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In this trenchant piece, originally delivered at the annual conference of the Drug Policy Foundation, and now published in the International Journal of Drug Policy, Stanton evaluates the popular drug reform conception that shifting from coercive drug policies to treatment will radically transform the American drug use and treatment scene. Stanton disagrees, maintaining that expanding the treatment system will (1) expand what is already largely coercive treatment serving as an adjunct to the criminal justice system, (2) refuse to acknowledge nonharmful use and force mainly nonproblem users into treatment, (3) serve to divert social resources from the worst-off street users who are the main symbols of the drug epidemic, (4) have an overall negative impact on outcomes for drug users in the United States. Read this before endorsing blindly the concept that more treatment is good.

Further Reading

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The Results for Drug Reform Goals of Shifting from Interdiction / Punishment to Treatment

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Abstract

The most popular idea in drug reform is that money now spent on interdicting drugs and arresting and imprisoning drug users should instead be spent on treating drug abusers. However, the likely results of such an expansion of treatment—based on the current example of massive treatment of alcohol problems in the U.S.—would be counter to critical drug policy reform goals. These goals include provision of social services for the severely addicted, acceptance of nonharmful illicit substance use, diminution of moralism in public health and policy towards substance use, and elimination of guilt and self-doubt among controlled drug users. Expansion of alcohol treatment in the U.S. has not led to adoption of treatments demonstrated to be effective but rather supports moralistic approaches that capitalize on deep-seated American ambivalence towards alcohol. Finally, there is no evidence that substance abuse treatment reduces overall substance abuse rates. In the case of alcohol, expanded treatment has coincided with greater numbers of Americans reporting they are

alcohol dependent, while studies of community populations find that untreated alcohol and drug dependent subjects fare better than those who are treated.

Treating Drug Use

The most popular version of drug reform is that we should shift funds from our massive drug interdiction and law enforcement efforts to the treatment of people with drug problems (of course, treatment for drug abuse is already a massive enterprise in the U.S.; SAMHSA, 1997). The failures of current punitive approaches are so obvious, and the value of treatment is so unquestioned, that a wide range of those involved in substance abuse policy and treatment endorse this shift.

There is also a large industry engaged in propagandizing on behalf of this position. On the Internet (www.health.org/csat/) and through other media, "Treatment Works! Month" is celebrated annually. "Designed by SAMHSA (Substance Abuse and Mental Health Services Administration)/CSAT (Center for Substance Abuse Treatment) with the cooperation of the National Association of Alcoholism and Drug Abuse Counselors (NAADAC), these promotional materials will help educate people throughout your state, county, city or community about the true value of treatment and the fact that it really works."

September 1996 is the 7th annual celebration of Treatment Works! Month. It's time to celebrate and promote the fact that treatment is an effective way of tackling America's substance abuse problems. Treatment not only saves the taxpayer a tremendous amount of money in the long run, it also saves lives; reduces crime and health care costs; and reunites families. In short, treatment helps everyone, not only the individual battling addiction.

An Opposing Position

Before accepting this position as irrefutable, let us look to the massive alcohol treatment industry in the United States for likely clues about where a grossly expanded drug treatment system would take us. Alcohol is, after all, legal, and presumably the only problem with alcohol use is when it becomes abusive, at which point treatment is the indicated response. This seems like the ideal towards which many in the drug policy field aspire. But we shall see that some key goals of drug reform are not in fact the likely results of making the shift to a policy like that followed in the United States towards alcohol.

Some of the goals of shifting from a punitive to a treatment-oriented drug policy are listed in **Table 1**:

Table 1. Goals of a Less Punitive Drug Policy

| Intended goal | Likely result |
|---------------------------------|--|
| harm reduction | warehousing, homelessness |
| wider choices in drug treatment | rigid adherence to 12-step approach |
| less moralism | zero-tolerance/moralism |
| accept controlled use | treatment of casual users |
| greater personal freedom | more coercive treatment |
| acceptance of drugs | ambivalence around drug use, more self-labeling by users |

The Explosion in Alcoholism Treatment

The fate of alcoholism treatment illustrates how these likely results will come about. **Table 2** depicts changes in alcohol treatment beds in the United States between 1978 and 1984.

**Table 2. Changes in
Alcoholism Beds 1978 - 1984**

| | 1978 | 1984 |
|--------------------------------------|---------------|---------------|
| Government | 10,240 | 10,458 |
| Not for profit | 4,952 | 11,520 |
| For profit | 813 | 4,003 |
| Total | 16,005 | 25,981 |
| <i>Source: USDHHS (1987), p. 121</i> | | |

The total number of beds increased dramatically in this six-year period (62 percent), but all this change occurred among nongovernmental non-profit (133 percent) and for-profit (390 percent) institutions (USDHHS, 1987). State, municipal, and federal hospital beds for alcoholics remained constant. This shift occurred in a burst, but is part of a long-term increase in treatment of alcoholics, much of which comprised AA group attendance (AA claimed 6,000 members in the United States in 1941 and 1,127,471 members in 1995; Alcoholics Anonymous, 1995).

The 1978-1984 upturn in private hospital treatment of alcoholism occurred because federal funding for alcohol treatment in the mid-1970s took the form of block grants which permitted states to support private hospital programs, as well as due to an expansion in coverage for alcohol abuse by private insurers (Peele, 1991). Since that time, reater scrutiny by private insurers and others of inpatient referrals and treatment has led to a relative shift from inpatient to outpatient treatment. This movement was fueled by overwhelming data that hospital treatment for alcohol problems was not cost-effective (Miller and Hester, 1986).

