

NEW APPROACHES IN THE TREATMENT OF SUBSTANCE ABUSE

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When community-based substance abuse treatment services were introduced in the United States in the 1960s, they were somewhat limited in scope, grossly under funded, and under supported. Few were served by the available treatment programs and many of the existing treatment modalities were found to be ineffective in the long term reduction of drug use. Over the past 30 years, however, many innovative strategies in substance abuse treatment have been developed to ameliorate these problems. New strategies have been designed to serve disparate populations of drug users by matching programs and services to clients with a multitude of special needs. As a result, there are many more options available to drug users who seek help for their addictions. Further, a substantial amount of evidence has accrued on the effectiveness of these innovative treatment programs indicating that drug and alcohol use, drug-related criminal activity, and poor social functioning improve during treatment and remain at more favorable levels after treatment (Ball and Ross 1991; Simpson and Sells 1990).

The difficulty for treatment programs is, however, formulating effective drug-abuse reduction strategies for the diverse populations that require treatment. The challenge for providers is to determine what type of treatment works for what types of people. Indeed, various treatment issues such as modality, counseling techniques, and available resources interact with characteristics of the patient like motivation for treatment, suitability for treatment, and medical and psychological problems (De Leon and Jainchill 1986; McLellan et al. 1993). Client demographics and external environmental events also serve as important influences on treatment entry, retention, and outcome. Over the past 10 years substantial evidence has accrued on the effectiveness of substance abuse treatment, much of which has focused on the incorporation of individual treatment needs into specific treatment modalities.

Nonetheless, political agendas continue to restrict positive steps and the allocation of money toward prevention and treatment efforts. However, the message that treatment works and that treatment is cost effective is becoming increasingly accepted by policy makers. In addition, the problems of HIV and AIDS continue to direct funding efforts on the reduction of high risk behaviors of drug users. The Clinton Administration announced as part of a five-point plan in its anti-drug campaign an initiative to strengthen efforts at prevention and treatment. Of the \$15.1 billion dollars allotted for federal drug spending, about one-third is planned for treatment and prevention.

The National Institute on Drug Abuse (NIDA) has developed a program of research demonstration projects to improve drug-abuse treatment effectiveness and to expand treatment capacity nationwide. NIDA instituted the Applied Evaluation Research (AER) portfolio in an effort to systematically integrate science and practice in the improvement of drug-abuse treatment. Many projects were funded under these initiatives including 12 of the projects included in this special issue. Two projects

incorporated here are not part of the AER portfolio but are nonetheless innovative and worthy of inclusion.

All of the projects contributing to this issue focus on applied community-based drug-abuse treatment research problems. As discussed above, those who seek treatment for drug abuse have diverse problems and needs that must be addressed while in treatment in order to ensure success. Thus, all of the projects presented here vary as to their focus; some deal with methadone maintenance clients, some with criminal justice populations, and others with mentally ill patients. Some of the projects function to modify existing treatment modalities, whereas others have developed new therapies and methods of service organization and delivery. Each of these undertakings makes substantial contributions to our knowledge of the drug-abuse treatment process and outcomes. These innovative approaches form a basis for continued research to build and integrate this knowledge into a set of principles upon which to base future research and to implement successful treatment.

Below are brief summaries of the projects included in this special issue highlighting the salient features and/or significant findings of each work.

Methadone Maintenance Programs

Predictors of Treatment Retention in Enhanced and Standard Methadone Maintenance Treatment for HIV Risk Reduction (Grella, Wugalter, and Anglin)

The predictors of discharge from a methadone maintenance treatment program for heroin addicts at high risk for HIV infection and/or transmission were determined through a survival analysis. Those clients found to be at a higher risk for discharge at intake were HIV seropositive, younger, used cocaine, used alcohol daily, and scored high on measures of depression and interpersonal problems. However, the receipt of enhanced methadone treatment, which included case management services, group participation, psychiatric services, contingency-based reinforcers, and transportation assistance, was associated with a higher probability of retention. These findings can be used to target individuals who are vulnerable to early discharge from treatment and to provide adjunctive services that may improve retention.

Outcomes of Methadone Maintenance 1 Year After Admission (Maddux and Desmond)

A cohort of over 600 opioid users was followed for 1 year after admission to methadone maintenance. At the end of the year 52% were still on methadone and among these clients, days of intravenous drug use, crime, and needle-sharing had decreased markedly from pre-admission activities. Among those off methadone, these activities also decreased but appeared to be related to increased days of incarceration. Subjects with more years of intravenous (IV) drug use were more likely to be on methadone at the end of the year, and subjects under compulsory supervision were less likely to be on methadone. Findings confirm previous reports of decreased illicit opioid use, crime, needle use, and risk of infection for HIV among opioid users who remain on methadone.

