The 4th International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention was held in Sydney, Australia from July 22-25, 2007. Over 5000 scientists, HIV clinicians, and community leaders from 133 countries came together to discuss and review important advances in HIV pathogenesis, treatment, prevention and research.

HIV/TB Co-Infection: Meeting the Challenge
A Satellite Symposium

The TB/HIV Working Group of the Stop TB Partnership, CREATE (Consortium to Respond Effectively to the AIDS TB Epidemic), the Forum for Collaborative HIV Research, and other partners organized a satellite symposium, entitled HIV/TB Co-Infection: Meeting the Challenge, which called for urgent action for TB research. The participants discussed critical gaps in research on the intersection of the two pandemics, as well as the emergence of extensively drug resistant TB (XDR-TB).

Dr. Diane Havlir, Chair of the TB/HIV Working Group of the Stop TB Partnership chairing the symposium

Dr. Diane Havlir, Chair of the TB/HIV Working Group of the Stop TB Partnership began the meeting by commending the acceleration of implementation activities. However, she noted that “despite this acceleration in implementation funding, I would honestly say research has been slow out of the gate.” She challenged the group to find solutions to the problem of financing and conducting research for HIV/TB.

The symposium included a panel discussion on ways to improve HIV/TB research with contributions from leading agencies.

Dr. Michel Kazatchkine, Executive Director, Global Fund speaking at the symposium.

“The Global Fund is not funding research … but the Global Fund is open to funding operational research provided that the operational research program comes to us within the country request for funding and this is an under used mechanism at this time.”

Deputy Executive Director of Programmes at UNAIDS, Dr. Michel Sibide said that UNAIDS will “build on the experience of HIV activism by civil society and use this experience and knowledge to build momentum around TB advocacy, and to build capacity for people with TB to demand better TB prevention and care.”

Dr. Debrework Zewdie, the World Bank's director for the Global HIV/AIDS Program, acknowledged the fact that the World Bank has not been responsive to TB/HIV until recently.
"Compared to the response the Bank has shown to HIV/AIDS, we ourselves acknowledge that we haven’t paid that much attention to TB. This is something we have picked up recently and hopefully would be implementing this much faster and much closer to our involvement in HIV/AIDS."

Dr. Debrework Zewdie, World Bank

Dr. Zewdie also outlined 3 areas in research in which the World Bank would work with partners, clinical, epidemiology and operational research. The first would concentrate on new ways to optimize the management of co-infected people and development of new diagnostics and drugs. Epidemiology would look at how HIV drives the TB epidemic and operational research would look at how to implement TB/HIV programs to deliver a continuum of treatment and care.

Donors were called on to fund the much needed research. If we do not address this issue now the implications for people with TB/HIV will be deadly.

To see the presentations (video), download a transcript or the powerpoint slides see: [http://www.kaisernetwork.org/health_cast/hcast_index.cfm?display=detail&hc=2224](http://www.kaisernetwork.org/health_cast/hcast_index.cfm?display=detail&hc=2224)

The Shack and Dialogues - Understanding Tuberculosis

Conference participants visited The Shack, an innovative photographic exhibition by rising young artist Damien Schumann displayed an authentic South African township shack. The pictures deal with people and families affected by tuberculosis (TB) and HIV, their stories and the lifestyle and living conditions that influence these diseases. These are not just pictures; they illustrate the realities of the everyday struggle for life. By trapping the viewer within the reality of poverty and confronting them with words and pictures portraying how TB and HIV doubly impact on the lives of people living in the shanty towns of South Africa and Zambia it brought a human face to what was being discussed in the scientific sessions and to highlight the desperate need for greater investment in research to improve TB prevention, diagnosis and treatment for people living with HIV. Dr. Alasdair Reid, HIV/TB Advisor of UNAIDS moderated the dialogue around TB in the Shack. The exhibition of the shack was supported by UNAIDS, WHO and IAS.
Bob McMullan, Australian Shadow Minister for International Development Assistance, Damien Shuman (creator of the Shack), Alasdair Reid, UNAIDS and Dr. Michel Sidibe, Deputy Executive Director of Programmes at UNAIDS visiting The Shack.

Delegates’ reactions (see above) to the exhibition were universally positive and frequently emotive with many admitting they had not realized the impact that TB has on the lives of people living with HIV.