However, total alcohol treatment in the United States remains high to the present, both historically and

in comparison with other countries (see Room and Greenfield, 1993). Inpatient treatment remains a significant proportion of this treatment, although it is less dominant than in the 1980s. In 1995, there were 690,000 admissions involving alcohol abuse/alcoholism (more than half of all substance abuse admissions in the U.S.). More than 60 percent of these admissions were in outpatient settings (SAMHSA, 1997).

A Note on Race, Social Class, and Ethnicity in Addiction/Alcoholism

One of the prevailing myths of alcoholism and addiction in the U.S. is that all races, social classes, and ethnic groups are equally likely to be addicted. This myth feeds into other prevailing myths—primarily that alcoholism/addiction is a medical illness that will be treatable by standard medical techniques. "Addiction,' declares Brookhaven's [Dr. Nora] Volkow, 'is a disorder of the brain no different from other forms of mental illness'" (Nash, 1997). This bill of goods is now being heavily sold by the National Institute of Mental Health (NIMH) and the National Institute on Drug Abuse. Just as *Time* has announced that dopamine is at the heart of all addiction, NIMH director Steven E. Hyman (1996) is busily "Shaking Out the [Neurochemical] Cause of Addiction." The data popular and scientific observers point to in support of this proposition is the absence of clear-cut racial and educational differences in exposure to drugs over people's lifetimes (SAMHSA, 1996).

In the case of alcohol, better educated, richer, and white Americans are actually far *more* likely to drink than less educated, poorer, and African and Hispanic Americans. However, those in the high-consumption categories who do drink are far less likely to become alcoholic than drinkers in the low-consumption groups. Decades of Alcohol Research Group surveys point out that, the higher one's social class, the more likely one is to drink and the less likely one is to drink abusively (Cahalan and Room, 1974; Hilton, 1987). Despite the emergence of this truth in surveys it sponsors, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) released a popular poster, captioned "The Typical Alcoholic American" showing every kind of racial, ethnic, and occupational group—thereby emphasizing the notion of alcoholism as "an equal opportunity destroyer." This, even as social and ethnic variables are regularly found to be the best predictors of alcoholism (Cahalan and Room, 1974). Even psychiatric researchers who strongly endorse the disease model find overwhelming cultural determinism of alcoholism. Vaillant (1983), for example, found Irish Americans were seven times as likely to become alcoholic over their lifetimes as Mediterranean (Italian) Americans living close by in inner-city Boston. Helzer and Canino (1992) found a *fiftyfold* difference in DSM III alcohol abuse/alcohol dependence lifetime prevalence between Koreans and Mexican Americans, on the one hand, and Chinese, on the other.

Such social differences drown out bloodline differences in alcoholism (e.g., Vaillant, 1983)—indeed, adopted-away studies have built an entire model of genetic etiology by ignoring such differences. If social differences are irrelevant to alcohol/drug abuse, then we can create an "objective" science of addiction and treatment can be provided without considering the social realities and meanings of people's lives. However, medical epidemiologists themselves don't actually believe this claptrap. At meetings of alcohol epidemiologists who claim that alcohol consumption must be curbed because it is inherently dangerous, I notice that they all drink socially. And the claim that all social groups are equally susceptible to drug addiction is belied by the inner-city destruction wrought by drug abuse. Some then claim that middle-class users are able to disguise their addictions because of their greater social resources. But if addiction is defined by lack of control, this is a self-contradicting statement.

Who Is Being Treated?

Those who continue to believe that alcoholics and addicts appear equally among all social, ethnic, and racial groups may be stunned to learn that, if this is true, less well-educated, poorer, and minority Americans are being overserved for alcohol and drug problems! (Certainly, this would be a unique case of overservicing of these groups.) The National Admissions to Substance Abuse Treatment Services, Treatment Episode Data Set (TEDS), 1992-1995 (SAMHSA, 1997) compared treatment episodes among different social groups to the prevalence of these groups in the general American population. Whites are 20 percent underrepresented in substance abuse treatment relative to their presence in the population, matched almost exactly by the overrepresentation of African Americans. Full-time workers are even *more* underrepresented, while those unemployed and not in the labor force are 20 percent overrepresented. Lest this be deduced to be the result of drug/alcohol abuse rather than a precondition, consider that those who have some college education are about 25 percent underrepresented in substance abuse treatment.

But does this greater exposure to treatment produce improved outcomes for these groups? The answer seems to be not. There are several possible explanations for this. One is that middle-class Americans receive better treatment than lower-SES Americans. In fact, the more likely explanation is that treatment is less important than the social resources of the drinker or drug-consumer both in the development of problems and in their remediation. Thus, while those enrolled in private treatment programs, who are almost by definition employed and/or socially stable (see Finney and Moos, 1991; Walsh et al., 1991), show relatively good improvement rates, those enrolled in inner-city treatment programs often fare very poorly indeed. In one remarkable study (which purported to discover that moderate drinking was almost impossible for treated alcoholics), of those treated in an inner-city alcoholism ward, 7 percent survived and were in remission at from 5-8 years following treatment (Helzer et al., 1985).

Although lower-SES Americans are more likely to receive alcoholism treatment, in the overall tidal wave of expanding treatment, many more middle-class Americans are receiving alcohol and substance treatment as well. Betty Ford came to typify such middle-class alcoholism patients who enter private hospitals, like that named for her. But the most common new alcohol treatment enrollee is an adolescent (Bascuas, 1992). Such middle-class patients, in addition to being better-off economically and more likely to be insured than the alcoholics who typified the founders of AA, for example, don't drink as much as earlier clinical alcoholics. Because less drinking is required to qualify for treatment, by the end of 1980s a substantial number of Americans over the age of 18 had been treated for alcoholism. A 1990 general population survey found that 4 percent of U.S. men (1 percent of women) had sought formal help (including AA) for a drinking problem in the past year, and 8 percent (2 percent of women) had done so at some point in their lives (Room and Greenfield, 1993). Unfortunately, Room and Greenfield gave no breakdowns by any social, educational, or economic indicators.