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Strategies for Improving Methadone Treatment Process and Outcomes (Simpson, Joe, Dansereau, and Chatham)

The Drug Abuse Treatment for AIDS-Risk Reduction (DATAR) project's purpose is to improve therapeutic interventions, increase treatment retention, and reduce relapse rates of IV drug users in methadone treatment. The DATAR program of research focused on therapeutic enhancements to methadone treatment administered by three multi-modality community-based drug-abuse treatment agencies. The therapeutic processes were enhanced by the addition of cognitive learning principles for improving communication in the counseling process, the provision of psycho educational training materials, and the use of behavioral approaches for increasing treatment engagement. In addition, a project management system was created that provided clinical training and monitored counseling services, data collection, and agency performance. During-treatment performance and follow-up outcomes collected 1 year after discharge indicate that enhanced counseling and length of time spent in treatment were related to treatment outcomes.

Residential Programs

An Effective Model of Prison-Based Treatment for Drug-Involved Offenders (Inciardi, Martin, Butzin, Hooper, and Harrison)

The effectiveness of a multistage therapeutic community (TC) for offenders is examined. This innovative treatment strategy entails a three-stage program designed to correspond with a client's changing correctional status—incarceration, work release, and parole. Eighteen month follow-up data are analyzed for those who receive treatment in: (1) a prison-based TC only, (2) a work release TC followed by aftercare, and (3) a prison-based TC followed by the work release TC and aftercare. These three groups are compared with a no treatment comparison group. Results indicate that those receiving treatment in the two-stage (work release and aftercare) and three-stage (prison, work release, and aftercare) models had significantly lower rates of drug relapse and criminal recidivism even when adjusting for other risk factors. These findings support the effectiveness of a multistage TC model for drug-involved offenders.

Changing the Behavior of Substance Abusers: Factors Influencing the Effectiveness of Therapeutic Communities (Nielsen and Scarpitti)

CREST Outreach Center is a combined therapeutic community and work release program for substance abusers with criminal histories. The authors present a comprehensive framework for understanding how and why TCs work based on the success of the CREST treatment modality. This unique framework considers both structural and programmatic elements and individual factors in attempting to understand the relationship between the treatment process and change in clients. Data derived from a process analysis of the CREST program generates a framework that attempts to show the dynamic processes ongoing among various elements in the TC setting. These dynamic processes work to produce global changes in the clients that are necessary for living drug free.

Participant Observation of a Therapeutic Community Model for Offenders in Drug Treatment (Mello, Pechansky, Inciardi, and Surratt)

Participant observation of two therapeutic communities (TCs) for drug-using offenders was completed over a 1-month period. One of the TCs is located inside a separate area of a medium to maximum security prison and the other operates as a work release halfway house. This study presents a detailed description of the treatment modalities used at these TCs and is complemented with a theoretical analysis of the process. Clinical and developmental psychological approaches are used to explain the functioning of TCs when applied to a correctional setting.

Recruitment into Treatment of Homeless, Mentally Ill, Chemical Abusing Men (Rahav, Nuttbrock, Rivera, and Ng-Mak)

Psychiatric and socio-demographic characteristics, substance abuse, and family histories of the understudied population of homeless, mentally ill, chemical abusing men (HMICAs) were examined in relation to treatment recruitment, entry, and retention. The study aimed to identify correlates of recruitment attrition focusing on over 800 men who were recruited for treatment but did not actually enter treatment. Results indicate that certain client characteristics predict rejection and certain other characteristics predict acceptance by treatment programs. It was found that at the prescreening interview the main focus is on the candidate's psychological status and his ability to function in a residential treatment environment: those rejected are likely to be organically brain damaged, older, alcoholic, white men. And further, the treatment programs look for candidates who can be integrated into a facility without giving the staff a hard time; therefore, those with a history of crime and violence are likely to be rejected.

Case Management Programs

Improving Substance Abuse Treatment Access and Retention Using a Case Management Approach (Mejta, Bokos, Mickenberg, Maslar, and Senay)

A cohort of 360 intravenous drug users were interviewed monthly over a 3-year period to evaluate the effectiveness of an innovative case management model. Clients pursuing substance abuse treatment were either assigned to case managed treatment or a comparison group. The goal of the case management treatment was to provide rapid access to treatment, increase retention, improve outcomes, and to reduce drug use and HIV risk behaviors. Results indicate that the case-managed clients entered treatment more quickly, in greater numbers, and remained in treatment nearly twice as long as did the comparison group. Case-managed clients also showed better treatment outcomes including reduced alcohol and drug use.

Day Treatment Programs

Passages: A Therapeutic Community Oriented Day Treatment Model for Methadone Maintained Clients (De Leon, Staines, and Sacks)

Passages is a day treatment center based on TC methods. The Passages approach uses a recovery-oriented perspective in which methadone is used to facilitate the recovery process. Differences between Passages and traditional TCs include placing a greater emphasis on outreach and advocacy, reduction in the intensity of

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interactions, and more flexibility in the phases of treatment. Preliminary findings based on over 500 research participants indicated that clients who remained in Passages for 6 months showed considerably more improvement in the reduction of both heroin and cocaine use, drug risk behaviors, and psychological status compared with non-Passages clients. These results suggest that it is possible to successfully integrate methadone maintenance and TC-oriented day treatment in methadone clinics.

