

Student Reflections on the XVI International AIDS Conference 2006, Toronto, Canada

This past summer, twenty-four thousand people descended upon Toronto for the XVI International AIDS Conference 2006. Amongst the delegates were people living with HIV/AIDS, researchers, politicians, artists, youth, healthcare practitioners, journalists, and students. This article explores four medical students' perspectives on sessions that they attended; from nutrition issues to the emerging epidemic in China, they reflect on significant themes that emerged from the conference, as well as strategies for students to become involved in the fight against HIV/AIDS.

Emerging Epidemics in China, Eastern Europe and India

Susan Lee (OT7)

What session did you attend and what did you learn?

“The Price of Inaction: Emerging Epidemics in China, Eastern Europe and India: In Memoriam Lucille Teasdale Corti”¹ began with a tribute to Lucille Teasdale Corti, a Canadian physician who, with her husband, dedicated her life to developing one of the most renowned hospitals in tropical Africa. After contracting HIV while operating, she continued working until her death in 1996.

This session consisted of presentations from experts from China, Russia, and India describing the emerging AIDS epidemics in their respective countries. Dr. Zunyou Wu from the Chinese Center for Disease Control and Prevention noted that though the prevalence of HIV in China is currently low (0.05%), if it were to rise to 4% of its 1.3 billion citizens, the number infected would outnumber the total global number of HIV infections today. Recognizing the potential magnitude of this problem, the Chinese government recently fortified its prevention measures, rapidly establishing screening labs, ARV treatment, needle exchanges, and methadone maintenance programs. Next, Dr. Vadrim Pokrovsky from the Russian Federal AIDS Center prognosticated that, at the current rate of infection, 2.5 million Russians would be living with HIV by 2020 and without ARVs, 1.2 million would die before that year. Unfortunately, Russia's efforts to deal with the situation have been hampered by economic hardship and political instability. Dr. Rajesh Kumar, a professor of public health, then spoke about the difficulties in tracking India's epidemic which affects over five million people. He noted that peer education and condom-use programs have led to some decline in incidence in southern (but not northern) India, giving hope that prevention measures are having some effect.

This session showed me how intertwined economics, culture and politics are with the emerging AIDS epidemics. The enormity of China's potential problems, given its massive population, spurred the large scale intensification of its efforts. Russia's struggles to emerge from a period of revolution and reconstruction coincided with a sluggish response to the

increasing threat of AIDS. In India, cultural differences and variations in sexual practices throughout the country seemed to influence the success of prevention measures. This session demonstrated that HIV is not only a virus that affects individuals, but rather an epidemic with ramifications on all aspects of society. It also highlighted the importance of intervening early and rapidly to prevent calamity, a fitting lesson given that Lucille Teasdale Corti's motto was, “If you are not part of the solution, then you are part of the problem.”

In your opinion, what is the most promising strategy to reduce the global incidence and prevalence of HIV/AIDS?

In my opinion, no single strategy is the most promising in the global fight against HIV/AIDS. This does not mean that there is no hope, but rather the hope lies in a united effort by individuals and groups from across the globe. As Dr. Mark Wainberg put it, “partnerships that link science, medicine, community and political activism can translate into action.”¹ This is a point that came across with full force at the XVI International AIDS Conference. With an estimated attendance of 26,000 people from all walks of life from over 170 countries, including health care workers, researchers, leaders in politics and business, journalists, non-governmental representatives, and people living with HIV/AIDS, it is clear that current efforts to combat HIV/AIDS are coming from many different angles. Indeed, many of the exciting scientific advances presented offer more effective treatments and preventative measures in the future. However, scientific advances alone will not be able to conquer HIV/AIDS if the infrastructure and social milieu for implementing it does not exist. If I learned anything from attending the XVI International AIDS Conference, it is that while there is hope for progress in light of the massive efforts put forth by all, there is certainly no easy solution to this global problem.

What is the best way for medical students to become involved in the global fight against HIV/AIDS?

Sometimes it amazes me what my fellow medical students have achieved simply by being passionate about what they do. So what is the best way for medical students to get involved in the global fight against HIV/AIDS? The first step is to find some avenue of the HIV/AIDS fight that you really believe in, whether it be basic science research, volunteering with an AIDS organization, doing an elective in AIDS care, or working on a project in a developing country. There is a place for everyone in the global fight – just find it and be enthusiastic and devoted to your role!

