Joint Session 2: Non-Communicable Diseases

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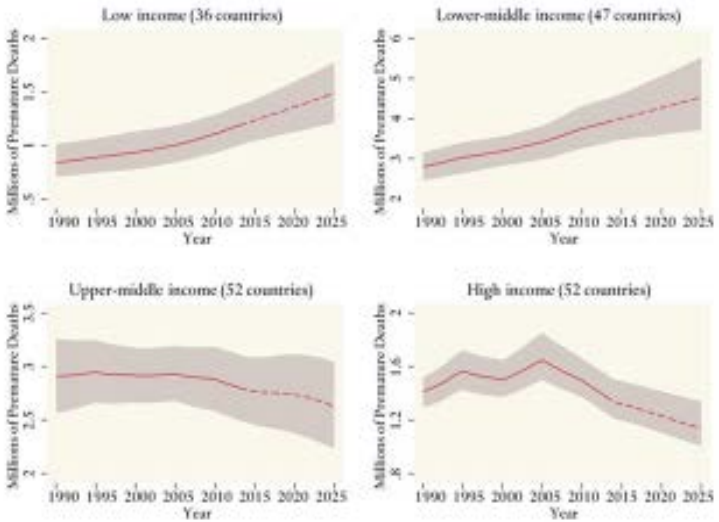
Linda Kupfer: The Increasing Burden of NCDs in LMICs

The Context

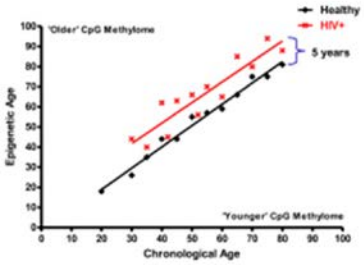
Figure 1: Premature (Under Age Sixty) Deaths From NCDs



Underlying Data Source: Institute for Health Metrics and Evaluation, Global Burden of Disease Study 2013.

Council on Foreign Relations: Daniels and Donolon Chairs: The Emerging Global Health Crisis: Noncommunicable Diseases in Low-and Middle-Income Co

