

## RethinkHIV

Thirty years after the identification of the disease that became known as AIDS, humanitarian organizations warn that the fight against HIV/AIDS has slowed, amid a funding shortfall and donor fatigue. In this book, Bjørn Lomborg brings together research by world-class specialist authors, a foreword by UNAIDS founding director Peter Piot, and perspectives from Nobel Laureates and African civil society leaders to identify the most effective ways to tackle the pandemic across sub-Saharan Africa. There remains an alarming lack of high-quality data evaluating responses to HIV. We still know too little about what works, where, and how to replicate our successes. This book offers the first comprehensive attempt by teams of authors to analyze HIV/AIDS policy choices using cost-benefit analysis, across six major topics. This approach provides a provocative fresh look at the best ways to scale up the fight against this killer epidemic.

BJØRN LOMBORG is Adjunct Professor at Copenhagen Business School and Director of the Copenhagen Consensus Center. He is author of best-sellers *The Skeptical Environmentalist* (2001) and *Cool It* (2007), which challenged the effectiveness of standard responses to environmental challenges. He has been named one of the “top 100 global thinkers” by *Foreign Policy* in 2010 and 2011, one of the world’s “100 most influential people” by *Time*, and one of the “50 people who could save the planet” by *The Guardian*. He is a sought-after speaker and opinion leader who frequently participates in debates on environmental and developmental policy choices.

# RethinkHIV

## Smarter Ways to Invest in Ending HIV in Sub-Saharan Africa

Edited by

BJØRN LOMBORG



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Abbreviations and acronyms

ABCE	Goals and Allocation by Cost-Effectiveness model	FAO	Food and Agricultural Organization
ACT	artemisin combination therapy for malaria prevention and treatment	FP	family planning
		FSW	female sex worker
AGF	Abuja Goals Fund	GAVI	Global Alliance for Vaccines and Immunization
AMC	adult male circumcision	GF	The Global Fund to Fight AIDS, Tuberculosis and Malaria
AMI	acute myocardial infarction		
ANC	antenatal care	GHI	Global Health Initiative
ART	anti-retroviral therapy (three-drug combination therapy)	GNI	gross national income
		HC	human capital
ARV	any single or dual anti-retroviral drug regimen	HIA	HIV infection averted
BCA	benefit-cost analysis	HICs	high-income countries
BCC	behavioral change communication	HIPC	Heavily Indebted Poor Countries Initiative of World Bank
B/C ratio	benefit-cost ratio	HLT	High Level Taskforce on International Innovative Financing for Health Systems
CAR	Central African Republic		
CBA	cost-benefit analysis	HSS	health system strengthening = strengthening health systems
CCC	Copenhagen Consensus Center	HSV-2	herpes
CCT	conditional cash transfer	HTC	HIV testing and counseling
CEA	cost-effectiveness analysis	IAC	International AIDS Congress
CHW	community health worker	IC	information campaigns
CM	cryptococcal meningitis	ICD	infectious and communicable diseases
CMH	Commission on Macroeconomics and Health		
COD	cash on delivery	ICER	incremental cost-effectiveness ratio
CRAG	cryptococcal antigen		
DALY	disability-adjusted life year	IDU	injecting drug user
DCP2	Disease Control Priorities in Developing Countries, Second Edition	IHP+	International Health Partnership
DHS	Demographic and Health Surveys	IMAGE	Intervention with Microfinance for AIDS and Gender Equity
DMPPT	Decision Makers' Program Planning Tool	IOM	Institute of Medicine (USA)
		IPV	intimate partner violence
DOTS	directly-observed treatment, short course	IRR	internal rate of return; also, economic rate of return



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LMICs	low- and middle-income countries	QALY	quality-adjusted life year
		RBF	results-based financing
MBB	marginal budgeting for bottlenecks	RCTs	randomized controlled trials
		R4D	Results for Development Institute
MC	male circumcision		
MD	medical doctor	SRH	sexual and reproductive health
MDG	Millennium Development Goal		
MDR-TB	multidrug resistant tuberculosis	SSA	sub-Saharan Africa
MMC	medical male circumcision	STI	sexually transmitted infection
MSF	Médecins Sans Frontières	TAC	Treatment Action Campaign
MSM	men who have sex with men	TB	tuberculosis
MTCT	mother-to-child transmission	TnT	treat and test
NASA	National AIDS Spending Assessment	UNAIDS	Joint United Nations Programme on HIV/AIDS
NCD	non-communicable diseases	UNGASS	United Nations General Assembly Special Session on HIV/AIDS (June 2001)
ODA	official development assistance		
OI	opportunistic infection		
OST	opioid substitution therapy	UNICEF	United Nations Children’s Fund
PBI	performance-based incentives		
PDV	present discounted value	VCT	voluntary counseling and testing
PEPFAR	President’s Emergency Program for AIDS Relief (USA)	VSL	value of a statistical life
		VSLY	value of statistical life year
pMTCT/PMTCT	prevention of maternal to child transmission	WHO	World Health Organization
		WTP	willingness to pay
POC	point-of-care	XDR-TB	extensively drug-resistant tuberculosis
PPP	purchasing power parity		
		YLL	years of life lost

## Foreword

PETER PIOT

The emergence of the AIDS epidemic three decades ago represented an historic and unexpected development, upsetting the belief that the era of widespread infectious disease was coming to an end.

Since the beginning of the epidemic, almost 60 million people have been infected with HIV and 25 million people have died of HIV-related causes (UNAIDS and World Health Organization 2009). Yet, in that time an immense amount has been accomplished: scientific breakthroughs, unprecedented increases in global funding, and a new model for human rights and public health policy. Millions of lives have been saved.

At the end of 2010, five million people in sub-Saharan Africa had access to anti-retroviral treatment, whereas at the beginning of the millennium fewer than 100,000 had access (World Health Organization 2011).

