Same-day HIV treatment improves health outcomes, study finds

May 11 2016

A clinical trial of same-day initiation of antiretroviral therapy (ART) for HIV patients in South Africa led to a higher proportion of people starting treatment and to better health outcomes, according to a new study led by a Boston University School of Public Health researcher.

The study, in the journal *PLOS Medicine*, found that 97 percent of patients in the rapid-initiation group (dubbed the RapIT intervention) had started ART within 90 days, compared to 72 percent receiving standard care. And by 10 months after enrollment, 64 percent of patients in the rapid group had good outcomes, in terms of viral suppression, compared to 51 percent in the standard arm.

The World Health Organization recommends that people with HIV should start treatment soon after diagnosis. Despite those guidelines, most people with HIV in South Africa, which has world's largest HIV treatment program, start ART later than they should, said Sydney Rosen, lead author of the study and a research professor of global health at BUSPH. Once they get to a clinic, the treatment initiation process is long and complicated, Rosen said, with a first visit for an HIV test, a second visit to determine treatment eligibility, and several more visits for a physical exam, adherence education and counseling.

The researchers hypothesized that offering patients a chance to start treatment on the same day as their first clinic visit would improve the proportion of patients who made it through all the steps and were successfully established on ART. The study randomly assigned 377 adult

patients at two public clinics in Johannesburg to two groups: One that was offered the chance to start treatment on the same day, using rapid lab tests and accelerated counseling and a physical exam, and the other assigned to standard treatment procedures, usually requiring three to five more clinic visits over a two- to four-week period.

"The RapIT intervention showed clinically meaningful improvements in ART uptake and viral suppression, providing proof of principle that a single-visit treatment approach can have benefits," Rosen said. "The patients who likely benefitted the most from it are those who would not otherwise have initiated treatment at all, or who would have waited until they were sick enough to compromise their prognosis."

Interestingly, the study found that among patients who did start treatment within three months of study enrollment, loss to follow-up was higher in the rapid-intervention group than the standard group. But so many more patients in the standard group failed to start treatment at all—28 percent, compared to the rapid group's three percent—that patients in the rapid group still had overall better outcomes than did those in the standard group.

Rosen said that while the rapid intervention was successful in increasing the overall proportion of patients with successful health outcomes, "the rate of post-initiation attrition is a reminder that early retention in care and adherence support, once patients start treatment, remain high priorities for further research and interventions."

Based on this study's results, the authors said, "Consideration could be given to accelerating the process of ART initiation in many different settings and for different types of patients."

Provided by Boston University Medical Center