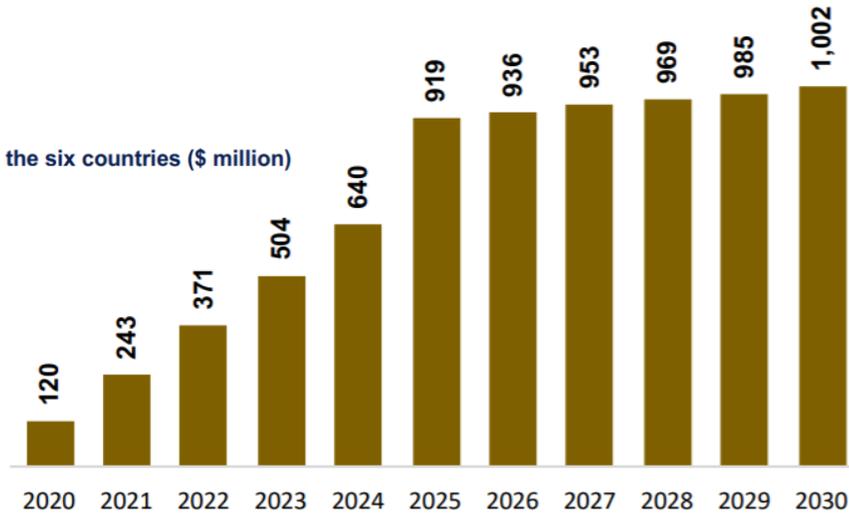


Figure 7: Annual incremental costs in the six countries (\$ million)



Malawi, Madagascar,
Mozambique, Tanzania
Zambia, Zimbabwe