

Pain Management Program Shows Promise for People With HIV

Study participants experienced significant improvements in pain severity, functional impairment and depression.

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A tailored behavioral approach known as Skills to Manage Pain, or STOMP, may help relieve chronic pain and improve daily functioning for people living with HIV, according to study findings published in [JAMA Internal Medicine](#).

“Among people with HIV and chronic pain, those who received the STOMP intervention demonstrated meaningful improvements in average pain ratings compared to enhanced usual care in this randomized clinical trial,” the study authors concluded. “STOMP has the potential to improve the lives of people with HIV with chronic pain.”

Chronic pain—defined as pain that lasts at least three months—is common among people living with HIV, especially those who are older or have comorbidities. Studies suggest that as many as 85% of this population experiences persistent pain. Chronic pain can lead to disability, depression, decreased quality of life, difficulty adhering to antiretroviral treatment and greater need for health care resources.

The Infectious Diseases Society of America, the HIV Medical Association and the British HIV Association [include pain assessment and management](#) in their guidelines on care for HIV-positive people, but there are few proven effective interventions. Long-term use of opioid pain medications can lead to dependence and is a concern especially for people struggling with substance use or in recovery, underscoring the need for other types of pain management.

Katie Fitzgerald Jones, PhD, of the New England Geriatric Research Education and Clinical Center, and colleagues, conducted a randomized clinical trial to evaluate the effectiveness of STOMP for people living with HIV ([NCT03692611](#)).

The study included 278 HIV-positive adults seen at the University of Alabama Birmingham and the University of North Carolina Chapel Hill who had experienced chronic pain for three months or more. Just over half (55%) were men, more than 80% were Black, and the average age was about 54 years. At the start of the study, 78% had pain at multiple sites, and nearly a quarter reported long-term opioid use. Back, knee and neuropathy pain were most common. The mean score on the

Brief Pain Inventory (BPI) was 6.4 on a scale of 0 to 10, indicating moderate to severe pain.

The participants were randomly assigned to participate in the STOMP intervention or receive enhanced usual care. The intervention involved six one-on-one skills-building sessions with trained social workers and health educators, alternating with six group sessions led by trained staff and peers. The intervention and control groups both received the same STOMP education manual, but the latter group had no one-on-one or group sessions.

The study was conducted between August 2019 and September 2022, but due to the COVID-19 pandemic, the intervention pivoted to a remote telephone format in March 2020. Attendance was quite poor overall. On average, participants attended just 2.9 of the one-on-one sessions and 2.4 of the group sessions—and about a quarter attended no sessions at all.

Nonetheless, people in the STOMP group had a significantly greater reduction in pain immediately after the intervention compared with the standard care group, with an average decrease of 1.25 more points on the BPI scale. What's more, the STOMP group experienced sustained improvement when assessed three months later, with a mean reduction of 0.62 more points.

The proportion of people who had more than a 30% improvement in pain scores was higher in the intervention group compared with the control group (37% versus 20%, respectively). People in the STOMP group reported significantly more improvement in both pain severity and functional impairment. They also saw improvements on scales measuring enjoyment of life, general activity, depression and feelings of self-efficacy.

“The findings of this randomized clinical trial demonstrated that STOMP may be an efficacious chronic pain intervention for people with HIV,” the study authors concluded. “The STOMP intervention also has the potential to be tailored to other highly affected groups, including cancer survivors, older adults or veterans who frequently experience chronic multisite pain.”

“STOMP is the first peer-involved pain self-management intervention to our knowledge that produced a clinically meaningful result,” the researchers wrote. “[P]eer-led sessions may be especially important due to a host of biopsychosocial challenges (e.g., stigma, substance use and racism) faced by people with HIV, leading to worse chronic pain outcomes and social isolation.”

“Although adherence was low and small differences were attenuated over time, we hypothesized that the combination of one-on-one and group sessions plus our intensive intervention session reminder protocol was sufficient for short-term behavioral change. For long-term behavioral maintenance, different approaches may be needed,” they continued. “We speculated that lower-than-anticipated adherence may have resulted from study procedures during the COVID-19 pandemic when maintaining and addressing medical needs in people with HIV was particularly challenging. Nonetheless, given the findings, future research should aim to identify the optimal and minimally effective number of STOMP sessions and the specific combination regimen of individual and group sessions.”

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