Informal Discussion on HIV/TV Research

Research discussions in all the meetings produced useful suggestions on how the TB/HIV research issue could be moved forward. In particular, The TB/HIV Working Group of the Stop TB Partnership and CREATE, the Forum for Collaborative HIV Research, and other partners organized an informal meeting of leading HIV researchers and funders. The meeting was co-chaired by Haileyesus Getahun, Secretary of the TB/HIV Working Group and Veronica Miller of the Forum for Collaborative HIV Research and created a good networking opportunity for HIV researchers who work on treatment and prevention and funding agencies.

Integration of TB and HIV programs continues to be challenging particularly logistical issues such as including TB prevention and treatment services into established HIV prevention trials. However, success stories with integration in some trials provided good examples of how it can be done. These successes need to be more widely disseminated to the broader HIV research community in order to be picked up and included in trials.

“In our clinics in the township we can diagnose HIV within 15 minutes using a rapid test. But with TB diagnosis, often we are waiting 3 weeks for a result of sputum culture.”

Dr. Stephen Lawn, University of Cape Town

A continuing problem is the lack of communication and collaboration with national ART programs which fail to ensure the provision of ART to individuals enrolled into clinical trials. Urgent attention is needed to address operational obstacles in some clinical trials.

Participants also acknowledged the TB/HIV Working Group of the Stop TB Partnership as a crucial platform to further promote the information and experience exchange among HIV researchers and networks.
HIV/TB: An Evolving Epidemic

The HIV/TB session entitled HIV/TB: An Evolving Epidemic (chaired by the TB/HIV Working Group of the Stop TB Partnership Chair, Diane Havlir) provided participants with the most recent information and progress on global HIV/TB co-infection and the latest on new diagnostics.

HIV/TB presentations at the conference also highlighted the fact that though there has been an increase in scale up of collaborative HIV/TB activities in the past two years, we are still a long way off global targets. Dr. Haileyesus Getahun gave statistics which showed that only 14% of the estimated number of PLHIV with TB were detected in 2005 - globally. Only 26,000 PLHIV received IPT (Isoniazid Preventive Therapy) in 2005, even though it is a proven prophylaxis against TB.

Dr. Haileyesus Getahun, Secretary, TB/HIV Working Group of the Stop TB Partnership presenting the progress in the global response for TB/HIV.

Dr. Soumya Swaminathan, Deputy Director of the TB Research Center, Chennai, India presented findings which show that ART taken during TB treatment lowers mortality by 80%. This is regardless of CD4 count or co-trimoxazole prophylaxis.

An overview of new technologies was delivered by Dr. Mark Perkins who emphasized the need to improve current strategies so that they are applicable to resource-poor settings where new technologies might not be possible to implement in the near future.

Dr. Alison Grant emphasized the implementation of IPT for PLWHIV.

To see the presentations (video), download a transcript or the powerpoint slides see:
http://www.kaisernetwork.org/health_cast/hcast_index.cfm?display=detail&hc=2267

Rapporteur

The final Rapporteur report for Track B (where the TB/HIV sessions were included) mentioned TB as a substantial clinical problem whose impact is most pressing in late presenting HIV cases.

Read the full Rapporteur report:

Key Research Findings

Theo Smart writing for NAM, (an NGO that provides HIV information to PLHIV and to the professionals who treat, support and care for them), produced two interesting articles on key studies presented at the conference.

The first article reviews two studies that were presented at the conference, 24-week efficacy and safety of nevirapine: 400 mg versus 600 mg based HAART in HIV-infected patients with active tuberculosis receiving rifampicin and TB co-infection treated at onset of therapy does not affect long-term risk of treatment failure among HIV-1 patients initiating efavirenz (EFV)-based combination antiretroviral treatment (cART). Both studies describe findings about dosage and efficacy of efavirenz and nevirapine based ART. However, questions still remain about when to start a patient on ART.

Read the full summary:

The second article reviewed the study on the Incidence of sub-therapeutic tuberculosis drug concentrations and associated treatment outcomes among predominantly HIV-infected tuberculosis patients in Botswana.

The study found low concentrations of TB drugs common in PLHIV and predicted TB treatment failure. The pharmacokinetic (PK) study was conducted in people who were already on TB treatment. Results indicate that standard TB dosage needs to be revised and population-specific pharmacokinetic norms be established, particularly for people living with HIV/AIDS, people of color and women.

Read the full summary: