



Collaboration in Strengthening Capacity of African Countries to Conduct and Use Health Research

Dr. Olive Shisana, CEO
Human Sciences Research Council
Presented on the 24th of October 2011
World Health Summit, Berlin

Social science that makes a difference



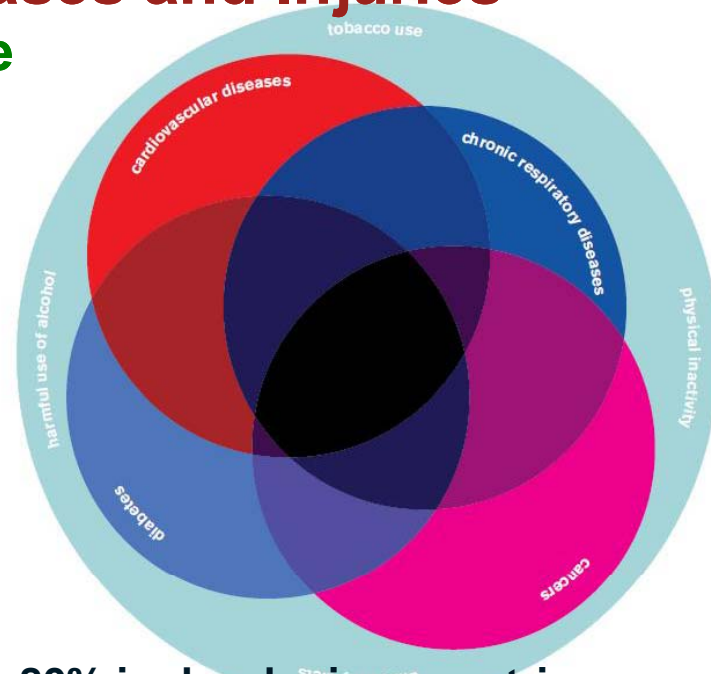
Outline of presentation

- Global health challenges
- Scientific knowledge production and use
- Opportunities for global collaboration
- Investment in research infrastructure
- Strengthening capacity for knowledge production
- Conclusion

Noncommunicable Diseases and Injuries

Magnitude

- **Four major noncommunicable diseases (NCDs):**
 - Cardiovascular diseases
 - Diabetes
 - Cancers
 - Chronic respiratory diseases
- **Four shared modifiable risk factors:**
 - Tobacco use
 - Unhealthy diet
 - Physical inactivity
 - Harmful use of alcohol



- 60% of deaths globally – 70% if injuries are included **-80% in developing countries**
- 40-50% are premature
- Magnitude has a major socio-economic impact on developing countries

➤ **NCDs and injuries are still excluded from global discussions on development**

ECOSOC/UNESCWA/WHO Western Asia Ministerial Meeting

Addressing noncommunicable diseases and injuries (Doha, Qatar, 10-11 May 2009)

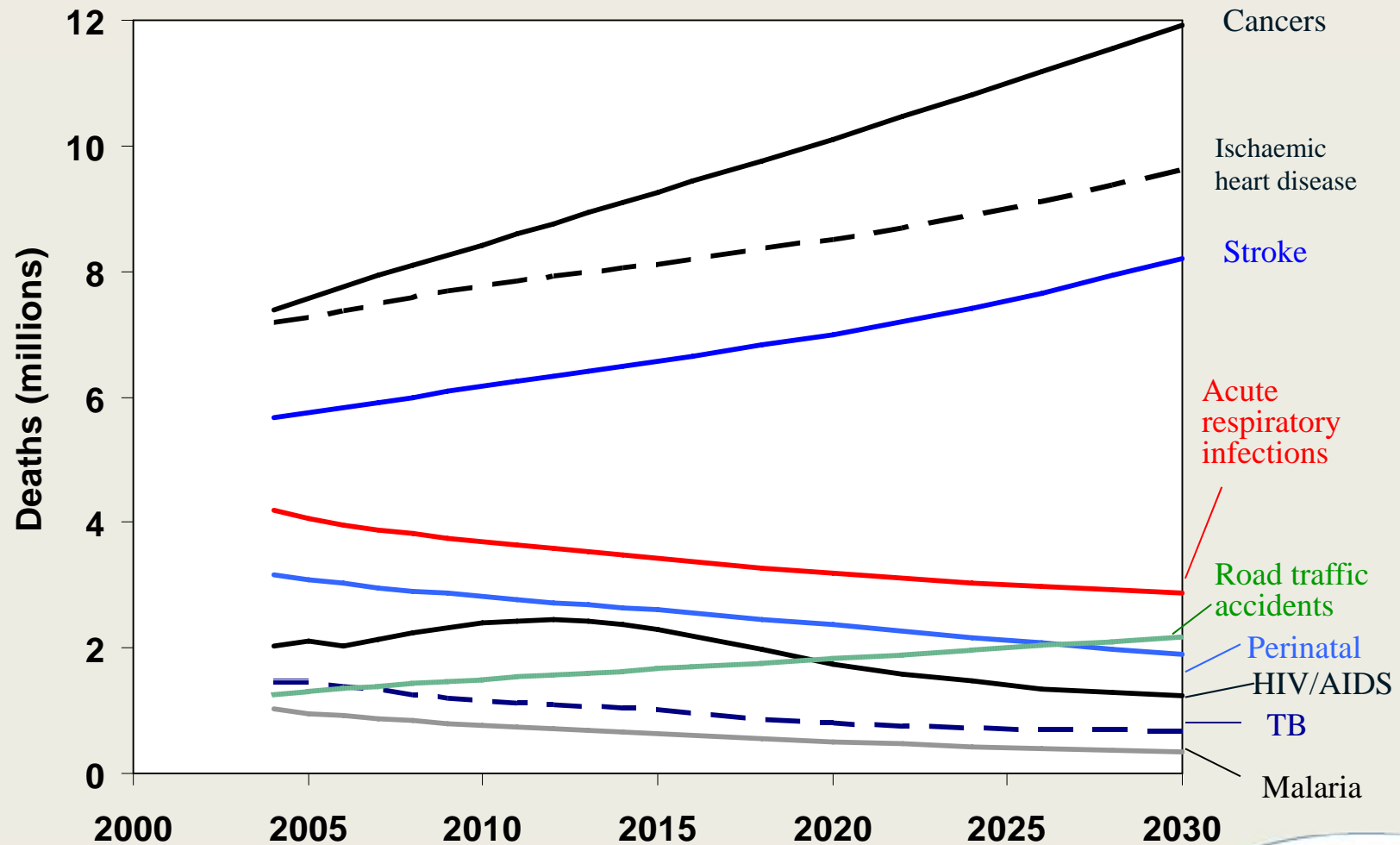
Social science that makes a difference

HIV/AIDS Globally and Sub-Saharan Africa (numbers in millions)

	Year	Adults and Children	Newly Infected	AIDS related Deaths
Sub-Saharan Africa	2009	22.5	1.2	1.3
	2001	20.3	1.8	1.4
Global	2009	33.3	2.6	1.8
	2001	28.6	3.1	1.8

Noncommunicable Diseases & Injuries

Projected global deaths (2030)



