

**2nd IAS Conference on HIV Pathogenesis and Treatment
Opening Session
“Building a State-Civil Society Alliance to Fight AIDS: the
Brazilian Experience”
“Expanding Access to Antiretroviral Treatment in the
Developing World: the Economic Rationale”
Where is the War Chest Against AIDS?
July 13, 2002**

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

DR. KAZATCHKINE: [Welcome opening in French.]

Dear colleagues, dear friends, ladies and gentlemen, welcome to Paris. And welcome to the 2nd IAS Conference on HIV Pathogenesis and Treatment. My name is Michel Kazatchkine; I am the director of ANRS, the French national agency for AIDS research, and Chair of the conference. I'm extending these greetings also on behalf of Professor Joep Lange, President of the International AIDS Society and IAS Chair of the conference; Françoise Barre-Sinoussi and Jean-François Delfraissy, our conference co-chairs, Christine Katlama, Souleymane Mboup, Giuseppe Pantaleo, and Doug Richman, the four chairs of the scientific program committee; and all scientists, physicians and community members in France and around the world committed to the fight against HIV/AIDS.

I would like to express my gratitude, and that of the organizers, to our institutional sponsors, particularly the NIH and the CDC, and to our sponsors from industry. Their support has allowed us to stage this event of over 5,500 participants and an unprecedented scholarship program of 300 awards for scientists and physicians, and 50 community scholarships for delegates from the developing world, as well as over 80 scholarships for young scientists from Europe and the U.S.

When we started work on preparing this conference two years ago, we set ourselves, together with the IAS, three objectives: One was to give a strong and attractive scientific

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

program that would bring together basic science and clinical science. I hope that you will find that we have achieved this goal as you go from plenary session to forums or to the controversy sessions that will be held on key and emerging issues for which we have no clear answer at this time, as well as to the poster exhibitions, institutional symposia, and an exciting late-breaking session on Wednesday that together constitute our program. We received over 1,850 abstracts that were reviewed by three reviewers each. The scientific program committee then selected 190, that is 10% of the submitted abstracts, for oral presentations and included six plenary sessions, 15 forums, 16 oral sessions, eight controversy session and 900 abstracts for poster presentation. We're especially pleased that 30% of the submitted abstracts were in basic science.

Our second aim was to make of this IAS conference a truly international event, with a strong representation of colleagues from the South and of programs that would integrate issues of biomedical, social, economic and operational research relevant to treatment in resource-limited settings, as an integral part of the program. We urgently need to disseminate the results of the research that has been conducted in the last two years, and to design and launch new research programs to support the global effort of expanding access to prevention and treatment in the developing world. The inequality between the

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

North and the South with regard to access to care and treatment is not only unacceptable from a moral and human perspective but also an economic, social and political challenge to development and to the stability of nations that we, as physicians and scientists, must confront if we are to be part of the solution.

Our third aim was to position the proceedings of this conference in the context of where we are in the epidemic in 2003, and the need to be in touch with political, financial and cultural realities that make HIV and AIDS the greatest public health challenge of our generation.

This is why we are so honored to welcome tonight former president Fernando Henrique Cardoso from Brazil and the mayor of Paris, Mr. Bertrand Delanoë. Tomorrow, former president Nelson Mandela will join us in an extraordinary plenary session, also featuring Tony Fauci, Director of NIAID, a session that will be chaired by professors Bob Gallo and Luc Montagnier.

The closing ceremony, on Wednesday at 5 p.m., will feature addresses by Mark Weinberg, on behalf of the IAS, Richard Feachem, the Executive Director of the Global Fund, Romano Prodi, the President of the European Commission, and an address by President Jacques Chirac. In a new development, our closing ceremony will be integrated with the closing ceremony of the donors' meeting for the Global Fund called by the GF Summit in Avignon, that will take place next door in the Hotel

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Concorde La Fayette on Wednesday.

Dear colleagues, dear friends, I would like to thank you for coming. We hope that the next three days will be an event to remember, a chance to learn, a chance to share new experiences, and to take home knowledge that will not only bring hope, but help make a difference. Thank you for your attention.

