

Thaler and Beverly J. Thurman. Indianapolis, IN.

The Motivational Structure Questionnaire (MSQ) assesses the characteristic manner in which alcoholics seek to obtain positive incentives and to rid themselves of negative incentives. Previously we found the MSQ to have acceptable reliability and predictive validity. In the present study, we assessed the *concurrent* validity of the MSQ by administering it to 79 inpatient alcoholics, together with the Minnesota Multiphasic Personality Inventory and Alcohol Use Inventory. Results indicate significant and clinically meaningful relationships among alcoholics' motivational patterns and their personality characteristics and patterns of alcohol use.

SPECIFICITY OF FAMILIAL PATTERNS OF SUBSTANCE ABUSE. Mary E. McCaul and Dace S. Sviki. The Johns Hopkins University School of Medicine, Baltimore, MD.

The familial pattern of alcoholism has been well-established (e.g., Cotton, 1979), however, the extent to which other types of drug abuse show similar patterns of inheritance remains uncertain. The present study examined alcohol and drug use patterns of first-degree relatives of probands with different types of self-reported substance abuse problems: 1) alcohol abuse only (no current/lifetime history of other drug problems); 2) drug abuse only (no current/lifetime history of alcohol problems); and 3) both alcohol and other drug abuse. Probands were interviewed on admission to substance-abuse treatment using a semi-structured family history interview, and diagnoses were made using FH-RDC. Data are currently available on 150 probands. Preliminary analyses, however, are based on the first 50 probands enrolled in the study. To date, no significant differences have been found for age, gender, and race in the three proband groups. Rates of drug abuse (excluding alcohol) were significantly higher in first degree relatives of probands with drug abuse only and alcohol and drug abuse, than in probands with alcohol abuse only. There was a trend for rates of alcohol abuse to be higher in the alcohol abuse only proband group. When completed, these findings will provide information on the specificity of familial transmission of substance abuse. If probands and relatives show similar types of substance abuse, this will suggest that familial transmission is specific to type of substance.

MONDAY A.M.

SYMPOSIUM

Extended Use of Nicotine Gum for Smoking Cessation

Chair: *Cynthia S. Rand*, The Johns Hopkins School of Medicine, Baltimore, MD

Discussant: *Ellen Gritz*, University of California at Los Angeles, Los Angeles, CA

INTRODUCTION. *Cynthia S. Rand*. The Johns Hopkins School of Medicine, Baltimore, MD.

The Lung Health Study (LHS) is a five-year NHLBI-sponsored clinical trial that is designed to determine if smoking cessation and the use of an inhaled bronchodilator (ipratropium bromide) can slow the rate of decline in lung function (FEV₁) in smokers who have early chronic obstructive pulmonary disease (emphysema and chronic bronchitis) when compared to a no treatment control group. The ten clinical centers in this trial have been recruiting participants for two years and will end recruitment in January 1989. Four thousand participants will be assigned to the smoking cessation treatment group. Participants in the LHS are generally

heavy smokers, averaging better than a pack and a half a day. Since nicotine gum seems to favorably improve cessation rates, nicotine gum therapy was selected to be used as an important adjunct to the comprehensive, behavioral, group-based smoking cessation program that these 4000 participants will complete. Nicotine gum use is strongly encouraged for participants, and an emphasis is placed in the intervention program on participants using sufficient gum for at least three months after cessation. As of September 1988, over 1000 LHS participants had been seen for their one-year follow-up visit. By August 1989 over 2000 LHS members will have been seen for their one-year follow-up. Among these one-year quitters a significant number of participants are still using the free nicotine gum provided by the study, despite active encouragement and instruction in gum tapering. There has been much discussion in the smoking cessation field about the risk of nicotine gum "addiction," the possible enhanced smoking cessation efficacy of extended nicotine gum use, value of extended nicotine gum use in moderating postcessation weight gain, and the predictors of extended gum use. This symposium will present information on the frequency, consequences and characteristics of extended nicotine gum use (that is, over 8 months use) in a large population of subjects completing an intensive smoking cessation program.

FREQUENCY OF EXTENDED USE OF NICOTINE GUM IN THE LUNG HEALTH STUDY. *Wendy Bjornson-Benson*. Oregon Health Sciences University, Portland, OR.

The Lung Health Study is the first national clinical trial to use nicotine gum as a primary smoking cessation therapy. Multiple studies testing the efficacy of nicotine gum have demonstrated its effectiveness in helping people stop smoking, especially those more heavily addicted to nicotine. Little is known, however, about the extended use of nicotine gum beyond the recommended six months, although recent reports indicate that extended use can further improve cessation rates by helping to prevent relapse. The Lung Health Study offers a unique opportunity to analyze extended use of nicotine gum for a large population of smokers motivated to quit smoking who are encouraged to use nicotine gum as a part of a behavioral smoking cessation intervention program. Participants in the Lung Health Study are generally heavy smokers (mean = 31.4 cigarettes per day), in the age range 35-59 years (mean = 48.4 years at baseline); 62.7% are men and all have mild to moderate lung function impairment (FEV₁ = >55% <90% pred., FEV₁/FVC = ≤0.7). Forty-seven percent had high scores on a baseline nicotine dependency scale (Fagerstrom Tolerance Questionnaire). Nicotine gum was offered at no charge at the beginning of a comprehensive twelve-week stop smoking program with standard prescribing instructions including instructions for tapering by 6 months. Preliminary data from one-year follow-ups has found that despite instructions, 26% of one-year sustained quitters (that is, no smoking since quit day) continued to use an average of at least 6 pieces per day, with 12% of these participants using 8 or more pieces per day. Additionally, 50% of those nonsmokers who reported slips since Quit Day continued to use nicotine gum at the first annual follow-up, with 26% of these participants using 8 or more pieces per day. Use of nicotine gum by this group may be directly related to preventing relapse or fear of relapse. In general, rates of extended use of nicotine gum in the Lung Health Study exceed the investigators' expectations. From this experience, it appears that when smokers motivated for health reasons to quit are strongly encouraged to use nicotine gum as a part of a smoking cessation program *and* are given the gum at no cost, a significant number of ex-smokers will continue to use