# Treatment of Problem Drinkers:

## The Missing Part of a Comprehensive Approach to Alcohol Problems

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## Concordance of Advances in the Alcohol Field and in Behavior Therapy

While epidemiological and longitudinal studies were calling attention to problem drinkers, the field of behavior therapy was evolving to embrace cognitive-behavioral treatments. This juxtapositioning of advances in separate areas was fortuitous because the cognitive-behavioral interventions incorporated features that were consistent with the emerging approaches to the treatment of problem drinkers.

Earlier we described the emerging awareness in the alcohol field of problem drinkers as a population in need of services. Here we briefly review how behavioral treatment approaches have evolved, and how recent behavioral treatment approaches have been targeted at problem drinkers.

Learning-theory based approaches to the treatment of alcohol problems predate the development of behavior therapy as a field and the development of Alcoholics Anonymous. An aversive-conditioning treatment for alcohol problems based on the principles of Pavlovian conditioning was reported by Kantorovich (1929). Such an approach involves pairing an aversive event (e.g., painful electric shock, vomiting) with alcohol cues (i.e., sight, smell, taste of alcohol). Aversive-conditioning approaches were used in a few private treatment programs in the 1940s (e.g., Voegtlin & Lemere, 1942) and later resurfaced in a very limited fashion (e.g., Cannon, Baker, Gino, & Nathan, 1986).

In the 1960s behavioral treatments based on operant-conditioning principles became popular. A basic feature of this approach is the supposition that drinking behavior occurs in particular circumstances (i.e., high-risk situations) maintained by reward contingencies. It was at this time that the functional analysis of stimulus and reinforcement contingencies related to drinking became established as a clinical procedure (e.g., Bandura, 1969; Lazarus, 1965). The value of functional analysis was supported by laboratory studies demonstrating that alcohol consumption could be treated as an operant behavior (e.g., Mendelson, LaDou, & Solomon, 1964; reviewed in L. C. Sobell & M. B. Sobell, 1983). This led to tests of treatments based on operant conditioning such as contingency-management treatments

(Hunt & Azrin, 1973) and treatments featuring the learning of alternative responses to replace the functions served by alcohol consumption (M. B. Sobell & L. C. Sobell, 1973).

Studies based on operant conditioning were often "broad-spectrum" approaches, incorporating several interventions directed at the multiple dimensions of alcohol problems (Lovibond & Caddy, 1970; M. B. Sobell & L. C. Sobell, 1973). These studies often involved skills training based on the assumption that persons needed to replace functions served by drinking with alternative less-problematic behaviors. In the early years, little research was directed at testing the assumption that skills deficits existed, and what little work existed suggested that any skills deficits were specific to refusing drinks (Foy, Miller, Eisler, & O'Toole, 1976; Twentyman et al., 1982). Broad-spectrum treatments also often involved anxiety-reduction techniques such as relaxation training or systematic desensitization.