[APPLAUSE]

DR. LANGE: Ladies and gentlemen, on behalf of the IAS I would also like to welcome you to the second IAS conference on HIV Pathogenesis and Treatment. This series of conferences was conceived under the leadership of my predecessors as IAS President, Mike Lindberg and Stefano Vellac (Misspelled?) and took off in Buenos Aires two years ago. I must say that at the time I was very skeptical about the need for yet another conference, but after (Unintelligible) such an excellent job in Buenos Aires I started to be somewhat more positive. And now we're here in Paris with on one hand the scientific program of the highest standard, on the other hand unprecedented (Unintelligible) participation from developing countries and a lot of issues of relevance to treatment and prevention in resource-poor settings. So as well to be skeptical. So we just have to close down a few other conferences, but we have to keep this one.

Like Michel, I want to go into the fact that the

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

conferences do not occur without sponsors, and I want to acknowledge the main ones. The institutional ones, the Department of Health and Human Services of the U.S., the National Institute of Health, and CDC. And they not only sponsored the meeting but also contributed greatly to the scientific program. And I'm vainly looking for the European leadership here. And then the pharmaceutical sponsors, Abbott, Ageron, (unintelligible), Bristol Meyers, Squibb (misspelled?), (unintelligible), Glaxo-Smith-Kline, MSE and Roche in alphabetical order, doesn't mean I'm preferring one to the other. I have my secret preferences, but I won't tell you. And I also want to thank these companies for their continued commitment to developing new HIV therapies. The world needs this.

I also want to use this podium to apologize for a mistake that IAS has made, which is the recent introduction for a new code of conduct for conference without proper consultation of the global and local community. Again, I apologize for that. I think we've learned from it. And I hope that this mistake in the end will lead to a more meaningful and constructive collaborative effort, together with the community. And it's certainly my intention to work hard for that, for the (unintelligible) conference.

Lastly,

[APPLAUSE]

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Lastly, I want to acknowledge that it has been a privilege and pleasure to work closely with the ANRS, the only organization in Europe that still is dedicating substantial resources to the fight against HIV/AIDS, to research on HIV/AIDS. And especially, thank Michel Kazatchkine and his team, Jean-François and Françoise, thank you very much. I'll actually miss our marathon local organizing committee meetings, which usually lasted until very late at night. I want to thank Peter Hale for doing such a thorough job on putting together the scientific program. And I will name Marie-Christine Simone (misspelled?) for also important hard work, and also want to include Jean-Jacques Catagno (misspelled?) as the (unintelligible) also his scholars.

I wish you all a very good conference, and I'll now go over to French.

[Brief address by Dr. Lange in French.]

[Next speaker is entirely in French.]

DR. LANGE: I now have the great privilege and the pleasure to introduce to you President Fernando Enrique Cardoso.

[APPLAUSE]

DR. LANGE: Fernando Enrique Cardoso was president of the Federated Republic of Brazil for eight years, for two successive mandates from January, 1995 to January, 2003. Among his current functions, Fernando Enrique Cardoso is chairman of

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

the Club of Madrid, co-chairman of the Inter-American Dialogue, head of the United Nations panel on the relationship between the UN and Civil Society, and coordinator of the working group in charge of reviewing the process of the (unintelligible) American Summit. He was born in Rio de Janeiro in 1931; he's married and has three children. He's a sociologist, trained at the University of Sao Paulo. President Cardoso is one of the most influential figures in the analysis of large-scale social change, international development, dependency, democracy and safe reform. He became deeply involved in Brazil's struggle to overcome the military regime, 1964 to 1985. A founding member of the Brazilian Social Democratic Party, he served as Minister of Foreign Relations from 1992 to 1993 and Minister of Finance from 1993 to 1994. Today Professor Emeritus at the University of Sao Paulo, he serves as Associate Director of Studies at the [French], visiting professor at the College de France. He taught at Cambridge University as Simon Bolivar professor, and at the Universities of Stanford and California at Berkeley. The author of many books and articles on democracy, development and social transformation, he founded the Cardoso Institute to continue his work on the international stage, most recently as a global ambassador for AIDS. We're honored to have him join us for this event, and to help us open the conference. His keynote address is entitled, "Building a State-Civil Society Alliance to Fight AIDS: the Brazilian Experience". Ladies and

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

gentlemen, President Fernando Enrique Cardoso.

[APPLAUSE]

MR. CARDOSO: Ladies and gentlemen, dear friends.

[Brief address in French.]

