The 15th International HIV/AIDS Conference, Bangkok, 2004 – "Uniting the World against HIV/AIDS"

Moodley K, MBChB (Natal), M Fam Med (Stell), MCFP (SA), MPhil -Applied Ethics (Stell) Bioethics Unit - Tygerberg Division, Centre for Applied Ethics, Department of Family Medicine, Faculty of Health Sciences, University of Stellenbosch

(SA Fam Pract 2004;46(7): 34-35)

In many respects, the location of the 2004 conference – exotic Bangkok – appeared to be almost antithetical to hopes of containment of the HIV/AIDS pandemic. At the same time, the paradox was also poign-antly reflective of the myriad complexities underlying this illusive viral syndrome. The dichotomy inherent in the widespread practice of Bud-dhism contrasted with cabaret bars and massage parlours that make Bangkok a world- renowned sexual tourism destination was striking.

There was a sharp realization at this conference that the traditional ABC prevention programs advocated by the United States were perfect in theory only. The UN envoy at the conference described the ABC prevention approach as an "ideological distortion" that could not work in Africa where women are forced into early marriage and coercive sex. Human behaviour is determined by more than just cognitive function and rationality. A very fine line exists between HIV prevention messages and the physical expression of human sexuality. Often only a thin latex barrier maintains the fragile balance and averts a complete human catastrophe. While the usage of both male and female condoms has been poor, female condoms are now being eroticized to enable women to negotiate safer sex by emphasizing the pleasure element for their partners.

The location of the conference was also important in drawing attention to the magnitude and gravity of HIV/AIDS in south-east Asia – especially, if we realize that the Indian subcontinent has 5,1 million HIV positive people – the second largest number of HIV infected people in the world – second only to South Africa.¹ Bangkok as host to the 15th International AIDS conference was also significant in paying tribute to the first developing country to complete a phase 3 HIV vaccine trial.

While the 2002 Barcelona conference focused on "Knowledge and commitment for action", the theme of the 2004 conference was "Access for all" – a pertinent theme as many developing countries including South Africa commence widespread antiretroviral rollout programs. Sub themes dealt with commitment and accountability in access to resources, scaling up access to treatment, ensuring access for youth and women, expanding options and access for prevention and finally, overcoming challenges through empowerment and action. A strong criticism leveled against the Bangkok conference was the paucity of scientific content. The Nation, a local independent newspaper noted that the conference closed "with no major research breakthroughs reported and a vaccine, the Holy Grail in the war on the incurable virus, still years away".

Many aspects of scientific discovery have reached a plateau since the 1996 Vancouver conference when the first breakthroughs in antiretroviral treatment were announced. Some attention was focused on complications of antiretroviral treatment – like amyloidosis, dementia and diabetes, and treatment adherence was covered. In keeping with the survival of more children into adolescence and beyond, attention was focused on paediatric HIV care incorporating the psychosocial care of children both infected and affected by the disease.

While vaccine development is still in its infancy, the urgency to develop a vaccine should not undermine the progress made to date. This can only be appreciated if we consider how long it has taken to develop other vaccines that have made a major impact on disease prevention. The Hepatitis B vaccine took 16 years to develop while the Typhoid vaccine took 105 years.² Since the first phase 1 HIV vaccine trial in 1987, more than 80 phase1and 2 trials with 30 different candidate vaccines have been conducted. These trials have shown that vaccines are safe and induce different degrees of imunogenicity.³

The first phase 3 vaccine trials were conducted in 2003: one in the United States testing a clade B vaccine on 5400 volunteers - men who have sex with men (MSM) and one in Thailand testing a clade B/E vaccine on 2500 volunteers - Injecting Drug Users (IDUs). The results of the Thai study conducted over 36 months unfortunately yielded vaccine efficacy of 0,1% with a confidence interval of -31,2% to 23,6%. 105 participants in the placebo group became HIV positive and 106 participants in the vaccine group demonstrated seroconversion.⁴

While the results were disappointing, the study proved that a phase 3 trial could be conducted with good follow-up (more than 97% received all 7 injections and more than 95% completed follow-up) and allowed investigators the opportunity to test their own capabilities and infrastructure in the conduct of the trial. It also yielded important information regarding a significant reduction in risk behaviour as a result of the prevention programs and allayed fears that a vaccine, even an experimental one, would increase risk behaviour.⁴

Presently, much of the disappointment with vaccines relates to the realization that none of the candidates thus far can result in sterilizing immunity, that is, none of the candidates are able to produce neutralizing antibodies. The reliance on cellmediated immunity will result in reduction of secondary spread of infection and amelioration of disease in those who do become infected. However, after 17 years of experimentation on HIV vaccines, this has to be seen as a long-term goal that will unavoidably represent a source of frustration to those understandably seeking short- term solutions to the pandemic.

