

cal passions profoundly influence discourse concerning addictions and drugs around the world, including the formal literature of psychology on these topics. To "de-rhetorize" these issues, it is necessary to reexamine some fundamentals of psychology and history. These include: the meaning of the English-language word *addiction* prior to the 19th century, the fact that human beings can be "given over" to various objects of devotion in ways that can be either beneficial or harmful, the history of the American temperance movement and the psychological assumptions that it popularized, and the conditions under which cause and effect can be reasonably inferred. Exploration of these fundamentals leads to a critical view of the DSM-III-R classification of addictive behaviours, the view of addiction as an essentially pathological phenomenon, the imposition of professional treatment on addicted people, and the assumption that drugs cause any significant portion of "drug-related" social problems.

SYMPOSIUM

Drug Abuse Treatment in Special Populations

Chair: *John Grabowski*, University of Texas, Houston, TX.

Discussant: *John Grabowski*, University of Texas, Houston, TX.

SHAPING OF ILLICIT DRUG USE IN TWO HEALTH-COMPROMISED POPULATIONS. Ronith Elk, John Grabowski, Howard Rhoades, Joy Schmitz and Ralph Spiga. University of Texas, Houston, TX.

Drug abuse by pregnant women can pose extreme risks with personal, social, and economic consequences. Tuberculosis-positive, intravenous drug users who abuse drugs increase the risk of hepatotoxicity. The need for an efficacious intervention on drug use in these two populations is imperative. Shaping by successive approximations involves reinforcing successive approximations of a desired target behavior until the goal is reached. While this intervention has been demonstrated to be effective in the treatment of other behavior problems, it has been implemented only infrequently in drug abuse treatment. The purpose of this investigation was to investigate the efficacy of an innovative shaping procedure in reducing cocaine or marijuana (THC) use in two health-compromised populations: opiate-dependent patients receiving prophylactic treatment for tuberculosis, and opiate- or cocaine-dependent pregnant women abusing drugs.

Subjects were 6 TB positive patients and 4 pregnant women abusing either cocaine or THC. A within-subject A-B design with contingency management interventions on cocaine or THC was implemented. There was no intervention on drug use in baseline. During the contingent phase, patients were reinforced for a decrease in the quantity of cocaine/THC in the urine sample from the previous sample, and received a reinforcer of a larger magnitude for a cocaine/THC-free sample. They received an additional weekly reinforcer if all three samples per week met these criteria. In 8 patients (5 TB-positive and 3 pregnant) cocaine use was intervened on, and in 2 patients (1 TB-positive and 1 pregnant) intervention was on THC use.

Three patients are still in study. Preliminary analyses indicate marked improvement in 7 patients, with 0–20% cocaine/THC-free samples in baseline compared with 40–100% drug-free samples in contingency condition. There was moderate impairment in 1 patient and no improvement in 2 patients.

These results are extremely promising. Systematic replications in larger *N* studies are being conducted at our clinic.

FEMALES SEEKING TREATMENT FOR COCAINE DEPENDENCE: ASSESSMENT AND OUTCOME. Alan J. Budney, Stephen T. Higgins, Warren K. Bickel and Doris H. Ogden. University of Vermont, Burlington, VT.

Females represent 15–30% of persons seeking treatment for cocaine dependence. It is important to assess whether gender influences treatment-seeking behavior and/or treatment outcome. Potential gender differences need to be examined in the following areas: 1) drug-use factors such as age at initiation of use, duration of use, types of drugs used, severity of use, current use patterns, and consequences of use; 2) economic stability; 3) social support; 4) relationship stability; and 5) comorbid psychopathology.

Demographic, drug and alcohol use, and psychiatric functioning data were collected from 127 consecutive admissions to a university-based outpatient cocaine clinic who requested treatment for cocaine-related problems and met DSM-III-R criteria for cocaine dependence. Thirty-four (27%) were women.

Age, education level, marital status, and weekly income did not differ between women and men. Women, however, were less likely to be employed during the prior three years, and the type of living arrangements differed between women and men. No global differences in psychiatric functioning were observed. Women did not differ from men on any cocaine-use variables, except they reported fewer years of occasional use prior to becoming regular cocaine users. Women reported less alcohol use prior to entering treatment, although they were equally likely to be alcohol dependent. Women were less likely to be marijuana dependent. Interestingly, women were less likely to have sought treatment prior to entering our clinic despite reporting substance abuse histories of equal duration to men.

We further examined differences in outcome between 20 women and 52 men who received behavioral treatment for cocaine dependence. No significant differences emerged in duration of cocaine abstinence achieved during treatment. The behavioral treatment, however, includes a range of services that are employed based on the specific needs of each patient; thus, our finding no difference may be a function of differential use of treatment services. We are in the process of evaluating this possibility.

TREATMENT OF TOBACCO DEPENDENCE IN POST-MYOCARDIAL INFARCTION PATIENTS: TREATMENT SEEKERS VS. TREATMENT REFUSERS. J. M. Schmitz, F. Fuentes and T. Le. University of Texas, Houston, TX.

The health benefits of maintaining smoking abstinence following a major cardiac event are unequivocal and well-documented. Despite such motivational health reasons, research generally reveals that maintaining abstinence from smoking is nearly as difficult to achieve for post-myocardial infarction (MI) patients as it is for the general population. Specialized treatment interventions for cardiac patients suffering from smoking-related health problems have produced substantial treatment effects in some studies, but only slight improvements over usual care or no intervention in other studies. Most people who quit smoking do so on their own, outside of

structured treatment contexts. Little is known about self-initiated smoking cessation behavior among cardiac patients. We undertook this study in preparation for a longitudinal analysis of patients attempting to maintain smoking abstinence without treatment assistance following MI. In this ongoing study we evaluate baseline differences between treatment seekers and treatment refusers on smoking history, disease severity, and psychological variables.

