Focus: Maurice Tempelsman Receives HAI Leadership Award

The Harvard School of Public Health AIDS Initiative honored Maurice Tempelsman with its Leadership Award at a dinner at the Knickerbocker Club in New York on January 15th. The HAI Leadership Award is presented to individuals who have displayed outstanding vision, leadership, and courage in the worldwide struggle against AIDS.

Mr. Tempelsman serves as Chairman of HAI’s International Advisory Council. He has been instrumental in helping HAI establish research collaborations in Africa. Such programs train students and researchers and help build capacity in developing countries.

Mr. Tempelsman is Chairman of the Board of Directors of Lazare Kaplan International and a senior partner in the firm of Leon Tempelsman & Son. He served as the Chairman of the Corporate Council on Africa from 1992 to 2002. He is past Chairman of the Africa-America Institute. He has served on several Presidential Commissions, including the President’s Commission for the Observance of Human Rights.

In presenting Mr. Tempelsman with the award, Dr. Max Essex, Chair of HAI, said, “He is more than a Renaissance man. When it comes to AIDS in Africa, he is also an action figure. Others not only listen to his advice, they follow it. For numerous people in Africa and around the world, this has resulted in the saving of many lives and the prevention of much suffering and anguish. For this we are deeply grateful.”

Previous recipients of HAI’s Leadership Award include Arthur Ashe, President Festus Mogae of Botswana, Ambassador Richard Holbrooke, Diana, Princess of Wales, Richard Gere, and Deeda Blair.

To view a slide show of the event, visit our website, www.aids.harvard.edu.

Study on Deaths Due to AIDS Policy in South Africa Makes Front-Page News

“Study Cites Toll of AIDS Policy in South Africa” was the front-page headline of The New York Times on November 25th. “A new study by Harvard researchers estimates that the South African government would have prevented the premature deaths of 365,000 people earlier this decade if it had provided antiretroviral drugs to AIDS patients and widely administered drugs to help prevent pregnant women from infecting their babies.”

The paper that garnered international attention, “Estimating the Lost Benefits of Antiretroviral Drug Use in South Africa,” is the first peer-reviewed quantitative analysis of lives lost in South Africa due to the AIDS policy of President Thabo Mbeki, who resigned his office in September 2008.

The lead author, Dr. Pride Chigwedere, earned his doctoral degree from the Harvard School of Public Health, graduating in June 2008. He came to HSPH from Zimbabwe, where he was a practicing physician treating AIDS patients.

More than 330,000 lives were lost to HIV/AIDS in South Africa from 2000 and 2005 because a feasible and timely antiretroviral (ARV) treatment program was not implemented. In addition, an estimated 35,000 babies were born with HIV during that same period in the country because a feasible mother-to-child transmission prophylaxis program using nevirapine (an anti-AIDS drug) was not implemented.

The authors estimated that by 2005, South Africa could have been providing ARVs to 50 percent of those who needed them, but had reached only 23 percent. By comparison, Botswana was already providing treatment to 85 percent of those in need.

To download a copy of the paper, visit our website, www.aids.harvard.edu.
Ireen Kiwelu is a Fogarty Fellow conducting research in Dr. Max Essex's lab at the Harvard School of Public Health. Born in Moshi, Tanzania, at the base of Mt. Kilimanjaro, she was educated in Tanzania, Denmark, England and Norway. She returned to her hometown to work as a Senior Research Scientist at the Kilimanjaro Christian Medical Center. She is working towards her PhD in molecular biology.

Spotlight: What is your current research project?

Kiwelu: I’m working on the Moshi Women’s Health Project, a prospective cohort study that characterizes HIV-1 in Tanzanian women. Working from December 2004 through March 2007, we enrolled 800 female bar and hotel workers in Moshi. Women were followed for 12 months. Interviews were conducted at quarterly visits to collect information about sexual behavior and risk factors for HIV infection. In addition, blood and genital tract samples were collected for genetic analyses.

Spotlight: Why did you follow bar and hotel workers in particular?

Kiwelu: These women are at high risk of HIV infection. Though prostitution is illegal in Tanzania, many bar and hotel workers engage in part-time commercial sex work to supplement their incomes. We conducted a pilot study in 2000 that showed that bar and hotel workers have a much higher HIV prevalence than the general population. In our cohort, we found that 17% of the women were HIV-positive, compared to about 7% of women overall in Tanzania in 2007.

Spotlight: What were the objectives of the study?

Kiwelu: The objectives were to determine HIV and sexually transmitted disease prevalence, as well as the incidence or occurrence of new HIV infections in the women. We wanted to know what subtypes of HIV we have in Moshi. We are also looking at the variation of the virus in individuals over time, including how much the virus changes in a 12-month period.

Spotlight: What kind of work are you doing in the Essex Lab in Boston?

