RESEARCH ROUNDUP

INSTITUTE OF BEHAVIORAL RESEARCH

Taking care of business: IBR/DATAR data management

Without accurate, easily accessed data, the scope and quality of research findings may be compromised.

The success of any research project depends on the timely and effective management of data. Without accurate, easily accessed data, the scope and quality of research findings may be compromised. It's a complicated task for even a small research endeavor, but IBR's DATAR project presents researchers and support staff with the challenge of managing 5 years of data from a final sample of 1,000 methadone maintenance clients from three geographically separated drug treatment programs in Texas (Corpus Christi, Dallas, and Houston). This article highlights how DATAR goes about the business of managing its research data.

The DATAR project (Improving Drug Abuse Treatment for AIDS-Risk Reduction) is funded by a NIDA research grant for the purpose of developing and implementing improvements to drug treatment and evaluating the results. The goals are to reduce client dropout and relapse and to impact HIV/AIDS risky behaviors. Along with standard intake and background data on each client, the research design calls for data collection at several time points during treatment (30 days, 60 days, 90 days, and every 3 months thereafter). In addition, counselors submit information about the scope and content of each individual and group counseling session, and urinalysis results for drug screening are re-

Other Features

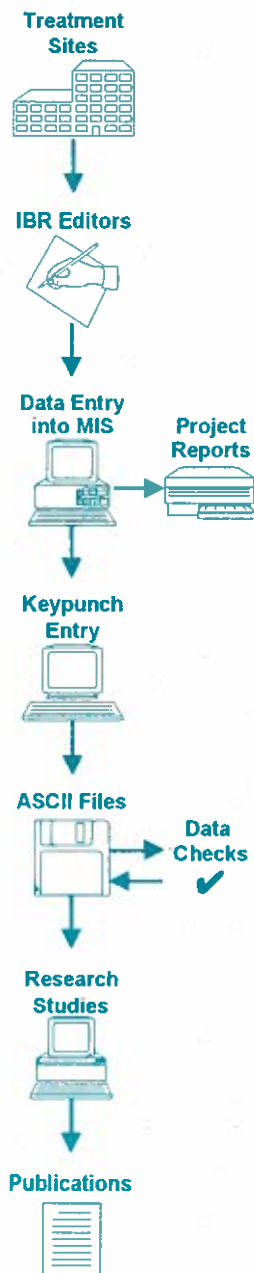# Researchers investigate suicidality risk factors

Suicide is a significant concern for those who work with substance abusing clients. A new DATAR study suggests that drug users at higher risk for suicidality may be discriminated from those at lower risk at the time of admission to treatment based upon their self-reports of psychological dysfunction, their lack of current or past family support, and their own help-seeking behavior in the past. A report on the study, conducted by **Drs. Lois R. Chatham, Kevin**

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Overview of DATAR Data Flow

Treatment Sites

IBR Editors

Data Entry into MIS

Project Reports

Keypunch Entry

ASCII Files

Data Checks ✔

Research Studies

Publications

ported monthly. Counselors and clients also submit periodic evaluations of each other and the program. Finally, follow-up data are collected at 12 and 24 months posttreatment. All total, approximately 38,000 data forms (most of them with multiple pages) have been collected since the project began in 1990.

The front line

The orderly flow of data begins at the treatment sites, where counselors and data coordinators administer forms as they become due and spot check them for accuracy. Forms are then sent to the DATAR TCU office each week via first class mail. Once in-house, data editors **Barbara Thomsen** and **Virginia Schmidt** scrutinize the data forms for errors or omissions. **Jean Fitzgerald** assists the data editors, and manages the organizing and cataloging of "maps," a special data set of client and counselor produced diagrams used in DATAR cognitive enhancement studies. If a problem or error in the data is discovered, the editors work with counselors and data coordinators at the treatment sites to track down missing information from clients and correct recording mistakes. The editors strive to make sure all items on the data forms are accurate, consistent, and easily legible for keypunching.

Data entry phases

Data entry occurs is two phases—entry into the Management Information System (MIS) and keypunch entry (ASCII format). The MIS, designed by **Dr. Grace Rowan-Szal**, uses a relational database software package to track the receipt and progress of all DATAR forms as they move through the data processing chain. The MIS signals when forms are due and identifies forms that are missing or forms that have been received but need further work before keypunch entry. The system also allows staff to create periodic reports for project management such as client census counts, data flow summaries, and reports on missing data. For example,

Matthew Hiller, an IBR graduate student, uses the MIS to generate reports on clients ready for follow-up. These reports track which clients are due for follow-up each month and provide location rates for the different treatment sites.