Are Greater Levels of Treatment Producing Better Social Outcomes?

Given the substantial growth in treatment for alcohol and drug abuse and the relatively greater exposure to such treatment of the unemployed and drop-outs from the labor force, we could expect that the least well-off Americans are being prevented from dropping out of the social net. Instead, during a period of rapidly expanding provision of alcohol treatment, probably the number of homeless alcoholics—which had already begun to climb—continued to grow rapidly. A survey of Baltimore homeless in the 1980s

(Breakey et al., 1989) found that, while major mental illnesses were very prevalent (42% of men; 49% of women), alcohol disorders were more so (among men 68%; 38% of women).

In the 1950s through the 1960s, in many urban centers, such alcoholics were privately handled through a series of SRO (single-room-occupancy) hotels and through "flop houses." Income from federal assistance programs and even panhandling were sufficient to gain a berth in these establishments, which were highly tolerant of their clientele's drinking habits (think of Charles Bukowski's novels and the film *Barfly*). But the 1960s and 1970s saw urban renewal and "yuppification" eradicate such housing in many urban centers. There is no longer, for example, a Bowery in lower Manhattan. The idea that those on the public dole or panhandlers could afford to live in this district today is impossible to imagine. At the same time, charity institutions in the United States charged with housing the poor and/or homeless, including both private groups such as the Salvation Army and homeless shelters, typically exclude drinkers or intoxicated residents.

In other words, there is no existing basic subsistence "harm reduction" structure in place in the United States. This is not because there are not abundant AA chapters or Salvation Army units and other religiously-oriented missions willing to assist the street alcoholic, or because there aren't many homeless shelters (although perhaps not enough to handle all potential clients). But continued drinking by many street alcoholics runs afoul of the ground rules of such institutions, which are steeped in a no-use moralism which dictates that help can only be offered to those willing and able to stop drinking.

The Growth in Alcohol Dependence Problems

Along with the growth in bottom-of-the-barrel alcoholics and their experience of more serious negative social repercussions, **Table 3** reveals that growing numbers of Americans of all types were reporting serious alcohol problems in the 1980s. That is, in 1984—at the tail end of the upsurge in private treatment of alcoholism reported in **Table 2**—the number of American men reporting alcohol dependence symptoms more than doubled, while growing one-and-a-half times for women, compared with the 1967 survey (Hilton and Clark, 1991). Yet, at about this time, overall American alcohol consumption had begun to drop steadily. Hilton and Clark found consumption did not increase among their respondents between 1967 and 1984, nor did actual patterns of drinking change (except for an increase in abstainers!). Thus, without drinking more, and while undergoing much more treatment, Americans reported far more alcohol dependence symptoms (the most severe symptoms of alcohol abuse) beginning in the 1980s. Although the increase in alcohol dependence problems was more evident among less well-educated and younger respondents, the increase was nonetheless apparent across the population—for example, both higher- and lower-income groups.

One last finding to note from Hilton and Clark was that physicians' advice to cut back drinking became *less* common in 1984 compared with 1967. Minimal physician efforts at reducing drinking have been shown to be the most effective means for ameliorating drinking problems (see **Table 4**). However, as formal medical treatment for the "disease" of alcoholism rose, such existing "harm-reduction" efforts that may have helped to keep excessive drinking in check disappeared.

Table 3. Changes in Drinking Problems 1967 - 1984

| | Men | | Women | |
|---|------|------|-------|------|
| | 1967 | 1984 | 1967 | 1984 |
| Dependence Symptoms+ | 8 | 19* | 5 | 8* |
| Age | | | | |
| 23-29 | 14 | 31* | 10 | 18 |
| 30-39 | 8 | 18* | 6 | 9 |
| 40-49 | 8 | 22* | 5 | 8 |
| 50-59 | 9 | 9 | 1 | 0.5 |
| 60+ | 3 | 9 | 3 | 1 |
| Education | | | | |
| < high school | 8 | 21* | 7 | 12 |
| H.S. graduate | 8 | 22* | 2 | 6 |
| some college | 10 | 16 | 7 | 8 |
| college grad | 7 | 14 | 6 | 9 |
| Income | | | | |
| above median | 9 | 20* | 6 | 9 |
| below median | 8 | 18* | 5 | 8 |
| +within last year, skipped meals, loss of memory, couldn't stop, binges * significance level < .05 | | | | |
| Source: Hilton and Clark (1991) | | | | |

These figures are especially interesting because earlier population surveys had revealed very few people (fewer than 1 percent) who had consumption and problem levels typical for those who at the time entered treatment clinics (Room, 1980). One argument had been that genuine alcoholics were hard to reach by such surveys. Thus, the growth in reported dependence-type symptoms occurred among *other* than the skid-row-type of alcoholic who at one time typified alcoholism. Nonetheless—despite reporting skipping meals, blackout drinking, an inability to stop, and binge drinking—these surveyed drinkers drank far less than the median 17 drinks daily in a treated population in the mid-1970s (Polich et al., 1981).