[APPLAUSE]

But I wish to express my gratitude to the organizers of the (unintelligible) conference for the opportunity to share the lessons from the Brazilian experience of building a strategic alliance of state and civil society to fight AIDS. The challenge raised by AIDS (unintelligible) is multiple: epidemiological, social, cultural and political in the best sense of the word. AIDS is for sure a global public health priority.

But in contrast to other diseases, it also calls for bold, sweeping change, peoples' values and mindset, sexuality and (unintelligible) of life. The initial association of AIDS with so-called risk groups might have led to widespread stigma and discrimination. The risk of stigmatization has been (unintelligible) by the growing understanding that solidarity, partnership and responsibility are the values that empower (unintelligible) to fight AIDS.

For this breakthrough to happen, it was essential that the victims became protagonists. People living with AIDS did things that patients suffering from other disease had never done. They broke the silence and created their own

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

organizations and networks. They lobbied governments, the scientific community, and pharmaceutical companies. They mobilized (unintelligible) and helped them to design national and global policies.

Hard lessons have been learned, and (unintelligible) it threatens to tear apart the very fabric of society. Silence and denial only breed despair and ways of (unintelligible). Truth and partnership expand the sources and competencies; hope and solidarity are the strongest incentive for responsible behavior. The Brazilian experience is veritable case study in innovative interactions generated by the AIDS challenges between state and civil society, prevention and care, economic imperatives and ethical values, large-scale action and targeted forums.

Brazil has approximately 600,000 HIV-positive people. Four-fifths do not know they are infected. And yet, the number of death caused by AIDS in Brazil now stands at the level of less than half the total predicted by international agencies not too many years ago.

How did a country with Brazil's cultural diversity, newly-regained democracy, and heritage of poverty and inequality achieve these results? I believe the most (unintelligible) aspects of Brazil's mobilization against AIDS is in the (unintelligible) interplay between citizen initiatives and public policies. Brazil was also the first

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

developing country to adopt, as official policy, the free and universal access to life-saving drugs.

[APPLAUSE]

The impact of AIDS in Brazil at the early '80's was to expose the glaring shortcomings of the public health system, the lack of adequate screening of blood banks, for instance, led to the widespread contamination of hemophilic operation. Associations of people living with HIV/AIDS were the first to denounce the risks of dissimulation and inaction. A national network on HIV/AIDS and human rights gave social and political visibility to a problem that seemed at first to concern only a small number of people. Advocacy and political pressure led the federal government to create, as early as 1988, a national coordinating structure specifically instructed to design a comprehensive strategy to fight AIDS. The outcome was a public policy in the truest sense of the word. (unintelligible) and political visibility of all sectors of society and all levels of government, the guiding principles are openness, flexibility, decentralization, multi-sector cooperation and support through innovative community organized initiatives.

In 1994, a loan agreement signed by the government with the World Bank led to the financing of 1,500 partnerships with 600 (unintelligible) organizations. Public awareness was further enhanced by a series of judicial decisions that upheld the basic rights of HIV carriers in insurance and employment

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

matters. In 1996, a special national legislation ensured the right of free and universal access to antiretroviral drugs.

Presently, 100,000 patients receive medication support on a regular basis from distribution centers close to their place of residence. To sustain this quality, it was absolutely essential to lower the price of the drugs. The Minister of Health (unintelligible) the local production of eight low-cost generic versions of non-patented antiviral drugs. Confronted with this government policy, the pharmaceutical industry was compelled to sharply reduce its price.

Guaranteed access to treatment and full respect for human rights encouraged people to accept (unintelligible) early and confidential testing. Hope and self-esteem guide treatment. HIV carriers improved the quality of life and adopted a responsible behavior toward others. The \$500 million annual cost of this policy is being more than compensated by the reduction of the cost of the hospital treatment and economic benefits derived from people living a productive and dignified life.

The death rate has fallen by 50%. Hospitalizations have plunged by 75%. In the Brazilian approach, the treatment and prevention strategies complement each other. Prevention costs ten times less than treatment and encompasses a wide range of measures: universal access to condoms, helping mother to child transmissions, women's involvement and inclusion of

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

specification in school curricula.

The Ministry of Health, in partnership with the Ministry of Education, trained 200,000 teachers from the public school system to raise awareness about sexually-transmitted diseases. A partnership with the armed forces facilitated the dissemination of basic information on how to avoid AIDS to the 750,000 young men who come each year to the military board for conscription. Women's health care programs were expanded to include the coverage for HIV testing during pregnancy. Targeted prevention programs reached out to especially vulnerable population groups, such as sex workers, drug users, truck drivers, inmates, (unintelligible), and indigenous people.

