Directly observed HIV treatment by patient-nominated treatment supporter improves survival

EurekAlert

When applied to HIV care, the community-based model of directly observed therapy (DOT) has no effect on virologic outcomes, but significantly improves patient survival. This is according to researchers at the Johns Hopkins Bloomberg School of Public Health, in collaboration with colleagues at University of Cape Town, South Africa, who conducted the first randomized controlled trial of patient-nominated treatment-supporters providing partial DOT in resource-limited settings. The researchers found that mortality rates were lower among DOT patients than among self-monitored antiretroviral therapy (ART). The results are featured in the June 1, 2010, issue of *AIDS*.

Directly observed therapy (DOT) is a treatment strategy commonly used in tuberculosis control programs, in which a health care worker ensures that medication is taken by patients at health care facilities. Previous observational studies suggested the effectiveness of community health supporters (friends or family members) performing DOT antiretroviral therapy as a strategy to improve adherence, but data from randomized trials were previously lacking.

"Community DOT-ART showed no effect on virologic outcomes, but was associated with greater CD4 cell count increases at 6-month follow up," said Jean B. Nachega, MD, PhD, MPH, lead author of the study, associate scientist in the Bloomberg School's Department of International Health. Nachega is also, professor of medicine and director of the Center for Infectious disease at Stellenbosch University, Cape Town, South Africa.) "More importantly, there were 20 deaths in the control group compared to 9 deaths among those who received the intervention, and mortality was independently associated with the study arm in multivariate Cox regression analyses. This survival benefit was not fully explained by improved adherence, virologic or immunologic outcomes."

For the study, researchers analyzed data from 274 adult patients initiating antiretroviral therapy (ART) at a public HIV clinic in Cape Town, South Africa. Patients were randomized to treatment-supporter DOT-ART or self -administered ART. In the DOT group, patients selected someone from their own personal network such as a family member or friend to observe at least one medication dose every day and provide support. DOT-ART patients and supporters received baseline and follow-up training and monitoring. Researchers defined the primary endpoints as the number of patients with undetectable HIV viral loads (fewer than 400 copies/ml) and a mean change in CD4 cell counts at 6, 18, 12 and 24 months. Secondary endpoints were pill count adherence, new or recurrent AIDS defining illness and all-cause mortality.

"The `social capital´ provided by a trusted patient-nominated treatment supporter (e.g. material and emotional support, health care utilization, etc.), may have contributed to save lives, regardless of the DOT component of our intervention" said Nachega. "Moving forward, there is a critical need to identify and assess additional community-based interventions to improve outcomes of HIV patients worldwide. We recommend these community-based DOT-ART interventions be large enough to detect meaningful clinical and public health differences that improve patients' conditions and save lives. In addition, they should target patients with documented poor adherence and collect both qualitative and quantitative outcomes."

SOURCE [1]

Source URL (retrieved on *05/19/2013 - 1:32pm*):
http://www.mdtmag.com/news/2010/06/directly-observed-hiv-treatment-patient-nominated-treatment-supporter-improves-survival

Links:
[1] http://www.eurekalert.org/pub_releases/2010-06/jhub-doh061110.php