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

combination of supportive therapy and naltrexone, whereas the combination of naltrexone and coping skills therapy is most effective in helping the patient avoid relapses to heavy drinking.

PSYCHOPHARMACOLOGY TREATMENT RESEARCH IN DEPRESSION: IMPLICATIONS FOR CLINICAL PSYCHOLOGY PRACTICE. M. Tracie Shea. Brown University, Providence, RI.

The effectiveness of various forms of antidepressants in the treatment of depression has been well-established in placebo-controlled trials. Findings from a large multisite naturalistic study of the course of affective illness (the NIMH Collaborative Depression Study), however, have suggested that a substantial proportion of individuals with depression seeking treatment in the community receive less than adequate levels of treatment (psychotherapy or pharmacotherapy) (Keller et al., 1986). Perhaps one factor contributing to this discrepancy is the lack of clarity regarding the answers to more specific treatment-related questions, such as: When should psychopharmacology be considered in the treatment of depression? When should psychopharmacology be the treatment of choice? How long should depressed patients be treated with pharmacotherapy? More recent research has begun to shed light on such questions.

The purpose of this presentation will be to highlight recent findings from psychopharmacology research that are relevant to such treatment choices in depression. Findings will include the implications of diagnostic subtypes, symptom severity, level of functioning, chronicity and recurrence of depression, and personality traits and disorders for treatment with psychopharmacology. Other treatment considerations including speed of response and duration of treatment will also be considered. The implications of this research for clinical psychology practice will be discussed.

NEW MEDICATIONS FOR SCHIZOPHRENIA: THERAPEUTIC IMPACT AND SIDE EFFECTS. Nina R. Schooler. University of Pittsburgh, Western Psychiatric Institute and Clinic, Pittsburgh, PA.

Antipsychotic medications such as chlorpromazine were among the first effective pharmacologic therapies for mental illness. Their efficacy in the treatment of psychotic symptoms is well established. Further, they may provide the base for additional psychological therapeutic gains. However, side effects of these medications also present substantial obstacles to psychological therapies. Motoric slowing, restlessness, tremors, and even memory deficits can compromise the ability of client to profit from psychological treatment. This presentation will first review the clinical and behavioral profile of effects of currently available antipsychotic medications, focusing on effects that may enhance psychological therapies and those that may impede treatment. Second, it will examine evidence regarding the role of medication in the context of specific psychological therapies: individual treatment or psychotherapy, family treatment, and behavioral and group therapy. For the first time in 20 years there is a new drug available for treatment of schizophrenia (clozapine). Two other agents are in late stages of development and will be marketed within the next several years (remoxipride and risperidone). Finally, the presentation will compare currently marketed antipsychotic drugs to these newer compounds in terms of both efficacy and side effects. Based on this comparison (and in the absence of experimental data regarding the relationship of novel antipsychotic medication and psychological treatment), we will speculate on how the spectrum of effects of new antipsychotic medications may influence clinical psychology practice with schizophrenic patients in the future.

SYMPOSIUM

Developmental Perspectives on Substance Abuse: Childhood to Adulthood.

Chair: *Stanley W. Sadava*, Brock University, St. Catherine's Ontario, Canada.

DEVELOPMENTAL SYSTEMS THEORY AND ALCOHOLISM: ANALYZING PATTERNS OF VARIATION IN HIGH-RISK FAMILIES. E. Fitzgerald, R. Zucker and H. Yang. Michigan State University, East Lansing, MI.

The MSU Longitudinal Study involves over 250 predominantly low-SES families, 150 having fathers who meet DSM-III-R criteria for alcohol dependence or abuse (approximately 40% of the mothers also meet these criteria) and 90 in which neither the mother nor father meet such criteria. When families enter the study, they must be intact and have a biological son between the ages of 3 and 5. In this report, we focus on data from Wave 1 that pertain to parental ego functioning, maternal social support, and stress-mediated parental psychopathology (lifetime alcohol problems, antisocial behavior, current depression), and to children's temperament, behavior problems, and cognitive functioning. The biopsychosocial or developmental systems model driving this prospective study presumes that each individual has a unique developmental and experiential history.

From a developmental systems perspective, alcohol abuse is conceptualised as a life span problem with roots reaching at least to the preschool years. Our multifactorial approach dictates five levels of analysis relevant to investigations of the structure and function of a system. First, the subsystems or individual components of the systems must be identified and described (e.g., assessing the presenting state characteristics of individual members of the family). For example, alcoholic males have higher lifetime alcohol problems, antisocial behavior, and self-reported depression (all p's $< .01$) than do nonalcoholic males. Male COA's have more total behavior problems ($p < .05$) than children of nonalcoholics. Second, the structural and functional connections of subunits must be identified and described (e.g., assessing intrafamilial relationships such as spousal, parent–child, and sibling relationships). For example, greater worst-ever depression in fathers is associated with greater lifetime alcohol involvement and current depression among mothers ($P < .01$). Third, one must identify and describe properties that emerge when this collection of components is coupled together into a specific dynamic structure (e.g., assessing family structure and function as reflected by family traditions, values, beliefs, resources, and cohesiveness). Fourth, one must identify adjunctive systems (such as work, neighborhood, and subculture) that may have direct effects on the family unit or that affect the family indirectly via individual members (e.g., assessing the impact of adjunctive systems on individual and family functioning). Finally, one must describe and eventually test predictive models of systemic state changes (e.g., assessing linear and nonlinear