The media was counted upon to release educational campaigns. These mass-oriented campaigns used clear and (unintelligible) to explain the use of condoms in all sexual relations.

The Brazilian experience confirms that the (unintelligible) and inconsistent methodologies like those of (unintelligible) run the risk of generating a misleading sense of security. Many married women with stable relationships felt protected by the simple fact that they had a single partner. The sad reality is that women are today the fastest-growing risk group. Local authorities were encouraged to create at the municipal level coordinating structures to extend the program's

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

outreach in a (unintelligible) arises way.

At international level, the Brazilian experience was also put at the disposal of Portuguese-speaking countries in Africa. That international cooperation is enhancing the capacity of Mozambique to fight AIDS. In the Brazilian race for position, changes in the quality in power usually changed the continuity of public policies. To minimize this risk, a consensus was formed involving the major political parties, to safeguard the AIDS strategy as a national priority.

The success of the program gave Brazil the moral and political strength to withstand the challenges added to the program in 2001, with the complaint presented by the United States at the World Trade Organization (unintelligible). The Brazilian policy of inducing cost-reduction in drug prices was charged as being a violation of the trade-relating collective rights agreement. A spontaneous alliance was formed to support the Brazilian position that the immediate and widespread dissemination of life-saving technologies serves as an overriding public interest. Leading (unintelligible), scientific community and organization of people living with HIV mobilized international solidarity in world public opinion. A determined effort was made to retrench American public opinion about the controversy. UN agencies adopted resolutions defining access to anti-AIDS drugs as a fundamental human right, encouraging the WTO to be flexible in finding the

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

balance between patent rights and public health priorities. On the very day of the opening in New York, in June 2001, of the scheduled session of the UN general assembly on AIDS, the United States withdrew the complaint against Brazil. I have no doubt in my mind that this favorable outcome was decisively influenced by global public opinion.

Despite all the program's accomplishments, it is important to acknowledge that the AIDS emergency is far from over in my country. Brazil is no exception to the international trend towards increased victimization of vulnerable social groups, namely the poor, young people, and women. The gender ratio, which was 20 men versus one woman ten years ago, is now two to one. And among the urban young, one to one. Today, 50% of the new cases of AIDS happen in young people. The affected population is becoming younger, female, uneducated and poor. These developments raise additional challenges in a country with the social problems and continental dimensions of Brazil. These vulnerable groups are less informed and organized. They are also more exposed to the pathologies deriving from malnutrition and lack of basic sanitation services.

Preventive strategies have to take into account this shifting pattern. They have to be as differentiated as their focus groups and make an extra effort to be culturally gender- and age-sensitive. This implies coming to grips with a set of

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

critical questions which I am sure are not exclusive for Brazil. How to ensure the availability of drugs where the need is greatest, and resources scarce? How to overcome the (unintelligible) prejudice in the direction against use of condoms? How to woman's empowerment? How to move from a successful piloting experience at the community level to large scale programs in (unintelligible) urban settings or resource-poor rural areas?

These are no easy - there are no easy answers to these questions. I'm deeply convinced, however, that pulling together the resource and skills of each of our societies and of the global community as a whole, is the only way to successfully address these challenges.

Brazil has demonstrated that AIDS is not an intractable problem. AIDS in Africa is definitely the most urgent and complex challenge facing the global community today. Leadership from African governments to assume the fight against AIDS as the topmost priority is a decisive step towards releasing the energy and the resources needed to meet the challenge. Active involvement of people living with AIDS, women, NGO's, religious and community leaders is essential to overcome stigma due to broad national coalitions and affect international support. Maybe in that case, coalition of the women. The private sector and scientific community has to (unintelligible) exercise social responsibility on a global

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

scale by devising appropriate mechanisms for making live-saving drugs available at viable costs. The media has a key role to play in shaping peoples' values and forcing solidarity and responsible action.

I would like to conclude these remarks on a note of confidence about the future. Today, more than ever, effectively fighting HIV/AIDS is a test to democracy, to human rights and the global ethics of compassion and solidarity. We have good reason to hope, and hope can also be strengthened by committed, concerted action. This is our responsibility. Life is more important than markets.

Thank you very much.

