Treatment Approaches to Alcohol Problems

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This book is intended for clinicians wishing to use a self-management approach in the treatment of persons who have nonsevere alcohol problems. The approach is largely motivational and cognitive-behavioral. It is directed toward helping people help themselves. While the nature of the target population—persons whose alcohol problems are not severe, whom we will define as "problem drinkers"—is discussed at length in this book, an understanding of this treatment approach is enhanced by viewing the alcohol field in perspective. Self-management approaches have been a part of an evolution of treatment approaches within the alcohol field. In a broader context, this evolution is consistent with changes occurring in other health-related fields, where there has been a growing acceptance of brief treatments and self-help based interventions for many health and mental health problems (Mahalik & Kivlighan, 1988; Scogin, Bynum, Stephens, & Calhoon, 1990). For this book, however, consideration of these issues will be restricted to the alcohol field.

The Evolution of Approaches to the Treatment of Alcohol Problems

It is now widely acknowledged that treatment for alcohol problems has developed in and continues to be practiced in the relative absence of integration of scientific knowledge about the nature of the disorder (Gordis, 1987; Heather & Robertson, 1983; Pattison, Sobell, & Sobell, 1977). One reason for this state of affairs is that treatments for alcohol problems were not initially based on scientifically derived knowledge about the disorder but rather on anecdotal and subjective impressions. Another reason is that although considerable scientific knowledge about alcohol problems has accumulated over the past 30 to 40 years, the treatments most widely available in North America are remarkably similar to those used several decades ago (Cook, 1988a, 1988b; Fingarette, 1988; Hill, 1985; Peele, 1990). These treatments either lack research support or are contraindicated by research evidence (Fingarette, 1988; Hill, 1985; Miller & Hester, 1986a; Peele, 1989; Shaffer, 1985).

In what follows, we will call "belief based" those treatments that have been developed without a research basis. Most often these are 12-step treatments based on the Alcoholics Anonymous literature

(Nowinski, Baker, & Carroll, 1992). Treatments that have been empirically evaluated and have a scientific basis will be referred to as research based.

In light of how the alcohol treatment field has evolved, an interesting question is why treatments should be research based. If one considers treatments for other health problems, the answer, reflected in the words of Enoch Gordis, a physician and director of the National Institute on Alcohol Abuse and Alcoholism, is obvious:

> It would be unthinkable, for instance, to unleash a new drug therapy for cancer, a new antibiotic for kidney disease, a new medicine for the prevention of second heart attacks or even a new flavoring agent for foods without careful evaluation and planning. . . . Yet in the case of alcoholism, our whole treatment system, with its innumerable therapies, armies of therapists, large and expensive programs, endless conferences, innovation and public relations activities is founded on hunch, not evidence, and not on science. . . . [T]he history of medicine demonstrates repeatedly that unevaluated treatment, no matter how compassionately administered, is frequently useless and wasteful and sometimes dangerous or harmful. (Gordis, 1987, p. 582)

In spite of Gordis's admonition, the most common treatment programs in the alcohol field, the Minnesota Model programs (Cook, 1988a, 1988b), are 28-day intensive inpatient programs. These and most traditional alcohol treatment programs have not been evaluated in the kinds of controlled trials that would support their widespread acceptance. In addition, there has been no research showing that these approaches are more effective than alternative, less intrusive, and less costly approaches. Much of what is taken for granted about the nature of alcohol problems and its treatment is based on beliefs rather than research. Unfortunately, while research-based treatments can and have changed to accommodate new research findings, belief-based treatments have changed very little despite contradictory evidence.

Some Key Issues

While it is not our purpose in this book to present an in-depth review of conventional notions about alcohol problems and treatment approaches, certain aspects of alcohol problems and treatment are important to the understanding of self-management treatments. One point we wish to emphasize is that conventional treatments were developed to treat chronic alcoholics. The program we present in this book is intended for persons who are problem drinkers (see Chapter 3).

There is considerable disagreement in the alcohol field about what constitutes alcohol problems and who has them. For example, what are the differences between those labeled as alcoholic and those

we call problem drinkers? More specifically, what are the defining features of alcoholism versus heavy drinking? Is alcohol dependence a better term than alcoholism? These and dozens of definitional questions cannot be answered, for there is no consensus on terminology in the alcohol field.