The expansion of treatment has been one of several events that have recently changed the AIDS landscape. There have been positive research breakthroughs in demonstrating the effectiveness of male circumcision to prevent acquisition of HIV in men, and of treatment as prevention in serodiscordant couples. On the political side, the June 2011 United Nations Security Council Resolution on HIV/AIDS and General Assembly Political Declaration on HIV/AIDS reflect a promising level of renewed political engagement, as well as a changed strategy to focus on the populations that are at highest risk of HIV.

However, in an environment where aggregate funding is either declining or flat-lining, continuing with a “business-as-usual” approach will not work. The response to HIV needs to draw from lessons gained over the past thirty years, to identify greater efficiencies and establish a longer-term strategy.

We already know a considerable amount about the future of the epidemic. AIDS will remain an enormous global challenge. The disease will undoubtedly remain a major cause of death worldwide for years to come. In the worst affected countries in sub-Saharan Africa, AIDS will continue to undermine national economies, agricultural production, and community cohesion.

But there is much that remains uncertain – and dependent on decisions that we make in the next few years. The aids2031 Modeling Working Group showed (The aids2031 Consortium 2010) that tens of millions of lives can be saved over the next generation if efforts to tackle AIDS become smarter, more focused, more tailor-made, and more community-centered. However, if actions remain static or weaken, there will be millions of preventable new infections and deaths.

Although we talk about the so-called “global AIDS epidemic,” in reality today there is a multitude of local epidemics that often differ markedly from one another among and within countries. While certain principles may apply universally in the fight against HIV – such as the importance of combating stigma, or of engaging affected communities – the variation teaches us that AIDS choices must address the unique settings of differing epidemics.

We must also learn to better reach the marginalized groups who experience the harshest effects of the HIV epidemic. Both globally and in sub-Saharan Africa, adult prevalence is considerably higher among people who inject drugs, men who have sex with men, and sex workers. Stigma, discrimination, and laws that criminalize these behaviors make it difficult for marginalized individuals in too many countries to seek health care, and to access preventative options.

Most importantly, we must acknowledge that AIDS is a generations-long challenge. Facing this reality requires us to adopt a longer-term, proactive mindset. Scaling up is vital, but it must be matched by an equal commitment to ensuring quality, efficiency, and sustainability.

This has profound implications for how we approach HIV. It would see us put more emphasis on investment in local capacity, identify greater synergies with other health and development needs, focus on locally adapted approaches rather than generic approaches, and introduce new prevention interventions in function of local needs.

Much of the knowledge that is needed to create radical reductions in the number of new HIV infections and AIDS deaths over the next generation is already available. The world possesses the research capacity to generate the new preventive and therapeutic tools that will be required.

However, AIDS research needs to evolve and develop. Whereas research for new interventions such as a vaccine microbicide or pre-exposure prophylaxis must continue, research in the real world into population level effectiveness must intensify, taking into account the effects of social marginalization, gender inequality, and management challenges of large-scale programs over a considerable period of time.

In translating new evidence, we should ask ourselves five questions to help to ensure that national strategies are based on more than received wisdom (Piot 2010):

- Does this work in the real world?
- Will people use it?
- What is the best way to deliver it?
- Can we afford it?
- Do the benefits warrant the costs?

*RethinkHIV* seeks to provide answers to each of those questions, and especially the last one. Prioritization based on establishing value for money is a different approach than the field of AIDS is accustomed to. The findings and implications from this first-ever, comprehensive effort to examine costs and benefits of the major HIV interventions across sub-Saharan Africa can be challenging and even confrontational. But the lessons from this field

should be incorporated into our policy discussions and decisions, along with evidence from other scientific fields.

The *RethinkHIV* research captures human ingenuity and enterprise in the face of HIV, by outlining the considerable number of effective (and cost-effective) ways that have been found to respond to the epidemic. It is striking that the project asked researchers to focus on initiatives with benefit-to-cost ratios greater than one: In other words, each of the responses to the epidemic is, in itself, cost-effective. There are no silver bullets in the fight against HIV. But, as this research shows, there are many effective weapons in our arsenal.

It is also noteworthy that a number of the initiatives explored – such as financial incentives to keep girls in school, and efforts to reduce gender-based violence (Chapter 5) – have positive benefits that flow beyond HIV prevention. HIV does not exist within a vacuum, and responses that have broader impacts are commendable. Identifying areas of potential convergence between investment options will not only save costs, but may help to address other societal problems and strengthen health systems.

These chapters also underscore the considerable need for further intervention evaluation. It is vital that we generate more rigorous effectiveness studies, and engage in more research into structural interventions to reduce vulnerability to HIV.

However, the responsibility for building a sustainable long-term response to HIV does not just rest with the research community. Political courage and commitment need to increase.

As the aids2031 Consortium demonstrates, the magnitude and severity of the HIV pandemic can be reduced dramatically over the next generation if the global community brings the seriousness of purpose to this problem that it deserves. So far, some political leaders have outlined a bold vision. However, they have left an unfinished agenda.

True leadership is required to develop strong, evidence-based national responses. Among other actions, political leaders must prioritize rights-based approaches with respect to marginalized populations.

Globally, AIDS needs to remain high on the global political agenda, even among a proliferating array of challenges and issues – and against the backdrop of the economic crisis and AIDS “fatigue.”

The response to AIDS needs to adapt to the changing environment. Funding demands will grow, but we can lower the long-term cost trajectory if wise policy choices are made today with attention paid to costs and benefits.

In highlighting effective responses, and shining a spotlight on prioritization and evidence-based decision-making, *RethinkHIV* adds to the body of information that can help to ensure smarter, sustainable decisions are made in the ongoing fight against HIV.

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