Acknowledgements

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Reference

¹ The Price of Inaction: Emerging Epidemics in China, Eastern Europe and India: In Memoriam Lucille Teasdale Corti (August 15, 2006). XVI International AIDS Conference, Toronto, Canada. Transcript and video available from kaisernetwork.org, Kaiser Family Foundation. [Accessed October 2, 2006]. Available from: http://www.kaisernetwork.org/health_cast/hcast_index.cfm?display=detail&hc=1824.

Screening for TB in HIV Patients with a Simple Questionnaire

Brodie Ramin (OT9)

What session did you attend and what did you learn?

The double-headed epidemic of HIV and Tuberculosis (TB) was a major theme of AIDS 2006. The WHO estimates that one third of HIV patients are co-infected with TB, and that as a consequence, TB accounts for a third of annual HIV-related deaths.¹ A WHO-led session on "Screening for TB in HIV patients with a simple questionnaire" provided a clinical perspective on this dual epidemic.² The session leaders argued that asking every patient with HIV about TB symptoms such as persistent cough, fever, night sweats and weight loss can lead to detection of active TB in HIV patients with high sensitivity. Obtaining this history and subsequently making a diagnosis could potentially prevent the high mortality associated with co-infection if these patients are started on appropriate therapy.

However, a diagnosis of TB will only help patients if their strain of TB is sensitive to the inexpensive first line drugs (isoniazid and rifampin) available in resource poor settings. Patients with multi-drug resistant (MDR) TB will not benefit from such therapy. Furthermore, TB co-infection has become even more fatal with the emergence of extensively drug resistant (XDR) TB. XDR TB is resistant to at least two main first-line TB drugs and at least 3 of the 6 classes of second-line drugs, and has shown mortality rates as high as 98% according to one study.³ As with most infectious diseases, it is only a matter of time before XDR TB begins to spread out of Southern Africa. Thus, while it is important to diagnose TB in HIV patients, it is also vital that the health system infrastructure necessary to treat and support patients with drug resistant strains of TB (including more expensive second line therapies) is available.

In your opinion, what is the most promising strategy to reduce the global incidence and prevalence of HIV/AIDS?

A theme of the conference was that microbicides are the most promising strategy to stop the growth of the HIV pandemic. Microbicides are compounds (gels, creams, suppositories) that can be applied inside the vagina or rectum to protect against sexually transmitted infections such as HIV.² While the technical issues with microbicides can be solved in the near future, certain ethical issues remain.

The problems began spectacularly with the use of tenofovir for HIV prophylaxis in clinical trials. It was argued by patient advocates that it was unethical to provide prophylaxis of unproven efficacy or safety to trial participants without also providing long term insurance against adverse events as well as treatment to those who seroconvert during the trial.^{3,4} Supporters of microbicides acknowledge similar critiques and ethical issues. During AIDS 2006, Bill and Melinda Gates argued forcefully that they hope to resolve these issues.⁵ While ethical concerns should always be paramount when designing clinical trials, the global community has an obligation to resolve these concerns since microbicides have the

potential to stop the growth of the pandemic in profound ways.

What is the best way for medical students to get involved in the global fight against HIV/AIDS?

From the research presented by Médecins Sans Frontières (MSF), it was evident that simple studies conducted in resource poor settings about such topics as compliance, the economic determinants of health and access to medicines can be medically and politically powerful.⁶ This research on some of the most understudied problems in medicine, can provide the raw knowledge required for positive social change.⁷ Thus, one of the best ways for medical students and health professionals to get involved in the fight against the pandemic is to conduct important and ethical research on HIV issues and use that research to advocate for better access to medicines, better care, and a better life for people living with HIV/AIDS (PLWHA).

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Nutrition and HIV: Food For Thought

Quynh-Dao Dinh (OT7)

What session did you attend and what did you learn?

I attended an abstract session simply titled, "Nutrition and HIV". Evidence was presented demonstrating the manner in which nutrition modulates HIV disease.

