NATIONAL news

MAKING PROGRESS

More people in the developing world are taking anti-HIV drugs; Kenyan study indicates circumcision prevents transmission

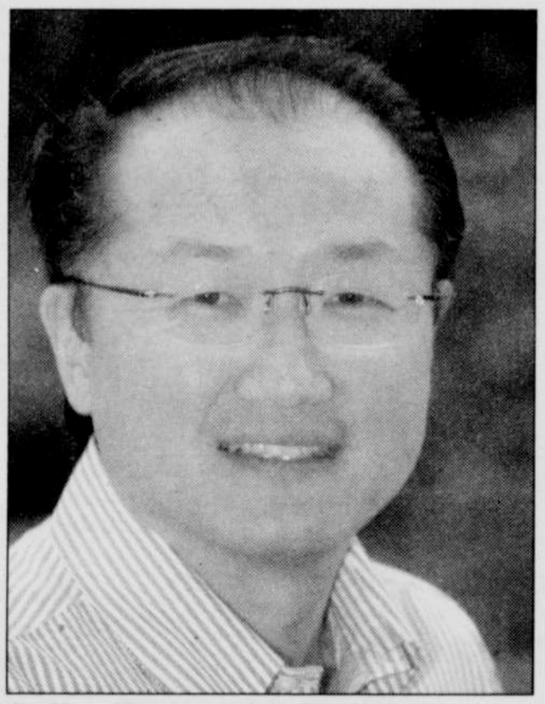
by Bob Roehr

The number of people in the developing world who are receiving anti-HIV drugs jumped 60 percent in the last six months of 2004, to 700,000. That is more than the number of people on combination therapy in the United States.

The World Health Organization announced the "3 X 5" campaign in December 2003, with the goal of having 3 million people in the developing world on anti-HIV therapy by the end of 2005. Even its most fervent supporters acknowledged it was an ambitious goal that would be difficult to meet.

These latest updated treatment figures, contained in a WHO report released Jan. 26, show both the progress being made and the distance left to travel. Only one in eight people in the developing world who would benefit from therapy are receiving it.

"A bigger commitment from South Africa, Nigeria and India is crucial if the developing world is to meet this year's treatment goals," said Jim Yong Kim, the head of WHO's HIV/AIDS programs.



Jim Yong Kim, head of the World Health Organization's HIV/AIDS program

One thing that can help speed that process along is greater use of less expensive generic drugs. The Food and Drug Administration approved the first generic HIV combination therapy Jan. 25. However, it is licensed only for use in the developing world.

Aspen Pharmacare of South Africa will manufacture both an AZT/3TC combination pill and a nevirapine pill at adult-strength formulations under licensing agreements with the pharmaceutical companies that developed the drugs. The licenses only allow for sales in the developing world and not in the United States or Europe.

FDA approval makes the drugs eligible for purchase under the President's Emergency Plan for AIDS Relief, the Bush administration's international AIDS initiative. The generic drugs will cost a third to a half the price of branded drugs.

Other generic anti-HIV drugs are manufactured in India and have been used in some countries in Africa. However, there has been some question as to the documentation of their equivalency to the branded products that they copy. They have not yet been approved by the FDA and do not qualify for purchase under the president's emergency plan.

The Bush administration will propose spending $3.2 billion for the emergency plan in the fiscal year 2006 budget, unnamed administration and congressional sources told Reuters.

Administration critics contend that the United States should be spending roughly double the amount it spends—last year it proposed $2.8 billion in international spending, and Congress upped that to $2.9 billion internationally—but they acknowledge little sympathy in Congress for such massive increases while other programs are receiving little or no increase.

The HIV viral load of people nearly doubles when they become infected with malaria. This is likely because of the additional challenges of a dual infection to the immune system. Other research has shown that the likelihood of transmitting HIV to an uninfected person increases proportionally with his or her viral load. Co-infections with other diseases such as malaria, tuberculosis and sexually transmitted diseases—often untreated or undertreated because of limited access to health care—helps explain the higher incidence of infection and faster progression of HIV disease that is seen in much of the developing world.

CIRCUMCISION

Another factor affecting the rates of transmission is circumcision, or the lack of it. A study published in the Feb. 15 edition of *The Journal of Infectious Disease* found that among presumably heterosexual Kenyan men having multiple sexual partners, the uncircumcised had more than twice the risk of acquiring HIV than did those who were circumcised.

The study was conducted between 1993 and 1997 among 745 male truck drivers in Kenya. All were initially HIV-negative. Periodically throughout the trial, they were asked about sexual encounters with wives, casual partners and prostitutes and were screened and treated for sexually transmitted infections as well as HIV.

Statistical analysis showed that the uncircumcised men became infected once every 80 times they had sex, while the circumcised men became infected once every 200 times.

Earlier studies had pointed to similar findings, but there was a question as to whether cultural practices, such as those associated with being Muslim, were a factor in helping explain the different rates of infection. Subgroup analysis of this study found that was not the case. Even when controlling for such factors, the probabilities of becoming infected with HIV remained the same.

The likely explanation is that the head of an uncircumcised penis remains a softer mucus membrane that HIV can more easily enter, while the head of a more exposed circumcised penis develops a tougher layer of skin that is more resistant to viral entry.

Three large-scale trials are under way in Africa to determine if voluntary adult circumcision offers similar protection. The outcome of those trials should be known in one to three years.

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