People with HIV Age Younger

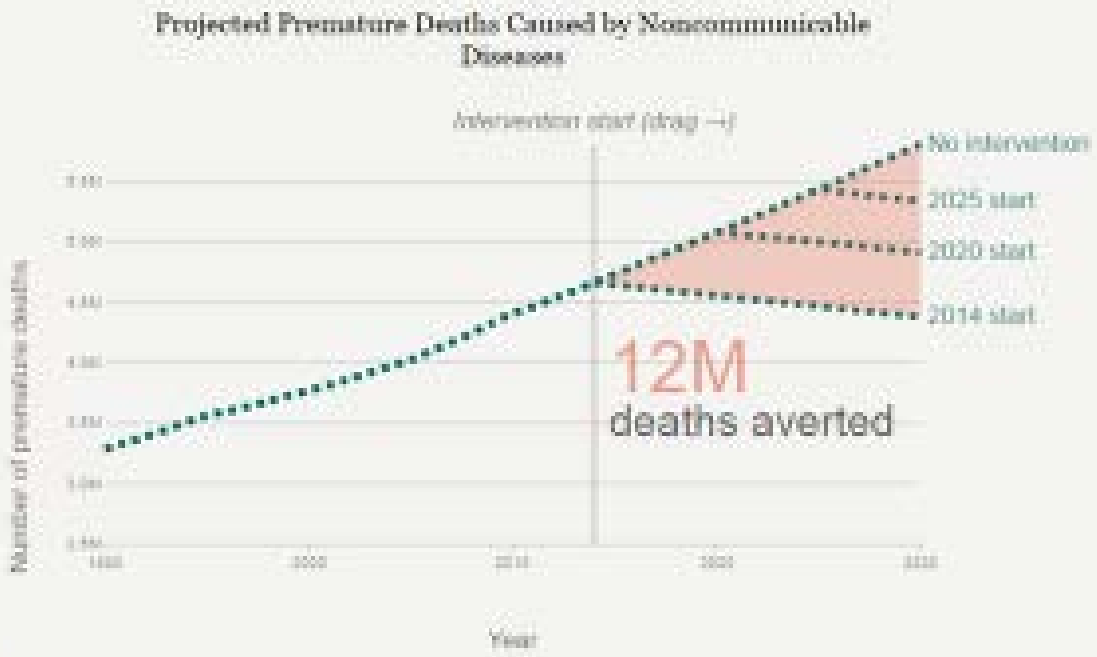


If We Do Nothing…….

COUNCIL on FOREIGN RELATIONS

Noncommunicable Diseases

successful U.S.-supported initiatives on childhood immunization and HIV.



Council on Foreign Relations: Daniels and Dondon Chairs: The Emerging Global Health Crisis: Noncommunicable Diseases in Low- and Middle-Income Countries (Fall 2014)

Research to Guide Practice

Enhancing HIV/AIDS platforms to address NCDs in low-resource settings (PEPFAR- NCD PROJECT)

To bring together researchers, implementers and policy-makers to articulate practical goals, approaches, and related research agendas to support LMICs as they strive to sustain and enhance the gains in HIV/AIDS prevention, care, and treatment and address the rising burden of chronic NCDs.

http://www.fic.nih.gov/About/Staff/Policy-Planning-Evaluation/Pages/pepfar-ncd-project.aspx

NCD care in the clinics

- Case Study #1 – the problem
  - Young woman (43 y/o) diagnosed with AIDS in 2001
  - Adherent to treatment and clinic follow-up regimen
  - Success: Does well – sustained viral suppression
  - Dies of stroke in 2008

Limited primary health care: clinical service silos, HIV care sites task shifting and training on non-HIV care is limited, lack of equipment or resources, etc…

- Case Study #2 – Choosing a solution
  - Policy Option 1: Integration of hypertension screening and treatment into existing HIV clinic structures
  - Policy Option 2: Hypertension screening within HIV Clinics and Subsequent Referral
  - Policy Option 3: Development of a Comprehensive Chronic Care Clinic Model
  - Policy Option 4: The Addition of Hypertension Screening and Referral into Community-Based HIV Activities

Implementation science needed to identify the best option in a given setting.

PEPFAR-NCD Call for Modeling Proposals

In response to a need for more data on NCD burden in PLWH in LMICs, the PEPFAR-NCD Project has issued a Call for Modeling Proposals.

The goal is to develop models to estimate the burden of four NCDs (CVD, type 2 diabetes, depression, and cervical cancer) in PLWH at the national scale in at least two of the following select countries: Ethiopia, Kenya, Malawi, Rwanda, South Africa, Swaziland, and Uganda

One or two awards of up to $150,000 USD will be made for a 1 year project.

