and results of the study will be reviewed. Additionally, descriptive information obtained from focus groups with successful program completers regarding aspects of the program that they thought help them will be discussed.

SYMPOSIUM

The Psychologist's Role in Pharmacologic and Behavior Treatment of Alcoholism.

Chair: *Raye Litten*, National Institute on Alcohol Abuse and Alcoholism.

Discussant: *John Allen*, National Institute on Alcohol Abuse and Alcoholism, Washington, D.C.

PHARMACOTHERAPY FOR TREATMENT OF ALCOHOLISM: OVERVIEW. Raye Z. Litten, National Institute on Alcohol Abuse and Alcoholism, Washington, D.C.

Medications can assist in treatment for alcohol in four ways: 1) reduce problems with acute withdrawal; 2) diminish craving or desire to drink; 3) improve emotional and cognitive functioning in recovering alcoholics; and 4) reduce risk of relapse to drink. Significant progress has been made in developing medications to satisfy each of these goals. Development of appropriate medicational strategies and incorporating them into alcoholism treatment programs also requires that consideration be given to a variety of psychological issues. The opening presentation of the symposium will review current medications and research results on promising new agents and will highlight key behavioral-pharmacologic issues involved in alcoholism treatment.

The most exciting pharmacological recent advances have been made in development of medications to decrease desire to drink. Progress in this area has resulted from important findings in the biological and behavioral bases of drinking behavior. Physiological mechanisms underlying alcohol consumption are complex and involve several major neurotransmitter systems including serotonergic, dopaminergic, opioid, norepinephrinergic, and gamma-aminobutyric acid pathways. Particularly promising for reducing desire to drink are opioid antagonists and serotonin reuptake inhibitors. Medications originally developed to treat depression and anxiety also reveal potential for diminishing drinking behavior. The opening presentation will briefly summarize these drug classes. Specific research on them will be reviewed by the second two speakers, who are themselves leading researchers on these topics.

Concurrent with development of medications, a wide range of behavioral issues have emerged which require resolution if the medications are to be effectively implemented in alcoholism treatment. The first session will address several of these issues to include developing a criteria for use of medications and alternative psychosocial interventions, integrating pharmacological agents with psychosocial therapies to enhance treatment outcome, implementing techniques to increase medicational compliance, matching specific drug treatments to subtypes of alcoholics, and developing treatment plans for treating alcoholics with comorbid psychiatric disorders.

The first presentation will conclude with a perspective on future research needs and research support opportunities.

OPIOID ANTAGONISTS IN THE TREATMENT OF ALCOHOLISM. Stephanie S. O'Malley, Yale University School of Medicine, New Haven, CT.

Recent clinical trials indicate that opiate antagonists provide an effective pharmacological adjunct to psychosocial treatments for alcohol dependence. Several studies strongly suggest that opioid antagonists can reduce relapse rates and increase abstinence rates over 12 weeks. In particular, alcohol dependent patients treated with the opioid antagonist naltrexone reported lower craving for alcohol, fewer drinking days, and lower relapse rate than the placebo group. Interestingly, when the subjects did "slip" and have one or two drinks, the naltrexone group was less likely to continue drinking than the placebo-treated patients. In addition, the type of psychosocial intervention influenced treatment outcome. Dr. O'Malley found that the naltrexone-treated subjects receiving supportive therapy had the highest rate of abstinence, while subjects receiving both naltrexone and coping skills therapy had the lowest relapse rate and the lowest level of craving for alcohol. Finally, patients treated with naltrexone continued to enjoy better outcome over the first few months of follow-up.

In this presentation Dr. O'Malley will review research findings on the use of opiate antagonists in the treatment of alcohol dependence and explore implications of these findings for the practice of clinical psychology. The following topics will be addressed: 1) pharmacological effects of opioid antagonists, 2) type of improvements in treatment outcome, 3) medicational safety issues, 4) characteristics of effective responders, 5) integration of medication and psychosocial treatments, and 6) behavioral methods to maximize medicational compliance.

PHARMACOTHERAPY FOR ALCOHOLISM TREATMENT WITH PSYCHIATRIC COMORBIDITY. Barbara Mason, University of Miami School of Medicine, Miami, FL.

Alcoholism is frequently associated with psychiatric disorders including depression, anxiety, and antisocial personality disorders. The prognosis of alcohol dependent patients with collateral psychiatric disorder is generally diminished because comorbidity is often not recognized nor adequately treated by clinicians or counselors.

Over the past several years alcohol research has begun to address the shortcomings in clinical management of alcoholics suffering from comorbidity. In particular, researchers have begun to investigate effectiveness of several mood-altering drugs on alcoholics with collateral psychiatric disorders including tricyclic antidepressants, serotonin reuptake inhibitors, the anxiolytic agent buspirone, and lithium. Preliminary results of several studies indicate that tricyclic antidepressants and serotonin reuptake inhibitors are particularly promising in reducing both mood and drinking behavior in alcoholics with collateral depression. Findings from these studies along with results from other medicational trials will be presented and discussed.

A range of clinical and behavioral issues for alcoholism treatment of comorbidity influence development of effective medications for alcoholism. These include identifying and assessing the nature and duration of the collateral disorder, determining how alcoholism treatment of patients with comorbidity should differ from that of noncomorbid alcoholics, evaluating the extent to which treatment of either alcoholism or emotional disorder improves outcome of the other condition, developing strategies to increase drug compliance, and integrating pharmacotherapy with psychosocial therapies.

This presentation will conclude by defining the most promising directions for future research on the topic.