

Research on HIV/AIDS—Current and planned
The World Bank’s Development Research Group (DECRG)
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Research by DECRG on the HIV/AIDS epidemic can be classified into three groups:

- A) HIV/AIDS Treatment
- B) HIV/AIDS Transmission and Prevention
- C) Socioeconomic Impact of HIV/AIDS

A) HIV/AIDS Treatment

The World Bank’s Africa region has launched several initiatives to accelerate the access to antiretroviral treatment (ART) for HIV/AIDS patients. In Burkina Faso, Ghana and Mozambique, the TAP (Treatment Acceleration Project) is supporting different models of public-private partnerships: ARV delivery through associations of persons living with HIV/AIDS, faith based organizations, local and international NGO’s, partnerships between government hospitals and private health facilities. The Bank is also supporting ART delivery in other countries.

A DECRG team has set up a series of prospective impact evaluations of programs delivering ART in the TAP countries, as well as in Rwanda, Kenya, South Africa and India. This work is done in close collaboration with other World Bank colleagues, and also the WHO and UNECA.

The questions addressed by these impact evaluations are (see further details in Table A):

1) Measuring the impact of treatment on the welfare of patients and family members

Over and above lives saved and health outcomes, we will measure the impact on the labor supply of the patient and other family members, the schooling and nutrition of children and other welfare indicators.

2) What are the effects of ART on HIV transmission and prevention?

		Direction of effect	
		<u>Beneficial</u> (Slow transmission)	<u>Adverse</u> (Speed transmission)
Type of effect	<u>Biological</u>	Reduce infectiousness	Select for resistance. Longer duration of infectivity
	<u>Behavioral</u>	Encourage VCT.	Off-setting risk behavior, “disinhibition”

3) What are the determinants of treatment success? (i.e. of patient care-seeking behavior and treatment adherence; quantity and quality and of ART services)

4) How to encourage cost-effectiveness and capacity building to reinforce the sustainability of ART delivery and adherence?

In order to answer these questions we are collecting data over time from biomedical records, household surveys (HIV patients and general population) as well as health facility and surveys. In some countries, we will, in addition, evaluate some experimental interventions:

- Rwanda: performance-based contracting for HIV/AIDS services in health facilities
- South Africa: food supplement and community health workers for supporting adherence to treatment.
- Kenya: reminders by text messages for improving adherence.

B) HIV/AIDS Transmission and Prevention

This research addresses three areas: (i) understanding the patterns of HIV/AIDS transmission, (ii) the impact of programs designed to affect the incidence of HIV, and (iii) understanding the determinants of testing.

The first research area relies on household data sources such as the Demographic Health Surveys which includes HIV status of sub-samples of respondents or entails new data collection efforts.

The second research area entails new projects to rigorously evaluate the impact of three prevention interventions: 1) Conditional Cash Transfers (CCT) which would provide monetary incentives for remaining STI/HIV negative in Tanzania 2) short-term financial incentives to remain STI negative in Lesotho and 3) Evaluating the impact of Conditional/Unconditional cash transfer program for schooling on the sexual behavior and HIV risk of young women and school-aged girls in Malawi. These three projects all include a prospective randomized evaluation.

The third research area uses household datasets and a randomized prospective evaluation from Kenya to look at who tests and who does not (both in the VCT clinic and in home-based testing) and how this affects economic and sexual behavior. We are also using already collected data to look at the impacts of ART on risky sexual behavior. Details of the individual projects in all three areas of research can be found in Table B below.

C) Socioeconomic Impact of HIV/AIDS

Research in this theme investigates the impact of HIV/AIDS on populations, economies and institutions. It also evaluates social protection mechanisms designed to mitigate the impact of the HIV/AIDS epidemic. Table C gives an overview of existing and planned research.

A) HIV/AIDS Treatment

DECRC team: Damien de Walque, Harounan Kazianga, Mead Over, Markus Goldstein, in collaboration with other researchers (international and country based)
Funded and supported by BNPP, Research Support Budget, Hewlett Foundation, TAP project, Global HIV/AIDS Program, HD Vice Presidency and Act Africa