One possibility is that these self-reports of dependence symptoms do not correspond to clinical assessments of alcoholism—that is, while people report alcoholic symptoms, clinical tools would find that they are not alcoholic. (This would belie claims by those in the treatment industry that alcoholism is underreported because of the widespread *denial* of drinking problems by alcoholics.) However, community studies which employ objective clinical tests show the same sharp upturn in alcohol

abuse/dependence. The Epidemiologic Catchment Area (ECA) survey (Helzer et al., 1991) found that 27 percent of men age 18-29 were classifiable as alcohol abusers/alcohol dependent over their lifetimes, along with 7 percent of women in this age group. While the youngest group of women had the highest lifetime prevalence rate, the 30-44 age group lifetime prevalence was slightly higher for men, although this figure dropped substantially for those over 45. Note that, since these were lifetime rates, the youngest cohort can only *increase* its alcoholism prevalence, making all but certain the discovery of a growing rate of clinically-defined alcohol abuse in the American population.

In summary, alcoholism treatment expanded dramatically among all social classes beginning in the 1970s and continuing to the 1990s. Yet both self- and clinically-diagnosed alcoholism simultaneously increased. Obviously, this increase represents a new labeling of drinkers whose lives are outwardly functional who would previously not have been seen as alcoholics. Since this labeling includes respondents' views of themselves, Americans seemingly feel less satisfied and in control of their own drinking. Apparently, widespread alcoholism treatment and knowledge of alcoholism serve primarily to make people feel out of control of their behavior. The parallel here is to the experience of participating in Alcoholics Anonymous. According to David Rudy (1986), in his book *Becoming Alcoholic*, people enter AA with a wide range of drinking symptoms. Those who remain in AA report symptoms that converge to meet AA's standard description of alcoholism—including loss of control, blackout, and the phenomenon of a single drink leading to full-scale relapse. In these cases, self-labelling seems likewise to be self-fulfilling.

The Nature of Treatment

American alcoholism treatment is nearly entirely 12-step based, even as it shifted from inpatient to outpatient treatment in the late 1980s. The National Treatment Center Study (Roman and Blum, 1997) found that 93% of U.S. treatment programs still use 12-step methods. In a not unrelated result, 99 percent of these centers advocated abstinence for all of their alcohol and/or drug dependent patients. This is despite the fact that treatment efficacy studies have consistently shown the typical treatment provided in these programs to be ineffective.

Miller and his colleagues (1995) ranked 43 treatments in terms of 217 published clinical research trials, although 13 therapies (including AA) had too few studies to be definitively rated. (**Table 4**) Of the treatments reliably rated, brief interventions had the highest score, followed by social skills training. These social skills include those required to avoid drinking situations, to cope with stressful settings, and to deal with bosses, spouses, children, and other relationships. At the *bottom* of the list of effectiveness were general alcoholism counseling and educational lectures and films about alcoholism. AA had the lowest score among treatments that had been inadequately tested.

Table 4. Most and Least Effective Alcoholism Treatments

| Highest Rated | |
|--|------|
| Brief interventions | +239 |
| Social skills training | +128 |
| Motivation enhancement | + 87 |
| Community reinforcement | + 80 |
| Behavioral contracting | + 73 |
| Lowest Rated | |
| Metronidazole | -102 |
| Relaxation training | -109 |
| Confrontational counseling | -125 |
| Psychotherapy | -127 |
| General alcohol counseling | -214 |
| Alcoholism education programs | -239 |
| Methods with Too Few Tests to be Reliably Rated | |
| Sensory deprivation | + 40 |
| Developmental counseling | + 28 |
| Acupuncture | + 20 |
| (.....) | |
| Calcium Carbimide | - 32 |
| Antipsychotic medication | - 36 |
| AA | - 52 |
| <i>Source: Miller et al. (1995)</i> | |

Miller et al. noted that the treatments with the worst clinical records are almost universally employed by American alcoholism programs. Educational lectures and general alcoholism counseling in the United States are almost entirely 12-step and disease oriented, while the successful treatments Miller et al. (1995) identified are specifically non-disease oriented. **Table 5** lists the differences between the disease school of thinking and what I call the Life Process approach (Peele et al., 1991). American treatment programs reject these innovations in treatment that have been shown to be considerably more effective than current practices. For example, brief interventions—by utilizing reduced drinking goals for patients and not labelling them as "alcoholics"—run afoul of the basic tenets of AA. And, as we saw above, MDs became less likely to advise heavy drinking patients to reduce their drinking as the disease

ideology of treatment grew.

Table 5. Differences Between the Disease and Life Process Approaches to Addiction

| Disease Model | Life Process Program |
|---|--|
| Addiction is inbred (genetic, biological) | Addiction is a way of coping with life experience |
| Everyone gets same therapy | Design a treatment that fits individual |
| Must accept addict/alcoholic identity | Focus on problems, not labels |
| Therapy and cure are dictated to person | Person arrives at own goals and therapy plan |
| Person either addicted or not | Addiction will vary depending on situation |
| Addictive symptoms are drummed into person | Person must identify negative consequences for self |
| Claims of being okay are attacked as denial | Positive aspects of self-image are accepted and amplified |
| Person taught he has no control/cannot choose | The capacity for control and making choices is fostered |
| Focus on addiction | Focus on dealing with environment |
| Total abstinence is the only treatment goal | Improved control and relapse reduction are sought |
| Primary social supports are fellow addicts | Primary social supports are work, family, friends |
| Require same treatment/group support forever | Treatment or group support evolves over life |
| Person must always think of self as addict | Can outgrow addiction and no longer need to think of self as an addict |
| <i>Source: Peele, Brodsky, and Arnold (1991), p. 174.</i> | |

Thus, the standard for treatment remained the 12-step approach, which is heavily didactic, built on the concept that alcoholics are out of control and need to be compelled to enter treatment, and that all drinking problems require abstinence.

