Computer programs help drug abusers stay abstinent

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Drug abusers who used a computer-assisted training program in addition to receiving traditional counseling stayed abstinent significantly longer than those who received counseling alone, a Yale University study has found.

The findings were reported in the May 1 online edition of the *American Journal of Psychiatry*.

Seventy-seven people who sought treatment for drug and alcohol abuse were randomly assigned to receive traditional counseling or to get computer-assisted training based on principles of cognitive behavioral therapy as well as sessions with a therapist.

The subjects who received computer-assisted training had significantly fewer positive drug tests at the conclusion of the study, reported Kathleen M. Carroll, professor of psychiatry and lead author of the study.

"We think this is a very exciting way of reaching more people who may have substance use problems and providing a means of helping them learn effective ways to change their behavior," Carroll said.

Cognitive behavioral therapy concentrates on teaching skills and strategies to help people change behavior patterns and has been proven to be effective way to treat a wide variety of psychiatric disorders. However, such therapy is not widely available for people with substance

use problems, Carroll said.

Also, many counselors lack the time or training to fully implement cognitive behavioral therapies for their patients, she said. She and her team at the Yale School of Medicine developed a software program to help supplement counseling in drug addiction as well as other psychiatric disorders.

The computer-assisted therapy program consists of text, audio, and videotaped examples designed to help the user learn new ways of avoiding the use of drugs and changing other problem behaviors. The study volunteers had sought treatment at a substance abuse clinic in Bridgeport, Ct. and met diagnostic criteria for a substance use problem, with alcohol, cocaine, opioids or marijuana. Those assigned to computer-assisted training were exposed to six lessons, or modules, that they accessed from a computer located at the treatment program. Each module included a brief movie that presented a particular challenge to the subjects' ability to resist substance use – such as the offer of drugs from a dealer. The narrator of the module then presented different skills and strategies to avoid drug use and also show videotapes of individuals employing those strategies.

"I am immensely proud of Dr. Carroll and her colleagues' work," said William Sledge, MD, interim chair and George D and Esther S Gross professor of psychiatry. "At first glance one might conclude that this computer-based training in some way threatens the conventionally perceived value of the relationship between the therapist and the patient, however, I do not see it as so. Rather, they have demonstrated how a low cost but carefully conceived procedure can enhance conventional treatment and add additional element of richness and effectiveness to its power."

Source: Yale University