Client Satisfaction with Drug Abuse Day Treatment Versus Residential Care (Chan, Sorensen, Guydish, Tajima, and Acampora)

Chan and her colleagues examined client satisfaction among clients who entered the Walden House day treatment and residential programs. Day treatment programs target patients who need more structure and support services than outpatient programs provide, but can get by without the resources and expense of inpatient care. Overall treatment satisfaction and helpfulness of treatment components for 216 clients randomly assigned to day or residential treatment were compared. Clients in both treatment modalities were highly satisfied with overall services and mean satisfaction scores did not differ by treatment assignment. However, mental health services were less helpful to day treatment clients, and more day treatment clients indicated not receiving certain treatment components. Client satisfaction correlated with treatment retention and several baseline and 6-month severity outcomes. Findings indicate that day treatment may be as satisfying to clients as residential treatment and, thus, may be a viable option for treatment programming.

Day Reporting Centers as an Alternative for Drug Using Offenders (McBride and VanderWaal)

The development, implementation, and effectiveness of a day reporting center (DRC) for drug-using offenders is examined. DRCs often receive participants who are awaiting trial, who are directly sentenced to the program, or who are placed there as a condition of probation and, thus, serve to reduce jail and prison overcrowding. The Cook County DRC program discussed here entailed assessment, orientation, and program services including drug treatment, educational and vocational services, and other habilitation services. While in the program, participants reduced their drug use, significantly improved the rate of their appearance for court dates, and had a very low rate of arrests on new charges. The program did have difficulties in integrating its services with other community services after participants left the program. Overall conclusions support the use of day reporting centers as a valuable, effective addition to services for the reduction of drug use among offenders.

Multimodality and Other Eclectic Programs

Changes in HIV/AIDS Risk Behaviors in Drug Users in St. Louis: Applications of Random Regression Models (Gallagher, Cottler, Compton, and Spitznagel)

The St. Louis Effort to Reduce the Spread of AIDS (ERSA) had the primary goal of reducing the spread of HIV by counseling cocaine and opiate users and by improving drug treatment programs in the area. A structured interview was administered six times over an 18-month period to a street-based community

outreach sample of 475 persons. Of the 475 participants, 274 also volunteered to receive either methadone or drug-free treatment. Group and individual level changes in risk behavior were assessed using a new method for examining repeated measures data—random regression models. Overall, there were statistically significant reductions in the number of sexual partners and injection drug use over the course of the study. In addition, there were significant reductions in the number of sexual partners of those who received treatment compared to the non-treated group. Results from this study indicate that an HIV/AIDS community-based intervention project can have a measurable impact on risk behaviors among injection and non-injection drug users.

Behavioral Treatments of Cocaine Addiction: Assessing Patient Needs and Improving Treatment Entry and Outcome (Kirby, Marlowe, Lamb, and Platt)

Research on behavioral interventions for cocaine dependence among low-income, minority, inner city clients focused on gaining better awareness of the multiple problems of this population and in improving treatment entry and outcome. Findings indicated that clients who enter drug treatment should be assessed for drug use, psychiatric illness, and neuropsychological function, as these are considered potential covariates of effective treatment programming. With regard to the improvement of treatment entry, retention, and outcome, (1) particular attention needs to be paid to patients who are highly anxious, are involved in the criminal justice system, or who live further distances from the clinic, (2) immediate intake should be offered to clients who call to make an initial appointment, and (3) the use of voucher incentive systems employing large, immediate incentives for provision of cocaine-free urine samples should be considered.

Mapping Techniques to Improve Substance Abuse Treatment in Criminal Justice Settings (Pitre, Dees, Dansereau, and Simpson)

One new approach to drug abuse treatment is the use of a graphic representation tool called node-link mapping. Node-link mapping is a multi-purpose visual communication technique in which ideas are represented by "nodes" and are connected to each other by named links specifying interrelationships. This tool was used to improve mandated substance abuse treatment in a 4-month residential criminal justice program. Probationers in this study were randomly assigned to either mapping-enhanced or standard counseling. Compared to those in standard counseling, residents receiving mapping gave more favorable evaluations to their group meetings, counselors, co-residents, and security staff. The node-link mapping clients also rated themselves more favorably on treatment effort and self-efficacy measures than did their counterparts. Findings suggest that counseling enhanced with mapping fosters more effective communication during meetings, promotes stronger therapeutic alliances, and enhances the perceptions of the effectiveness of the program and of the people associated with it. Overall, node-link mapping may be a powerful adjunct to traditional substance abuse counseling.

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