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## CLINICAL CONTROVERSIES SERIES

# Should Abstinence Be the Goal for Alcohol Treatment?

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### AFFIRMATIVE VIEWPOINT: PATRICIA OWEN, PH.D., M.H.A.

For most people who are dependent on alcohol, abstinence is the safest course and most honest treatment goal. For this subset of drinkers, a goal of abstinence is logical, possible, and, in the end, easier than sustaining moderation. I will take each of these points in turn.

First, abstinence as a treatment goal is logical. If a person presents with problems related to alcohol, the most direct approach is to eliminate the offending behavior, ie, drinking alcohol. By the time they have reached treatment, most people, have tried in numerous ways to change their drinking behavior: they've changed the time of day they drink, the setting, the type of beverage, or have made an entire geographical relocation. By simply discontinuing the common source of the problems (ie, alcohol), a person has laid the foundation for change. It should be noted that abstinence is the goal of treatment for models other than Twelve Step approaches. In community reinforcement or voucher programs, cumulative abstinence is reinforced as much or more than daily abstinence. One reason for this approach is that researchers using these strategies have found that in cocaine dependent outpatients, early continuous abstinence predicts longer-term abstinence.[1]

Second, abstinence is possible. Many studies have shown that about half of individuals presenting for treatment are able to achieve abstinence.[e.g., 2] Although results vary with setting and sample, there is no question that individuals can succeed in achieving abstinence. Further, abstinence does not produce a life of sad deprivation. Quality of life indicators (emotional health, relationship with spouse and friends, higher power, performance on the job, legal and health status) generally improve with abstinence. Because of the relapsing nature of alcoholism, several treatments may be needed to achieve abstinence; however, this phenomenon is more an indi-

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cation of its similarity to other chronic illnesses rather than a reason to abandon the treatment goal itself.[3]

Third, and perhaps most critical to the argument for abstinence as the preferred goal for alcohol treatment, is the issue of control over drinking. If a person is dependent on alcohol, attempts at control are extremely difficult and generally unsuccessful. In the end, it may take individuals as much emotional time and energy (often referred to as obsession or preoccupation) *not* to use as they once expended in planning to use. "Loss of control" in this context refers specifically to the inability for an individual to not drink or reliably quit drinking once the first drink is taken.[4] Recent research on neuroadaptation, the brain's adjustment to the effect of repeated alcohol intake, is providing a scientific understanding of the phenomenon of loss of control.[5(p112)] Robinson and Berridge[6] provide a compelling model of loss of control. Repeated use of alcohol can lead to neuronal sensitization to future exposure to alcohol. This sensitization occurs in the very structures of the brain most powerfully associated with what these researchers refer to as incentive salience, or "wanting" rather than "liking." In other words, the alcohol-dependent individual relapses not simply because of the rewarding properties of the substance but because of an intense compulsion, often against all reason. The effect of the ethanol occurs in the mesolimbic structure of the brain, in the dopaminergic systems. Robinson and Berridge note that "the persistence of neural sensitization is hypothesized to leave addicts susceptible to relapse even long after the discontinuation of drug use"[6(pS94)] and that this susceptibility, in animal studies, has been shown to last "months or years."[6(pS96)] Leshner[7] has also observed that "prolonged drug use causes pervasive changes in brain function that persist long after the individual stops taking the drug."[7(p46)] From their review of over 200 studies on the effect of ethanol on the brain, Robinson and Berridge conclude that "Sadly, the persistence of neural sensitization may mean, to paraphrase Alcoholics Anonymous, that in a neurobiological sense once an addict always an addict."[6(pS109)] In fact, they point out that until medication development targets neuroadaptation (of which sensitization is a manifestation), even these approaches will have limited success when compared with abstinence.

There are other compelling reasons for abstinence as a treatment goal beyond those stated above. For example, for people who are dependent on both alcohol and cocaine, drinking after treatment increases the probability of relapsing into cocaine.[8]

Some people incorrectly assume that disease model or Twelve-Step model programs dogmatically insist that all problem drinkers must abstain from alcohol. Nothing is farther from the truth. In fact, in the source book for Alcoholics Anonymous,[9] the writers assert several times that some people are able to moderate or control their use:

> Moderate drinkers have little trouble in giving up liquor entirely if they have good reason for it. They can take it or leave it alone. Then we have a certain type of hard drinker. He may have the habit badly enough to gradually impair him physically and mentally. It may cause him to die a few years before his time. If a sufficiently strong reason ill health, falling in love, change of environment, or the warning of a doctor becomes operative, this man can also stop or moderate, although he may find it difficult and troublesome and may even need medical attention.[9(p20,21)]

In other words, the authors and founders of AA repeatedly acknowledge that moderation or relatively easy cessation is possible for some types of drinkers.

