

and validation studies have been conducted on the RAATE-CE, QI, and SUDDS, and field trials are ongoing. CATOR inpatient and outpatient outcome data comparisons, as well as RAATE-CE, QI, and SUDDS data will be presented.

#### SYMPOSIUM

*Washington, DC, Metropolitan Area Drug Study (DC\*MADS): Initial Findings.*

Chair: *Robert M. Bray*, Research Triangle Institute, Research Triangle Park, NC.

Discussant: *Pamela J. Fischer*, The Johns Hopkins University School of Medicine, Baltimore, MD.

**THE WASHINGTON, DC, METROPOLITAN AREA DRUG STUDY: OVERVIEW AND CHALLENGES.** Elizabeth Y. Lambert. National Institute on Drug Abuse, Baltimore, MD.

Most major surveys about drug abuse, such as the National Household Survey on Drug Abuse and the High School Senior Survey, tend to exclude persons from nonhousehold and hard-to-reach populations (e.g., homeless persons, institutionalized persons, criminal offenders, pregnant women, and school dropouts). In contrast, the National Institute on Drug Abuse's DC\*MADS project is a first effort to systematically access all types of people in one metropolitan area and to characterize the nature and extent of drug abuse among them using an integrated, systematic approach.

DC\*MADS is a large-scale comprehensive research effort comprised of 16 related studies that focus on different population subgroups (e.g., homeless and institutionalized people) or different aspects of the drug abuse problem (e.g., economic and psychosocial costs of drug abuse). Together, these studies are designed to a) examine and characterize the epidemiology of drug abuse and its correlates and consequences among the variety of population subgroups residing in the metropolitan area, and b) develop a research model for systematic collection of similar data from hard-to-reach populations in other urban centers of the country.

This presentation will provide an overview of DC\*MADS and examine some of the major challenges the researchers have encountered. The overview will specify the studies included in DC\*MADS, note the relationships among them, describe the data collection methods, and give a status report on the project. Some of the major challenges encountered include: persuading the local communities to "buy in" to the research, conducting successful negotiations with gatekeepers, addressing quid pro quo issues, meeting confidentiality requirements, and ensuring interviewer security.

Some of these challenges are typically encountered in field studies, but all were heightened by the nature of the populations studied and the large number of jurisdictions in the metropolitan area.

**DRUG USE AND RELATED PROBLEMS AMONG HOUSEHOLD RESIDENTS.** Robert M. Bray\* and Mary Ellen Marsden.† \*Research Triangle Institute, Research Triangle Park, NC, and †Brandeis University, Waltham, MA.

The burden that drug abuse poses for communities across the nation is also notable in the Washington, DC, metropolitan area and requires reliable data to guide policy decisions and resource allocation. This presentation will report DC\*-

MADS findings about the use of illicit drugs, alcohol, and tobacco and related problems among members of the household population aged 12 and older.

Data were drawn from interviews with a representative sample of 1,931 persons in the DC metropolitan area. The metropolitan area was oversampled as part of the 1990 National Household Survey on Drug Abuse, sponsored by the National Institute on Drug Abuse. The drugs or classes of drugs examined included marijuana, cocaine (including crack), inhalants, hallucinogens, heroin, nonmedical use of prescription-type psychotherapeutic drugs (stimulants, sedatives, tranquilizers, and analgesics), alcohol, cigarettes, and smokeless tobacco.

Prevalence of drug use will be examined for three time periods: lifetime, past year, and past month. Rates of use will be presented overall and by the demographic correlates of age, sex, race/ethnicity, location within the DC metropolitan area, and socioeconomic status. Data will be related to residents' perceptions of the harmfulness of drug use and opportunities to use drugs. Problems attributed to drug use and alcohol use will also be presented, along with symptoms of dependence. The presentation will conclude with a discussion of the implications of the findings for other analyses and drug prevention policies.

**DRUG USE AMONG RESIDENTS OF INSTITUTIONS.** Gregory H. Gaertner and Linda J. Keil. Westat, Inc., Rockville, MD.

Much is known about substance use and abuse by persons living in households. The National Household Survey on Drug Abuse provides an excellent data series on rates of use of licit and illicit drugs in the noninstitutionalized, household population of the United States. Less, however, is known about substance abuse by people residing for weeks, months, or years in the care and custody of institutions—in prisons, jails, psychiatric facilities, homes for the handicapped and disabled, homes for abused or delinquent children, or psychiatric or correctional halfway houses. This presentation will report on the results of the National Institute on Drug Abuse's DC\*MADS project in a probability sample of institutional residents in the Washington, DC, metropolitan area.

Data were gathered through in-person interviews with 1,250 residents of institutions and group homes located in and around the District of Columbia. The interviews were conducted in 46 institutions and group homes selected with probabilities proportional to size from a list of all institutions and group homes in the DC metropolitan area. Information was collected on current and past use of licit and illicit drugs (tobacco, alcohol, marijuana, crack and other cocaine, opiates, amphetamines including "ice," depressants, inhalants, and psychotherapeutics) using a monthly calendar covering the previous 3-year period. The interview was structured around a life-calendar approach recording changes in residential, employment, and marital statuses; criminal involvements; treatment experiences; and other life events. Additional questions were asked regarding physical and psychological health, risk behaviors, context of drug use, and characteristics of the institutions. The data allow a rich, detailed portrait of drug use etiology and consequences.