Consideration of some recent definitions will illustrate these difficulties. In the Seventh Special Report to the U.S. Congress on Alcohol and Health (National Institute on Alcohol Abuse and Alcoholism, 1990), the National Institute on Alcohol Abuse and Alcoholism (NIAAA) divides the drinker population into three groups: (1) persons who drink with few, if any, problems; (2) nondependent problem drinkers who have difficulties secondary to alcohol consumption; and (3) persons who are dependent on alcohol and who suffer from the disease called alcoholism or alcohol dependence. The latter individuals are characterized by (a) tolerance, (b) physical dependence, (c) impaired control over regulating drinking, and (d) the discomfort of abstinence, or craving. The report goes on to assert that "an estimated 10.5 million U.S. adults exhibit some symptoms of alcoholism or alcohol dependence and an additional 7.2 million abuse alcohol, but do not yet show symptoms of dependence" (National Institute on Alcohol Abuse and Alcoholism, 1990, p. ix). Based on this, the NIAAA defines two types of alcohol problems—alcohol dependence (which is referred to as alcoholism) and alcohol abuse (which is referred to as nondependent problem drinking)—and they assert that the population of dependent persons is approximately 45% larger than that of alcohol abusers. This classification, however, relies upon the difficult-to-define and even more difficult-to-measure characteristic of "impaired control over regulating drinking."

In contrast to the NIAAA estimate, a recent report to the NIAAA by the Institute of Medicine (IOM) of the U.S. National Academy of Sciences states that "Approximately one-fifth [of the population of the United States] consumes substantial amounts of alcohol, and approximately 5 per cent drink heavily" {Institute of Medicine, 1990, pp. 30-31). The IOM report defines the former group as "problem drinkers" and the latter group as "alcoholics" or "dependent drinkers." The findings are summarized as "most people have no alcohol problems, many people have some alcohol problems, and a few people have many alcohol problems" (Institute of Medicine, 1990, p. 214). According to the IOM report, there are four times as many problem drinkers as there are alcohol-dependent individuals.

To complicate matters, consider definitional changes that have occurred in the Diagnostic and

Statistical Manual (DSM) of the American Psychiatric Association. Whereas the Institute of Medicine report (1990) cites references in support of its classifications, the DSM diagnoses are based on consensus by a panel of professional consultants. The third edition of the manual, revised in the mid-1980s (DSM-III-R; American Psychiatric Association, 1987), includes categories of alcohol abuse and alcohol dependence, with definitions relatively consistent with those used by the Institute of Medicine. However, a fourth edition of the manual, which is intended to serve as the mainstay for psychiatric diagnoses for the 1990s, may change these definitions so that most of what has been considered alcohol abuse in the DSM-III-R will now be considered low-level dependence (Nathan, 1991), thereby blurring the definitional distinction introduced by the IOM (1990) report.

Obviously, there are many classifications and definitions of alcohol problems. However, since this book is intended as a guidebook for practitioners, we will use definitions that have practical value. Thus, when we refer to chronic alcoholics, we mean the stereotypical image of the alcoholic, the image often portrayed in the media. Chronic alcoholics are individuals whose life is centered around procuring and consuming alcohol and who, upon stopping drinking, suffer severe withdrawal symptoms (e.g., severe tremors, hallucinations, seizures, delirium tremens). Some chronic alcoholics will experience significant brain and other end organ damage (e.g., cirrhosis) as a result of their drinking. Usually there is extensive social impairment, for example, few meaningful relationships with family members, vocational problems, and a history of alcohol-related arrests.

Historically (i.e., 1930s through 1950s), chronic alcoholics were the population of persons with alcohol problems to whom treatments were first directed. This is understandable, since Alcoholics Anonymous did not start until the mid-1930s and few treatment programs existed prior to that time. Severely dependent individuals were not only those most in need of services, but also the most visible. The concern was with persons who were at risk of dying from drinking-related problems or from severe withdrawals. With an absence of services, and the aura of life-threatening illness, the first priority for health care was to save lives.

While there is not much of a research basis for the use of very intensive treatments with these serious cases, given the low level of functioning of chronic alcoholics, it is clear that many circumstances may need to be addressed for any treatment to be effective. Thus, if the person has no place to live, it is

reasonable to think that treatment involving alternative living arrangements would be conducive to recovery. It also may be necessary to help the individual develop a different social environment—one that supports recovery by removing the alcoholic from drinking situations. Other services such as vocational rehabilitation might also be necessary. In terms of treatment aimed at behavior change including cessation of drinking, it might be appropriate to use a fairly directive approach, where the individual is advised and instructed how to act, rather than using an approach that depends on complex thought processes. Even though it has not yet been empirically demonstrated, persons with alcohol-related brain dysfunction would seem poor candidates for approaches that involve considerable abstract reasoning and self-direction. Consequently, the treatment procedures described in this book, which rely on intact cognitive capacities, are not intended for persons who may have brain damage.