Application deadline – August 1, 2016

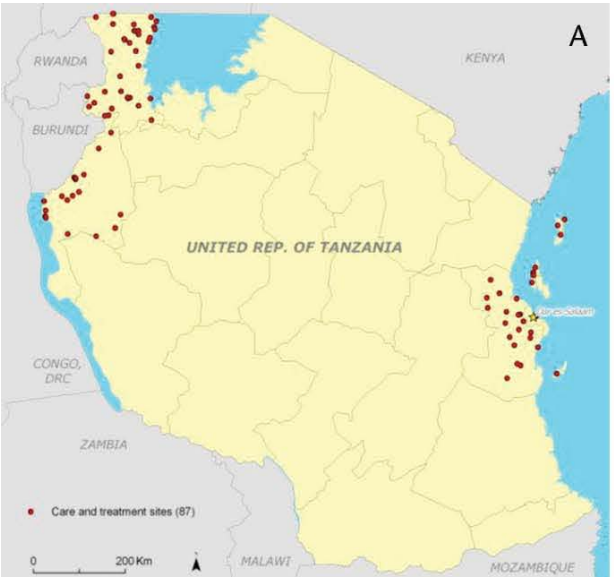
FIC Funding Opportunity

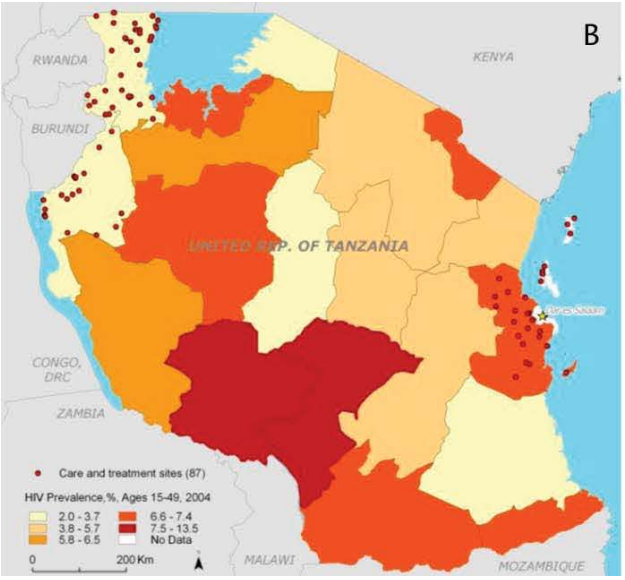
Global Non-communicable Diseases and Injury Across the Lifespan: Exploratory Research (R21) (PAR-16-052)

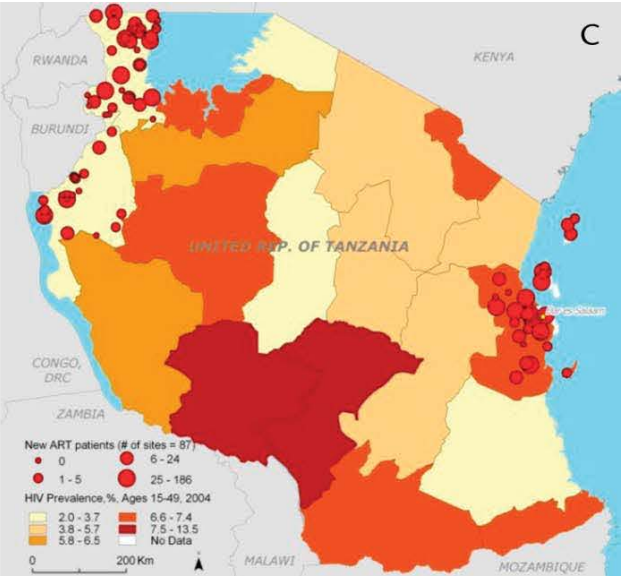
Due Feb. 22, 2017

Denis Nash: Pulling Back the Lens to contextualize HIV care

HIV care programs exist in a larger context







n ART

over a 3-month period (C).

Source: Nash et al. JAIDS 2009

CONTEXTUAL FACTORS THAT COULD INFLUENCE HIV CARE OUTCOMES AND PROGRAM:

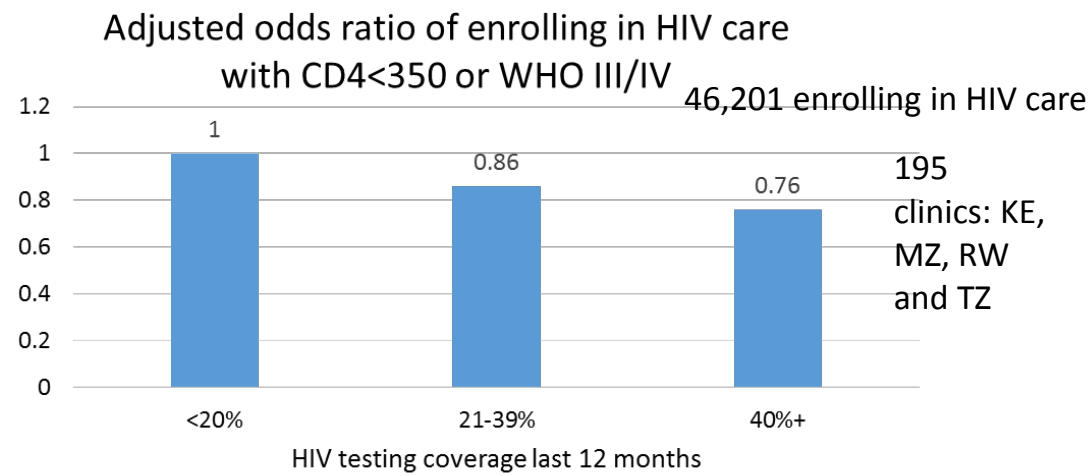
Setting and population, HIV burden, health care system capacity, policy environment

