Agence France-Presse

HIV regimen prevents infection among drug users

Staff Writer

June 12, 2013

PARIS, June 12, 2013 (AFP) - Giving injecting drug users a daily pill against HIV nearly halved their risk of infection by the AIDS virus, a pioneering study published on Thursday said.

The four-year research strengthens convictions that antiretroviral drugs can prevent HIV infection, rather than simply treat the virus after someone has been infected, it said.

Thai and US doctors recruited 2,411 volunteers who were attending drug-treatment clinics in Bangkok.

At the start of the study, the participants used injecting drugs and did not have the human immunodeficiency virus (HIV).

The volunteers were divided into two groups: one took a daily dose of tenofovir, a frontline HIV drug; the other took a dummy pill called a placebo.

Both groups were offered monthly testing for HIV, condoms, counselling and methadone treatment to wean them off opiate drugs.

By the end of the four years, 17 had become infected in the tenofovir group, and 33 in the placebo group.

This amounted to an average reduction in infection risk of 48.9 percent among tenofovir takers. But it rose to more than 70 percent among those who adhered most closely to the daily pill-taking.

The probe found no evidence of viral resistance nor of any serious side effects from taking tenofovir.

The study, published online in The Lancet, is the latest demonstration that so-called pre-exposure prophylaxis, or PrEP, can shield groups badly at risk from HIV, said the authors.

Previous research has found PrEP helps to prevent transmission of HIV among gays and among "discordant" heterosexual couples, where one partner had the virus and other was not infected. It also reduces the risk that an infected mother will hand on HIV to her baby.

"This is a significant step forward for HIV prevention. We now know that PrEP can work for all populations at increased risk for HIV," said Jonathan Mermin of the US Centers for Disease Control and Prevention (CDC), which funded the study alongside the Bangkok Metropolitan Administration and Thai Ministry of Health.

"Injection drug use accounts for a substantial portion of the HIV epidemic around the world, and we are hopeful that PrEP can play a role in reducing the continued toll."

According to UNAIDS, 34 million people were living with HIV in 2011. That year, 2.5 million people became newly infected, around 10 percent of which was probably caused by drug use.

In some countries in eastern Europe and central Asia, more than 80 percent of all HIV infections are due to drug use.

Transmission can occur through shared needles or syringes, or if a drug user resorts to commercial sex to get money for drugs.

Analysts said the results were encouraging but noted that, as the study progressed, fewer and fewer of the volunteers remained addicted to drugs and were less likely to engage in other risky behaviour.

Incarceration of some volunteers also made it likelier they would follow the drug regimen and counselling, they added.

This raises some questions as to how effective PrEP would be in real life, they said.

Salim Abdool Karim of South Africa's CAPRISA AIDS science centre said PrEP could only be "part of a combination" of techniques that included needle exchange, methadone initiatives and safe-sex counselling -- programmes that in some countries are politically sensitive.

Daniel Wolfe, director of the International Harm Reduction Development Programme at the Open Society Foundations, pointed to the problem of criminalising drug users.

He asked how PrEP could be implemented in countries "whose authorities routinely arrest, detain or stigmatize people who inject drugs."

"(...) Unless countries do more to build trust or willingness to work with people who inject drugs, health services will not be able to deliver medicines in this way," he said by email from a conference in Vilnius, Lithuania on HIV and drug users.

See the topic on aegis.org