The crux of the issue then is two-fold: (1) who is capable of moderating his or her alcohol use? and (2) for those people who cannot, what is the best treatment goal? In terms of the first question, the diagnostic criteria for alcohol abuse and dependence are far from perfect.[10] Someday, using biological or other indicators, we may be able to identify prospectively those heavy drinkers who can moderate their drinking. However, until we can make that distinction or have a biological method to reverse neuroadaptation, abstinence is the best treatment goal.

## REFERENCES


1. Higgins ST, Badger GJ, Budney AJ. Initial abstinence and success in achieving longer term cocaine abstinence. *Exp Clin Psychopharmacol.* 2000;8:377-386.
2. Stinchfield R, Owen P. Hazelden's model of treatment and its outcome. *Addict Behav.* 1998;23:669-683.
3. McLellan AT, Lewis DC, O'Brien CP, Kleber HD. Drug dependence, a chronic medical illness. *JAMA.* 2000;284:1689-1695.
4. Erickson CK. Voices of the Afflicted [commentary]. *Alcohol Clin Exp Res.* 1998;22:132-133.
5. National Institute on Alcohol Abuse and Alcoholism. *Tenth Special Report to Congress on Alcohol and Health: Highlights from Current Research.* Bethesda, Md.: U.S. Dept of Health and Human Services; 2000.
6. Robinson TE, Berridge KC. The psychology and neurobiology of addiction: an incentive-sensitization view. *Addiction.* 2000;95:S91-S117.
7. Leshner AI. Addiction is a brain disease, and it matters. *Science.* 1997;278:45-47.
8. McKay JR, Alterman AI, Rutherford MJ, Cacciola JS, McLellan AT. The relationship of alcohol use to cocaine relapse in cocaine dependent patients in an aftercare study. *J Stud Alcohol.* 1999;60:176-180.
9. Alcoholics Anonymous World Services. *Alcoholics Anonymous.* New York, NY: Alcoholics Anonymous World Services; 1976.
10. Dawson DH. Drinking patterns among individuals with and without DSM-IV alcohol use disorders. *J Stud Alcohol.* 1998;61:111-120.


## NEGATIVE VIEWPOINT: G. ALAN MARLATT, PH.D.

I am often asked by colleagues who are skeptical of alternatives to abstinence as a goal for alcohol intervention, "Would you ever recommend moderate drinking or harm reduction for a chronic, alcohol-dependent client who has a lifelong history of alcoholism including cirrhosis of the liver?" (or a similar description of a particular client with the worst possible prognosis for change). My response is, "I am willing to work with any client, no matter what his or her goal happens to be, including abstinence or harm reduction."[1] Anyone with a serious drinking problem is faced with three choices: to quit drinking, to cut back and reduce drinking problems, or to continue drinking in a chaotic and destructive manner. As a therapist who practices cognitive-behavioral therapy, I am willing to work with clients who are committed to abstinence (relapse prevention) or who desire to reduce the negative consequences of drinking (harm reduction). By refusing to offer treatment for clients who are unable or unwilling to commit to abstinence as the required goal, therapists set up a high-threshold barrier which may discourage them from getting any help at all.[2]

Let me take two recent case study examples from my clinical practice to illustrate this point. The first is a male client who has been very clear and insistent upon his goal to quit drinking altogether. "I need to kill this before it kills me," he said in the first session, describing his alcohol problem. In our treatment, I have been applying relapse prevention strategies[3] to help him cope more effectively with high-risk situations for relapse. When he experienced a brief lapse (drinking two beers on a single occasion), I helped him manage the slip and get "back on track" with his abstinence goal.

In the second case, a female client with co-occurring alcohol dependence and chronic depression came to me saying, "I am not yet ready to commit to abstinence, but I would like to reduce the problems caused by my drinking." We began with a moderate drinking program based on harm reduction principles. After several months of treatment, including coping skill training and meditation practice, the client changed her goal to abstinence. As harm reduction therapists advise: Do not attempt to take away a client's primary means of coping (eg, drinking) until there is another major coping strategy in place. If I refused to offer help to this client until she was willing to commit to abstinence, she may have dropped out of treatment altogether.

In our work with adolescent and young adults who engage in "binge drinking" on a frequent basis, we have found that most of these youth are in the *precontemplation stage* when it comes to accepting that they have a drinking problem. The majority of college students who engage in frequent binge drinking refuse to accept an abstinence-only goal, even though most of them are underage drinkers. Yet they respond well to a harm reduction program designed to teach them to drink in a safer, more moderate manner.[4] Our harm reduction program for college student drinkers has been found to be effective and has been implemented by many colleges and universities.[5]

Brief interventions have been applied to problem drinkers in a variety of clinical settings. Fleming and colleagues[6] have reported successful results of a brief intervention applied to problem drinkers by physicians in the primary health care setting. In a recently published book edited by Monti and associates,[7] several additional brief intervention programs for adolescents who are having problems with alcohol and other substances are described, including programs in emergency room settings. Many of the brief interventions described in this book are based on Motivational Enhancement Therapy (Motivational Interviewing), described by Miller and Rollnick.[8] Overall, harm reduction opens the door to many problem drinkers who are otherwise unable or unwilling to pursue an abstinence-only goal.