Kiwelu: I came here because of the facilities and training, which are not available in my country. Working with samples from the Moshi Women's Health Project, I’ve learned how to use advanced techniques in HIV/AIDS research, including DNA extraction, PCR [polymerase chain reaction], gene cloning and DNA sequencing. I’m currently using a new technique called single-genome sequencing. I’m in the lab from morning through evening, from Monday through Sunday. It's interesting because with single-genome sequencing you're able to see the variation of viral diversity within a single person, as well as between people.

Spotlight: Why is this work important?

Kiwelu: The findings from our research will contribute to HIV/AIDS interventions, mainly the future design and development of therapeutic strategies and HIV vaccines suitable for people in Tanzania. HIV variation and subtypes have been shown to be important factors in transmission, diagnosis, treatment and disease progression.

Spotlight: What happens next?

Kiwelu: We hope to begin publishing results from the study this summer. On completion of my Fogarty Fellowship, I hope to return to Tanzania to use my knowledge and skills towards strengthening training and research on HIV/AIDS, a disease that threatens many lives in my country. It is my dream to establish a molecular biology laboratory within the Research Laboratory in Moshi, in which we would be able to conduct techniques such as PCR, DNA sequencing and screening for HIV drug resistance. This would build scientific capacity in my country and also help to minimize the cost and time of traveling to other countries in order to analyze samples.
HAI Friends Trip to Botswana

Though dinner with President Festus Mogae was one of the highlights of the 2008 Friends Trip to Botswana, several travelers cited the small meetings with participants in the Botswana–Harvard Partnership’s (BHP) clinical trials as the most valuable experience. It is one thing to read about HIV-positive women receiving antiretroviral drugs during pregnancy to prevent their children from being born with HIV. It is an entirely different experience to sit next to a young mother in an examining room and have her tell you with a shy smile that yes, her baby was born without the virus, is doing fine, and is just now learning to walk.

In addition to meeting with participants in clinical trials, Friends also toured the lab at the BHP, heard presentations on studies and training programs, and met with doctors, graduate students, and government officials. One morning was spent touring the village hospital in Mochudi and meeting with residents under the kgotla, the traditional thatched-roofed meeting space.

The trip was not all science and medicine. Friends also enjoyed a bus tour of Gaborone and a sunset game drive at Mokolodi Nature Reserve, followed by African dancing and a bush braai, the local version of an outside barbecue.

The 2008 Friends trip included Robert Preyer of Lexington, MA, and his three daughters, Jill Preyer of Raleigh, NC, Liz Adamson of Brevard, NC, and Sally LaVenture of Boulder, CO. Also on the trip were William Haseltine of Washington, DC, Sofi Bergkvist of Hyderabad, India, and Jorge Dominguez, Vice Provost for International Affairs at Harvard. If you’re interested in joining the 2010 trip, please contact Martha Henry at mshenry@hsph.harvard.edu.

Long-Term Effects of ARVs

On November 19th, HAI co-sponsored a symposium in Boston, AIDS in Africa: Long-Term Effects of ARV Therapy, which explored the challenges of long-term use of antiretroviral (ARV) therapy to fight HIV/AIDS in Africa. Dr. Max Essex, who moderated the symposium, said that because efforts to develop an effective AIDS vaccine will likely take a decade or longer, more and more people will be taking ARVs for longer periods of time. We must plan ahead for the long-term consequences of this scenario.

Keynote speakers were Dr. Deborah Cotton, Chief Medical Officer of the Clinton Foundation HIV/AIDS Initiative, and Dr. Jean-Paul Moatti, Senior Adviser to the Executive Director of the Global Fund to Fight AIDS, Tuberculosis and Malaria. Dr. Cotton spoke about comprehensive AIDS care in Africa. Dr. Moatti addressed the scale-up of access to ARVs. Other topics covered in the symposium included drug resistance to ARVs, prevention of mother-to-child transmission, and TB/HIV co-infection.

Economic Evaluation and Analyses

Dr. Richard Marlink, Executive Director of Harvard AIDS Initiative, was co-editor of a special July supplement to the journal AIDS on “HIV/AIDS Interventions in Developing Countries: Using Economic Evaluation and Analyses to Help Guide Policy and Action.”

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New Book Highlights HAI's Work in Africa

Poignant full-color photographs help tell the story of *A Line Drawn in the Sand: Responses to the AIDS Treatment Crisis in Africa*, edited by HAI researchers Dr. Phyllis Kanki and Dr. Richard Marlink.

*A Line Drawn in the Sand* captures the determination of several African nations in tackling the challenges of providing lifesaving antiretroviral therapies to their citizens: Botswana, which has the second highest HIV infection rate worldwide; Nigeria, where the epidemic threatens to become one of the world’s largest; Senegal, often celebrated for its effective response to HIV/AIDS; and Tanzania, where extreme poverty threatens efforts to control the epidemic.

By emphasizing both the challenges and achievements of AIDS research and treatment in Africa, *A Line Drawn in the Sand* provides a moving account of how both individuals and an entire continent are affected by HIV/AIDS.