SITE LEVEL FACTORS THAT BOTH VARY AND POTENTIALLY DRIVE HIV CARE OUTCOMES AND PROGRAM EFFECTIVENESS

Physical characteristics of the HIV care clinic, Health care system tier, Patient load, Available services and programmatic characteristics, Staffing characteristics

Hoffman, et al:

After controlling for potential confounding factors, more extensive HIV testing coverage* in the region of a facility was significantly associated with lower risk of late enrollment



Research article

Characteristics and comprehensiveness of adult HIV care and treatment programmes in Asia-Pacific, sub-Saharan Africa and the Americas: results of a site assessment conducted by the International epidemiologic Databases to Evaluate AIDS (IeDEA) Collaboration

Stephany N Duda[§,1], Amanda M Farr[2,3], Mary Lou Lindegren[4,5], Meridith Blevins[6,7], C William Wester[7,8], Kara Wools-Kaloustian[9], Didier K Ekouevi[10,11,12], Matthias Egger[13], Jennifer Hemingway-Foday[14], David A Cooper[15], Richard D Moore[16,17], Catherine C McGowan[8], Denis Nash[18,19] and the International Epidemiologic Databases to Evaluate AIDS (IeDEA) Collaboration

A survey of paediatric HIV programmatic and clinical management practices in Asia and sub-Saharan Africa—the International epidemiologic Databases to Evaluate AIDS (IeDEA)

IeDEA Pediatric Working Group

Tuberculosis in Antiretroviral Treatment Programs in Lower Income Countries: Availability and Use of Diagnostics and Screening

Lukas Fenner[1,2,3]*, Marie Ballif[1], Claire Graber[1], Venerandah Nhandu[4], Jean Claude Dusingize[5], Claudia P. Cortes[6], Gabriela Carriquiry[7], Kathryn Anastos[8], Daniela Garone[9], Eefje Jong[10], Joachim Charles Gnokoro[11], Omar Sued[12], Samuel Ajayi[13], Lameck Diero[14], Kara Wools-Kaloustian[14,15], Sasisopin Kiertiburanakul[16], Barbara Castelnuovo[17], Charlotte Lewden[18], Nicolas Durier[19], Timothy R. Sterling[20], Matthias Egger[1], for the International epidemiological Databases to Evaluate AIDS (IeDEA)[¶]

Targeted Spontaneous Reporting: Assessing Opportunities to Conduct Routine Pharmacovigilance for Antiretroviral Treatment on an International Scale

Beth Rachlis[1] · Rakhi Karwa[2,3] · Celia Chema[3] · Sonak Pastakia[2,3] · Sten Olsson[4] · Kara Wools-Kaloustian[3,5] · Beatrice Jakait[3,6] · Mercy Maina[3,6] · Marcel Yotebieng[7,8] · Nagalingeswaran Kumarasamy[9] · Aimee Freeman[10] · Nathalie de Rekeneire[11] · Stephany N. Duda[12] · Mary-Ann Davies[13] · Paula Braitstein[3,14,15]

Comprehensiveness of Care Provided at Global HIV Treatment Sites in the IeDEA Consortium: 2009 and 2014