While HIV/AIDS has been hailed as a disease of exceptionalism, a disease that has received attention that is disproportionate to the attention received by other chronic and infectious diseases. We must concede that HIV/AIDS has revolutionized health care in many different ways and this was evident at the 2004 conference. No other disease has emphasized in quite the same way the enormous impact of sociopolitical, economic, cultural and gender perspectives on health and illness. No other disease has highlighted the ethical issues in medical care and, research related to HIV/AIDS in the developing world. No other disease has had such dramatic effects on the pharmaceutical industry. While this multi-factorial dimension of the disease has grown as its science reaches a plateau, a holistic approach to medicine is receiving greater clarity and acceptance.

As a point of departure, the role of gender in health and illness has largely been neglected in medical care and research. Kofi Annan the Secretary General of the United Nations, in a poignant opening address, highlighted the various deep-seated cultural factors that render young boys and girls vulnerable to HIV infection as adolescents and young children - from concepts of manhood instilled at a very young age to traditional male / female circumcision and to devaluation of the female child. He underscored the tremendous burden of disease carried by women in the pandemic. We know that 57% of people living with HIV/AIDS in sub-Saharan Africa are women! This theme, reflecting the vulnerability of women, was sustained throughout the conference with emphasis being placed on the impotence of women in negotiating safer sexual practices, hence the need for microbicides and an efficacious vaccine to enable women to protect themselves despite cultural constraints. Microbicide development remains a hopeful alternative and to date. most microbicides. especially Nonoxynol 9, have not proven to be efficacious in phase 3 clinical trials. An impassioned plea was, however, made by Zeda Rosenberg, CEO of the International Partnership for Microbicides, for the scientific community to continue with microbicide research. It is believed that even a "partially effective" microbicide could prevent 2,5 million HIV infections over 3 years.⁵

Ethics in both the clinical setting and collaborative research has certainly been refined and highlighted by the HIV/AIDS pandemic. Since the commencement of vertical transmission trials in the developing world in 1997, a number of international guidelines namely, the Declaration of Helsinki and the Council for International Organisations of Medical Sciences (CIOMS) have been revised to clarify the protection of human participants from exploitative research. A new era in empirical research into research ethics has dawned and the 2004 conference showcased a number of exciting studies on Informed Consent and Standards of Care in HIV research.

Most poignantly, no other disease has brought the pharmaceutical

industry to its knees like HIV/AIDS has done. Since the demonstration of antiretroviral efficacy and the prescription of antiretrovirals implemented, major price reductions have ensued as a result of pressure from HIV/AIDS activists and governments around the world. Debates, both academic and legal have ensued relating to the manufacture of generics, intellectual property rights, patent protection and drug pricing. As the 2004 conference drew to a close, there was talk of using the PEPFAR 15 Billion US dollars to purchase the cheapest possible drugs from countries like Thailand for use in Africa, provided that these drugs received approval for usage by the Food and Drug Administration (FDA).

At a global level, we have indeed come a long way in instituting a paradigm shift in thinking about disease and illness, in acknowledging the global disparities that exist in health care and health care funding between the developed and developing world. While scientific development has reached its plateau, this is not surprising. The merit of scientific knowledge will be judged by how it can be applied in conjunction with socio-political, economic, cultural and ethical factors to solve the challenges that lie ahead in our united global effort to defeat the virus that is ravaging millions of lives daily.

References:

- Excler J.L. Feasibility perspectives of AIDS vaccine efficacy trials in India. Oral presentation. 15th International AIDS conference, Bangkok 15 July 2004.
- Gray G. HIV vaccine trials in South Africa: Current and future Oral Presentation. Ethical-Legal Regulation of Research in South Africa: Implications for HIV Vaccine Trials. Durban. 22 July 2004.
- Esparza J. HIV Vaccines: where are we and where are we going? Plenary presentation. 15th International AIDS conference, Bangkok 15 July 2004.
- Choopanya K. Tappero J.W. Pitisuttithum P. Suntharasamai P. Kaewkungwal J. et al Preliminary results of a phase 3 HIV vaccine efficacy trial among injecting drug users in Thailand. Oral presentation. 15th International AIDS conference, Bangkok 15 July 2004.
- Rosenberg Z. State-of-the-art report on development and use of microbicides. Plenary presentation. 15th International AIDS conference, Bangkok 15 July 2004.