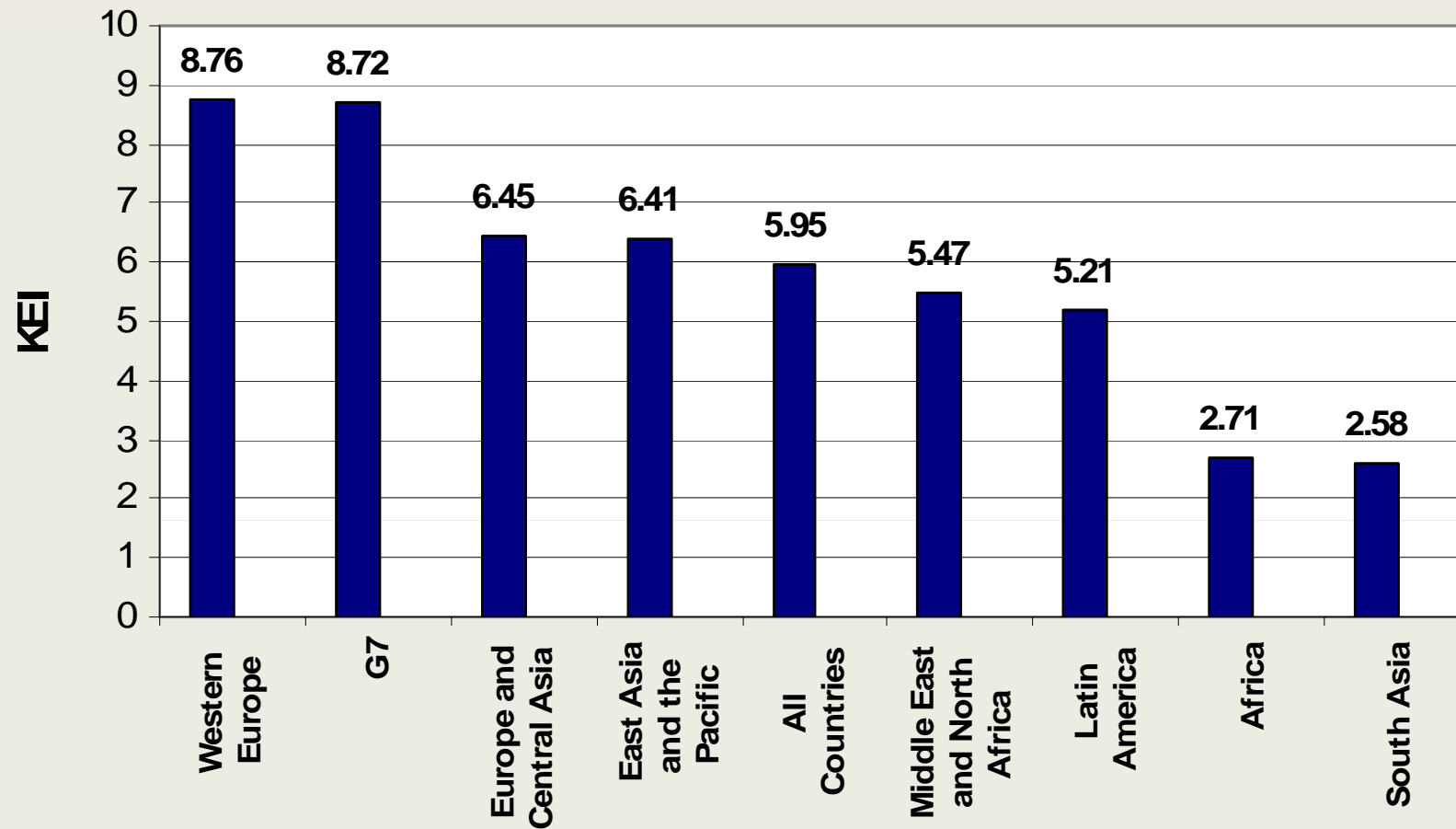
www.who.int/healthinfo/global_burden_disease/2004_report_update/en/index.html

Knowledge production

- Royal Society of London celebrated the 350th anniversary of science
- The Royal Society fellows credited with invention of processes used by modern science, i.e., experimentation, peer-review and publishing of articles
and use of English in science
– from around 1660.
- The French Academy of Science was established in 1666,
- American Academy of Science was formed in 1848
- TWAS in 1983
- ASSAF- 1995 and ACT passed in 2001

