

# RESEARCH ROUNDUP

## DATOS first-wave findings released

*The goal of DATOS is to study outcomes of typical drug abuse treatment programs.*

The latest issue of the journal *Psychology of Addictive Behaviors* (December 1997) is dedicated to findings from the [Drug Abuse Treatment Outcome Study \(DATOS\)](#), a collaborative research effort funded by the National Institute on Drug Abuse (NIDA) that draws on the expertise of the nation's top treatment evaluation scientists. IBR at TCU, NDRI (National Development and Research Institutes), and the Drug Abuse Research Center at UCLA have joined with NIDA in collaborating on this 5-year project. Articles appearing in this special issue, edited by [Dwayne Simpson](#) and [Susan Curry](#), represent the first-wave of

findings from DATOS and examine key treatment outcome issues including levels of illicit drug use, delivery of treatment services, treatment retention, research methodology, and the utilization of treatment services over time.

In his introduction to the DATOS studies, NIDA chief **Dr. Alan Leshner** notes that "the primary goal of DATOS is to tell us about the effectiveness of drug abuse treatment as it is currently delivered [in the U.S.]." The project collected data on clients in 96 treatment programs located in 11 cities across the

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## British study parallels DATOS findings

An article detailing 6-month follow-up outcomes from the first prospective, multi-site study conducted in the United Kingdom (UK) also is included in the current *Psychology of Addictive Behaviors* issue. **Dr. Michael Gossop** and colleagues at the National Addiction Centre (The Maudsley) in London report on findings from the National Treatment Outcome Research Study (NTORS), which collected data on 1,075 clients admitted to treatment in 54 programs across the UK in 1995. Clients were admitted to one of the four types of

treatment modalities available in Britain—Rehabilitation Units (short and long term residential programs, therapeutic communities, Christian houses), Inpatient Drug Dependence Units (short term programs usually based within psychiatric hospitals), Methadone Maintenance (similar to outpatient methadone programs in DATOS), and Methadone Reduction (outpatient detoxification and counseling services).

The authors report that while most clients entered treatment during NTORS

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## DATOS findings, continued from front page.

country. Admission data was collected on just over 10,000 clients who entered either outpatient methadone treatment (OMT), short-term inpatient (STI), long-term residential (LTR), or outpatient drug-free (ODF) programs in 1991-1993. In addition, data was collected on a follow-up sample of nearly 3,000 clients 12 months after treatment.

Together with the DARP (Drug Abuse Reporting Program) findings of the 1970s and the TOPS (Treatment Outcome Prospective Study) findings of the 1980s, the present DATOS studies help capture a longitudinal snapshot of drug abuse problems and drug treatment responses in the United States.

The following is an overview of the newly released DATOS articles.

### Drug Abuse Treatment Outcome Study (DATOS): Treatment Evaluation Research in the United States

**Bennett W. Fletcher, Frank M. Tims, & Barry S. Brown**

For readers with a special interest in the historical aspects of drug abuse treatment in the United States the authors offer a well-researched and thoughtful opening article that traces the rapid emergence of publicly-funded, community-based treatment in this country and the policy decisions that made it possible. The history, research designs, and findings from both the DARP and TOPS projects are summarized. In addition to describing this historical framework that gave rise to the DATOS research design, the authors

discuss four thematic areas around which DATOS studies are organized. Researchers at NDRI will focus on the theme of health services research, involving access to and use

***Research themes in DATOS include access to services, treatment retention, addiction careers, and policy decisions.***

of drug abuse treatment services; TCU/IBR will take the lead on the theme of client retention and engagement in treatment; UCLA will explore the life course of addiction and treatment careers; and NIDA will focus on policy-relevant issues that impact our national response to drug abuse problems. The authors conclude by describing some of the important research questions that will be addressed in future DATOS studies and calling attention to the contributions made by large-scale national and smaller-scale regional treatment evaluation initiatives over the past 3 decades. *Psychology of Addictive Behaviors*, 11(4), 216-229.

### Methodological Overview and Research Design for the Drug Abuse Treatment Outcome Study (DATOS)

**Patrick M. Flynn, S. Gail Craddock, Robert L. Hubbard, Jill Anderson, Rose M. Etheridge**

This article provides a comprehensive look at the methodology, treatment program characteristics,

client samples, data collection instruments, and analytical approaches used to meet DATOS research objectives. The authors note that "DATOS has an evolving research agenda that is being implemented in stages." All research centers (TCU, NDRI, UCLA and NIDA) will pay close attention to core client issues such as criminal justice, HIV risk, cocaine use, and psychological impairment, with individual centers also focusing on chosen themes related to broader treatment issues such as service delivery and access to services, addiction careers, treatment engagement, retention, and process, and policy development. The paper concludes with a discussion of the research contributions and future direction of DATOS studies. *Psychology of Addictive Behaviors*, 11(4), 230-243.