[APPLAUSE]

DR. LANGE: Thank you, Professor Cardoso, for your speech but also for the example that you have set during your leadership of Brazil.

It's my special pleasure to introduce Professor Jean-Paul Moatti to give us the second keynote lecture.

(unintelligible) access to care for too long as been obstructed by myths, myths about complexity of therapy, myths about necessary infrastructure. And the task of scientists is to dispel myths. Jean-Paul Moatti is one of those who have greatly contributed to dispelling the economic myths that have been misused to condone inertia. He has an impressive CV and I'm not going to read all the functions that he has but he's

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

currently Professor of Economics and the University of Marseille, he's Director of the Interim Research Unit on Social Science and (unintelligible) Innovation, has been involved in AIDS research since 1985 and is also coordinator of the ANRS research program on Economic Evaluation of Access to HIV Care in Developing Countries, called [French]. Again, it's my distinct pleasure to invite Jean-Paul Moatti to the podium.

[APPLAUSE]

DR. MOATTI: President Cardoso, [Mr. Mayor of Paris, in French], dear colleagues, it is an honor to be part of this opening session. I would like to thank the organizers, particularly Michel Kazatchkine and Joep Lange, who have given me this opportunity to address a distinguished audience of biomedical colleagues. It is a challenge, since reference to economics is currently the most frequently used argument against giving access to antiretroviral treatment in developing countries.

I wish to convince you that these arguments should be critically revisited. I wish to propose a new paradigm. Antiretroviral treatment can be a rational economic choice in developing countries. Economists recognize that standards of care need to be adapted to the availability of resources. Meaning you cannot take the same actions if your GDP per capita is ten times, or even a hundred times, lower than the average \$28,000 USD per capita that we have in rich OECD countries like

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

France. However, what is not acceptable is a double standard of thinking between the North and the South, where arguments such as economical strength have reached resistance and non-adherence, do not prevent us from extending treatment in the North but are used to deny giving up access to the same treatments in the South.

The new paradigm is based on growing empirical and scientific evidence. As President Cardoso demonstrated, the experience of the Brazilian program has proven that the goal of providing universal coverage for (unintelligible) could be successfully achieved in the low-income countries. Pilot drug (unintelligible) launched by the government of (unintelligible) Senegal and Uganda, with the support of UN aid, have proven the technical feasibility of our delivery in Africa. These data are presented in a special issue of AIDS and have been published this month. They demonstrate that similar clinical and laboratory outcomes are obtained in our treated patients in Africa, as in patients in the U.S. or Europe.

Recent (unintelligible) demonstrate that viral resistance and non-adherence to treatment are no greater problems in cohorts of patients in Africa than in developed countries. The new economic paradigm is supported by the results of the (unintelligible) research program on economics of AIDS, and now published in a book available at this conference.

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

I shall now provide six slides of evidence supporting the economic rationale for scaling up access to antiretroviral treatment in developing countries.

One, differential pricing for AIDS drugs in developing countries can be obtained through competitive market mechanisms.

Two, private interest with regard to intellectual property rights must be balanced against larger concerns for public health.

Three, HIV prevention and care are no substitutes. They are complementary.

Four, ART can be, and is, cost effective in developing countries.

Five, the negative impact of the epidemic on the macro economy of development has been grossly underestimated.

Six, a (unintelligible) of issues regarding access to ART can be addressed.

First evidence: there are several characteristics of the existing markets for HIV drugs. One is that fixed prescription development costs are high, but (unintelligible), and Brazil has proven that to us, are low. Close to an estimated \$200 USD, or less, for a year of treatment therapy. In addition, there is heavy market concentration with only a limited number of supplying firms.

What economy textbooks state is that differential

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

pricing, according to each country's ability to pay, should be rational marketing behavior of firms that hold a monopoly position, like firms that (unintelligible). But we are told, until recently, that differential drug prices between the North and the South would jeopardize international drug innovation. Now, we know it's not true. We have collected data on the source prices of antiretrovirals in more than 1,000 transactions that took place in Brazil and 13 African countries between '97 and 2002. There has been a significant decrease in prices, as well as a significant reduction in variability of prices between countries.

