consume more drug if it is made available. Several recent studies have examined this phenomenon in human volunteers, including cigarette smokers, alcoholics and normal social drinkers. Chornock et al. (1993) examined the likelihood of relapse to cigarette smoking after a forced exposure to smoking in abstinent smokers. Smokers exposed to the brief forced smoking condition were more likely to resume regular smoking than subjects who remained abstinent. Our laboratory has studied the priming effect of alcohol in social drinkers, using measures self-reported desire for alcohol and likelihood of consuming alcohol. Small preloads of alcohol increased both self-reported desire for alcohol and the reinforcing value of alcohol (i.e., the likelihood that more alcohol would be consumed). The priming effect with drugs may be an example of a more general priming effect observed with all positive incentive stimuli.

NEW FELLOWS ADDRESS

Chair: *Jalie A. Tucker*, Auburn University, Auburn, AL.

NATIONAL RECOVERY: A MAJOR PATHWAY TO RECOVERY FROM ALCOHOL PROBLEMS. Linda C. Sobell, Addiction Research Foundation and University of Toronto, Toronto, Ontario, Canada.

Most research on recovery from alcohol problems emanates from studies of alcohol abusers in treatment, and, therefore, is only safely generalizable to individuals who seek treatment. Such individuals are in a minority; the ratio of treated to untreated alcohol abusers has been estimated to range from 1 : 3 to 1 : 13. Little research has investigated why most alcohol abusers do not seek treatment, and how alcohol abusers recover without treatment. The few existing studies have serious methodological flaws that preclude drawing firm conclusions.

This address will present the results from two studies that examined natural recoveries (i.e., self-change) from alcohol problems. The first study conducted in depth interviews with alcohol abusers who had recovered without either treatment or self-help groups. The second study reports general population survey prevalence data on adults who recovered without treatment. Both studies report abstinent and nonabstinent recoveries.

The first study was a longitudinal investigation of alcohol abusers who had recovered on their own. Interviews were conducted with 120 naturally recovered alcohol abusers. Results of these interviews were contrasted with those from 62 alcohol abusers who when interviewed had active, similarly severe alcohol problems and who had never received treatment (i.e., control group). Subjects were recruited through advertisements and a collateral had to corroborate the problem history and resolution for each subject. The average length of recovery at the first interview was about 7 years. The objective of the first phase of the study was to identify factors, particularly life events, which promote and maintain natural recoveries from alcohol problems.

Since the initial data analyses did not find any specific pattern or constellation of life events associated with the majority of the subjects' resolutions or differences between recovered and nonrecovered subjects, a preliminary content analyses of subjects' taped interview responses about the reasons for their resolutions was conducted. Subjects' reasons were categorized into 1 of 3 categories: cognitive evaluation/appraisal, immediate (no associated thought process reported), and other. The category that accounted for the majority (57%) of all subjects' reasons for their recoveries was "cognitive evaluation or appraisal of drinking." If a cognitive appraisal process is instrumental in facilitating problem resolution, then treatment outcomes might be improved by including a technique specifically designed to encourage cognitive appraisal. It is also important to note, however, that a substantial proportion of subjects did not report cognitive evaluations as preceding their recovery.

The second phase of this study involved reinterviewing all subjects and their collaterals five years after their first interview. The most important objective was to evaluate the stability of natural recoveries from alcohol problems. The relapse rate was found to be 14%. In relation to treated subjects, this rate is quite low. Three factors appear to be associated with relapse in naturally recovered subjects: (1) length of resolution—subjects with shorter recoveries were more likely to relapse; (2) subjects who were smoking at the first interview were significantly more likely to relapse than those who were not smoking; and (3) at the end of the first interview, all resolved subjects were asked about what situations, if any, they thought might contribute to a future relapse—subjects who answered "definitely nothing" were less likely to relapse than those who mentioned some specific situation. In summary, this study found that the risk of relapse decreases dramatically with a longer recovery period.

The second study used data from a Canadian National Alcohol and Other Drugs Survey to investigate the prevalence of natural recoveries or self-change from alcohol problems in a general population sample. The survey, conducted by Statistics Canada in March 1989, interviewed almost 12,000 respondents about their alcohol and drug use. Because this survey included a broader range of questions on alcohol use than previous surveys, issues about the nature of recoveries (i.e., self-change vs. treatment; abstinence vs. nonabstinence) could be explored. The sample from which potential respondents could be drawn consisted of 10,796 people 20 years of age or older. The three key findings in this study were that of all recovered respondents (n = 575): (1) almost 80% resolved without treatment or self-help groups; (2) 40% of recoveries were nonabstinent drinking recoveries—i.e., moderate drinking; and (3) almost all (94%) nonabstinent recoveries occurred in the absence of treatment.

Compared to respondents who chose an abstinent recovery, respondents who chose a moderate (nonabstinent) drinking recovery were more likely to be female, to be younger, to have higher incomes, to have some post secondary education, and to have white collar jobs. Respondents who reported nonabstinent recoveries without treatment also reported significantly fewer alcohol-related consequences prior to their resolution.

