



Video-Based Program Helps HIV-Positive Smokers Quit Tobacco

The pilot program's success led researchers to begin developing a smartphone app to reach low- and middle-income countries.

May 25, 2023 By Laura Schmidt

A video-based smoking cessation program helped nearly 40% of HIV-positive smokers in Kathmandu, Nepal, quit tobacco, according to researchers at the University of Massachusetts Amherst (UMass).

"I am blown away with the findings," said lead author Krishna Poudel, PhD, an associate professor of community health education in the School of Public Health and Health Sciences, in a [UMass news release](#). "I was confident that a lot of people would quit, but I was not expecting 40%."

Results of the study were published in [AIDS and Behavior](#). The pilot study focused on helping people with HIV [quit smoking](#). [Previous research](#) has shown that people with HIV who are on treatment have a greater risk of death due to [tobacco](#) than HIV-related factors.

Poudel, the director of the UMass Amherst Institute of Global Health, adapted an English language smoking cessation intervention for people with HIV into a video program he wrote and narrated in Nepali. He decided to develop the program after having [conducted a study](#) with colleagues that linked intensity, duration and pack-years of smoking and inflammation in HIV-positive people living in the South Asian country Nepal. (A pack-year is equal to smoking one pack, containing 20 [cigarettes](#), every day for a year.)

Poudel "knew nothing about video making," he told UMass. Despite his inexperience, he developed 11 video sessions to help viewers set a quit date, manage cravings and maintain abstinence.

Poudel and colleagues sent participants links to the video clips, which ranged from three to eight minutes, and observed them. Of the 48 participants, all but two people watched every video clip. The two who didn't complete the clips watched nine and seven videos, respectively.

After three months, the study retention was 100%, according to UMass. Researchers then tested participants' smoking abstinence using the Bedfont Smokerlyzer, which tests carbon monoxide levels in the blood. Smoking abstinence was confirmed in 19 participants (40%).

Poudel reported receiving overwhelmingly positive feedback from participants. Most watched said the videos were easy to understand while also being relevant to their lives.

One participant said the money he used to spend on cigarettes now goes toward gifts for his daughter. Another person said that although they had tried quitting in the past, the videos helped them quit successfully.

Poudel is already developing an app to reach wider populations. “There is a need,” he told UMass. “The number of smartphone users has greatly increased, including in low- and middle-income countries, so we should be able to reach out to a large number of HIV-positive smokers in Nepal, even outside the capital city.”

In related news, did you know that the people living with HIV are more likely to smoke than those who are HIV negative? For more see “[Concerns: Lung Cancer](#).”