Is Treating AIDS the Way to Stop the Spread of the Disease?

The use of HIV treatment as a prevention strategy has been largely overlooked by public health officials. Now, a study published in the Journal of Infectious Diseases suggests that aggressive treatment programs for HIV-positive people could reduce the number of new cases by as much as 60 percent.

July 9, 2008 By Max Zimbert

To explore the notion of HIV treatment as a form of prevention, Julio Montaner, MD, and his colleagues at the British Columbia Centre for Excellence in HIV/AIDS used a mathematical model to determine whether providing highly active antiretroviral therapy (HAART) to more positive people would reduce future cases in British Columbia.

"Bottom line, we showed that no matter how you configure it, the more people you treat, the more [HIV] infections you prevent," Dr. Montaner told the Toronto Globe and Mail on July 3. "Our data is starting to generate support for the idea that treatment, as well as being a benefit to patients, can also be effective in preventing AIDS cases in the future."

The use of treatment as a prevention strategy is not new and has long been a major component of preventing public health infections such as tuberculosis, syphilis and genital herpes. "However," Montaner and his fellow experts write, "public health policymakers and program managers have been reluctant to accept this strategy as viable for preventing the growth of the HIV/AIDS epidemic."

Montaner and his colleagues argue that using HAART as a form of HIV prevention—in addition to lengthening the lives of and improving the health of HIV-positive people—works by lowering HIV-positive people's viral loads, essentially rendering them less infectious. Therefore, even if HIV-positive people did not practice safer sex, the theoretical risk to their partner would be lower.

Some AIDS experts worry that using treatment to curb the spread of the epidemic might actually increase risky behavior and reduce the effectiveness of other forms of prevention programs. If HIV-positive people believe an undetectable viral load makes them less capable of transmitting the virus—and as a result engage in riskier behaviors—there is the possibility of increasing, not decreasing, theoretical risk. And because not adhering to drug regimens can cause drug resistance that leads to higher viral loads, positive people may assume their viral loads are undetectable

when in fact they are not.

Still, the numbers are clear and compelling. In addition to potentially reducing the spread of the virus by as much as 60 percent, expanding HAART coverage could also save tens of millions of dollars in future health care costs. The study estimated that the annual cost of treating a person living with HIV in British Columbia is about $17,000 per patient per year. Montaner claims that the results of the study have led to discussions with the provincial government to lobby for more aggressive treatment programs.

“[Our] study provides additional motivation to bring treatment to the people and ultimately engage them in receiving it,” he said. “There is now a clear, direct incentive to do so.”