A materialistic econometric analysis of these data shows that in contrast to what may be expected in a well-performing market, there is no clear relation between prices and basic economic indicators related to the level of development. However, a direct relationship is found between higher volumes purchased per transaction and lower prices. However, this correlation tends to weaken in the latest years. (Unintelligible), and to a lesser extent NAFGIs remain as stated with higher prices. And this is the most important. In contrast to what has been sometimes published, patent protection in the (unintelligible) country does matter, and translates in higher prices. This is not surprising. That is exactly what patents are made for: to guarantee monopoly in order to extract higher prices from the market. So they do

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

The slide also shows that transactions in countries which participated in the accelerated access initiative, the partnership launched in 2001 between the UN and six major pharmaceutical companies, were associated with lower prices. However, even after adjusting for these factors, and you see the negative coefficient on the side, even after adjusting for these factors, the introduction of generated (unintelligible) appears as an essential factor in determining decreases in prices.

Thus, the policy recommendation emerges: too much reliance on closed international bargaining between the UN, governments, and the major manufacturers will not guarantee the long-term sustainability of the lower prices of HIV drugs and its extension to a greater number of countries and a greater number of drugs. In order to achieve the Global Fund recommendation that countries should purchase quality-controlled drugs at the minimum cost, market competition must be extended to all potential drug suppliers. (Unintelligible) force, to promote the currency and prices of drugs, should also be welcomed. And the ministries of health and the economic community of West Africa, ECOWA, have essentially committed themselves to establish an observatory to track the prices of HIV drugs, with technical support from UN aid, and INRS.

Second evidence: patent protection is a necessary

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

incentive for private business to invest in research and development. But this has to be balanced with the negative aspects of monopoly. Government shield agreements on trade effects of international property rights has reinforced the intellectual property laws of developed countries upon developing countries. As was just mentioned, (unintelligible), this must be revisited with a critical eye by economists and policy makers. The (unintelligible) declaration from November, 2001 provides latitude for developing countries to take measures to protect public health. It is essential that the declaration is now legally translated to guarantee the rights of developing countries to use compulsory licensing and the stipulation of generic drugs between countries of the South, including guaranteed imports of generic drugs by countries with limited manufacturing capabilities. Let's hope that the next WHO meeting in Cancun in September will come to such a solution.

Third evidence: Although standard economic theories state that each treatment becomes available the incentive to prevention will decrease, there is now clear evidence in the HIV field that prevention and treatment are indeed complementary. Access to ART boosts the effectiveness of prevention. ART can lower the effective risk of affected individuals. It also offers encouragement to those at risk, to seek screening and voluntary counseling. On the other hand, at

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

the level of the population as a whole, the positive effect of ART on prevention may be counteracted. And it's hard to say, but that's the economic reality. Can be counteracted by the increase in life expectancy of treated patients that would translate into an increased probability of sexual encounters with several different partners.

Thus, the overall impact on HIV incidence on intimacy in part will depend on the extent to which risk behaviors are affected by the availability of treatment. In developed countries, there have been disturbing reports of an increased incidence of STDs and high risk behaviors as ART has become widely available. In contrast, an optimistic view, we refer to the evidence from developing countries, that individuals receiving ART tend to adopt protective behaviors more frequently than those who are not on treatment. And we have seen with (unintelligible) the drug access initiative in (unintelligible) ART treated individuals use condoms more frequently than non-ART treated individuals. So that in effect that access to treatment (unintelligible) individuals are more incented to disclose their (unintelligible) status to their sexual partners. By giving the prospect of hope, longer survival and better quality of life, antiretroviral treatment has (unintelligible) prevention among infected individuals.

The only way to reach clear cut conclusions about the consequences of access to ART and prevention is definitely not

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

to postpone access, but rather to monitor the evolution of risk behaviors as treatment becomes available.

Fourth evidence: It has been often argued that ART is not cost-effective compared with escalated uses of resources in developing countries. And this is an argument you hear every day when you try to promote access to treatment in your countries. This argument ignores the fact that in the absence of an effective vaccine, all prevention and care interventions will follow the so-called economic law of diminishing returns. For example, (unintelligible) promotion has been proved to be cost-effective among the (unintelligible) workers. It is unlikely to be the same at the Vatican, and maybe also at this conference. But, increased efforts are needed to promote condom use in groups where people, particularly women, are not in a position to adopt such strict reporting strategies to the extent that the cost for other (unintelligible) would increase exponentially. As seen on the right side of the figure for you, it is likely that compared to (unintelligible) types of care, antiretroviral treatment would prove to be cost-effective.