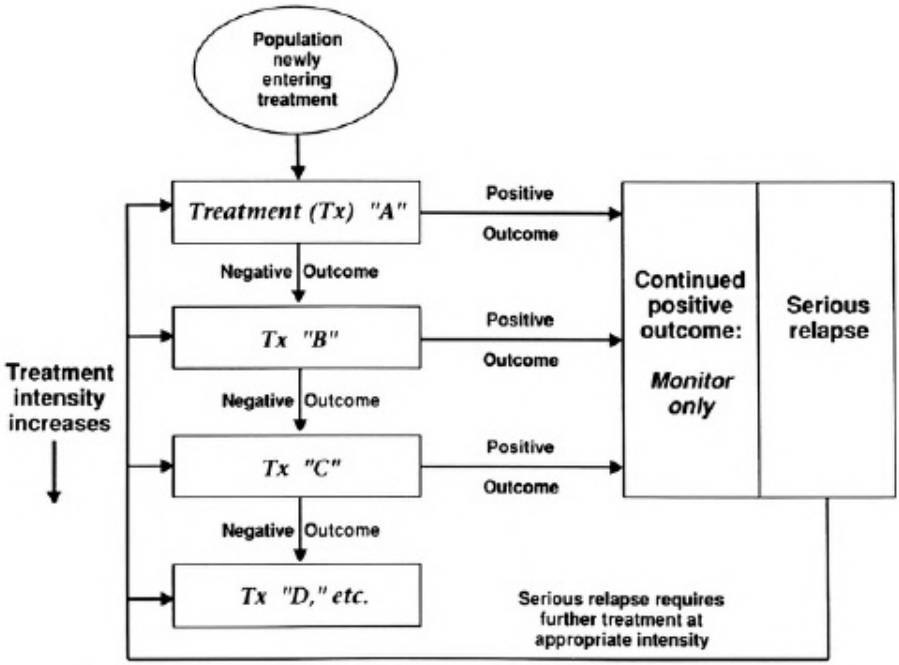
The 1970s were marked by the rise of the "cognitive sciences" (see Mahoney & Lyddon, 1988). This had a profound effect on behavior therapy, resulting in the emergence of cognitive-behavioral treatments as a dominant treatment approach. The hallmark of this shift in approach was that thoughts and thought processes were accepted as part of the explanation of abnormal behaviors and as a focus of treatment. Examples of cognitive-behavioral approaches are Bandura's self-efficacy theory (1977, 1986) and Beck's cognitive therapy for emotional disorders (1976, 1991). A cognitive-behavioral emphasis is also apparent in the relapse prevention treatment approach (Marlatt & Gordon, 1985) that receives considerable discussion later in this book.

More recently, Pavlovian conditioning models of addiction have been reintroduced, but in a more sophisticated form. These more sophisticated models are supported by considerable basic research (Niaura et al., 1988). Treatment implications of these models, however, are most relevant to cases of serious dependence, where there is a strong conditioning history. In contrast, cognitive-behavioral approaches are more relevant to the formulation of treatments for problem drinkers.

## Treatments for Problem Drinkers: Issues

The rationale for cost-effective treatments for alcohol problems was discussed earlier. If alcohol treatment services were like services in other areas of health care, a tiered system of treatment services

would be in place, such as is shown in Figure 4.1. Irrespective of the health problem, the use of highly intensive, costly, and intrusive treatments must be justified as necessary for a particular individual, and it must be shown to be superior to less-intensive approaches. When one considers the range of alcohol problems in our society, the need for a variety of treatment services is obvious. Services should range from advice and assisted self-help through a variety of treatments differing in their intensity and focus. Self-management treatment fits into this spectrum as an outpatient approach suitable for problem drinkers who want to take major responsibility for changing their behavior.




It will be recalled from Chapter 3 that problem drinkers often function satisfactorily in many areas of their lives and that some or even much of the time when they drink, they drink relatively small amounts (four or fewer standard drinks). They also tend to have substantial personal, social, and economic resources available, and they do not view themselves as alcoholics. In other words, problem

drinkers tend to be resourceful individuals who can assume considerable responsibility for themselves. Self-management treatment, as described in this book, can be viewed as guided self-help, where people are aided in understanding their problem and in formulating their own treatment plan from which they can take credit for their success.

In this chapter, several treatment studies involving problem drinkers are reviewed. This review sets the stage for a description of the treatment approach described in this book. It is important to recognize that guided self-management is a treatment for persons who self-identify as having alcohol problems. Other interventions have been developed for use in case identification and early intervention where the targets of the intervention are people who have not self-identified their drinking as a problem, and for whom the identification is made by primary care clinicians (often physicians). In such cases, brief interventions have sometimes been used with promising results by the primary care clinicians (e.g., Chick, Lloyd, & Crombie, 1985; Kristenson, Ohlin, Hulten-Nosslin, Trell, & Hood, 1983; Kristenson, Trell, & Hood, 1981; Persson & Magnusson, 1989). Although case identification and early intervention are important, they are not the focus of this book. This book centers on ways of helping people who recognize that they have an alcohol problem, and who want to change.