What about people who do not fit the definitional criteria of the chronic alcoholic but whose drinking causes them difficulties? Such individuals are often referred to as "problem drinkers." As described in more depth in Chapter 3, problem drinkers typically have either experienced negative consequences of their drinking or drink in ways that place them at risk of such consequences; however, they usually do not drink steadily, do not show major withdrawal symptoms when they stop drinking, and sometimes drink with control, and their lives do not revolve around drinking.

As the result of epidemiological investigations, problem drinkers began to receive attention in the late 1960s and early 1970s. However, despite this recognition, in the ensuing years the treatment system has neither changed nor expanded to accommodate problem drinkers.

In Chapters 2 and 3 we consider problem drinkers as a group in need of different services from those currently available, and we address how the notion of "progressivity" has impeded responding to this need. The issue is not simply that the alcohol field has failed to recognize the need to provide alternative services for problem drinkers, but that clinical practice in the field is discordant with research findings. Even with respect to more serious cases of alcohol problems for which conventional treatments were developed, the procedures demonstrated in the research literature as cost effective have been ignored in clinical practice (Miller & Hester, 1986a). This is probably due to a lack of accountability for treatment effectiveness that has existed until recently (Gordis, 1987; Holden, 1987) and to the fact that the majority of today's treatments are based on a set of strong beliefs about alcohol problems.

In most health care fields practitioners are eager to learn about and to apply research advances in their practice. In the alcohol field, this is different; many practitioners are not interested in research unless it is consistent with their own beliefs.

The Role of Outpatient Services

Since alcohol problems come in many types and severities, a logical premise is that different individuals will respond best to different types of treatment.

Here it is helpful to visualize a continuum of services that vary in the intensity of interventions. Often there will be considerable correspondence between the problem severity and the intensity of the intervention. A main consideration in recommending treatments will be the extent to which the interventions will consume resources, will intrude upon a person's life, and will require lifestyle changes. Obviously more demanding and costly treatments should be reserved for those who have serious problems or impairment. Against this background, and with the understanding that we are not arguing that there is no role for intensive treatments, there are difficulties with prescribing intensive interventions for all types of alcohol problems.

In order to understand and appreciate why outpatient treatment is important, it is helpful to consider addictions services in the context of other health and mental health services. Over the past several years, serious concern has developed about the cost of health care services. From the standpoint of government, there are real economic limits to the amount of public funding that can be dedicated to health care. This is especially true in countries like Canada and Great Britain where health services are wholly publicly funded. Since in such countries nearly all health care costs arc paid out of tax revenue, the costs are tied directly to the economy. Very serious attention is given to cost containment because higher costs ultimately mean higher taxes. In the United States some health services are publicly funded but most are provided by private health insurance. Since the costs usually are not directly paid by the government, pressure for cost containment has in the past come from insurance carriers. More recently, however, the need to contain health care costs has become part of the national political agenda and runaway health care costs have been viewed as a major impediment to economic growth. From a government perspective, concern for those with health and mental health problems must be balanced

with the need to support other important priorities, such as education and care for the elderly. Consequently, those responsible for formulating public policy must ensure that the funding is spent in ways that are equitable and efficient. In medicine, for example, it is expected that the use of hospital beds will be restricted to cases where inpatient stays can be justified. The concern is not to save money but rather to assure that limited resources are used wisely in order to benefit as many persons as possible. This is one of the natural forces that has contributed to the rise of outpatient treatments.

An important factor encouraging the growth of outpatient services for alcohol abusers has been repeated studies showing that for many individuals in this population, outpatient treatment produces as good an outcome as inpatient treatment. This issue has been investigated for alcohol problems at varying severities, but it is particularly supported for problem drinkers.

We want to stress that when evaluating comparative treatment research, the key question is not whether one treatment is as effective as another, but whether a more expensive or demanding (from the client's view) treatment produces a sufficiently superior outcome to warrant the additional cost or personal investment. Several studies have now examined the relationship between length of inpatient treatment and treatment outcome for alcohol problems (reviewed by Annis, 1986a, and Miller & Hester, 1986a). The findings are straightforward. Controlled studies, without exception, have found no advantage for longer over shorter inpatient treatment, whether treatment occurs over several days or weeks. Taking the issue a step further, one can ask whether residential care is even necessary. Two controlled studies have compared day treatment with inpatient treatment for alcohol problems (McCrady et al., 1986; McLachlan & Stein, 1982) and both found no differences between the two treatments.

