NIDA Trains Judges in Behavioral Research and Intervention

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Behavioral science research figures prominently in an effort by the National Institute on Drug Abuse (NIDA) to inform the criminal justice system about the effectiveness of sustained, comprehensive treatment for incarcerated or paroled offenders. A particularly innovative aspect of this project involves training judges about the neurological and behavioral underpinnings of substance abuse and treatment. The hope is that they will be better equipped to decide the types of treatment and services needed for addicted defendants.

Among the most vexing problems in this country are the rising tide of prison populations and the rate at which ex-felons return to prison. These problems are intertwined with drug and alcohol abuse; 70 percent of individuals in the penal system have abused drugs regularly, compared with 9 percent of the general population, according to NIDA. While the relationship between drug abuse and crime is complicated in terms of direct cause and effect, research has shown that physiological, behavioral, and environmental factors are all involved. More concretely, drug-related crime typically includes offenses involving drug possession or sales or those directly related to drug abuse such as stealing money to buy drugs. As with alcohol, it is also a crime to drive under the influence of any illegal drug.

These circumstances can make it difficult for presiding judges to determine how to deal with addicts appearing in their courtrooms, particularly in determining whether — and what kind of — treatment is warranted.

In July 2006, NIDA released a scientific report documenting the effectiveness of drug abuse treatment in reducing crime and costs to society. *Principles of Drug Abuse Treatment for Criminal Justice Populations* highlights some of the proven components for successfully treating drug abusers within the criminal justice system, leading to lower rates of criminal activity and recidivism.

Evidence-based interventions recommended to accompany any drug treatment include cognitive-behavioral therapy, contingency management approaches, motivational enhancement, and, in some cases, medication. These strategies are meant to encourage positive social and coping skills, reinforce positive behavior change, and increase treatment retention. According to NIDA, medication has been shown to help normalize brain function for addicts and for individuals with co-occurring mental health problems, and can be essential in treating the symptoms of mental illness. Such therapies have a long history in basic behavioral and bio-medical science, and have recently been modified by behavioral scientists such as Frank S. Pearson, National Development and Research Institutes, Inc.; Timothy W. Kinlock, University of Baltimore; and Tom Tyler, New York University.

Another intervention based on basic behavioral science involves rewards and sanctions, which can prevent individuals from sliding back into drug use and crime. Research conducted by Stephen T. Higgins, University of Vermont, along with Kenneth Silverman, Johns Hopkins University, and Nancy Petry, University of Connecticut, has shown that voucher-based (both monetary and non-monetary, such

as social praise) reinforcement therapy works for substance abuse disorders. This kind of reward approach works best when it directly and swiftly follows the targeted behavior and when the reward or sanction is perceived as fair, demonstrated by Douglas B. Marlowe, University of Pennsylvania, and Tom Tyler, New York University. Researchers such as Faye S. Taxman, University of Maryland, and John M. Roll, Washington State University-Spokane, have found that sanctions that match the severity of the transgression can also be effective, as long as they are consistent and predictable.

"When drug abusers enter the criminal justice system, it offers a unique opportunity to provide them with treatment for substance abuse and addiction," said NIDA Director Nora Volkow. "Treatment can be successful for drug-abusing offenders even if they enter it under legal mandate. And continued treatment helps them to successfully reenter the community, benefiting both public health and public safety."

Research has shown that addiction is a brain disease that originates — and is manifested — in behavior. Chronic use can cause long-lasting changes in the brain; these brain changes interfere with an individual's behavior in a variety of ways, including disrupting memory and attention and the ability to make voluntary decisions. Drug-related changes in the brain also can contribute to mental health problems such as paranoia, depression, aggression, and hallucinations.

These research findings can be used to develop effective criminal justice policies. Judges in Cook County, Illinois, are learning more about the behavioral and biological aspects of addiction by way of intensive training workshops, largely conducted by Timothy Condon, deputy director of NIDA; Redonna Chandler, chief, Services Research Branch, Division of Epidemiology, Services and Prevention Research, NIDA; and other NIDA staff. By equipping judges with scientific evidence, NIDA hopes the the judges will consider the complex interplay of biology and behavior and tailor their recommendations for drug addiction treatment to enable criminal offenders to make a successful return to society.