There is now considerable evidence that many problem drinkers who seek treatment respond well to nonintensive, outpatient interventions. There is even some suggestion that more traditional interventions might be counterproductive with this population. One of the best known seminal studies was discussed earlier. The important finding by Edwards et al. (1977) was that persons whose problems were less severe did better in the single session than in the more intensive treatment, while severely dependent persons showed the opposite pattern (Orford, Oppenheimer, & Edwards, 1976).

Several studies have since investigated so-called brief interventions, often aimed at problem drinkers and found that problem drinkers respond well to nonintensive outpatient treatments, and even to bibliotherapy. (See Babor, Ritson, & Hodgson, 1986, Heather, 1989, 1990, Hester & Miller, 1990, Institute of Medicine, 1990, and Saunders & Aasland, 1987, for reviews of these studies.) As will be seen, the majority of studies have compared variants of the same treatment approach. Consequently, while such comparisons can identify the relative contribution of various treatment components, they preclude conclusions about the absolute efficacy of the treatment or about its relative efficacy as compared to

widely used alternatives.

The issue of the absolute efficacy of any treatment for alcohol problems, whether for problem drinkers or chronic alcoholics, is a difficult question to answer. First, the assignment to a "no treatment" control group of persons who request treatment would be considered unethical. Second, even if assignment to a no treatment condition was attempted, it is doubtful that the condition could be enforced since multiple treatment programs and professionals, as well as self-help groups (e.g., Alcoholics Anonymous), are readily available. Third, the comparison of treatment recovery rates to natural recovery rates (i.e., rates of recovery among persons who have drinking problems but do not seek treatment) may not be a valid comparison because attempts at self-recovery may be the initial approach taken by most people once they decide they have an alcohol problem. If this is so, then the group that seeks treatment will contain many individuals who have attempted and failed at self recovery. Finally, while the use of waiting list control groups is a promising alternative to a no treatment control procedure, it is possible that the waiting list groups will be confounded for several reasons (e.g., they deliberately postpone changing their behavior until treatment commences; they become angry at the treatment program for imposing a waiting period; they seek alternative treatment during the waiting period). Nevertheless, waiting list control groups can provide useful information not otherwise available.

Two studies have been reported that used waiting list control groups with problem drinkers. Using media-recruited problem drinkers Alden (1988) compared a 12-session behavioral self-management program (n = 40) with a 12-session developmental counseling alternative (n = 33), an established approach in counseling psychology. An additional 54 subjects were randomly assigned to a waiting list control group and after a 12-week waiting period were randomly assigned to one or the other of the two treatments. A 2-year follow-up found that both treatments were associated with a significant reduction in drinking, but the treatments did not differ in effectiveness. During the 12-week waiting period, the waiting list control group's drinking did not change. This suggests that improvement in drinking was related to treatment, but the use and apparent relative effectiveness of developmental counseling suggests that the specific treatment approach may not be very important. Alden interpreted her study as supporting the use of moderation-drinking goals in treatment for problem drinkers, a feature shared by both treatments. Also, both treatments included the following procedures: establishing goals, self-monitoring of drinking, and discussing problems with empathic counselors. Thus, the treatments did not

seem to differ greatly in their major components, and both involved a substantial self-management emphasis.

The Alden study highlights a problem that complicates evaluating treatments for problem drinkers against alternative treatments: Alternative treatments are not readily available. To establish an alternative modality to a behavioral self-management approach, Alden had to create an alternative treatment by borrowing from an established approach used for other problems in developmental counseling. In so doing, and in gearing the treatment to a problem drinker population, the result was that the treatments ended up not differing in important ways.

The Alden study points up two current problems with attempting to validate the relative effectiveness of treatments for problem drinkers. First, there is no widely used alternative treatment to brief behavioral self management interventions. Thus, while brief behavioral interventions could serve as a comparison treatment against which to evaluate a newly crafted alternative approach, there is really no standard against which they can be compared (i.e., they are the standard). Second, while a valuable comparison would be against treatments designed for severely dependent individuals, this raises ethical considerations about purposefully assigning individuals to a treatment hypothesized to be inappropriate and possibly harmful for them (i.e., they might drop out of treatment because they felt the treatment was inappropriate for them).

