

Starting antiretroviral therapy improves HIV-infected Africans' nutrition

October 2 2012

Starting HIV-infected patients on antiretroviral therapy reduces food insecurity and improves physical health, thereby contributing to the disruption of a lethal syndemic, UCSF and Massachusetts General Hospital researchers have found in a study focused on sub-Saharan Africa.

The study was published this week in the [Journal of Acquired Immune Deficiency Syndromes](#).

With more than 20 million people infected with HIV/AIDS and almost 240 million people lacking access to enough food, sub-Saharan Africa is experiencing co-epidemics of [food insecurity](#) and HIV/AIDS that intensify the vulnerability to and increase the severity of each other, creating a deadly vicious cycle, researchers noted.

Food insecurity enhances the risk of HIV transmission by driving [risky sexual behaviors](#), fostering practices that increase mother-to-child [transmission of HIV](#), and contributing to [poor nutrition](#) and micronutrient deficiencies that diminish mucosal integrity and weakens the body's overall ability to resist infection.

For those infected with HIV, food insecurity is associated with higher rates of opportunistic infections, poorer immune responses, declining mental and [physical health](#) and higher risk of death. In turn, [HIV infection](#) worsens food insecurity due to death and illness of productive family members and increased caregiver burdens. Further, illness and

stigma related to HIV/AIDS can make finding and performing work harder and diminish social network support for finding food in times of scarcity.

"HIV makes people sicker and, as a result, accessing food becomes progressively more difficult. Antiretroviral therapy makes HIV-infected people feel better and makes them stronger physically – helping them to improve food security – in part because they are better able to work and to engage in food-generating activities," said the study's principal investigator, Sheri Weiser, MD, assistant professor of medicine in the UCSF HIV/AIDS Division at San Francisco General Hospital and Trauma Center.

The study, conducted in Uganda, followed 228 untreated HIV-infected patients for up to three years. More than 80 percent had some level of food insecurity and more than 40 percent were severely food insecure at baseline. Once therapy was initiated, food insecurity declined and nutritional status and physical status increased in parallel with time on therapy.

"Ideally, we would intervene with therapy early to interrupt this vicious cycle before it starts," said the study's senior author, David R. Bangsberg, MD, MPH, director of the Center for Global Health at Massachusetts General Hospital.

Along with a study published last year showing a potent prevention benefit from treatment—HIV-infected participants on therapy reduced their risk of transmitting HIV to their uninfected partners by 96 percent in the study—these findings provide additional evidence supporting initiating treatment with antiretrovirals as soon as possible after diagnosis, he said.

"In addition to improving health and decreasing [HIV transmission](#), our

study adds to the growing evidence that treating with ART is cost-effective by improving health and productivity over the long term," he concluded.

While antiretroviral therapy is necessary, it is not sufficient for reversing the negative impacts of food insecurity, said Weiser. Many HIV-infected patients on therapy still struggle with food insecurity, which is prevalent at high rates not only for our patients, but also for the population in general.

"We have also shown in other work that food insecurity leads to worse outcomes for HIV-infected patients," added Weiser. Weiser and Bangsberg concluded that to best address these overlapping epidemics, programs targeting food insecurity should be integrated into HIV treatment programs.

Provided by University of California, San Francisco

Citation: Starting antiretroviral therapy improves HIV-infected Africans' nutrition (2012, October 2) retrieved 12 July 2023 from <https://medicalxpress.com/news/2012-10-antiretroviral-therapy-hiv-infected-africans-nutrition.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--