Subject were 48 patients hospitalized for treatment of acute myocardial infarction (AMI). At a predischARGE interview, patients were asked specific questions regarding their desire to quit "on your own" vs. "with treatment assistance." Information on demographic, smoking history, and disease severity variables were collected while patients were in the hospital. Peak blood levels of the enzyme creatine kinase (CK) were used as the primary objective biological index of infarction severity. Left ventricular ejection fraction was used as another index of MI severity. Perceived ratings of MI severity and percent to which smoking contributed to their MIs were made on 9-point scales. All patients attended an assessment session seven days postdischarge, during which time additional psychological measures were administered, including the Smoking Confidence Questionnaire, the Beck Depression Inventory, a measure of perceived social support, the General Health Questionnaire, and the POMS.

The screening procedure has resulted in 22 treatment-seeking patients and 26 treatment "rejectors" to date. Preliminary analyses show gender and education differences. Patients who desire to quit on their own tend to be male, and have more years of education than patients who seek treatment. Those seeking treatment report more years of smoking, shorter periods of abstinence, and higher scores on the Fagerstrom nicotine dependence measure. Finally, treatment seekers experience more severe MIs, as indicated on both subjective and objective measures. Treatment seekers rate smoking as more contributory to their heart illness compared to treatment refusers. To examine the predictive utility of these baseline variables, three- and six-month follow-up assessment of smoking behavior is in progress, and will be presented at the meeting.

Clinic-based cessation programs appear to serve a small but important population of smokers, including those most at risk for tobacco-related morbidity and mortality. In a group of patients with cardiac disease we found interesting baseline differences between those individuals seeking treatment and those preferring to quit without formal treatment assistance. These observations will be discussed within the context of potential predictors of treatment responsiveness in special populations.

PSYCHOSOCIAL ISSUES IN TREATING DRUG ABUSERS WITH AIDS. James L. Sorensen, Julie A. London and Tamara Wall. University of California, San Francisco, CA.

Psychologists working in substance abuse treatment programs need to cope with the emerging epidemic of acquired immunodeficiency syndrome (AIDS). This presentation reviews new research in psychosocial aspects of treating patients with AIDS in a drug treatment program.

San Francisco General Hospital's Substance Abuse Services has developed specialized services for people with AIDS. Through preferential admission policies the patient population has shifted so that over 60% of methadone maintenance patients have symptomatic HIV infection. Although medical treatment is vital, it is also important to address psychosocial

issues. Research is underway in three areas: bereavement among patients, adherence to medications, and case management.

Drug abusers with AIDS experience the death of friends and relatives, and bereavement complicates the treatment process. A prevalence assessment revealed that over 90% of patients in the maintenance program knew three or more people who had died in the past 12 months.

Nonadherence to medication regimens has been significant. In the maintenance program the average patient is prescribed six medications. An intervention was developed and piloted to increase adherence to AZT among drug abusers with AIDS. This random assignment study is revealing significant improvement in patients' adherence to the thrice-daily medication regimen, as measured by biological, behavioral, and self-report measures.

Drug abusers with HIV disease may underutilize outpatient programs and overuse more expensive emergency and inpatient care. A pilot study is examining the impact of providing intensive case management to these patients when they are hospitalized. Preliminary results of a random-assignment study indicate benefits in linking patients with social services.

SYMPOSIUM

The Impact of Discoveries in Psychopharmacology on Clinical Psychology Practice.

Chair: *Carolyn M. Mazure*, Yale-New Haven Hospital, New Haven, CT.

Discussant: *Charles R. Schuster*, NIDA Addiction Research Center, Baltimore, MD.

PHARMACOLOGICAL INTERVENTIONS FOR SUBSTANCE ABUSE: IMPLICATIONS FOR PSYCHOLOGISTS. Stephanie S. O'Malley. Yale University School of Medicine, New Haven, CT.

New and promising pharmacological treatments recently have been identified as potentially important adjuncts to the treatment of substance abuse. As new medications are developed, psychologists will have an important role in delineating the conditions under which the effects of these medications can be maximized. These include techniques to increase adherence to medication regimens, the development of cognitive behavioral strategies to augment reductions in craving induced by pharmacotherapies, and teaching coping skills and lifestyle modifications in order to promote long-term maintenance of change. The current status of pharmacological interventions for opiate dependence, cocaine abuse, and alcoholism will be reviewed. Pharmacological interventions designed to aid in rehabilitation rather than detoxification will be discussed in terms of the rationale for the medication, including 1) the reversal or amelioration of protracted abstinence, 2) reduction of desire to use substances, 3) blockade of the reinforcing properties of the substance, and 4) the use of nonaddicting psychotropic drugs for comorbid psychiatric disorders that may contribute to the substance abuse problem. In addition to providing an overview of medications for opioids and cocaine, examples from pharmacological studies of alcoholism will be used to illustrate how psychological interventions play a key role in determining the ultimate response to treatment. Recent research on the use of naltrexone in the treatment of alcohol dependence clearly suggests that the type of psychotherapy provided can differentially interact with medication to influence abstinence rates and rates of relapse to heavy drinking. Abstinence rates, for example, appear to be augmented by the