

News Scan

NIDA ADDICTION RESEARCH NEWS

NEWS UPDATE

Research Advances

Brief Family Interventions in 6th Grade Cut Substance Abuse in 10th Grade

Providing substance abuse prevention training to the parents of 6th graders and their children during one evening a week, for as little as five weeks, was effective in reducing the number of adolescents who became alcohol, tobacco, or drug users by 10th grade. The interventions included separate sessions for parents and for children, as well as some sessions involving the whole family. The training was designed to teach skills that strengthen children's ability to avoid the temptations of substance abuse as they get older.

Researchers from Iowa State University randomly assigned 33 public schools to one of three conditions: the 5-session Preparing for the Drug Free Years Program, the 7-session Iowa Strengthening Families Program, and a minimal contact control condition. The interventions were delivered with the help of Cooperative Extension Service community educators. The study involved 667 6th graders and their families.

Assessments included multiple measures of initiation and current use of alcohol, tobacco, and marijuana. Baseline data were collected in 6th grade and follow-up data were collected in 10th grade. Significant differences in initiation and current use were found for adolescents in either intervention program as compared to the control group. The investigators conclude that brief family skills-training interventions designed for general populations have the potential to reduce adolescent substance use and thus have important public health implications. These findings parallel other recent results showing reduced aggressive and hostile behaviors among 10th graders (see Archives of Pediatrics and Adolescent Medicine, Vol. 154, 128-1257).

■ **WHAT IT MEANS:** Focused short-term interventions for parents and children appear to be effective in reducing alcohol, drug, and tobacco use, and are feasible and practical for implementation in communities.

The study was published by lead investigator by Dr. Richard Spoth in the *Journal of Consulting and Clinical Psychology*, 2001, Vol. 69, No. 4, 627-642.

Integrating Medical Care and Treatment for Substance Abuse Provides Better Outcomes

Researchers at the University of California, San Francisco, and Kaiser Permanente Division of Research, Oakland, have determined that integrating treatment for medical and substance abuse problems can be cost effective and, for recovering addicts with substance-abuse related medical problems, provides better patient outcomes than offering such services independently.

To examine differences in treatment outcomes and costs between integrated and independent models of medical and substance abuse care, the investigators studied outcomes for almost 600 patients admitted to Kaiser Permanente's Chemical Dependency Recovery Program in Sacramento, California, between April 1997 and December 1998. The patients were randomly assigned to receive treatment through either an integrated model, in which primary health care was included within the addiction treatment program, or to an independent treatment-as-usual model in which primary care and substance abuse treatment were provided separately. A subgroup of 341 patients who were also suffering from medical conditions

commonly associated with substance abuse such as hypertension, coronary artery disease, chronic liver disease and hepatitis C were also studied independently in the analysis.

Each of the groups showed improvement on all drug and alcohol use measures. However, the patients with substance abuse-related medical problems who received integrated care had higher abstinence rates and longer periods of abstinence, and their costs were not significantly higher relative to patients in the independent services group. For patients without substance-abuse related medical problems, there was a trend but not a significant difference in abstinence rates between those receiving integrated or independent services.

■ **WHAT IT MEANS:** Patients who received integrated health care and addiction treatment were about three times more likely to remain drug-free. These findings should be of interest to HMO and other health care providers given the high rate of medical conditions among substance abuse patients.

The study, by lead author Dr. Constance Weisner from the University of California, San Francisco, was published in the October 10th issue of the *Journal of the American Medical Association*.

Drug Tested as Possible New Treatment for Methamphetamine Dependence

Researchers from the University of Kentucky found that methamphetamine self-administration in rats is decreased by lobeline, a drug that has been touted as a smoking cessation agent. Lobeline inhibits dopamine uptake into and enhances the release of dopamine from synaptic vesicles by interacting with the vesicular membrane transporter, VMAT2. Recent research suggests that VMAT2 is involved in dopamine release and the feeling of pleasure associated with stimulant drugs, such as amphetamine and methamphetamine.

Rats were trained to self-administer methamphetamine by pressing a lever in daily 60-min sessions. In three separate experiments, rats were injected with lobeline 15 minutes prior to methamphetamine self-administration sessions. The first experiment showed that as the dose of lobeline increased, there was a decrease in methamphetamine self-administration. Additional experiments revealed that repeated pretreatment with lobeline consistently decreased methamphetamine self-administration, and that this effect was not surmounted by increasing the dose of methamphetamine by eight-fold.

■ **WHAT IT MEANS:** Currently, there are no particular medications that provide effective treatment for methamphetamine addiction. Based on the results of this study, lobeline warrants further investigation as a pharmacological treatment for addiction to methamphetamine.

This study was published by lead investigator Dr. Steven B. Harrod in the July, 2001 issue of the *Journal of Pharmacology and Experimental Therapeutics*.

Study Examines the Relationship of Drug Use, Personality, and HIV Sexual Risk Behavior in Adolescents

Researchers from the University of Miami and the Medical College of Wisconsin have further clarified the connection between drug use, personality traits, risky sexual behavior, and an increased risk of HIV infection in teens. This study involved adolescents who were enrolled in a court-ordered inpatient substance abuse treatment program. The adolescents who rated higher on personality tests for impulsive behavior were more likely to use alcohol and marijuana and to engage in sexual behavior that increased their risk of contracting HIV. The researchers also found that marijuana use was a predictive factor in an adolescent's choice to engage in sexual activity and that alcohol use was predictive in choosing to have sex with multiple partners.