Once forms are received and entered in the MIS, the process that allows retrieval of data for research studies begins. **Dr. Jack Greener** designs and manages the FORTRAN programs used in the keypunch phase of data

Data checks increase reliability by flagging discrepancies.

entry. He is assisted by **Lindsay Lowenthal** who oversees the actual key punching of forms. Files are returned from keying as ASCII files, and a SAS program is used for range and consistency checks. These checks increase reliability by comparing files and flagging discrepancies. If errors are discovered, data editors again contact counselors and attempt to resolve the discrepancy. The resulting "clean" ASCII data files are then ready for use in analytic studies, allowing selection and merging of variables as needed.

The accuracy and integrity of successful research is dependent on effective data management. In the DATAR project, this has been a complex, ever-changing and developing endeavor requiring constant surveillance of the flow and quality of data collected. The dedication and persistence of staff involved in this process has made all the difference.

A more detailed description and summary of the methods and systems developed by the IBR DATAR project is available upon request to researchers.

For a copy of the technical report, "Data management system for the DATAR Project," contact Dr. Lois Chatham at IBR/TCU. ■

Study looks at drug and alcohol use in suburban workplace

A new study of drug and alcohol use in the workplace is underway using data collected from 325 city workers employed by a mid-size suburban municipality in the Southwest. The study, designed by **Dr. Wayne E. K. Lehman** with IBR's Workplace Project, asked workers to provide self-reports of their personal alcohol and drug use, their perceptions of coworker use, and their attitudes about and tolerance for substance use on and off the job. This information will be used to make comparisons with data from two previous studies of municipal workers in larger metropolitan cities.

Researchers hope to establish both the generalizability and validity of self-report measures of substance use. In addition, the study will examine whether the use of multiple indicators and supplemental measures over and above self-reports of personal use can be used as a tool to provide managers and personnel staff with feedback on potential problem areas in the workplace. Dr. Lehman notes that this type of focused feedback may be especially helpful for employers who want to assess need and build support for Employee Assistance Programs and other problem-solving approaches. ∎

Comparison will be made with data from two previous studies.

Contingency management: positive outcomes for small rewards

Contingency management approaches that offer small, inexpensive rewards to induce new clients to participate more fully in their drug treatment program may hold promise for improving outcomes during the first 90 days of treatment. A recent DATAR study randomly assigned new clients to either receive or not receive inexpensive rewards such as food and gas coupons or other token gifts based on program compliance (attending counseling sessions and reducing drug use). Clients in the contingency management (CM) group were awarded stars for attending counseling sessions and for clean urine screens. Clients were allowed to "purchase" a small prize for four stars, or save up stars for a slightly larger prize.

Results showed that the CM group attended more counseling sessions during the first 90 days of treatment, and had fewer cocaine positive urines in the subsequent three months after the intervention. In addition, clients in the CM group were slightly less likely to drop out of treatment during the first 90 days than were clients in the control group. The study, conducted by **Drs. Grace Rowan-Szal** and **George Joe, Matt Hiller,** and **Dr. Dwayne Simpson,** illustrates the usefulness of positive contingency management approaches in community-based outpatient treatment settings. ∎

CM group attended more counseling sessions during first 90 days.

Staff notes

Corpus Christi

DATAR Counselor **Laura Thorndike** has left CCDAC for a new position in San Angelo, Texas.

Fort Worth

DATAR Associate Research Scientist **Dr. Angie Rosenbaum** has resigned to take a position in the Human Resources Division of U.S. West, a Denver-based communications firm. ∎

Suicidality continued from page 1

Knight, George W. Joe, and **Dwayne Simpson** is due to be published later this year.

The study compared 55 clients enrolled at the Corpus Christi Drug Abuse Council who demonstrated some level of suicidality during treatment (defined as serious threats on at least two occasions, unsuccessful attempts, or successful attempts) with 55 matched controls who demonstrated no suicidality. The results showed that at admission clients who later manifested suicidality reported higher levels of depression, hostility, social dysfunction, risk-taking, and previous thoughts of suicide, along with lower levels of family support in adulthood and childhood. In addition, clients manifesting suicidality during treatment showed evidence of more help-seeking behaviors in the past as indicated by self-referrals to treatment, previous admissions to treatment programs, more attendance at self-help groups, and higher scores on motivational measures of desire for help.

The study suggests that counselors, by careful review of the data they collect on DATAR admission forms, may be able to identify those clients at greater risk for suicidality during treatment. Being able to do this enables the counselor to more quickly detect behaviors that may signal the need for special interventions. ∎

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