Lessons learned from the IeDEA West Africa Collaboration

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Antiretroviral treatment (ART)
Successes and limits (1)
- From 3 by 5 to ... 15 by 15
Number of people receiving antiretroviral therapy in low- and middle-income countries, by region, 2002–2011


North Africa and Middle East
Europe and Central Asia
East, South and South-East Asia
Latin America and the Caribbean
Sub-Saharan Africa
Antiretroviral treatment
Successes and limits (2)

- From 3 by 5 to ... 15 by 15
- ... already 9.7 million by the end of 2012 (+21% in the last year)

i.e. 61% of those in need according to 2010 WHO guidelines
Context (1)

• International collaboration for health system development has been identified as a critical input to meet pressing global health needs

• IeDEA network [http://www.iedea.org/](http://www.iedea.org/)
  – An international research consortium established in 2005 by the National Institute of Allergy and Infectious Diseases (USA) to provide a rich resource for globally diverse HIV/AIDS data
International collaboration for health system

- IeDEA Collaboration (Global Consortium)

- IeDEA West Africa Collaboration
  - Launched in July 2006
  - Funded by the National Institutes of Health (USA)
  - Using research infrastructure developed by ANRS & INSERM in Côte d’Ivoire - Partnership
  - Main priority areas: HIV and Cancer
Aims

• To increase the capacity for monitoring treatment outcomes in HIV-infected patients (adults and children) at the individual and population levels in West Africa

• To assess in the era of universal access to ART:
  – Clinical outcomes (survival, clinical response)
  – Public health outcomes (relation to health services and program delivery, retention in care)

• And explore their determinants
Management of IeDEA WA

- Contractor: Bordeaux School of Public Health (ISPED)
  - Methodology and statistical analysis
  - Administration and finance

- Regional office: Programme PACCI in Abidjan
  - Provide data management support to field sites
  - Team composition
    - Two epidemiologists
    - Two data managers
    - Two data clerks

- Sub contractors: Clinical Centers
Governance of IeDEA WA

- General Assembly: one meeting per year

- Executive Committee
  - One meeting every 3 months
  - PIs, project managers, one representative per country and leads of working groups

- Steering Committee and technical meetings
  - Every 6 weeks
9 countries, 11 cities, 27 cohorts
47,651 adults (16 cohorts) on ART
4,390 infants (11 cohort) on ART, …
Strengths of this collaboration (1)

- Participation of University Teaching Hospitals
  - Infectious Diseases or Internal Medicine wards
  - Togo, Senegal, Côte d’Ivoire, Benin, Mali
  - Research capacity
- Participation of lower-level care facilities:
  - General hospitals, Day Hospitals
  - Côte d’Ivoire, Burkina Faso, Guinea
  - Increase representativeness

- Dedicated instruments for online communication and data management
  - Public and private access
  - Latest version of all available files: study protocol, clinical forms, questionnaires, key findings, publications, …
Strengths of this collaboration (2)

• Extensive list of research questions updated regularly:
  – Hepatitis B cohort
  – HIV-2 cohort
  – Cancer and HIV cross-sectional, case-control and cohort studies
  – Ad hoc surveys

• Site assessment (descriptive surveys)
• Assess data quality (completeness/accuracy of forms, status of data entry, proper storage of study documents)

• Two types of collaboration: North-South and South-South

• Collaboration with other IeDEA regions
Achievements

- Data quality procedures in place
- Implementation of reporting tools
- Regular refresher training in data management
- Learning by doing to improve research skills
- Multi-disciplinary approach +++

- Newsletters

- Scientific publications (as of July 2013)
  - 27 for the IeDEA West Africa Collaboration alone
  - 5 for Multiregional Collaboration
Limiting factors

• Communication with the clinical sites:
  – Limited access to internet
  – Need face-to-face meetings to be more productive

• South-South Collaboration has been limited

• Quality of database is challenging
  – Missing data for important variables
  – Inaccurate information
  – Under reporting of death events
  – The use of routine data for research

• Lack of systematic biobank (except for HIV-2 cohort)
SWOT Analysis

**Strengths**
- Network (9 countries, 100 collaborators)
- North-South collaboration
- HIV & Cancer

**Weaknesses**
- Constraints linked to financial & administrative procedures
- Lack of human resources
- Limited funds per activity