In rich countries, the total cost of care for adults with HIV has declined since the ART was introduced. Our Brazilian colleagues often emphasize that the extra cost of purchasing (unintelligible) in their country has been totally offset by savings through reduced number of hospitalizations

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

and antidote of opportunistic infections, leading to huge net savings in direct cost of care, more than \$2 billion in five years, for the Ministry of Health.

You need, however, to be cautious since this may not be the case in other countries, where costs of hospitalization are lower. And this would not be the case in the long term. Because hopefully, ART-treated individuals would live longer, and generate higher costs during their entire life. But one should keep in mind that an investment which implies net extra cost for health care may be a very good economic choice. Indirect benefits, such as productivity gains associated with reduced morbidity, have to be taken into account in the calculation. When you do so, ART is clearly cost saving in developed societies, and in many population groups in developing countries. This is the reason why an increasing number of private companies in Africa have moved to provide ART for their employees. It is in their financial interest to do so.

Many health interventions which are considered cost effective in the North involve initial cost for the health care system, which are considered worth incurring to the extent that they buy additional health benefits. In high income countries, it is usually considered that medical innovations should be adopted without discussion if a marginal health cost per additional life you have saved are below \$50,000 USD, about

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

twice the GDP per capita. The rationale for this is that for value below this bound, one can be sure that the extra cost for health care will be more than compensated by the economic benefits deriving from increased life expectancy. When applying this criterion, ART is clearly justified on cost-effectiveness grounds in high OECD countries.

But why don't we apply this same criterion in developing countries? If we do so, even taking into account the lower GDPs of these countries, the use of antiretrovirals for the prevention of mother to child transmission is clearly cost effective. We should be ready to spent five or fifteen dollars to guard the contamination of a child. That's ridiculous, in comparison to the benefits. And this if is so, of course this should be implemented on a large scale everywhere.

Continuing ART for the mother and child after delivery, if indicated, will meet this criterion and strongly supports the new multi-country initiative, (unintelligible) plus. Recent estimates from Brazil and South Africa, about \$1,000 per life we save with ART, also show that ART is cost-effective for HIV-infective adults in middle income countries. Preliminary results from the World Bank study in response to a request from the Indian government suggest even lower health care costs per additional life you have saved with ART, in the range of \$150-300 USD, which further decreases to only \$30-50 per

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

(unintelligible) in the optimistic scenarios, the green bars, in which access to ART has a positive impact on prevention.

Although we need further (unintelligible) research alongside ART programs, we already have enough evidence to claim that the cost-effectiveness argument should not be used anymore to legitimate delays by governments and other organizations, to launch large-scale programs for ART. That would be very, very bad economics.

Fifth evidence: We also realize that the social loss for economic development related to AIDS has been significantly underestimated, and that the potential economic benefits of ART are consequently being underestimated. (Unintelligible) concerning AIDS orphans who are showing the debilitating effects of AIDS and averaged increased poverty. The demographic impact in Africa is obviously terrifying, yet previous estimates of the macroeconomic impact of AIDS, as measured by the reduction in the growth rate of GDP, remain modest, in an order of magnitude of 1% annually. Meaning that, instead of growing 5%, we only grow 4%, for example. And the Ministry of Finance may believe that the 1% loss is not such a big deal, that it is similar to shocks such as the economic consequences of the terrorist attacks on September 11, that are usually absorbed by most countries.

The reason why these estimations are modest is presently that the models consider AIDS as a traditional shock

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

on labor supply. If you lose 10% of your work force in the short term, because of a war, because of AIDS, your production and consequently your GDP, may decrease but in a more limited proportion than (unintelligible) at present. Which means that your productivity per worker would increase. What this simplistic view of how the economy works has forgotten is that AIDS is a disease of young adults, and that young adults, even young economists, have and raise children. And this has a major role in the formation of a basic feature of the government, as President Cardoso knows very well: human capital. By killing mostly young adults, AIDS affects the whole mechanism through which human capital is transmitted across generations. It reduces the incentives to invest in education, and weakens the transmission of (unintelligible) from parents to children, particularly in rural areas.

The cumulative effects over time may lead to catastrophic devaluation of the long-term growth machine of these economies. The conclusions of the working paper soon to be issued at the World Bank about South Africa state that if nothing is done to combat the epidemic, a complete economic collapse will occur within four generations, with the risk of South Africa being taken back to the level of the low-income countries.