Several controlled studies have compared the effectiveness of inpatient versus outpatient treatment for alcohol problems. Edwards and Guthrie (1967) randomly assigned 40 male alcohol abusers either to inpatient treatment averaging 9 weeks in length or to outpatient treatment averaging 7.5 sessions. Not only were no differences found between the groups over a 1-year follow-up but trends for differences favored the outpatients.

A study by Kissin, Platz, and Su (1970) is also informative despite a serious design problem and a low (49%) follow-up rate that makes the findings inconclusive. Alcoholics (n = 458) were assigned to

either outpatient alcohol treatment, outpatient psychotherapy, inpatient rehabilitation, or no treatment. Unfortunately, random assignment was violated as clients assigned to inpatient treatment were allowed to substitute one of the two outpatient treatments if they wished. Two thirds of those assigned to inpatient treatment chose outpatient treatment instead. While this violation of random assignment destroys the value of the study as a comparative effectiveness evaluation, it demonstrates very clearly that a high percentage of individuals prefer outpatient to inpatient treatment, which bears on the issues of acceptability of treatments to clients and matching of clients to treatments.

Pittman and Tate (1969) randomly assigned 255 alcoholics to either 6 weeks of inpatient treatment plus aftercare or to detoxification lasting 7 to 10 days. At 1-year follow-up, no differences were found between groups. Another study (Stein, Newton, & Bowman, 1975) compared alcoholics who after inpatient detoxification were randomly assigned to outpatient aftercare or to a 25-day inpatient treatment. A 13-month follow-up found no significant differences between groups. Finally, Wilson, White, and Lange (1978) randomly assigned 90 alcoholics to either inpatient or outpatient treatment. At 5-month follow-up, fewer alcoholism symptoms were found for the outpatient group, but by a 10-month follow-up these differences had disappeared.

A controlled study that did not explicitly evaluate inpatient against outpatient treatment but that has direct relevance for the development of self management treatment is the classic trial of "treatment" and "advice" by Edwards and his colleagues (Edwards, Orford, et al., 1977; Orford, Oppenheimer, & Edwards, 1976). In that study, 100 married male alcoholics were randomly assigned to receive either a standard package of care that could include outpatient and/or inpatient treatment or to receive a single outpatient session of advice. Although a 2-year follow-up found no difference in outcome between the groups, a trend was noted. More severely debilitated clients had better outcomes when provided the full package of care, and those with less severe problems did better with a single session of advice. These findings, however, were based on a small number of cases.

In summary, the study by Edwards and his fellow researchers and the other controlled studies reviewed have consistently failed to find evidence that inpatient treatment for alcohol problems produces superior outcomes over outpatient treatment, except for the more impaired clients in the study by Edwards and his colleagues. On this basis alone, outpatient treatment is a more cost-effective

alternative to inpatient treatment for the less-impaired alcohol abuser.

Nonintensive Outpatient Treatments

Another type of intervention that has begun to receive widespread attention as a broad public health response to alcohol and drug problems has been called "brief advice," "early intervention," or "brief intervention." This strategy got its initial impetus from a study of smokers by Russell, Wilson, Taylor, and Baker (1979) in Great Britain. These researchers demonstrated that if cigarette smokers were simply advised by their physicians to stop smoking, particularly if they were also provided with a short pamphlet on tips for stopping smoking, about 5% stopped smoking at a 1-year follow-up compared to only 1% to 2% of patients who were not advised to stop smoking. While this finding may not seem dramatic, the results are important when one considers that the vast majority of adults visit their physician at least once every 5 years. Russell estimated that if all general practice physicians in Great Britain advised their smoking patients to stop smoking, this would yield about half a million ex-smokers per year. In contrast, he estimated that it would take at least a 200-fold increase in smoking-cessation clinics to yield an equivalent number of ex-smokers. In terms of the overall health care system, this study revealed a highly cost-effective countermeasure for helping people stop smoking.

A similar strategy has been used to encourage heavy or problem drinkers to reduce or cease their drinking. Interestingly, most of these interventions have not been in response to an individual's request for treatment. Instead, they often involve individuals identified as excessive drinkers by primary care clinicians (typically physicians). An example of such a study with drinkers was reported by Persson and Magnusson (1989). Of 2,114 patients attending somatic outpatient clinics in Sweden, 78 were identified as either reporting excessive alcohol consumption on a questionnaire or as having abnormal liver serum enzyme levels on a blood test. These patients were randomly assigned either to a control group or to a limited intervention that involved an interview with a physician followed by monthly checkups to gather information on the patients' drinking and enzyme levels and to provide patients with feedback. Those patients given the intervention showed positive effects for all of the main variables examined (e.g., drinking levels, serum enzyme levels) over the course of the intervention.