Meanwhile, drug treatment has already shifted in the 12-step direction. That is, drug treatment in the U.S. has historically offered a wider set of treatment modalities than alcohol treatment. For example, therapeutic communities, methadone maintenance, skills-oriented training, and so on—which reflect some of the modalities found most effective in alcoholism treatment—were already part and parcel of the array of available drug abuse treatments. As drug treatment has expanded, the influence of the 12-step approach has grown, and it has become part of practically every treatment program in America.

The lack of demonstrated efficacy of AA and its continued dominance in American treatment is a social phenomenon well worth analyzing on its own. AA appeals to American religious fundamentalism, as

expressed in its nineteenth century revivalistic style involving public confession, contrition, and restitution. The success of AA is a tribute both to its appeal to fundamental tenets of American culture and to the skills of Marty Mann and subsequent gifted AA marketers. The morality tale of the repentant sinner who used to enjoy drinking and intoxication but who now recognizes the folly of his ways and the need for abstinence will always be a sure seller in the United States.

Likewise, this tale will market well as drug treatment expands. The marijuana smoker or cocaine user who used to enjoy the high life but who now sees the error of his ways, affirming the correctness of his sober and abstemious brethren, will soon dominate drug treatment (as it already shows signs of doing) the way it does alcohol treatment. William Bennett and succeeding drug tsars, drug education specialists, and U.S. presidents are always on the lookout for such spokespeople for the cause of treatment. An expansion in treatment is not gauged in terms of its efficacy, but in terms of how well it supports moral entrepreneurs in presenting their visions of drug use.

Pimping Project MATCH

The results of Project MATCH—an NIAAA-administered clinical trial comparing coping skills, motivational enhancement, and 12-step approaches to alcohol treatment—received a great deal of attention. The overriding goal of the project was to uncover the traits that predicted which type of alcoholic responded best to each type of treatment (and hence, should be matched with it). The broad results of this study were that no treatment proved superior to any other, while virtually no identifiable patterns differentiated those who responded to each treatment (Project MATCH Research Group, 1997). Faced with a \$25 million boondoggle that did little more than disconfirm a decade's worth of theorizing about optimizing patient-therapy matching, the NIAAA put the best face forward on this study by asserting it showed in what great shape American alcoholism treatment is.

The NIAAA and the researchers did this by pointing to the high remission rates reported for *all* treatments. The man mainly charged with carrying this message was Enoch Gordis, an MD and career hospital/treatment/government bureaucrat. According to Gordis, "The good news is that treatment works" (Bower, 1997). Gordis did not start out as a treatment booster. A decade earlier, shortly after becoming the NIAAA's director in 1986, he issued the following rather pessimistic pronouncement about the state of American alcoholism treatment, which at the time (as it is today) was almost completely 12-step oriented.

After all [many of us assert], we have provided many of our treatments for years. We really are confident that the treatment approaches are sound. We can point to thousands of caring...treatment staff, many of whom are recovering alcoholics themselves. It seems impossible to imagine that what these splendid people are doing may be, at least in part, useless, wasteful or occasionally harmful. Yet the history of medicine demonstrates repeatedly that unevaluated treatment...is frequently useless and wasteful and sometimes dangerous and harmful. (Gordis, 1987, p. 582)

Gordis's apparent skepticism here reflects his own research showing that public hospital alcoholism patients didn't fare very well (Gordis et al., 1981).

Why do the MATCH results differ so dramatically from the decades of research summarized by Miller et al. (1995) and Gordis's own experience? Project MATCH, remarkably well-funded as it was, bears no

resemblance to treatment as ordinarily practiced in the U.S. In the first place, MATCH carefully selected 1726 subjects out of 4481 who were screened for participation. Almost 500 eliminated themselves after first volunteering because they felt treatment was inconvenient. Others were discarded for "failure to complete the assessment battery; residential instability; legal or probation problems, etc. " Leading therapists trained and supervised the ongoing administration of therapy and both those being treated and those providing treatment realized they were under the spotlight (all therapy sessions were videotaped, and these tapes were reviewed). Project MATCH itself acknowledged: "The overall effect of being part of Project MATCH, with extensive assessment, attractive treatments, and aggressive follow-up may have minimized naturally occurring variability among treatment modalities and may, in part, account for the favorable treatment outcomes" (Project MATCH Research Group, 1997, p. 24).

But this research was not designed to show that treatment works in general. After all, the study had no non-treatment group experiencing comparable attention and support (without therapy) to the treatment groups. This study's all-encompassing positive outcomes resemble those in the famed 1950s Hawthorne studies at the Western Electric plant, where a group of hourly employees was separated and subjected to a study of the effects of different lighting, rest intervals, and other trivial environmental factors. What in fact caused productivity to rise dramatically in all the conditions was the intensive, personalized attention they received no matter what the experimental variation being studied.

Of course, since American alcoholism treatment *is* 12-step treatment, these results mean that this treatment can safely be promoted as effective and treatment can continue as is in the U.S. According to one of the NIAAA sponsors of Project MATCH, Margaret Mattson (1997), "The results indicate that the Twelve Step model, which is the most widely practiced treatment model in the U.S., is beneficial." What makes the promotion of Project MATCH as proof of the effectiveness of American treatment doubly strange is that the NIAAA has simultaneously conducted comparative research of those receiving actual alcohol treatment in the U.S. with untreated alcoholics, the National Longitudinal Alcohol Epidemiologic Survey. Its results, described below, do not confirm assertions by Mattson, Gordis, and others at NIAAA or involved in Project MATCH about the effectiveness of American alcoholism treatment.

