Project in Rural Kentucky Shows Progress Toward Hepatitis C Elimination

Two thirds of people who currently use drugs completed treatment, and most of those were cured.

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Three quarters of people who currently or previously used drugs completed treatment for hepatitis C and about two thirds were cured in a low-barrier program in a rural Appalachian community, according to findings presented at the AASLD Liver Meeting.

“Early results from this clinical trial indicate that it is possible to successfully treat high-risk rural residents in their community,” the researchers concluded.

Targeted efforts to eliminate hepatitis C virus (HCV) in populations with high transmission is especially important. The goal of the Kentucky Viral Hepatitis Treatment Project (KeY Treat) is to eliminate HCV in a rural community that has been heavily affected by hepatitis C and opioid use. To do this, the program removed barriers to treatment by providing free care and direct-acting antiviral medications to participants regardless of insurance status and continued drug use.

Jennifer Havens, PhD, of the University of Kentucky College of Medicine, and colleagues sought to enroll 400 people with HCV. After conducting an initial phone screening of 901 rural residents, 640 met the eligibility criteria and were screened in person and tested for HCV antibodies and HCV RNA. Of these, 347 (54%) agreed to receive a 12-week course of Epclusa (sofosbuvir/velpatasvir).

Participants received their first two weeks worth of medication at the initial visit and were scheduled to return two and six weeks later to receive refills. Additional visits were scheduled at the end of treatment and 12 weeks later to determine whether they achieved sustained virological response (SVR), or continued undetectable viral load, which is considered a cure. Participants received phone calls, texts and Facebook messages to remind them of appointments.

All but 10 participants (337 people) started treatment. A majority were men (58%), almost all were white and the median age was 41 years. Most (97%) had a history of drug use and 41% were currently using drugs, of which methamphetamine and prescription opioids were the most common. About a quarter currently injected drugs, a majority of whom reported meth injection. At
the beginning of the study, 47% were currently on medication for opioid use disorder (such as methadone or buprenorphine). Most had HCV genotype 1. About 60% had no apparent liver fibrosis, 30% had mild or moderate fibrosis and 9% had advanced fibrosis or cirrhosis.

Among people who began HCV treatment, some 77% completed the 12-week regimen. More than 90% of those who completed therapy achieved a sustained virological response. People who currently inject drugs were less likely to finish antiviral therapy than those who did not (65% versus 81%).

Looking at all 337 people who started treatment, about 65% achieved SVR, just over 10% were still on treatment and about 20% were lost to follow-up. Loss to follow-up most often occurred during the first two weeks after treatment initiation. Thirty people lost to follow-up (44%) had an undetectable viral load on their last test. Less than 5% finished treatment but did not achieve SVR.

People who currently inject drugs were significantly less likely to achieve SVR than those who did not. Younger participants were also less likely to be cured. Those who achieved SVR received more pills than those who did not (63 versus 22 pills). Receiving medication for opioid use disorder was not linked to either treatment completion or achieving SVR.

“Those who are younger and who are actively injecting had lower SVR rates. However, two thirds of all PWID [people who inject drugs] (mostly meth injectors) who started meds were successfully cured,” the researchers noted. “Although PWID were less likely to achieve SVR, the potential for community spread has been reduced as 46 active injectors that completed treatment and six that had an undetectable viral load at the last visit will no longer be transmitting the virus.”

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