**Opportunities**
- Capacity to initiate quickly a new project/survey on new global health challenges

**Threats**
- Fatigue – routine activities
- Challenge of identifying novel ideas

**IeDE**
west africa
Four permanent working groups

Pediatric
Cohort analyses / Cross sectional surveys

Women
Cohort

HIV-2
Cohort
Biobank

Cancer & HIV
Mostly cross sectional surveys
Effect of age on immunological response in the first year of antiretroviral therapy in HIV-1-infected adults in West Africa

Eric Balestre\textsuperscript{a,b}, Serge P. Eholié\textsuperscript{c}, Amani Lokossue\textsuperscript{c}, Papa Salif Sow\textsuperscript{d}, Man Charurat\textsuperscript{e}, Albert Minga\textsuperscript{f,h}, Joseph Drabo\textsuperscript{g}, François Dabis\textsuperscript{a,b}, Didier K. Ekouevi\textsuperscript{a,b,h}, Rodolphe Thiébaut\textsuperscript{a,b}, for the International epidemiological Database to Evaluate AIDS (IeDEA) West Africa Collaboration

AIDS 2012, 26:951–957
Characteristics of HIV-2 and HIV-1/HIV-2 Dually Seropositive Adults in West Africa Presenting for Care and Antiretroviral Therapy: The IeDEA-West Africa HIV-2 Cohort Study

Didier K. Ekouevi¹,²,³*, Eric Balestre¹, Patrick A. Coffie²,⁴, Daouda Minta⁵, Eugene Messou²,⁴,⁶, Adrien Sawadogo⁷, Albert Minga⁸, Papa Salif Sow⁹, Emmanuel Bissagnene⁴,¹⁰, Serge P. Eholie⁴,¹⁰, Geoffrey S. Gottlieb¹¹, François Dabis¹, for the IeDEA West Africa collaboration⁴
HIV Status Disclosure and Retention in Care in HIV-Infected Adolescents on Antiretroviral Therapy (ART) in West Africa

Elise Arrivé¹,²*, Fatoumata Dicko³, Hind Amghar¹, Addi Edmond Aka⁴, Hélène Dior⁵, Belinda Bouah⁶, Mariam Traoré³, Patricia Ogbo⁷, Hortense Aka Dago-Akribi⁴, Tanoh Kassi F. Eboua⁶, Kouadio Kouakou⁷, Haby Signate Sy⁵, Ahmadou Alioum¹,², François Dabis¹,², Didier Koumavi Ekouévi²,⁸, Valériane Leroy¹,², for the Pediatric IeDEA West Africa Working Group⁵

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March 2012 | Volume 7 | Issue 3 | e33690
Cervical cancer screening by visual inspection in Côte d’Ivoire, operational and clinical aspects according to HIV status

Apollinaire Horo, Antoine Jaquet, Didier K Ekouevi, Badian Toure, Patrick A Coffie, Benjamin Effi, Eugene Messou, Albert Minga, Raoul Moh, Mamourou Kone, François Dabis and Annie J Sasco, for The IeDEA West Africa collaboration
Tuberculosis in Antiretroviral Treatment Programs in Lower Income Countries: Availability and Use of Diagnostics and Screening

Lukas Fenner¹,²,³*, Marie Ballif¹, Claire Graber¹, Venerandah Nhandu⁴, Jean Claude Dusingize⁵, Claudia P. Cortes⁶, Gabriela Carriquiry⁷, Kathryn Anastos⁸, Daniela Garone⁹, Eefje Jong¹⁰, Joachim Charles Gnokoro¹¹, Omar Sued¹², Samuel Ajayi¹³, Lameck Diero¹⁴, Kara Wools-Kaloustian¹⁴,¹⁵, Sasisopin Kiertiburanakul¹⁶, Barbara Castelnuovo¹⁷, Charlotte Lewden¹⁸, Nicolas Durier¹⁹, Timothy R. Sterling²⁰, Matthias Egger¹, for the International epidemiological Databases to Evaluate AIDS (IeDEA)⁹

IeDEA
International epidemiologic Databases to Evaluate AIDS

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Conclusions

• Better characterization of the HIV epidemic and its case management in West Africa in the ART era

• Concentrate resources and attraction of funding

• Need implementation of biobank (HIV-2) and more contribution of biologists and new disciplines beyond the biomedical ones

• Challenges to develop and sustain research capacities specifically for the South
4th General Assembly of IeDEA West Africa
Bordeaux, June 2011