The second study that used a waiting list control group was reported by Harris and Miller (1990). These researchers evaluated a brief intervention designed for media-solicited persons who had concerns that they were drinking too much. Subjects were assigned to either a self-directed or therapist-directed behavioral self-control treatment or to one of two waiting list control groups. Subjects assigned to one waiting list group were told that their treatment involved an initial baseline phase during which they would record (self monitor) their drinking. Subjects assigned to the other waiting list group were told they would begin treatment in 10 weeks. After the waiting period, subjects in both waiting list groups participated in either the self-directed or therapist-directed treatment. Even though the self-monitoring procedure could have had a therapeutic effect in and of itself (L. C. Sobell & M. B. Sobell, 1973), improvement for this group occurred only after treatment had commenced. Like Alden's study, this study suggests that treatment does benefit problem drinkers.

A promising alternative comparison procedure was recently introduced by Connors, Tarbox, and Faillace (1992) in a study of the effects of aftercare on problem drinkers. Media-solicited problem drinkers participated in an eight-session outpatient treatment and were then randomized to either group aftercare, telephone aftercare, or no aftercare conditions. A no treatment comparison group was recruited through media solicitations for problem drinkers who were concerned about their drinking but were neither in nor seeking treatment. While not a true "no treatment" control group because of the absence of random assignment and because the subjects had not sought treatment, this procedure provides a group that can be followed indefinitely over time, whereas persons assigned to a waiting list control group can at best have their entry into treatment delayed by several weeks. Moreover, any purposeful delay that is not due to an inability to provide timely treatment raises ethical questions.

Connors and his colleagues found no evidence that treated problem drinkers who got aftercare did better than those who did not get aftercare, and they found that the nontreated problem drinkers (i.e., comparison group) improved as much over time as those who were treated. In terms of the latter finding, these authors suggest that the comparison subjects may have been ready to make changes in their drinking and that the experience of being interviewed and followed over time may have been sufficient to help them change their behavior.

## Treatments for Problem Drinkers: Evaluations

Of the several treatment research studies that have evaluated treatments for problem drinkers, many have used self-management procedures. Miller and his colleagues conducted several studies using procedures they refer to as behavioral self-control training (Miller, 1977; Miller & Baca, 1983; Miller, Gribskov, & Mortell, 1981; Miller & Taylor, 1980; Miller, Taylor, & West, 1980). These studies largely involved media-solicited problem drinkers, and they have tested variations of a basic treatment paradigm involving the use of a self-control training manual. The variations have consisted of testing the manual alone (i.e., bibliotherapy, but usually accompanied by at least one session of instruction in use of the manual) or assisted by a therapist either in individual or group treatment sessions (typically eight to ten sessions). In most of these studies a relatively small number of subjects (i.e., about 8 to 12) have been assigned to a specific group. Hester and Miller (1990) described behavioral self-control training as involving "goal setting, self-monitoring, specific changes in drinking behavior, rewards for goal

attainment, functional analysis of drinking situations, and the learning of alternative coping skills" (p. 141). A key feature is that the client is responsible for making significant treatment decisions. This series of studies has found no differences in outcomes between group and individual therapist-assisted treatments. Also, the self-directed treatment did not differ significantly in outcome from therapist-directed treatment.

Sanchez-Craig, Annis, Bornet, and MacDonald (1984) evaluated a cognitive-behavioral treatment for problem drinkers in a study that compared abstinence and moderation (i.e., controlled-drinking) treatment goals. The 70 socially stable problem drinkers treated in the study were largely media solicited. The only procedural difference between treatments was that problem drinkers in the moderation-goal condition received counseling about how to regulate their drinking. Also, those assigned to the abstinence-goal condition were not aware that they could have been assigned to a moderation-goal treatment. Both groups significantly reduced their drinking over 2 years of follow-up, but they did not differ from one another in outcome. Irrespective of the assigned goal, most of the subjects who had a successful outcome had reduced rather than ceased their drinking. It is also notable that individuals advised to be abstinent drank significantly more during treatment and that moderation was the vastly preferred goal for these problem drinkers (i.e., even most of those assigned to abstinence ended up reducing rather than stopping their drinking). This theme of moderation as a preferred treatment goal and as the most likely successful outcome (even if it is not a goal) pervades treatment studies of problem drinkers, although some problem drinkers do favor and achieve abstinence.