Meanwhile, MATCH investigators have systematically attacked those who have commented on MATCH results—Richard Longabaugh, a MATCH PI, attacked me on an Internet list of the American Psychological Association for my comments on the 22-page Project MATCH report published in the *Journal of Studies on Alcohol*. Longabaugh claimed that I was speaking of MATCH results without awaiting further publications because "discussion is 'livelier' without the facts." Meanwhile, his request that outside investigators withhold commenting until further results are published in a year or more—while Gordis, Mattson and others spin the MATCH results—amounts to government suppression of public commentary. (Schaler, 1996, described similar efforts by MATCH personnel to silence revisionist interpretations of study results.)

Moralism and Coercion in Treatment

Despite the fact that many Americans claim to be alcohol dependent and that alcohol treatment has become relatively commonplace in many middle-class communities, *most* Americans who enter alcohol treatment are not volunteers (Weisner, 1990; Weisner and Room, 1984). Among the host of mechanisms for compelling drinkers to seek treatment, the primary are DUI regulations and, in the private sector, EAPs. However, a number of federal agencies (such as those requiring treatment among

public-assistance recipients) and criminal proceedings aside from drunk-driving contribute to these trends. Moreover, the largest single age category in expanded treatment rolls has been teenagers, who are not usually voluntary treatment clients.

It is ironic in the extreme that the majority of people entering treatment for alcohol are coerced (or strongly encouraged with unpleasant alternatives) to seek such treatment, given that alcohol is legal. This situation is due to a series of distinctive strands in American culture, to wit: (1) a social value on treating the alcoholic, (2) a lower threshold for labeling alcohol problems, (3) powerful residual attitude of disapproval of alcohol intoxication and, really, of all drinking, (d) the idea that alcohol problems, understood in terms of loss of control, lead alcoholics to "deny" their drinking problems and to require outside interventions to get them to seek necessary treatment (although Hilton and Clark, 1991, showed that Americans in large numbers readily acknowledge alcohol dependence symptoms).

Drug treatment is also highly coercive, since drug use is ipso facto illegal and treatment is now frequently offered as an alternative to sentencing for drug possession and other drug-related crimes. This trend is accelerating with the so-called drug courts. As described in the *Los Angeles Times*, "Court's War on Drugs" (August 13, 1996): "Defendants are sent to a 12-step style rehabilitation program instead of jail under the program. It is held as a model across the nation and is scheduled for expansion.... Drug courts, which sentence addicts to treatment programs instead of time behind bars, are multiplying across the country, fueled by enthusiasm from the Clinton administration.... 'Drug courts provide the incentive, and the "stick" without which many young people would never seek drug treatment and alternatives to drug use,' U.S. Atty. Gen. Janet Reno has said."

The idea many have of drug reform is that, by making drug use legal or allowing people who feel they have a drug problem to seek treatment as they feel they need it, the element of coercion will be minimized in drug treatment. The experience with American alcoholism treatment would lead us to expect otherwise.

Treat People and Soon We'll Have No More Substance Problems—Not

The "Treatment Works" program is sponsored by an alliance among government and private treatment organizations. The burden of this coalition is to present "Myths and Facts About Addiction and Treatment." Among the "FACTS" described at the "Treatment Works" web site are the following:

Fact: Addiction is a chronic, life-threatening condition, like hypertension and adult diabetes.

Fact: Certain drugs are highly addictive, rapidly causing biochemical and structural changes in the brain.

Fact: Few people addicted to alcohol and other drugs can simply stop using them, no matter how strong their inner resolve. Most need one or more courses of structured substance abuse treatment to reduce or end their dependence on alcohol or other drugs.

The first of these "facts" is certainly a matter of interpretation. And no study has found the last to be true. Studies of general populations (called community studies) typically find that the overwhelming majority of substance users, even those who encounter substantial problems, never enter treatment. This has been the case, for example, with every community study of cocaine users (which would seem to be

one of the highly addictive drugs "Treatment Works" has in mind). In the first place, most cocaine users do not use regularly, while most regular users do not become compulsive users. A World Health Organization multinational survey, the largest ever of cocaine users, found "an enormous variety in the types of people who use cocaine, the amount of drug used, the frequency of use, the duration and intensity of use, the reasons for using cocaine and any associated problems that users experience" (WHO, 1995).

For example, a Canadian survey found 5 percent of current users used monthly or more often (Adlaf et al., 1991). But monthly and weekly use are far from addiction, and only 10-25 percent of *regular* users, or about 1-2 percent of all current users, resemble clinical addicts (Erickson and Alexander, 1989). Studies of ongoing cocaine users in Canada, Scotland, Australia, and Holland identify controlled use as the most common usage pattern (Cohen, 1989; Ditton et al., 1991; Fagan and Chin, 1989; Harrison, 1994; Mugford and Cohen, 1989; Murphy, Reinerman, and Waldorf, 1989; Siegel, 1984). Moreover, most users who do encounter problems—problems that usually fall far short of "loss of control" (Cohen & Sas, 1994; Siegel, 1984)—do not seek treatment. Rather, they overcome their problems by quitting or cutting back without treatment (Erickson, 1993; Erickson et al., 1987; Waldorf et al., 1991). In Holland, of 64 users of cocaine for five or more years, only *one* actually underwent treatment for cocaine use (Cohen and Sas, 1994).

When "Treatment Works" identifies treatment as a necessity for those who have substance problems, without which it claims that people rarely recover, it is expounding a philosophical and an economic position, one that both the government and private treatment providers welcome. However, let us turn to two U.S. government studies, more than a decade apart, to test this claim. The studies concern the two other drugs "Treatment Works" probably means to indicate are, in addition to cocaine, "highly addictive"—alcohol and heroin.