Research theme	Longitudinal household survey of HIV patients	Longitudinal health facility survey	Household survey in general population
1) Measuring the impact of treatment on the welfare of patients and family members	Rwanda (baseline and follow-up done, analysis ongoing and presented) Burkina Faso (baseline done, analysis ongoing and presented, follow-up ongoing)		
2) What are the effects of ART on HIV transmission and prevention?	Ghana (baseline done, 1 st follow-up done, second follow-up ongoing, analysis ongoing and presented) Mozambique (baseline done, follow-up done, analysis ongoing and presented) South Africa (baseline done, 1 st follow-up done, analysis ongoing and presented)		Ghana (analysis ongoing and presented) Burkina Faso (analysis ongoing and presented)
3) What are the determinants of treatment success including adherence?	Kenya (analysis ongoing, 2 papers published, 2 working papers in progress)	Burkina Faso (follow-up done, analysis ongoing and presented) Rwanda (baseline done with randomized performance contracting intervention, follow-up done, analysis ongoing and presented)	
4) How to encourage cost-effectiveness and capacity building to reinforce the sustainability of ART delivery?		Mozambique (baseline done, follow-up done, follow-up analysis ongoing and presented) South Africa (baseline done, 1 st follow-up done, analysis ongoing and presented) India (baseline, including interviews of HIV patients, analysis ongoing and presented)	

See also: *HIV/AIDS Treatment and Prevention in India. Modeling the Cost and Consequences*. 2004. Over, M, Heywood P, Gold J, Gupta I, Hira Subhash, Marseille, E.; *The Economics of Effective AIDS Treatment. Evaluating Policy Options for Thailand*. 2006. Mead Over, Ana Revenga, Emiko Masaki, Wiwat Peerapatanapokin, Julian Gold, Viroj Tangcharoensathien, Sombat Thanprasertsuk.

B) HIV/AIDS Transmission and Prevention

Research project	Country	Design	Team	Progress
Can Conditional Cash Transfers (CCT) be used as a prevention tool for STI/HIV infection?	Tanzania	Prospective randomized evaluation with baseline survey and control group	Damien de Walque UC Berkeley Ifakara Health Institute	Research launched Baseline completed Follow-up ongoing
The impact of short-term financial incentives on sexual behavior and HIV incidence among youth in Lesotho	Lesotho	Prospective randomized evaluation with baseline survey and control group	Damien de Walque Martina Bjorkman Jakob Svensson	Research launched Funding from BNPP + SIEF
Marriage transitions and the risk of HIV infection for adolescents and young adults (MTM).	Malawi	A 3-year longitudinal observational study with HIV testing	Kathleen Beegle Berk Özler Brown University Chancellor College (U Malawi)	Five rounds of data collection completed/ Funding received from RSB, Hewlett Foundation.
Schooling, Income, and HIV/AIDS Risk (SIHR).	Malawi	Prospective randomized evaluation with baseline survey and control group	Berk Özler UCSD University of Malawi	Round 2 data collection completed in March, 2009. Second and final year of CCT intervention ongoing until November 2009. Two working papers (and one forthcoming journal publication)* exist and data analysis to draft other papers is ongoing. BB, KCP, SIEF, GAP, NBER, and GDN funding received. Round 3 data collection to start in January 2010. The fourth and final round of data collection is scheduled for January 2012 to assess longer-term impacts.
The socio-economic determinants of the HIV/AIDS epidemic	Various	Analysis of DHSs and other existing data	Kathleen Beegle Damien de Walque Harounan Kazianga	Eight papers* Others in progress
The socio-economic determinants of the HIV/AIDS epidemic	Various	Developing HIV/AIDS modules for the CWIQ surveys and analyzing them	Ghislaine Delaine (AFTRL) Global HIV/AIDS Unit Damien de Walque Harounan Kazianga	HIV/AIDS module developed for Burkina Faso
The role of gender inequality in the spread of HIV	Kenya	Analysis of Kenya DHS, census and poverty map	Kathleen Beegle Berk Ozler	One paper*
The determinants of HIV/AIDS testing and the effects of testing on economic and sexual behavior	Kenya	Analysis of panel household survey data, prospective randomized evaluation	Markus Goldstein UNC, Columbia Univ, Moi University	Data analysis ongoing on existing data, baseline for evaluation collected

C) Socioeconomic Impact of HIV/AIDS

Research project	Country	Design	Team	Progress
Adult mortality and the HIV/AIDS epidemic	Various	Analysis of DHS	Damien de Walque Deon Filmer	Data analysis ongoing
The impact of the HIV/AIDS epidemic on poverty and living standards	Tanzania Others	Analysis of KHDS and review of existing studies	Kathleen Beegle	Five papers*
The impact of the HIV/AIDS epidemic on orphans	Tanzania Others	Analysis of KHDS and DHS	Kathleen Beegle Deon Filmer	Four papers*
Institutions and HIV/AIDS policy	South Africa Brazil	Comparative case studies	Varun Gauri	Two papers*
Litigation for HIV/AIDS treatment	Various	Comparative Case studies	Varun Gauri	Book
Mitigating the socio-economic impact of AIDS through conditional cash transfers for vulnerable households	Burkina Faso	Prospective randomized evaluation with baseline survey and control group	Damien de Walque Harounan Kazianga	Research launched Program started in 9/2008. Baseline done, 1 st follow-up survey completed.

* See Annex for reference.

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