## REFERENCES


1. Marlatt GA, ed. *Harm Reduction: Pragmatic Strategies for Managing High-Risk Behaviors.* New York, NY: Guilford Press; 1998.
2. Marlatt GA, Larimer ME, Baer JS, Quigley LA. Harm reduction for alcohol problems: moving beyond the controlled drinking controversy. *Behav Ther.* 1993;24:461-504.
3. Marlatt GA, Gordon JR, eds. *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors.* New York, NY: Guilford Press; 1985.
4. Marlatt GA, Baer JS, Kivlahan DR, et al. Screening and brief intervention for high-risk college student drinkers: results from a two-year follow-up assessment. *J Consult Clin Psychol.* 1998;66:604-615.
5. Dimeff LA, Baer JS, Kivlahan DR, Marlatt GA. *Brief Alcohol Screening and Intervention for College Drinkers: A Harm-Reduction Approach.* New York, NY: Guilford Press; 1999.

6. Fleming MF, Barry KL, Johnson K, London R. Brief physician advice for problem alcohol drinkers: a randomized controlled trial in community-based primary care practices. *JAMA*. 1997;277:1039-1045.
7. Monti PM, Colby SM, O'Leary TA, eds. *Adolescents, Alcohol, and Substance Abuse: Reaching Teens Through Brief Interventions*. New York, NY: Guilford Press; 2001.
8. Miller WR, Rollnick S. *Motivational Interviewing: Preparing People to Change Addictive Behavior*. New York, NY: Guilford Press; 1991.

## AFFIRMATIVE REBUTTAL: DR. OWEN

Dr. Marlatt's position is flawed in a number of ways. From his clinical examples, one could infer that Dr. Marlatt agrees that abstinence is the preferred goal for the treatment of alcohol dependence. In both cases, he describes clients who ultimately become abstinent. Periods of use preceding abstinence do not make the ultimate goal of abstinence any less important or achievable. Abstinence-based models generally accept the fact that some people may need to "collect more experience" about their use before attaining abstinence. Furthermore, the diagnoses of the clients in his vignettes are unclear. If a diagnosis is simply alcohol abuse or unwise decisions about use (eg, in the case of many college students), advice about how to make better decisions is a reasonable approach.

However, anecdotal support for a position is insufficient. For every story demonstrating the effectiveness of harm reduction, another story could be told about tragic consequences of trying to control use or the miracle of transformation that can occur with abstinence. Dr. Marlatt offers no scientific evidence supporting a harm reduction approach to alcohol problems. What proportion of subjects is able to sustain non-problematic social use of alcohol? Are there animal models or biochemical explanations that help to elucidate how reduced use is achieved? Answers to these questions would strengthen his position. For much of his support, Marlatt cites publications that are descriptions about how to apply harm reduction approaches. The intent of this debate, as I see it, is not whether harm reduction therapy is well documented, but whether it is effective. (In fact, abstinence approaches are also well-documented.)[e.g., 1-4]

Individuals are free to make their own choice about how to deal with problematic use of alcohol. But when they seek help from a professional, it is the professional's role to make an accurate diagnosis and clearly state the treatment goal and plan, even though that plan may be at odds with the patient's own ideas about the best course of treatment. This is not so different from approaches used to treat other chronic diseases. If an out-of-control diabetic comes to a physician's office and says, "my insulin is a little off, but I really want to have a chocolate milkshake and two candy bars every day," the physician doesn't say, "I'm happy to work with you whatever your goals." If a hypertensive says "I won't change my diet, I refuse to take my meds, but I will take a walk around the block once a day for exercise," the physician doesn't say, "well that's a place to start; let me know how it goes and come back in a month." Rather, in both these cases, the physician explains the diagnosis and treatment plan and goal, offers ancillary help, and may bring in the family for reinforcement. Although not all patients will immediately comply,[5] the physician

does not use this as a cue to abandon the goal.

We can be respectful, realistic and compassionate, and cheer people on as they slip and slide their way to abstinence. But, at this point in our understanding about alcohol dependence, we need to be clear about the goal of abstinence and help people obtain it as soon and as successfully as they can.