Dawson (1996) analyzed 1992 National Longitudinal Alcohol Epidemiologic Survey (NLAES) data mentioned above, designed and sponsored by the NIAAA and conducted face-to-face by the U.S. Census Bureau.

Table 6. NLAES Data on Alcohol Dependent Subjects

| Outcome categories | Treated (n=1,233) | Untreated (n=3,309) |
|--|--------------------------|----------------------------|
| < 5 years since onset dependence | | |
| abuse/dependence | 70% | 53% |
| abstinent | 11% | 5% |
| drinking w/o abuse/dependence | 19% | 41% |
| 20+ years since onset dependence | | |
| abuse/dependence | 20% | 10% |
| abstinent | 55% | 30% |
| drinking w/o abuse/dependence | 24% | 60% |
| <i>Source: Dawson (1996)</i> | | |

These data seriously question most assumptions made in alcoholism treatment today, to wit:

1. *Only those whose alcohol abuse does not meet dependence criteria may continue/resume drinking without clinical problems.* In fact, non-abusive/dependent drinking was by far the largest outcome category in this group of formerly dependent drinkers. (Indeed, MATCH itself was really a kind of controlled-drinking experiment, since it reported improvement in terms of reduction in days drinking—on average from 25 days/month to 6 days/month—with corresponding reduction in consumption on drinking days.)
2. *Treatment is necessary for recovery.* Treated alcohol-dependent subjects in fact had lower remission rates than untreated dependent subjects, and this disparity grew with the passage of years. Treatment mainly served to turn people towards abstinence versus drinking without clinical problems as an escape from dependence.

Those who only know alcoholics in clinical settings (and then only during treatment or briefly afterwards) seem to be missing the larger picture of alcoholism, including the large majority who remain untreated. Among other things, addiction and alcoholism are not progressive diseases, but patterns into and out of which people regularly cycle. Within this framework—in at least some cases—treatment has the counterproductive effect of stalling people in the addictive swing of the cycle and of preventing their ultimate emergence from addiction.

These data strongly affirm similar in-person data from the Vietnam study as reported by Lee Robins, John Helzer, and their colleagues (1980) over 15 years earlier (this is the same research group—Helzer, Robins et al., 1985—who claimed that resumption of moderate drinking by alcoholics is impossible). These researchers reported the following challenges to conventional wisdom about heroin and drug treatment based on their research:

Is addiction to heroin more or less permanent without prolonged treatment?

Of all the men addicted in Vietnam [defined as prolonged heavy use and severe withdrawal symptoms lasting more than two days], only 12% have relapsed to addiction at any time since their return. . . . Of those men who were addicted in the first year back, half were treated and half were not. . . . **Of those treated, 47 percent were addicted in the second period; of those not treated, 17 percent were addicted**

Does recovery from addiction require abstinence?

Perhaps an even more surprising finding than the high proportion of men who recovered from addiction after Vietnam was the number who went back to heroin without becoming readdicted Half of the men who had been addicted in Vietnam used heroin on their return home, but only one-eighth became readdicted to heroin. Even when heroin was used frequently . . . , only one-half became readdicted.

These government-funded studies (the Vietnam research was funded by the Defense Department) seem to contradict the impetus of a massive government propaganda effort. Shouldn't the U.S. government get its story straight?

"Who Gets Treated" Revisited

We have seen that more socially deprived people are to be found in alcohol and substance abuse treatment. But the NLAES and Vietnam Vet studies also showed (as has other research) that treated alcoholics/addicts are, on average, more severely addicted. This means that those who received treatment in the NLAES and Vietnam study fared worse because they had worse addictions. But this can't account for the entire phenomenon of natural remission and of superior outcomes for untreated over treated addicts/alcoholics. First, keep in mind, all subjects in the Vietnam study were classified as addicted based on prolonged heavy use and the appearance of substantial withdrawal, while everyone in NLAES was classified "alcohol dependent" according to DSM-IV. In other words, those who recovered at such a good rate without treatment—better than untreated addicts and alcoholics—were in fact genuine addicts and alcoholics, at least as determined by standard diagnostic tools.

More importantly, the relatively poor performance of the treated addicts and alcoholics in these studies seemingly belies the optimistic claims for treatment, most notably those of NIAAA director Gordis and other MATCH research personnel. In NLAES, 7 in 10 treated alcoholics were still abusing alcohol or alcohol dependent within five years of treatment. Recall, then, the elimination of more than 60 percent of prospective patient/subjects for Project MATCH due to "residential instability; legal or probation problems, etc. " In other words, by advantageous selection and other special features, MATCH created results wholly unlike those actually found for alcoholism treatment in the U.S.

Conclusions—The Likely Results of More Treatment

If the expansion of drug treatment follows the already dominant model of substance abuse treatment created in the case of alcoholism, then the results of changing drug policy to emphasize treatment over punitive approaches to substance abuse will be at odds with the goals of most drug reformers. The actuality would seem to differ from the intended in the following ways:

1. While the goal of "harm reduction" for reformers focuses on the provision of greater social services for the extremely addicted individual with few social and economic resources, the greater availability of alcohol treatment in the U.S. has apparently led to the *reduction* of social services for this group. As a result, homelessness among such drinkers has increased. It is as though treatment *substituted* for providing external services for these individuals.
2. The fact that alcohol is a legal drug has in no way lessened the influence of strongly moralistic traditions of American thought which disapprove of intoxication, emphasizing abstinence and the need to avoid intoxicating substances in even moderate doses. Thus, the drug reform goal of greater recognition and acceptance of controlled drug use will not be served by expanded drug treatment. Rather, to judge from the alcohol treatment experience, expanded treatment lowers the threshold for the level of drug use and problems thought to require treatment, and accepts abstinence as the only successful outcome of treatment (although efforts to introduce moderate drinking treatment in the U.S. have begun to make very slight inroads).
3. Even with a substance like alcohol, where use of the substance is not itself illegal, treatment has become increasingly coercive. Therefore, the hoped-for consequence of offering more treatment

for drug abusers will *not* eliminate, reduce, or even reverse the expansion of coercion into drug treatment.