Graber and Miller (1988) also randomly assigned problem drinkers (n = 24) to treatment goals, although their subjects had more severe alcohol problems than those in the 1984 study by Sanchez-Craig and her colleagues. At the start of Graber and Miller's study, the subjects had no clearly stated preference for either abstinence or moderation goals. The subjects assigned to a moderation goal were taught goal setting and given a self-help manual that included a section about controlling their drinking. The abstinence-goal subjects were given the same manual but without the controlled drinking section. They were also introduced to the disease model of alcoholism as a rationale for their abstinence, and they were informed about denial as a defense mechanism used by persons with alcohol problems.

Despite the rather clear differences between procedures and the use of a slightly more severe

sample of problem drinkers, outcomes for the two groups did not differ significantly at a 42-month follow-up or at shorter follow-ups. At the 42-month follow-up, using very stringent classification criteria, four subjects had been abstinent for at least 1 year and three had been moderate and asymptomatic drinkers. The relatively low (30%) success rate in this study may relate to the use of very strict criteria for asymptomatic moderate drinking or to the use of a more severe sample than in the 1984 study by Sanchez-Craig and her fellow researchers.

In Norway, Skutle and Berg (1987) used a treatment similar to that used in Miller's earlier behavioral self-control training research. Media-recruited problem drinkers were randomly assigned to (1) bibliotherapy (involving 4 hours of instruction in use of a self-help manual); (2) therapist-directed self-control treatment; (3) training in coping skills; or (4) a combination of the two therapist-directed treatments. At 1-year follow-up, although all groups showed significant reductions in drinking, there were no differences between groups. The majority of clients had reduced their alcohol consumption before treatment started. This suggests that the treatment was not responsible for the initiation of behavior change, although it may have helped maintain the change.

In Scotland, Heather and his colleagues (Heather, Robertson, MacPherson, Allsop, & Fulton, 1987; Heather, Whitton, & Robertson, 1986) evaluated a controlled-drinking self-help manual for media-recruited problem drinkers. Subjects were randomly assigned to receive by mail either the manual or a booklet of general advice and information. At 1-year follow-up, both groups of subjects had reduced their consumption by about one third. In an interesting subanalysis, subjects who had received other help for their problem were excluded from the sample. It was then found that subjects who had received the self-help manual had significantly lower alcohol consumption than the control group. In this and the Sanchez-Craig and Lei (1986) study, high consumers at assessment showed greater reductions in consumption than low consumers at assessment. Heather and his colleagues cautioned that differential attrition from follow-up between the groups may have accounted for the observed group difference.

Robertson, Heather, Dzialdowski, Crawford, and Winton (1986) randomly assigned 37 problem drinkers to either three or four sessions of advice or to about nine sessions of cognitive-behavioral therapy. The brief treatment had many features of a self-management treatment including functional analysis of drinking, the formulation of drinking guidelines, and provision of a controlled-drinking

advice sheet. The intensive treatment involved problem-solving skills training, marital contracting, relaxation training, cognitive restructuring, self-management training, controlled drinking counseling, and sexual counseling as needed. At follow-up, an average of 15 months after treatment, the intensive treatment subjects showed a significantly greater reduction in their average monthly consumption compared to those in the advice group. However, since females were overrepresented in the intensive treatment group, gender differences are an alternative explanation for the difference between groups.

Moderation as a goal and outcome of treatment has been a central issue in the development of treatments for problem drinkers (M. B. Sobell & L. C. Sobell, 1986/1987). Such goals are now viewed as a reasonable treatment alternative for problem drinkers (Institute of Medicine, 1990; Sanchez-Craig & Wilkinson, 1986/1987; Wallace, Cutler, & Haines, 1988). It has been suggested that allowing clients to make decisions about treatment goals increases their commitment to achieving their goals (Bandura, 1986; Miller, 1986/1987). This proposition has been tested in some studies.