### Treatment Structure and Program Services in the Drug Abuse Treatment Outcome Study (DATOS)

**Rose M. Etheridge, Robert L. Hubbard, Jill Anderson, S. Gail Craddock, Patrick M. Flynn**

In their investigation of the characteristics of program structure and treatment services delivered in the DATOS sample (1991-1993), the authors made comparisons with similar data from the TOPS studies (1979-1981). They report that primary treatment components for both cohorts included group and supportive therapy, relapse prevention, urine monitoring, and an emphasis on abstinence from all psychoactive substances. They also

note that secondary treatment components seemed to reflect the unique orientation of each treatment modality (OMT, LTR, ODF, or STI). After examining changes in

***The availability of medical, vocational, and other ancillary services appears to have declined over the past decade.***

drug abuse treatment structure and program services over the 10 to 12-year span, evidence was cited showing an overall decline in the availability of comprehensive services (e.g., medical, vocational, psychological) while at the same time a strengthening of core services (e.g., supportive counseling, treatment planning, 12-step referrals, aftercare). For some programs, these changes were a result of cost containment pressures and managed care. *Psychology of Addictive Behaviors*, 11(4), 244-260.

## Overview of 1-Year Follow-Up Outcomes in the Drug Abuse Treatment Outcome Study (DATOS)

**Robert L. Hubbard, S. Gail Craddock, Patrick M. Flynn, Jill Anderson, Rose M. Etheridge**

In this review of 1-year follow-up outcomes in DATOS, data from 2,966 clients treated in OMT, LTR, ODF, and STI programs was studied. The findings highlight a

number of key outcome issues and build a foundation for future studies. Substantial and significant reductions in illicit drug use were reported for clients in all treatment modalities from preadmission to follow-up. In OMT, daily or weekly heroin use fell from 89% of all clients to 28% at follow-up, and cocaine use fell from 42% to 22%. LTR, STI, and ODF clients reported 50% or greater reductions in weekly or daily cocaine use compared to preadmission.

Overall, reductions in drug use were greatest for LTR and ODF clients treated 3 months or more, and for OMT clients still in treatment at follow-up. A multivariate analysis

***Longer treatment stays appear to be associated with better outcomes in all modalities studied.***

further supported the relationship between treatment duration and effectiveness. According to the authors, the patterns of change in DATOS appear similar to those reported in the TOPS project a decade earlier. However, subsequent DATOS studies will investigate more complex questions of access, utilization, and treatment effectiveness not captured in previous national studies. *Psychology of Addictive Behaviors*, 11(4), 261-278.

## Program Diversity and Treatment Retention Rates in the Drug Abuse Treatment Outcome Study (DATOS)

**D. Dwayne Simpson, George W. Joe, Kirk M. Broome, Matthew L. Hiller, Kevin Knight, Grace A. Rowan-Szal**

In this study, the authors examined how program differences relate to treatment retention in three of the major modalities represented in DATOS – LTR, ODF, and OMT. (STI programs were not included in the analyses because of their planned short duration.) In association with DATOS findings that treatment stays of 3 months or longer in LTR and ODF and 12 months in OMT are predictive of better outcomes (see Hubbard et al., above), it is particularly noteworthy that the authors found median lengths of treatment were 3 months for LTR and ODF clients and 1 year for those in OMT. Within each modality, individual programs differed widely on treat-

***Despite expected differences, some programs were found to be more effective than others in retaining clients.***

ment retention rates as well as service delivery. Programs with younger clients who reported heavier cocaine and alcohol use and poorer psychological functioning tended to have shorter retention

See DATOS findings, page 4.

## DATOS findings, continued from page 3.

rates. However, after controlling for client differences, some programs were found to be more effective than others in keeping clients in treatment. It is suggested that more comprehensive profiles of client characteristics, treatment structure and process, and program response to client needs are needed in order to better understand differences in program effectiveness. *Psychology of Addictive Behaviors*, 11(4), 279-293.

### Treatment Retention and Follow-Up Outcomes in the Drug Abuse Treatment Outcome Study (DATOS)

**D. Dwayne Simpson, George W. Joe, Barry S. Brown**

This study examined treatment retention and 12-month follow-up data for a sample of DATOS clients in LTR, ODF, and OMT modalities.

*Clients reported significant improvements in drug use and related problems at 1-year follow-up.*

(Again, STI was not included in the analyses because of its shorter duration.) Overall, clients reported significant improvements in illicit drug use and related behaviors at follow-up. A quasi-experimental design was employed to look at how treatment retention was related to outcomes in each of the modalities. Clients in LTR and OMT who

stayed in treatment longer had significantly better outcomes—a finding that supports retention effects from previous national evaluation studies. In ODF, sample limitations did not permit in-depth analyses that could compensate for the program-specific variations in client characteristics and retention rates found.

Overall, several indicators of treatment process—most notably the client-counselor relationship, the range of services delivered, and client satisfaction with the program—were related to treatment retention. The authors recommend that evaluation studies should continue to address key factors of treatment process and examine the overall impact of treatment process on client retention and recovery. *Psychology of Addictive Behaviors*, 11(4), 294-307.