■ **WHAT IT MEANS:** These findings suggest that personality characteristics, such as impulsive behavior, need to be considered when designing HIV prevention and substance abuse treatment and prevention programs for teens.

This study, led by Dr. Robert Malow, appears in the August, 2001 issue of the *Journal of Substance Abuse*.

Study Details Drug Use and Lifestyle Changes of Students at a New England College over 30 years

In a 30-year study at a New England college, investigators from Harvard Medical School and Duke University reported that over the last 10 years drug use is generally declining and that college students who use drugs are becoming a more distinct population from the rest of the student body in terms of values and lifestyle.

The investigators distributed questionnaires to all seniors attending the college in 1999. Students were asked about their use of marijuana, alcohol, cocaine, lysergic acid diethylamide (LSD), amphetamine, opium, and methylenedioxymethamphetamine (ecstasy), and about aspects of college life. Data from the questionnaires were compared to data collected during similar studies in 1969, 1978, and 1989. Alcohol use remained stable over the 30-year period. However, use of illicit drugs peaked in 1978 and then fell sharply over the next 20 years with the exception of methylenedioxymethamphetamine (ecstasy). Use of this drug increased from about 4 percent in 1989 to more than 10 percent in 1999. In contrast to previous years, the 1999 study revealed that students using drugs had lower grades and spent less time in extracurricular college activities than nonusers.

■ **WHAT IT MEANS:** The results of this study show generally declining trends in drug use among college age students, but an emerging distinct profile of those students who use. Data from this study, together with data from similar studies at other institutions, can provide an overall picture of drug use and lifestyle attributes of college students who use drugs.

The study was published by lead investigator Dr. Harrison Pope in the September, 2001 issue of *American Journal of Psychiatry*.

NEW PUBLICATIONS

Walking a Good Path Free 2002 Indian Country Calendar Now Available

In a unique collaboration to raise awareness about the health risks of drug abuse and addiction, as well as prevention and treatment, American Indian experts and organizations nationwide have collaborated with NIDA to create an intergenerational year 2002 calendar, **Walking a Good Path**.

"This is the second year of this unique and successful partnership between the American Indian community and NIDA to produce a calendar that is both culturally inspiring and educational for people throughout Indian Country," says Dr. Alan I. Leshner, NIDA Director. "It shares the most current science-based information about the health effects and risks of drugs of abuse, and key elements of effective prevention and treatment." **Walking a Good Path** also features powerful photos and quotes from American Indians and Alaska Natives.

Nearly 150,000 **Walking a Good Path** calendars for 2002 are being distributed throughout Indian Country, to tribal leaders, schools, community centers, health care and treatment centers, museums, casinos, and homes.

Free copies of the calendar can be ordered by calling the National Clearinghouse for Alcohol and Drug Information at 1-800-729-6686 and asking for Publication #AVD143. The entire calendar will also be accessible for downloading from <http://www.nida.nih.gov/PubCat/PubsIndex.html>, NIDA's Web site for publications.

Research Report on Prescription Drug Abuse Now Available in Spanish

An estimated 9 million people over the age of 12 used prescription drugs for nonmedical reasons in 1999. In April 2001, NIDA launched a public awareness campaign about recent trends in the misuse and abuse of prescription drugs in the United States, and the Research Report, **Prescription Drugs: Abuse and Addiction** was developed as part of that campaign.

The report has been available in English and now is available in Spanish. The publication answers questions about the consequences of abusing commonly prescribed medications and provides information on how certain medications affect the brain and body. It also discusses treatment options.

These publications may be ordered from the National Clearinghouse for Alcohol and Drug Information. To order, call 1-800-729-6686 or order online at www.health.org. These publications also are available on the NIDA Web site at <http://www.drugabuse.gov>.

Upcoming Events

- March 14-15, 2002: **Blending Clinical Practice and Research: Forging Partnerships to Enhance Drug Treatment**, Grand Hyatt Hotel, New York, New York. (<http://www.mac1988.com/blendingNYC>)

Watch upcoming issues of NewsScan for more information on this event, or call NIDA at 301-443-6245.

For more information about any item in this NewsScan:

- Reporters, call Michelle Muth, NIDA Press Office, at 301-443-6245
- Congressional staffers, call Mary Mayhew, NIDA Office of Science Policy and Communications, at 301-443-6071.

The National Institute on Drug Abuse is a component of the National Institutes of Health, U.S. Department of Health and Human Services. NIDA supports more than 85 percent of the world's research on the health aspects of drug abuse and addiction. The Institute carries out a large variety of programs to ensure the rapid dissemination of research information and its implementation in policy and practice. Fact sheets on the health effects of drugs of abuse and other topics can be ordered free of charge in English and Spanish by calling NIDA Infobox at 1-888-NIH-NIDA (644-6432) or 1-888-TTY-NIDA (889-6432) for the deaf. These fact sheets and further information on NIDA research and other activities can be found on the NIDA home page at <http://www.drugabuse.gov>.

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