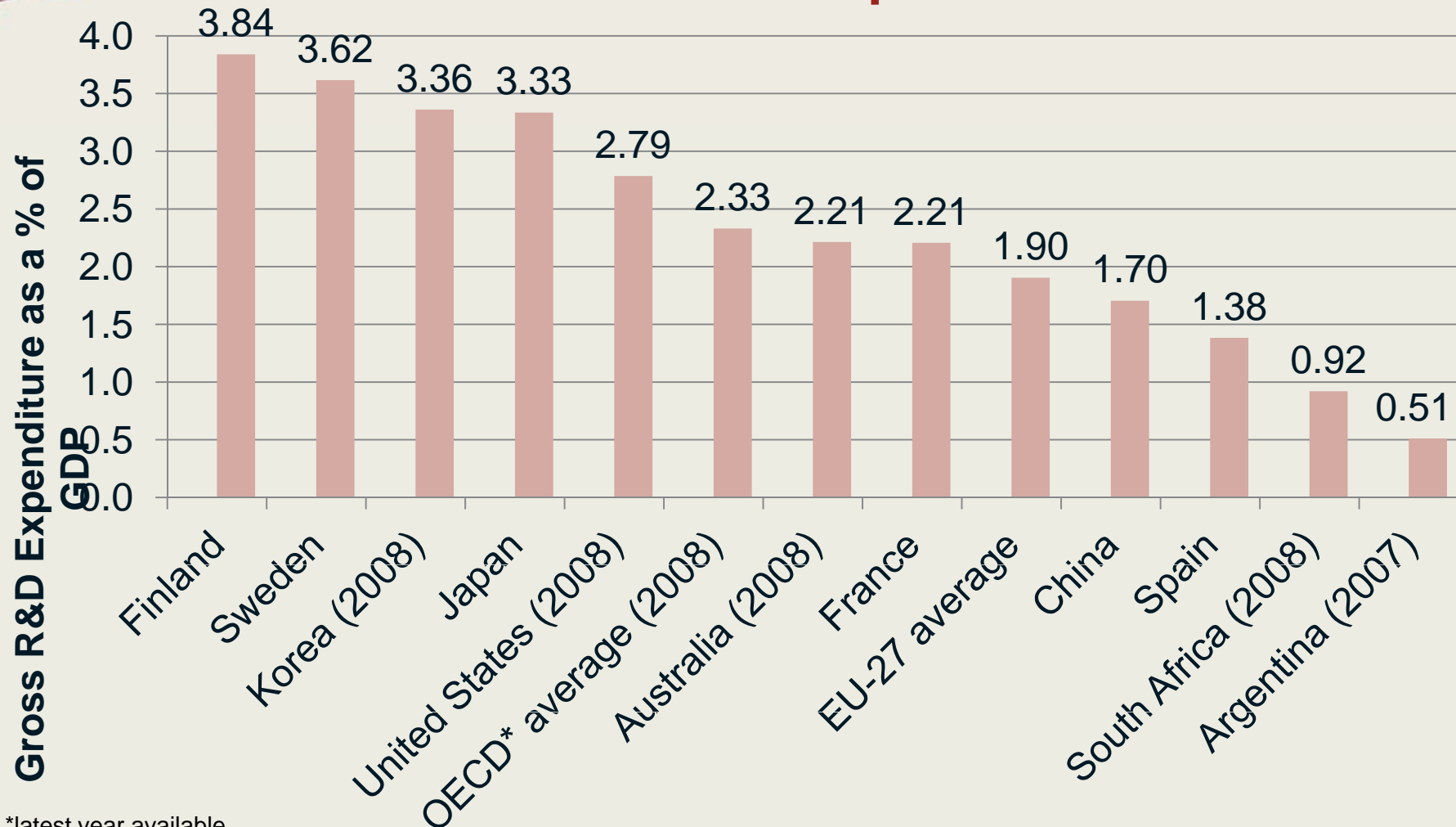


Knowledge Economic Index (KEI) 2009



The World Bank Group 2009
Social science that makes a difference

International Comparisons, GERD



*latest year available

Source: OECD Main Science and Technology Indicators, 2011-1

Source: OECD Main Science and Technology Indicators, 2009

Opportunities for Global Collaboration

Social science that makes a difference



Opportunities for global and international collaboration

- Networks-Global HIV prevention working group secretariat in Africa
- Grant makers using funding as an instrument of collaboration
- Joint Projects between African researchers and scientists in the rest of the world.