### Drug Addiction and Treatment Careers Among Clients in the Drug Abuse Treatment Outcome Study (DATOS)

**M. Douglas Anglin, Yih-Ing Hser, Christine E. Grella**

In their study of the DATOS admission sample of over 10,000 clients, the authors found considerable diversity in patterns of drug use and in treatment histories. The article discusses the concepts of addiction careers and treatment careers and provides corresponding measures for examining these frameworks in DATOS. For about half of the clients studied, DATOS was their first treatment experience; the other half averaged about 3.5 prior epi-

sodes of treatment. The type of treatment (OMT, LTR, ODF, or STI) and the cumulative amount of treatment exposure were related to the interaction of drug use patterns and the availability of different treatment approaches. Individuals in STI and ODF were least likely to report prior treatment (about 46%), while those in LTR and OMT were

**Addiction and treatment careers varied for clients in each of the treatment modalities studied.**

more likely to have treatment experience (60% and 74%, respectively). Across all modalities, the average age of first treatment was 29.5 years. Admissions to OMT reported longer addiction and treatment careers, while clients in STI and ODF reported shorter, less severe histories. Using regression analysis, higher levels of prior treatment were shown to be associated with injection drug use, criminal activity, and more severe addiction career characteristics at treatment admission. It is suggested that future approaches to treatment focus on strategic interventions that recognize the diversity of client treatment histories in order to maximize effectiveness. *Psychology of Addictive Behaviors*, 11(4), 308-323. ■

## Summary of DATOS Findings (4 Bar Charts)

Four bar charts are included on this page in the newsletter. To view these charts, please select the link above.

The four charts compare changes from before to after treatment in the treatment modalities studied in the DATOS Project: Outpatient Methadone Treatment (OMT), Short-Term Inpatient (STI), Long-Term Residential (LTR), and Outpatient Drug-Free (ODF).

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## Research Highlights

Drs. [Kevin Knight](#) and [Matthew Hiller](#) presented workshops based on IBR's Criminal Justice Project at the American Probation and Parole Association Annual Winter Training in Orlando, FL in January. Dr. Knight discussed "Community corrections-based substance abuse treatment: Outcome evaluation of

the Dallas County Judicial Treatment Center," and Dr. Hiller presented "Evaluating corrections-based substance abuse treatment programs."

IBR Director [Dr. Dwayne Simpson](#) met with members of the European Multinational Project on Evaluation

of Action Against Drug Abuse in Europe in Zurich, Switzerland in November. He presented "Guidelines for the evaluation of treatment," and discussed issues surrounding treatment engagement and process based on research from the DATAR and DATOS projects. ■

## NIH Panel releases findings on treatment for opiate addiction

The National Consensus Development Conference on Effective Medical Treatment of Heroin Addiction, an independent panel convened by the National Institutes on Health (NIH), has released recommendations developed at its November 1997 meeting in Washington DC. Calling opiate addiction a medical disorder that can be treated effectively with methadone maintenance treatment, the panel

stressed the value of counseling, psychosocial therapies, and other supportive services for enhancing retention and successful outcomes in methadone programs. The importance of motivation for treatment also was recognized, based in part on research being conducted by scientists at IBR. The panel further recommended that unnecessary government regulation of methadone programs be eliminated and urged

that funding be provided to make this treatment modality accessible to all who require it. Additionally, more research was called for to assess the prevalence and financial costs of opiate addiction in the U.S. and to help further determine the factors that impact positive treatment outcomes. The full consensus statement is available through the NIH Web site at <http://odp.od.nih.gov/consensus/> ■

**British study**, continued from front page.

because of heroin addiction, virtually all were polydrug users with multiple drug problems. At intake, clients in the residential modalities (both rehabilitation units and inpatient) were more likely to have used cocaine/stimulants and alcohol in addition to opiates, were older, had longer drug careers, and had more previous episodes of treatment. Methadone Reduction clients were youngest, had used drugs for fewer years, and had fewer episodes of prior treatment. At 6-month follow-up, substantial improvements were noted among clients in all modalities. The percentage of clients using

opiates weekly or more often declined at follow-up as did the frequency and amount used. Clients in Rehabilitation Units, who were more likely to be cocaine/stimulant users at admission, also reduced their use of all forms of cocaine/stimulants at follow-up. The authors conclude by noting the similarities between NTORS findings and those of national, multi-site studies in this country.

Future NTORS research will include a continuing 5-year follow-up of clients in this study, as well as investigations into the impact of

client characteristics and program variables on drug treatment outcomes in Britain.

**The National Treatment Outcome Research Study in the United Kingdom: Six-Month Follow-Up Outcomes** Michael Gossop, John Marsden, Duncan Stewart, Carolyn Edwards, Petra Lehmann, Alice Wilson, Graham Segar, *Psychology of Addictive Behaviors*, 11(4), 324-337. ■

## WEB SITE ADDS FORMS INDEX

IBR is pleased to make available, without charge, a wide array of data collection instruments developed for drug abuse treatment and outcome assessments. A new [Forms Index](#) provides an alphabetical list of all data collection forms that may be downloaded from the IBR web site. The Acrobat(R) Reader, [free from the Adobe\(R\) site](#), assists browsers to read and print the forms in PDF format.



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