

Chair: *Maxine L. Stitzer*, The Johns Hopkins University School of Medicine, Baltimore, MD.

Discussant: *George E. Bigelow*, The Johns Hopkins University School of Medicine, Baltimore, MD.

COUNSELING LEVEL EFFECTS IN METHADONE TREATMENT. A. T. McLellan, George Woody, David Metzger and Charles O'Brien. University of Pennsylvania School of Medicine, Philadelphia, PA.

Substance abuse treatment outcome has often been evaluated without sufficient regard to the services actually delivered and received. These service factors vary not only between programs and modalities but within them as well. Data from our prospective, random assignment evaluation of three different levels of methadone maintenance treatment: Minimum (urine monitoring and crisis counseling), Basic (urine monitoring and regular counseling) and Enhanced (vocational, family and psychiatric services included) will be used to highlight the relationship between treatments received and treatment outcome. A new measure of service involvement, the Treatment Services Review, will also be described. Our preliminary findings have identified a strong relationship between treatment components and treatment outcomes.

EFFECTIVE UTILIZATION OF URINALYSIS RESULTS. Donald A. Calsyn. Veterans Affairs Medical Center and University of Washington School of Medicine, Seattle, WA.

Urine monitoring has been a mandated component of methadone maintenance since its inception. However, procedures for utilizing the results vary widely across treatment sites. A brief review of the role of urinalysis in methadone maintenance will be presented highlighting studies in which urinalysis results are linked to behavioral contingencies. The treatment procedures currently utilized by our program, which include a structured contingency contracting system, will be demonstrated. Data supporting the feasibility and effectiveness of the contracting system will be presented. Finally, a prospective NIDA funded research project being conducted by our group to further assess the efficacy of these procedures will be described.

COMMUNITY-BASED CONTINGENCY PROGRAMS FOR METHADONE MAINTENANCE PATIENTS. Michael Kidorf and Maxine L. Stitzer. The Johns Hopkins University School of Medicine, Baltimore, MD.

Clinic-based and community-based contingency programs have been employed to decrease alcohol and illicit substance abuse among methadone maintenance patients. Clinic-based contingency programs have effectively used take-home methadone and other clinic privileges to reinforce drug abstinence; however, drug use typically resumes following termination of these procedures. In response to treatment generalization issues, current treatments have initiated community reinforcement programs. Specifically, patients can earn goods and services in the community as rewards for drug abstinence. Community reinforcement is often used in connection with skills training and employment counseling. These procedures serve to restructure patients' leisure time while engaging them in new and potentially reinforcing activities in the community. In this paper, I will review the advantages and limitations of clinic-based contingency programs and present current data (including data from

our laboratory) on the efficacy of community-based interventions. Future directions in the use of clinic-based and community-based reinforcement procedures will also be discussed.

PHARMACOTHERAPY PLUS INTENSIVE OUTPATIENT TREATMENT FOR COCAINE DEPENDENCY. Richard A. Rawson. Matrix Center, Beverly Hills, CA.

There is a great interest in the development of pharmacological agents for the treatment of cocaine dependency. Many of the previous outpatient investigations have involved brief evaluations conducted in poorly defined or nonexistent psychosocial support contexts. This presentation will describe a structured outpatient treatment program, the neurobehavioral model, which provides a standardized format within which medications are being evaluated. Currently, double-blind evaluations of desipramine and gepirone are underway and several other medication evaluations are in preparation. Data will be presented on the value of desipramine and gepirone for the treatment of cocaine dependency within the neurobehavioral model.

TREATMENT OF COCAINE DEPENDENCE WITH DISULFIRAM. Dawn D. Delaney, Stephen T. Higgins, Alan J. Bidney, Lisa M. Kent and Warren K. Bickel. University of Vermont, Burlington, VT.

Persons seeking treatment for cocaine dependence also typically abuse other drugs, the most common of which is alcohol. This presentation will overview the available literature on dual cocaine and alcohol dependence, and report some preliminary results from a study currently being conducted in our clinic investigating the efficacy of disulfiram (Antabuse) in decreasing cocaine use in alcohol-dependence clients receiving behavioral treatment for cocaine dependence. This study is the first reported investigation of the use of Antabuse in the treatment of cocaine dependence. Although the results are preliminary, there is reason to believe that this pharmacotherapy may be an effective adjunct in treating cocaine dependence in those clients who additionally abuse alcohol.

SYMPOSIUM

Caffeine and Human Behavior

Chair: *Mary Z. Mays*, USA Research Institute of Environmental Medicine, Natick, MA.

Discussant: *Harris R. Lieberman*, USA Research Institute of Environmental Medicine, Natick, MA.

EFFECT OF DIETARY DOSES OF CAFFEINE ON HUMAN PERFORMANCE, MOOD AND MEMORY. John D. E. Gabrieli. Northwestern University, Evanston, IL; Harris R. Lieberman. Massachusetts Institute of Technology, Cambridge, MA.

Caffeine is a frequently consumed food and beverage constituent that is widely thought to have a stimulant-like effect on human mood and performance. Many controlled studies of the effect of caffeine on mood and performance have used doses of caffeine that are substantially greater than the amount that is typically consumed in a cup of coffee or a glass of cola. A series of studies have examined the effect of smaller, dietary-level doses on human mood and performance. These studies employed double-blind, placebo-controlled, cross-over designs that used two or more doses of caffeine and involved, in a given session, the administration of a single dietary-level dose of caffeine (or