In a double-blinded, placebo-controlled study examining the effect of micronutrients on HIV, researchers found that supplementation led to increased CD4 counts in people living with HIV/AIDS (PLWHA) on HAART.¹ Selenium is thought to be one of the active micronutrients in these supplements. Another group studied the impact of micronutrient-fortified corn-soya blend rations on food-insecure PLWHA on HAART.² In this resource-limited setting, the

authors concluded that food supplementation not only increased CD4 counts at 12 months, but also improved adherence to HAART. While these studies were of short duration and small sample sizes, the data support the notion that a healthy diet can lead to better outcomes for HIV/AIDS patients.

At a satellite session about food supplements that was organized by the World Food Program (WFP), representatives of non-governmental organizations (NGOs) described operational research that they were conducting to assess what impact the provision of food supplements had on PLWHAs and their families. Not surprisingly, those who ate better, felt better.

In your opinion, what is the most promising strategy to reduce the global incidence and prevalence of HIV/AIDS?

In combating HIV/AIDS, it is essential to hold focused objectives in the context of a broader perspective. To claim that the solution to the HIV/AIDS crisis lies in any one strategy alone, be it nutrition, education, prevention, existing treatments, or new technologies, would amount to hubris.

What is the best way for medical students to become involved in the global fight against HIV/AIDS?

I believe that the global effort to reduce the toll of this pandemic welcomes anyone who is genuinely interested in making a difference. As doctors-in-training, it is natural for us to feel overwhelmed by the geopolitical, social, and medical scope of HIV/AIDS. By developing a framework for understanding this disease, each of us will discover a niche in which we can make a meaningful contribution. These individual efforts will strengthen our collective ability to fight HIV/AIDS.

References

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A Clinical Summary of AIDS Conference 2006

Melissa Vyvey (OT9)

The clinical summary of the conference¹ contained many powerful and pertinent conclusions and statistics. In the realm of treatment, adherence to HAART medications in Africa is currently better than adherence in North America (77% compared to 55%, respectively). This refutes the argument that HAART should not be implemented in resource-poor settings for reasons of non-adherence, and pushes forward the campaign for universal access to HAART. The training and employment of treatment buddies

and community health care workers has been shown to increase adherence and in order to effectively deliver HAART to all who need it, this must continue.

Currently, there are no paediatric formulations of HAART, and there was a general consensus that children must be put onto the treatment agenda. In addition, the issue was raised that second-line anti-retrovirals for HIV infections resistant to first-line drugs must be made more affordable. Political action and advocacy were proposed as potential vehicles to decrease their cost. Finally, earlier diagnosis and initiation of treatment are a high priority in achieving therapeutic success with HAART. An increase in the availability of voluntary counseling and testing services will be instrumental in achieving all treatment goals.

There was an attempt to integrate treatment and prevention strategies at the conference, which have too often been seen as separate entities, competing for resources. In France, a study found that 17% of men who have sex with men continued to have unsafe sex, and 29% of heterosexual PLWHA continued to have unsafe sex despite their HIV diagnosis. In India, married HIV positive women had four times more unplanned pregnancies, indicating a need to integrate sexual and reproductive health services with HIV treatment and prevention. A particularly somber statistic was that we are failing to reach 90% of pregnant women who need prevention of mother to child transmission (PMTCT) even though the research and drugs have been available for many years now. It is a statistic like this that reminds us why we desperately need AIDS conferences. The great injustice of children being born into a world where they are likely to be orphaned early and where they suffer from a disease for which there is an inaccessible therapy reverberated throughout the conference halls here in affluent Toronto.

What did AIDS 2006 leave us with? Perhaps the most memorable aspect of the conference was its sense of urgency. 'Time to deliver' is a call to action. It is an absolute, abrupt, and no-nonsense demand for results. In fact, one theme of the conference was the self-awareness that this was only a conference; while thousands of delegates stood and passionately applauded Stephen Lewis, he humbly reminded them that endless meetings and speeches do not equal the saving of lives. Direct action will only proceed when research results are implemented, plans are put into operation, and passion is directed into advocacy work. International health can too often become resolutions, research, draft papers, proposals, and lofty policies. The conference attempted to re-centre the international AIDS efforts onto action.

Through the media, the Global Village, and the tangible presence of so many HIV/AIDS activists, Torontonians were invited into the campaign against HIV/AIDS. Will we respond to what we have learned? Millions of lives hang in the balance.

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