Cristin Q. Fritz[1§], Meridith Blevins[2, 3], Mary Lou Lindegren[1,3,4*], Kara Wools-Kaloutsian[5], Beverly S. Musick[6], Morna Cornell[7], Kelly Goodwin[8], Dianne Addison[9], Jean Claude Dusingize[10], Eugène Messou[11], Armel Poda[12], Stephany N. Duda[13], Catherine C. McGowan[14], Matthew G. Law[15], Richard D. Moore[16], Aimee Freeman[17], Denis Nash[9], C. William Wester[3, 14*]

IeDEA Site Assessment papers: Fenner L et al. PLoS One 2013; Sohn et al. JIAS 2013; Duda S et al. JIAS 2014; Rachclis B et al. Drug Saf 2016; Quinn et al. JIAS (in press)

High attrition before and after ART initiation among youth (15–24 years of age) enrolled in HIV care

Matthew R. Lamb[a,b], Ruby Fayorsey[a], Harriet Nuwagaba-Biribonwoha[a], Violante Viola[a], Vincent Mutabazi[c], Teresa Alwar[a], Caterina Casalini[a] and Batya Elul[a,b] *AIDS* 2014, **28**:559–568

- Among 14,844 youth initiating ART in Kenya, Mozambique, Rwanda, and Tanzania:
  - Those attending clinics providing sexual and reproductive health services, including condoms, had significantly lower attrition after ART initiation
    - AHR =0.47, 95% CI: 0.32 – 0.70
  - Those attending clinics offering adolescent support groups had significantly lower attrition after ART initiation
    - AHR=0.73, 95% CI: 0.52 – 1.0

Just Released!

IeDEA site survey on non-communicable diseases (NCDs)

- What: Site assessments of IeDEA sites in LMICs
  - Goal: Assess capacity for the screening, diagnosis, and management of NCDs and their risk factors.
- How: Cross sectional web-based survey of a represen REDCap sample of IeDEA sites in LMICs (n~165)
- When: Summer 2016

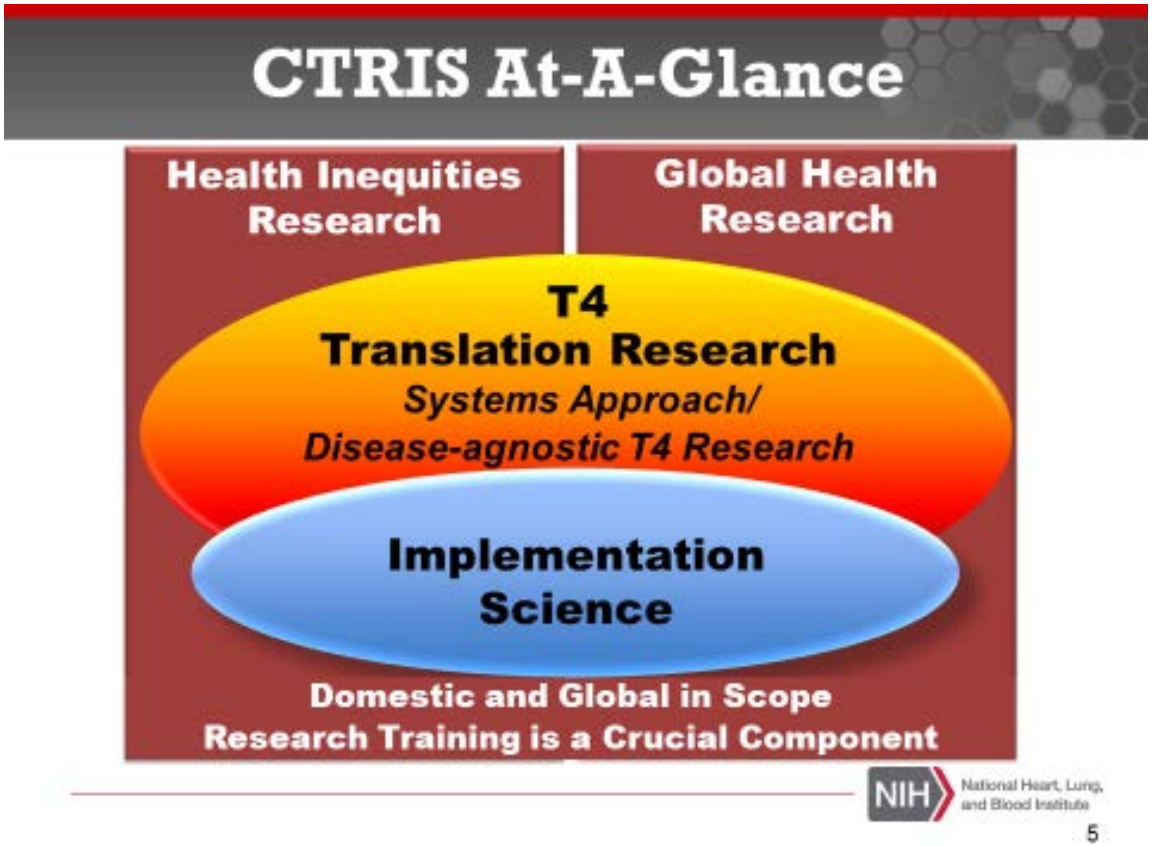
IeDEA
International epidemiologic Databases to Evaluate AIDS