Using a population that included problem drinkers and more severely dependent clients, Orford and Keddie (1986a, 1986b) assigned alcohol abusers who strongly preferred either abstinence or moderation to their preferred goal, and randomly assigned goals to alcohol abusers who did not express a strong goal preference. They concluded that treatment was most effective when it was compatible with the client's preferred goal. This study failed to find any relationship between type of successful recovery (abstinence or moderation) and the severity of alcohol dependence. A study by Elal-Lawrence, Slade, and Dewey (1986) also allowed a broad range of alcohol abusers to select their own goals and reached conclusions similar to those of Orford and Keddie (1986a, 1986b). However, they reported that goal choice at assessment was not predictive of outcome. Finally, Booth, Dale, and Ansari (1984) used procedures similar to those of Elal-Lawrence, Slade, and Dewey (1986) and found that alcohol abusers were most likely to achieve the goals they had chosen for themselves.

In the studies discussed in the previous paragraph, all of the alcohol abusers were assigned to goals that were preferred or at least acceptable to them. It is interesting that in the Sanchez-Craig, Annis, Bornet, and MacDonald (1984) study, the majority of problem drinkers assigned to an abstinence goal ended up reducing rather than stopping their drinking, meaning that the overwhelming majority of successful outcomes for clients in the abstinence-goal group were moderation outcomes. In conjunction

with problem drinkers' preference for goal self-selection, this strongly suggests that the availability of moderation goals is imperative for providing treatments likely to be perceived as attractive by problem drinkers.

It is not just mandatory-abstinence approaches that have been thought to be counterproductive for problem drinkers. There is also some evidence that other aspects of conventional approaches are associated with higher rates of attrition or noncompliance with the treatment regimen compared to short-term behavioral treatments.

A study by Pomerleau and his colleagues (Pomerleau & Adkins, 1980; Pomerleau, Pertschuk, Adkins, & Brady, 1978) compared problem drinkers randomly assigned to a multicomponent behavioral treatment emphasizing moderation or to a traditional group-encounter therapy emphasizing abstinence. At 1-year follow-up, 14% of the traditionally treated subjects had maintained abstinence compared to 6% in the behaviorally treated group. However, 72% of the behaviorally treated subjects and 50% of the traditionally treated subjects had improved outcomes (the difference was not statistically significant). Most of the improvement involved a reduction in drinking rather than abstinence. Thus, consistent with other studies, the requirement of abstinence had little effect on treatment outcome for problem drinkers.

A key finding in the study by Pomerleau and his fellow researchers was that attrition during treatment differed markedly between groups; 43% (6 out of 14) of the traditionally treated subjects dropped out compared to only 11% (2 out of 18) of the behaviorally treated subjects. Unfortunately, since the treatments differed in many ways, it is difficult to draw conclusions about how the treatments and goals affected attrition. The authors noted, however, that the majority of dropouts from the traditional treatment condition occurred shortly after a confrontational group session.

In summary, several studies have investigated treatments for problem drinkers. Overall, these studies have shown considerable reductions in drinking. The two studies that used waiting list control groups showed positive gains from treatment, although another study that used a control group of problem drinkers not seeking treatment found that these subjects reduced their drinking as much as those who had been treated. A central feature of this literature is the use of moderation treatment goals and the attainment of moderation outcomes. In fact, a perplexing aspect of these studies is that it does not

seem to matter whether one advises problem drinkers to abstain from or to moderate their drinking: The majority of successful outcomes occur through moderation. Since some studies have also found very brief (i.e., one-session) interventions to produce similar changes in problem drinkers, it is unclear that even the relatively modest treatment intensity found in short-term treatments is necessary in most cases. Finally, there is some suggestion that conventional treatment approaches may be inappropriate for problem drinkers. In the next chapter, these and other issues are examined in light of a recent trend to conceptualize motivational interventions. Following that discussion, the framework of the guided self-management approach to treatment of problem drinkers is presented.