The presentation has three aims. First, the institutionalized population of the metropolitan area will be described in terms of the characteristics of institutions and of residents. Second, rates of current use of licit and illicit drugs will be presented,

overall and by the characteristics of institutions and residents. Third, an attempt will be made to develop a joint theory of patterns of institutionalization and drug use. Patterns of drug use and institutionalization histories will be developed and interrelated to current drug use in institutions in the context of a pattern of residential and other life changes, as well as a pattern of noninstitutionalized use. Implications for policies regarding treatment and aftercare will also be presented.

#### DRUG USE AND THE SEVERITY OF HOMELESSNESS.

Michael L. Dennis. Research Triangle Institute, Research Triangle Park, NC.

Although much attention has been focused in the last 10 years on mental illness among people who are homeless, substance abuse continues to be a predominant problem. It is related to the severity of an individuals' homelessness, co-morbid mental illness, and a host of other social problems. Using data from the National Institute on Drug Abuse's DC\*MADS project, this presentation will examine these relationships and how estimates vary depending on the definition and sampling frames that are used.

The NIDA study includes four major samples from the 16 cities and counties in the Washington, DC, metropolitan area: shelter clients, soup kitchen clients, people in outdoor encampments, and people in nondwelling areas of a census block sample. The research design also includes a random temporal sample of 64 days between February and March that allows the calculation of seasonal trends for the shelter clients. The drug and alcohol use items are comparable to the National Household Survey on Drug Abuse and other DC\*MADS studies on people who are institutionalized, criminal offenders, school dropouts, pregnant, entering drug abuse treatment, or young adults.

This presentation will explore the correlation between the severity of alcohol use, illicit drug use, and mental illness, both in a respondent's lifetime and in the last 30 days. It will then examine how this cluster of problems is highly correlated with both the severity of homelessness and desocialization (e.g., at risk of becoming homeless, to living in a shelter, to living in a communal situation on the street, to living alone on the street) and a variety of social problems (e.g., illegal activity, physical illness, unemployment). It will then examine the extent to which people are getting access to the appropriate treatment or services, and the extent to which this access is related to the range of an individual's problems. Of particular concern here is the extent to which individuals with a dual diagnosis are getting help for both their mental- and substance-related problems.

#### SYMPOSIUM

*Childhood/Familial Characteristics and Alcohol/Substance Abuse: Etiological and Risk Factors.*

Chair and Discussant: *William E. Pelham, Jr.*, University of Pittsburgh Medical Center, Pittsburgh, PA.

**MULTIPLE PROCESSES IN TRANSMISSION OF RISK FROM PARENT TO CHILD.** Robert A. Zucker and Hiram E. Fitzgerald. Michigan State University, East Lansing, MI.

This presentation will utilize Wave One findings from the Michigan State University Longitudinal Study in elaborating

a multiple process framework for the transmission of risk for substance abuse and other behavior disorder from one generation to the next. The MSU project is a prospective, population-based high-risk-for-substance-abuse study, which is following families whose sons are initially 3 to 5 years of age. High-risk families have fathers who are convicted drunk drivers with very high blood alcohol levels, who are obtained by way of a total blanket of all drunk driving arrests occurring in a  $3\frac{1}{2}$  county wide area. Yoked community control families are drawn from the same neighborhoods of residence as are the high-risk families, have children within 6 months of age of the high-risk child, but parents in these families are without significant alcohol or any other drug involvement. An extensive and broad-ranging data set on all three family members, collected over nine sessions, and reassessed at 3-year intervals, provides the core data base for the study.

Wave One analyses have already documented a number of findings, which together are indicative of a set of multiple processes operating, all of which will need to be taken into account in any comprehensive, developmentally focused theory of the etiology of alcoholism and other drug involvement. These findings include: a) evidence for subtype differences in type of alcoholism among the parents, with antisocial alcoholism showing the operation of different etiological mechanisms, and different pathways of flow into adult alcoholic difficulty than does nonantisocial alcoholism; b) evidence that indicators of child trouble among preschoolers are consistent with the earlier emergence of the antisocial subtype; and c) evidence that the early pattern of psychosocial risk transmission, at least among preschoolers, is more directly mediated by mothers' behavior than by fathers'. Discussion focuses upon the linkage of these multiple processes into a multifactorial, developmentally framed theory of alcoholic etiologies.

**OBJECTIVE MEASUREMENT OF BEHAVIORAL ACTIVITY IN SONS OF SUBSTANCE ABUSERS.** Ralph Tarter and Timothy Blackson. University of Pittsburgh Medical Center, Pittsburgh, PA.

Forty 10-12-year-old boys having a father with a substance disorder (SA+) were compared to 60 age- and education-matched boys of normal fathers (SA-). Employing the actigraph positioned on the nondominant wrist of the subjects, it was found that SA+ boys demonstrated more behavioral activity than SA- boys during a continuous attention test and a test requiring motor restraint but not during resting condition. Within the SA+ group, subjects scored significantly higher on the actigraph measure of behavior activity level who qualified for a DSM-III-R diagnosis of disruptive behavior disorder (encompassing attention deficit disorder, conduct disorder, and oppositional defiant disorder).

Quantitative assessment of behavioral activity did not correlate with activity level measured by the Dimensions of Temperament Scale (revised) (DOTS-R) or the hyperactivity scale of the Child Behavior Checklist (CBCL). Behavioral activity level was, however, moderately associated with factorial scales of the DOTS and CBCL describing negative affect and externalizing behavior respectively. In addition, an association was observed between the child's activity level and negative affect of the father measured by the Multidimensional Personality Questionnaire.