PLoS Medicine: Randomized, Controlled Intervention Trial of Male Circumcision for Reduction of HIV Infection Risk: The ANRS 1265 Trial



PLoS MEDICINE

a peer-reviewed open-access journal published by the Public Library of Science

[Login](#) | [Create Account](#) | [Feedback](#)

Search articles...

GO

Advanced Search

[Browse](#)

[RSS](#)

[Home](#) [Browse Articles](#) [About](#) [For Readers](#) [For Authors and Reviewers](#)

[Journals](#)

[Hubs](#)

[PLoS.org](#)

RESEARCH ARTICLE

OPEN ACCESS

Featured in [PLoS Hub for Clinical Trials](#)

Randomized, Controlled Intervention Trial of Male Circumcision for Reduction of HIV Infection Risk: The ANRS 1265 Trial

[Article](#)

[Metrics](#)

[Related Content](#)

[Comments: 21](#)

Bertran Auvert^{1,2,3,4*}, Dirk Taljaard⁵, Emmanuel Lagarde^{2,4}, Joëlle Sobngwi-Tambekou², Rémi Sitta^{2,4}, Adrian Puren⁶

1 Hôpital Ambroise-Paré, Assistance Publique—Hôpitaux de Paris, Boulogne, France, **2** INSERM U 687, Saint-Maurice, France, **3** University Versailles Saint-Quentin, Versailles, France, **4** IFR 69, Villejuif, France, **5** Progressus, Johannesburg, South Africa, **6** National Institute for Communicable Disease, Johannesburg, South Africa

To add a note, highlight some text. [Hide notes](#)
[Make a general comment](#)

Download: [PDF](#) | [Citation](#) | [XML](#)

[Print article](#)

[Order Reprints](#)

Published in the [November 2005 Issue of PLoS Medicine](#)

Metrics [i](#)

Average Rating (0 User Ratings)

☆☆☆☆☆ [See all categories](#)

[Rate This Article](#)

[More](#)

Related Content

Related PLoS Articles

[First Trial of Male Circumcision against HIV](#)

[Does Male Circumcision Prevent HIV Infection?](#)

[Correction: Randomized, Controlled Intervention Trial of Male Circumcision for Reduction of HIV Infection Risk: The ANRS 1265 Trial](#)

[HIV Treatment Proceeds as Prevention](#)

[Abstract](#) [Top](#)

Background

Observational studies suggest that male circumcision may provide protection against HIV-1 infection. A randomized, controlled intervention trial was conducted in a general population of South Africa to test this hypothesis.

Effectiveness and Safety of Tenofovir Gel, an Antiretroviral Microbicide, for the Prevention of HIV Infection in Women

Opt-in for automatic e-mail alerts... | 

Science AAAS.ORG | FEEDBACK | HELP | LIBRARIANS | Science Magazine | Enter Search Term

AAAS NEWS SCIENCE JOURNALS CAREERS BLOGS & COMMUNITIES MULTIMEDIA COLLECTIONS

Science The World's Leading Journal of Original Scientific Research, Global News, and Commentary.

Science Home Current Issue Previous Issues Science Express Science Products My Science About the Journal

Home > Science Magazine > 3 September 2010 > Abdool Karim *et al.*, 329 (5996): 1168-1174

Published Online July 19 2010
Science 3 September 2010:
Vol. 329 no. 5996 pp. 1168-1174
DOI: 10.1126/science.1193748

< Prev | Table of Contents | Next >

RESEARCH ARTICLE

Effectiveness and Safety of Tenofovir Gel, an Antiretroviral Microbicide, for the Prevention of HIV Infection in Women

Quarraisha Abdool Karim^{1,2,3,†}, Salim S. Abdool Karim^{1,2,3,*}, Janet A. Frohlich¹, Anneke C. Grobler¹, Cheryl Baxter¹, Leila E. Mansoor¹, Ayesha B. M. Kharsany¹, Sengeziwe Sibeko¹, Koleka P. Mlisana¹, Zaheen Omar¹, Tanuja N. Gengiah¹, Silvia Maarschalk¹, Natasha Arulappan¹, Mukelisiwe Mlotshwa¹, Lynn Morris⁴, Douglas Taylor⁵ and on behalf of the CAPRISA 004 Trial Group

± Author Affiliations
†To whom correspondence should be addressed. E-mail: caprisa@ukzn.ac.za
±* These authors contributed equally to this work.