The drinking of Resolved Nonabstinent No Treatment and Social Drinker survey respondents did not differ significantly on 5 of 6 drinking variables, and drinking reported by both of these groups for these 5 variables was significantly less than that reported by current Problem Drinkers Basically, the Resolved Nonabstinent respondents' drinking greatly resembled that of social drinkers in the population who had never reported having an alcohol problem. This study yielded three important findings: (1) there are multiple pathways to recovery from alcohol problems; (2) the predominant pathway to recovery in this survey was self-change—this finding parallels that for cigarette smokers where the vast majority stop on

their own; and (3) almost all nonabstinent recoveries—those who return to moderate drinking—occurred without treatment.

These two studies coupled with a growing body of recent literature clearly show that many people recover from alcohol problems on their own.

NEW FELLOWS ADDRESS

Chair: *Rudy E. Vuchinich*, Auburn University, Auburn, AL.

SLOWLY INTO THE BREACH: RATIONAL TREATMENT FOR PROBLEM DRINKERS. Mark B. Sobell, Addiction Research Foundation and University of Toronto, Toronto, Ontario, Canada.

The majority of persons who have alcohol problems can be considered "problem drinkers," as contrasted with chronic alcoholics. Yet, services for problem drinkers are rare. This address first briefly describes the evolution of research over the past two decades, identifying major lines of work that have influenced the development of treatments for problem drinkers. Most of the research has been in the context of behavioral treatments. A quarter of a century ago, behavioral treatments were developed based on strong assumptions that excessive drinking was learned as an inappropriate coping response, and that persons who had drinking problems had response deficiencies that prevented them from coping more constructively. Early treatments, therefore, had a strong emphasis on skills training. Even when epidemiological data began appearing in the early 1970s demonstrating that the majority of persons with alcohol problems were not seriously physically dependent, skills training approaches still dominated behavioral treatments. However, behavior therapists were among the first to recognize that services should be developed for problem drinkers, and to begin testing treatments specifically directed at problem drinkers.

Three other concurrent lines of work eventually forced a reevaluation of treatment approaches. First, research started to accrue demonstrating that short term treatments, as short as a single session, were as helpful as more intensive treatments for many alcohol abusers, and particularly those whose problems were not very severe. Second, systematic studies of persons who recovered from alcohol problems without treatment began to appear in the literature. Finally, psychotherapy research on stages of change led to conceptualizing motivation for change as a state rather than personality variable. These lines of research challenged conventional skills deficits assumptions and eventually led to the development of motivationally based treatment approaches. The development of one such approach, Guided Self-Change, is described. The approach was developed for working with problem drinkers, and assumes that many problem drinkers have the capacity to change their own behavior if they are sufficiently motivated. The treatment, which involves a few outpatient sessions, emphasizes the individual assuming personal responsibility for deciding upon treatment goals and for creating and implementing treatment plans. The approach is presently being extended to low severity problems with other drugs and to a group treatment format.

A formidable remaining challenge is for such treatments, thus far largely tested in research settings, to become widely available in communities. In this regard, the value of a public health approach to alcohol problems and the role of treatments for problem drinkers in the health care system are discussed. Barriers to dissemination are considered, as are ways of surmounting barriers. It is suggested that primary care health providers are likely to become the main professionals who will provide services for problem drinkers. One reason relates to the apparent inability of many traditional addictions service workers to embrace philosophically a public health approach and to work with clients to reduce rather than cease their alcohol consumption. Another reason is economic. It is very unlikely that a new cadre of service providers can be added to the health care system at a time when there is tremendous emphasis on cost containment. Enabling primary care health workers to identify and insofar as possible deal with alcohol problems among their patients makes sense as a cost-effective way of providing these needed services by a health care system that is already financially hard pressed. These developments will be of huge value to problem drinkers—the "underserved majority" of those with alcohol problems.

NEW FELLOWS ADDRESS

Chair: *Marlyne M. Kilbey*, Wayne State University, Detroit, MI.

SMOKING RELAPSE EPISODES: NEW METHODS AND FINDINGS. Saul Shiffman, University of Pittsburgh, Pittsburgh, PA.

Most efforts to quit cigarette smoking or other drug use end in relapse. Widely used relapse prevention strategies have grown out of research on relapse episodes. However, this research is marred by serious methodological weaknesses: (1) retrospective recall, often over months, introduces biases; (2) without base-rate data on moods and activities, data on relapse situations is difficult to interpret; and (3) individual differences are usually ignored.

This paper describes preliminary data obtained using a novel method for obtaining data on relapse episodes. 200 subjects who quit smoking for at least 24 h monitored lapses and temptation episodes using small palm-top computers they carried with them. When subjects reported such episodes, the computer administered an assessment of their mood and circumstances. The computer obtained baserate data by administering the same assessment at random several times daily.

Episodes were typically reported within 5 minutes of their resolution. In one analysis, first lapses were contrasted to nearby temptation episodes and random assessments. Mood was significantly more negative in lapse situations than in either temptations or random control situations. This effect was stronger for more nicotine-dependent subjects, suggesting that some of the observed mood disturbance might be due to nicotine withdrawal. The occurrence of lapses could be predicted prospectively from ratings of stress, motivation, and self-efficacy obtained the preceding day.

Cigarette availability and exposure also significantly distinguished lapses from temptations. Subjects were more likely to have consumed alcohol prior to lapse episodes than either temptation or control situations. The data suggested that alcohol intoxication reduced subjects' motivation to control their impulses, rather than directly promoting smoking. Coping strongly discriminated temptations from lapses. Even in high-urge situations, subjects who performed cognitive or behavioral coping were 20 times more likely to avoid lapsing.

These methods and findings have implications for theory, treatment, and research.