Please, bring back this message to your ministries, and not only your ministry of health. Also your ministry of budget

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

and your ministry of finance. If they don't move faster, the worst is still to come.

Well, where are we going to get the money? WHO estimates that six million people, at minimum, are in immediate need of ART and have committed themselves to the goal of expanding access to three million people in the developing world by 2005. According to Global Fund, funding commitments made in 2002 will allow 500,000 HIV patients to access treatment, a twofold increase in developing countries. International estimates of the funding needs have been consistent in calling for an investment of between \$8-10 billion per year to be provided jointly by the international community and national resources. Such effort is clearly achievable, but implies significant transfers of resources between countries, and among sectors inside developing countries themselves. Promoting mobilization of all public, private, and private not-for-profit partners, both for ART delivery and funding of programs, is essential. But it should be made clear that this partnership should not serve as an alibi for governments to escape responsibilities and for donors not to coordinate their efforts.

Sixth and last evidence: Centrality of resource flows is necessary to clarify the difficult issue of equity. Out of pocket spending for HIV care varies widely, as you see on the slide, across countries. In general, equity in access to

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

health care is far from being granted in developing countries.

The concern that the use of public funds to subsidize ART may shift resources from the poor to those who are less poor is legitimate. When we sort it (unintelligible), trade-offs will be promoted under the table. Because universal ART coverage will not be possible from one day to the other, health care professionals will be confronted to tragic choices, with the risk that selection of those who will benefit from treatment may initially be driven by social stereotypes.

It is therefore appropriate to mobilize sectors who have strong ability to pay, through health care insurance or company's funding, in order to concentrate public and international subsidies on the poorest sections of the HIV-infected population. The experience of Senegal shows that national consensus can be reached for defining priorities for ART public subsidies. Communities can be involved in defining priorities for access to treatment. The process that is under way between government and TASO (misspelled?), the community based organization in Uganda and in Tanganyika, the ground shaping the western state province of South Africa is the an NSF project.

Debates on priorities are likely to be controversial, but there is no doubt that the alternative, that would be leaving access to treatment to pure market forces, would limit its availability to the most privileged and (unintelligible)

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

antiretroviral anarchy with its illustrated risk of black market digression (unintelligible), irrational prescriptions, and diffusion of resistance.

Since we are in Paris, I wish to close with an (unintelligible) quotation from a French author. Soon after the (unintelligible) genocide, Jean-Paul Sartre wrote that for each individual act we accomplish as human beings, we create the image of humanity as we think it should be. If we do not succeed in bring ART efficiently to those in need in developing countries, we will project an image of humanity that in spite of technological progress is still on its way back to (unintelligible), and indeed, as Bertrand Delanoë has said, to barbary. If we succeed, we will do so thanks to the HIV-infected patients, friends and lovers who are the champions in the fight for a better world.

Thank you.

[APPLAUSE]

DR. LANGE: [Beginning of concluding remarks in French]. A citizen of Burundi, Dr. Marie-Josée Mbuzenakamwe coordinates comprehensive care for people living with HIV/AIDS in Bujumbura. The group, ANSS, Association Nationale de Soutien aux Séropositifs et Sidéens, is one of the largest community-based organizations in Central Africa. Sponsored by [French], ANSS has been providing care for people living with AIDS since 1993. Since joining ANSS in 1999, Marie-Josée has

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.

Opening Session

7/13/02

faced the reality of the virus on a daily basis, including its effect on families coping with the consequences of war. She's part of a growing community of African doctors coming together to respond to the urgent need to provide effective treatment for the greatest possible number of patients and expand access as fast as possible. A physician, Marie-Josée is married and has one child. She is a founding member, and co-chair of the conference's international community liaison committee, and as co-chair of this committee, a full member of our scientific program committee. She was chosen by her peers to speak on behalf of the community, which completed an all-day community forum earlier today. Her address is entitled, "Where Is the War Chest Against AIDS?"

Please join me in welcoming Marie-Josée.

[APPLAUSE]

DR. MBUZENAKAMWE: [Entire address in French]

[APPLAUSE]

[END OF RECORDING]

¹ kaisernetwork.org makes every effort to ensure the accuracy of written transcripts, but due to the nature of transcribing recorded material and the deadlines involved, they may contain errors or incomplete content. We apologize for any inaccuracies.