Article Views

- > Abstract
- > Full Text
- > Full Text (PDF)
- > Figures Only
- > Supporting Online Material

VERSION HISTORY

- > 329/5996/1168 (most recent)
- > science.1193748v1

Article Tools

- > Save to My Folders

A Decline in New HIV Infections in South Africa: Estimating HIV Incidence from Three National HIV Surveys in 2002, 2005 and 2008

Thomas M. Rehle^{1*}, Timothy B. Hallett², Olive Shisana¹, Victoria Pillay-van Wyk¹, Khangelani Zuma¹, Henri Carrara¹, Sean Jooste¹

¹ Human Sciences Research Council, Cape Town, South Africa, ² Imperial College London, London, United Kingdom

Abstract

Background: Three national HIV household surveys were conducted in South Africa, in 2002, 2005 and 2008. A novelty of the 2008 survey was the addition of serological testing to ascertain antiretroviral treatment (ART) use.

Methods and Principal Findings: We used a validated mathematical method to estimate the rate of new HIV infections (HIV incidence) in South Africa using nationally representative HIV prevalence data collected in 2002, 2005 and 2008. The observed HIV prevalence levels in 2008 were adjusted for the effect of antiretroviral treatment on survival. The estimated “excess” HIV prevalence due to ART in 2008 was highest among women 25 years and older and among men 30 years and

Int J Epidemiol. 2011 Aug;40(4):885-901. Epub 2011 Apr 28.

Non-communicable diseases in sub-Saharan Africa: what we know now.

Dalal S, Beunza JJ, Volmink J, Adebamowo C, Bajunirwe F, Njelekela M, Mozaffarian D, Fawzi W, Willett W, Adami HO, Holmes MD.

The prevalence of NCDs and their risk factors is high in some SSA settings. With the lack of vital statistics systems, epidemiologic studies with a variety of designs (cross-sectional, longitudinal and interventional) capable of in-depth analyses of risk factors could provide a better understanding of NCDs in SSA, and inform health-care policy to mitigate the oncoming NCD epidemic.

Infrastructure for science and technology

- Poor economic development→
 - low investment in research and development
 - few libraries, with older books and journals
 - Poor access to ICT with high speed bandwidth
 - Few highly skilled scientists who can tutor, provide mentorship and review articles
 - Poor salaries for scientists
 - Often no requirement for scientific publication for academic promotion
- a critical mass of scientists, can be achieved with high investment in science and technology



Poor access to infrastructure for dissemination of scientific papers

- Attitudes or practices of editors and scientists in the North (real or perceived)
 - English as the language of scientific communication results in higher rejection rates in North-based journals for research papers submitted from non-English speaking authors
- Journals to create sub-editing sections dedicated to language, and for editors to have such articles sub-edited accordingly.



External Barriers (cont.)

- High fees: some journals charge for publishing electronically or in hard copy, may cost up to \$3 000

Promote open access policy, eg

- SatelLife (www.healthnet.org),
- International Network for the Availability of Scientific Publications (www.inasp.info),
- Electronic Publishing Trust for Development (www.epublishingtrust.org)
- Human Science Research Council (HSRC) Press with respect to books.

Strengthening capacity for knowledge production

- Set the research agenda together
- Share research resources
- Grant funds for research unconditionally
- Make research infrastructure available to scientists no matter where they are
- Offer incentives to conduct research
- Collaborate on research –South To South, North to South, North-South-South
- Be open to publish articles from the South

Conclusion

- The epidemiological transition offers and opportunity for us to build capacity and collaborate to tackle non-communicable diseases that are common in our countries as well as address communicable diseases
- Agencies such as TWAS are good examples of helping African countries to leap frog and become partners in research

Thank you for your attention

Social science that makes a difference