Conclusions

- Contextual and site level factors are important drivers of HIV care outcomes and program effectiveness
- IeDEA has ability and infrastructure to conduct general and targeted time updated site assessments, and to incorporate these data into descriptive and analytical research studies
- Ability to incorporate information on larger context needs further development, but will allow us to further leverage our strengths as a global network
- Forthcoming NCD survey should help lay the foundation for more focused NCD-related research within IeDEA

Emmanuel Peprah: Using Implementation Rsearch to Improve the Health of PLWHIV for heart, lung and blood disease and sleep disorders

Center for Translational Research and Implementation Science (CTRIS)



NHLBI's Commitment to Global Health

S18 CVJAFRICA • Volume 26, No 2, H3Africa Supplement, March/April 2015 CVJAFRICA

NHLBI perspectives on the growth of heart, lung, blood and sleep conditions in Africa: global and domestic insights, challenges and opportunities

Gary H Gibbons, Uchechukwu KA Sampson, Nakela L Cook, George A Mensah

CVJA 2015. Vol 26 H3Africa Supplement March/April 2015

"….the NHLBI's strategy for successful stewardship at national and global levels rests on several enduring principles, which include:…. valuing the health of all communities; and innovating an evidence-based elimination of health inequities in the United States and around the globe."

Hypertension Outcomes for T4 REsearch within Lower Middle-Income Countries (Hy-TREC) (NOT-HL-16-299)

Objectives

- Support research from **lower middle-income country** (Lower-MICs) institutions (i.e., defined by World Bank as countries with a gross national income per capita of $1,046 to $4,125)
- Support systematic local assessment of needs, infrastructure, and capacity for T4TR
- Study the implementation of preexisting evidence-based strategies/programs at regional or national setting for the prevention, treatment, and control of hypertension.
- Support the utilization an appropriate implementation framework (e.g. CFIR,RE-AIM, PRECEDE-PROCEED, PARIHS, K2A..etc.)

NIDA: Priorities for Substance Abuse Research in PLWHIV

Outreach models, **assessment methods** to improve SU-related data capture

timely

inexpensive

Sentinel surveillance

SU effects on longitudinal HIV **clinical outcomes**

enhancing **strategies for linkage** to testing and HIV treatment and improved integrated care approaches

Epidemiologic **assessments** of SU effects on HIV at individual and population levels

novel ways to **characterize** SU-related behavior and use of HIV services

efforts to **model** individual and ecological contributions

Implementation science and cost-effectiveness research related to care barriers or enhancements and changes in care delivery

inform focal points for intervention strategies