New program boosts use of HIV medications in injection-drug users

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A relatively simple effort to provide counseling and connect injection-drug users with resources could prove powerful against the spread of HIV in a notoriously hard-to-reach population, new research suggests.

The study increased by almost 30 percent the use of antiretroviral medications to suppress HIV infection, according to the study, which appears in *The Lancet*.

The research team, co-led by William Miller of The Ohio State University, studied the intervention in a handful of high-risk populations around the world and found that it was not only well-received but could also reduce deaths from HIV infection.

Miller, a professor of epidemiology at Ohio State, and his colleagues wanted to create a low-cost, effective program that would help the select populations tested in this study—but one that could also be ramped up to improve the worldwide health of HIV-infected people who inject drugs. The study included sites in the Ukraine, Vietnam and Indonesia that are part of the HIV Prevention Trials Network.

"All over the world, people who inject drugs are stigmatized in both the general population and the health care setting and they tend to be afraid to engage with health care providers and others who want to help them," Miller said. "This becomes even more of a challenge when it comes to people who inject drugs and who have HIV."

"Our goal was to design something that could be scaled up relatively easily, including in places that don't have a lot of resources," Miller said.

After a year, 72 percent of the HIV-positive group who received the flexible program of psychosocial counseling and help navigating existing resources said they were using antiretroviral therapy (ART) to combat their HIV infection. In the control group, only 43 percent of infected participants were on therapy.

That's a remarkable victory in a group of HIV-positive people who face serious obstacles to ongoing treatment, including stigma and poor access to adequate health care, Miller said. The World Health Organization has set a goal of 90 percent uptake of ART among infected individuals by 2020.

The researchers also saw a significant improvement in the intervention group when it came to suppressing the virus—and likely reducing the risk of transmission. Forty-one percent of HIV-positive men and women who had psychosocial support and help accessing resources achieved viral suppression, compared to 24 percent of those in the control group.

Furthermore, 41 percent of the HIV-positive participants in the study group were on medication to help with their drug use, versus 25 percent of their peers who did not receive additional help. Among the non-infected drug-use partners, uptake of medication for drug use was slightly higher among those in the intervention group, but the difference wasn't statistically significant.

And none of the HIV-free drug-use partners in the intervention group were infected in a year's time. In the control group, seven partners were infected.

Both the infected and uninfected participants in the intervention group

saw lower mortality rates than those in the standard-of-care group. Seven percent of infected intervention participants, compared to 15 percent who received standard care, died during the study follow-up.

And, though it wasn't an outcome the research team originally planned to analyze, they did find that the initiative cut the risk of death in half. Among uninfected intervention participants in the study, .5 percent died, compared to 3 percent of those who received standard care.

People who use injection drugs typically have high rates of HIV and limited access to antiretroviral therapy and medications to help them stop using injection drugs, Miller said.

The intervention used in the study was designed in hopes of offering counseling and steering people toward existing resources that could improve their health—including preventing HIV infection and helping them move toward a drug-free life.

A key element was the flexibility of the program, the researchers said. Previous studies have often been prescriptive in terms of how much counseling a participant receives. In this study, the participants could receive as little or as much as suited their needs.

"Our study confirmed the fact that the effort to successfully engage HIV-infected people who use injection drugs in care is on a spectrum. Some needed very little support and some required an enormous effort with several visits and counseling sessions to help them and convince them to get into care," said study co-lead author Irving Hoffman of the University of North Carolina.

"The flexibility of our intervention was ideal to serve this population and objective," he said.

The study included 502 people who were HIV positive at the start of the trial, and another 806 HIV-free people within their drug-use circles. A quarter of the study participants were assigned to the new intervention, while the rest received "standard of care—whatever is typically available to this population.

Participants in the study ranged from 18 to 60 years old and were actively injecting drugs at least twice a week at the time of enrollment in the research. The researchers found the non-infected participants through the HIV-infected study subjects, who suggested people with whom they used drugs. Up to five injection partners were enrolled per HIV-infected "index" participant.

Standard of care in each of the countries included referrals for HIV management and medication, including methadone or buprenorphine. They also received a standard harm-reduction package, HIV testing and counseling, referrals for antiretroviral therapy and other basic care provided in their country. That could include referrals to clean syringe programs, risk-reduction counseling for injection drug use and sexually transmitted diseases.

Infected participants in the intervention group received all of that, in addition to access to systems navigators who helped them engage with resources, stick with the program and adhere to HIV care and therapy to reduce or stop injection drug use. They also had psychosocial counseling that included tactics to help them solve problems, build skills and set goals.

Each participant received at least two meetings or phone calls with a systems navigator and a counselor. Participants were asked to bring a family member, friend or partner with them to these sessions. After the initial two sessions, the frequency or amount of help was dictated by the participant's needs and desires.

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