## REFERENCES


1. Owen P. Minnesota model: description of counseling approach. In Boren, JJ, Onken, LS & Carroll, KM, eds. *Approaches to Drug Abuse Counseling: National Institute on Drug Abuse.* Rockville, MD: U.S. Dept of Health and Human Services; 2000. NIH Publication N. 00-4151. Available at: http://www.nida.nih.gov/ADAC/ADAC1.html
2. Nowinski, J. *Twelve Step Facilitation Manual: A Clinical Research Guide for Therapists Treating Individuals with Alcohol Abuse and Dependence. National Institute on Alcohol Abuse and Alcoholism.* Rockville, Md: U.S. Dept of Health and Human Services; 1995. NIH publication No. 94-3722.
3. Sheehan T, Owen P. The disease model. In: McCrady B, Epstein E, eds. *Addictions.* New York: Oxford University Press; 1999:268-286.
4. Budney AJ and Higgin S. *A Community Reinforcement Plus Vouchers Approach: Treating Cocaine Addiction. National Institute on Drug Abuse.* Rockville, Md: U.S. Dept of Health and Human Services; 1998. NIH Publication N. 98-4309. Available at: http://www.nida.nih.gov/pdf/CRA.pdf
5. McLellan AT, Lewis DC, O'Brien CP, Kleber HD. Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *JAMA*. 2000; 284(13):1689-1695.


## NEGATIVE REBUTTAL: DR. MARLATT

I would agree, as Dr. Owen states in her concluding sentence, that "abstinence is the best treatment goal," especially in the eyes of the treatment provider and the society at large. I also agree, as stated in her opening paragraph, that abstinence is a logical goal as the safest course of action for most people who are dependent on alcohol. It would be a mistake to assume that those who support harm reduction are somehow anti-abstinence. Harm reduction accepts abstinence as the endpoint on a continuum of strategies to reduce the problem consequences of hazardous or dependent drinking. On the other hand, there seems to be zero tolerance for any alternative to abstinence among many treatment professionals, including Dr. Owen.

Dr. Owen's enthusiasm for abstinence appears overstated, in that she claims it is "easier" to abstain than to sustain moderation, and that "many studies have shown that about half of individuals presenting for treatment are able to achieve abstinence." These conclusions do not fit with my understanding of the alcoholism treatment outcome literature. The most widely cited study, Project MATCH, compared treatment results for three different treatment modalities, all with an abstinence goal: cognitive-behavioral therapy, motivational enhancement therapy, and Twelve Step facilitation. One-year follow-up results showed that a minority of patients ($< 20\%$ on average) was able to maintain abstinence.[1,2]

Another issue is to take the perspective of the potential consumer of treatment services: those who continue to use alcohol in an unsafe and harmful manner, regardless of their diagnostic status in terms of alcohol abuse or dependence. Given that estimates indicate that the majority of problem drinkers and alcoholics are currently receiving no help or treatment, opening the door to alternatives to abstinence may serve as a user-friendly invitation to seek help.[3,4] For most active problem drinkers, the choice of options is similar to that of drivers approaching a traffic signal at a dangerous intersection. If the light is red, you should stop drinking, but if it's green, you can continue drinking at the same rate. Harm reduction provides a yellow warning signal, that it's time to slow down and use caution before proceeding. At least, harm reduction offers a third alternative, whereas before we only had two (stop or go).

As a final point, Dr. Owen claims that abstinence is the preferred goal because relapse is caused by irregularities in brain functioning that trigger an "intense compulsion" to drink, and that "loss of control" drinking is primarily caused by biological factors beyond the individual's control. This argument overlooks important environmental determinants of relapse, including the role of cognitive expectancies[5] and psychosocial high-risk situations, such as the experience of negative emotional states and giving into social influence to resume drinking. Cognitive-behavioral treatment with a focus on relapse prevention[6] has proven effective in both preventing and managing alcohol relapse.

## REFERENCES


1. Project MATCH Research Group. Matching alcoholism treatment to client heterogeneity: Project MATCH posttreatment drinking outcomes. *J Stud Alcohol.* 1997;58:7-29.
2. Marlatt GA. From hindsight to foresight: a commentary on Project MATCH. In: Tucker JA, Donovan DM, Marlatt GA, eds. *Changing Addictive Behavior.* New York, NY: Guilford Press; 1999:45-66.
3. Ogilvie H. *Alternatives to Abstinence.* New York: Hatherleigh Press; 2001.
4. Fletcher AM. *Sober for Good: New Solutions for Drinking Problems.* New York: Houghton-Mifflin; 2001.
5. Marlatt GA, Demming B, Reid JB. Loss of control drinking in alcoholics: an experimental analogue. *J AbnormPsychol.* 1973;81:223-241.
6. Daley DC, Marlatt GA, Spotts C. Relapse prevention: clinical models and specific intervention strategies. In: Graham AW, Schulz TK, Wilford BB, eds. *Principles of Addiction Medicine.* 3rd ed. Chevy Chase, Md.: American Society of Addiction Medicine. In press.