Other studies with less patient contact have yielded similar findings (Chick, Lloyd, & Crombie,

1985; Kristenson, Öhlin, Hulten-Nosslin, Trell, & Hood, 1983; Kristenson, Trell, & Hood, 1981). Such studies are usually hospital or clinic based, and the intervention seldom consists of more than advice to reduce drinking and education about the health risks associated with heavy drinking. Typically, little evidence is provided that the targets of the advice have experienced serious life problems related to their drinking. A similar strategy, but in a nonmedical setting, has been reported by Miller and his colleagues (Miller & Sovereign, 1989; Miller, Sovereign, & Krege, 1988). A "Drinker's Check-up" was offered to the public through media advertisements. Thus far, short-term significant decreases in alcohol consumption have been reported.

With regard to helping persons who self-identify as having alcohol problems, brief interventions have also been positively evaluated. One of the best known studies, conducted by Edwards and his colleagues (1977), has already been discussed. In contrast to Edwards and his fellow researchers, most minimal interventions have been specifically directed at problem drinkers. These treatments usually allow goals of reduced drinking or abstinence or allow clients to choose their own goal (reviewed in Institute of Medicine, 1990), and they often use self-help manuals and/or one or more sessions of counseling. (See Babor, Ritson, & Hodgson, 1986, Heather, 1989, Institute of Medicine, 1990, and Saunders & Aasland, 1987, for reviews of these studies.)

Very often studies of self-identified problem drinkers have found very brief treatments, and sometimes even bibliotherapy (self-help manuals used by clients), to be as effective as more intensive outpatient treatments. For example, Chick and his colleagues (Chick, Ritson, Connaughton, Stewart, & Chick, 1988) randomly assigned 152 clients at an alcohol clinic either to one session of simple advice (5-minute discussion where the client was told that he or she had an alcohol problem and should stop drinking), one session of amplified advice (30- to 60-minute discussion intended to increase the client's motivation to change), or extended treatment that included amplified advice plus individualized further help that could have involved inpatient or day treatment. At a 2-year follow-up, the extended treatment group had suffered less harm from their drinking, but abstinence and problem-free drinking rates did not differ significantly between the treatments.

The study by Chick et al. (1988) was exceptional in the use of an inpatient condition and a 5-minute advice condition. More typical of studies comparing the intensity of outpatient treatment is a

study reported by Zweben, Pearlman, and Li (1988). Married couples in which at least one of the partners had an alcohol problem were randomly assigned to eight sessions of conjoint therapy or to one session of conjoint advice and counseling. At the 18-month follow-up there were no differences between the treatments on any outcome measures. Another similar study was reported by Skutle and Berg (1987). Problem drinkers received either 4 hours of instruction in the use of a self-help manual or were assigned to one of three other treatments involving 12 to 16 therapist-directed outpatient sessions (e.g., coping-skills training). At 1-year follow-up, there were no differences between the treatments.

Other studies comparing different amounts of outpatient treatment for alcohol abusers are described in the reviews mentioned earlier. Many of these studies involved relatively small sample sizes, and thus differences between treatments would have to be large to be evaluated as statistically significant (Kazdin & Bass, 1989). However, even when the issue of sample size has been taken into account, no superiority has been demonstrated for more intensive over less intensive treatments (Hall & Heather, 1991).

The above conclusions about the generally equivalent effectiveness of intensive and nonintensive treatments derive from studies where nonselected populations were assigned to treatments. That is, all of the eligible subjects for a given study were assigned nonsystematically among the treatments. While it is possible that some individuals respond particularly well to intensive treatment and others to nonintensive treatment, these interactions cannot be discerned from studies conducted to date. A matching strategy, where clients are purposely assigned or misassigned to treatments thought to "match" their needs would shed some light on this question (Miller & Hester, 1986b). The conduct of high quality prospective matching research, however, is a complicated and resource consuming enterprise (Finney & Moos, 1986).

Several of the following chapters are devoted to a consideration of the literature on issues related to the development and application of self-management treatment of alcohol problems. Although we have written about many of these issues and procedures previously (e.g., L. C. Sobell & M. B. Sobell, 1973, 1983, 1992b; Sobell, Sobell, & Nirenberg, 1988; M. B. Sobell & L. C. Sobell, 1978, 1986/1987; Sobell, Sobell, & Sheahan, 1976), we have never before tied these topics together. That integration is the primary goal of this book.