4. The idea that shifting from a law enforcement to a treatment model will not actually increase the freedom of ordinary Americans who use drugs or the choices available to drug addicts seems a paradoxical and alarming consequence of drug policies meant to be more liberal and less punitive. Yet, the path in this direction is inexorable.
5. Despite the coerciveness and intolerance of American drug and alcohol treatment policy, the most alarming consequence of the expansion of treatment rolls is not the external imposition of views of alcoholism, but the willingness of so many people to accept and internalize these definitions of themselves as alcohol and drug abusers and addicts. This trend will accelerate with expanding treatment.

The expansion of treatment enlarges the number of people who feel they need treatment. These shifts in reported dependence symptoms are not because people drink or use drugs more or in more harmful ways, but because they believe they have less control over their drinking and drug use and over themselves. At the same time, they come to define more and more of their life problems in terms of their substance use. In the U.S. today, addiction is already the dominant paradigm for people to understand and deal with their problems. And when you are addicted, what you need is treatment (Peele, 1995).

Finally, despite all this greater treatment, we have no indication that addiction, alcoholism, etc., are declining. We have no indication when we examine community populations who experience treatment as it is actually administered en masse in the U.S. that treatment reduces substance abuse. Studies of community populations find that those with substance abuse problems who resist treatment in fact fare better; but if treatment is to expand, these people must be directed into treatment programs. Remarkably, substantial evidence from the most authoritative government sources indicates that resorting to standard American treatment is a risk factor for continued substance abuse.

Responses from readers

References

- Adlaf, E. M., Smart, R. G., and Canale, M. D. (1991). *Drug use among Ontario adults 1977-1991*. Toronto: Ontario Addiction Research Foundation.
- Alcoholics Anonymous (1995). *A.A. fact file*. New York: General Services Office of Alcoholics Anonymous.
- Bascuas, I. (1992). Psychiatric confinement of youth: Marketing coup or national dilemma? *Medical Interface*, 5(2), 52-58.
- Bower, B. (1997, January 25). Alcoholics synonymous: Heavy drinkers of all stripe may get comparable help from a variety of therapies. *Science News*, 151, 62-63.
- Breakey, W.R., Fischer, P.J., Kramer, M., Nestadt, G., Romanoski, A.J., Ross, A., Royall, R.M., and

Stine, O.C. (1989). Health and mental health problems of homeless men and women in Baltimore. *JAMA*, 262, 1352-1357.

Cahalan, D., and Room, R. (1974). *Problem drinking among American men*. New Brunswick, NJ: Rutgers Center of Alcohol Studies.

Cohen, P. D. A. (1989). *Cocaine use in Amsterdam in nondeviant subcultures*. Amsterdam: Instituut voor Sociale Geografie, Universiteit van Amsterdam.

Cohen, P. D. A., and Sas, A. (1994). *Cocaine use in Amsterdam in nondeviant subcultures*. *Addiction Research*, 2, 71-94.

Dawson, D.A. (1996). Correlates of past-year status among treated and untreated persons with former alcohol dependence: United States, 1992. *Alcoholism: Clinical and Experimental Research*, 20, 771-779.

Ditton, J., Farrow, K., Forsyth, A., Hammersly, R., Hunter, G., Lavelle, T., Mullen, K., et al. (1991). Scottish cocaine users: Wealthy snorters or delinquent smokers? *Drug and Alcohol Dependence*, 28, 269-276.

Erickson, P.G. (1993). Prospects of harm reduction for psychostimulants. In N. Heather, A. Wodak, E. A. Nadelmann, and P. O'Hare (Eds.), *Psychoactive drugs and harm reduction* (pp. 184-210). London: Whurr.

Erickson, P.G., Adlaf, E.M., Murray, G.F., and Smart, R.G. (1987). *The steel drug: Cocaine in perspective*. Lexington, MA: Lexington.

Erickson, P.G., and Alexander, B.K. (1989). Cocaine and addictive liability. *Social Pharmacology*, 3, 249-270.

Fagan, J., and Chin, K. L. (1989). Initiation into crack and cocaine: A tale of two epidemics. *Contemporary Drug Problems*, 17, 579-616.

Finney, J.W., and Moos, R.H. (1991). The long-term course of treated alcoholism: 1. Mortality, relapse and remission rates and comparisons with community controls. *Journal of Studies on Alcohol*, 52, 44-54.

Gordis, E. (1987). Accessible and affordable health care for alcoholism and related problems: Strategy for cost containment. *Journal of Studies on Alcohol*, 48, 579-585.

Gordis, E., Dorph, D., Sepe, V., and Smith, H. (1981). Outcome of alcoholism treatment among 5578 patients in an urban comprehensive hospital-based program. *Alcoholism: Clinical and Experimental Research*, 5, 509-522.

Harrison, L.D. (1994). Cocaine using careers in perspective. *Addiction Research*, 2, 1-20.

Helzer, J.E., Burnham, A., and McEvoy, L.T. (1991). Alcohol abuse and dependence. In L.N. Robins and D.A. Regier (Eds.), *Psychiatric disorders in America* (pp. 81-115). New York: Free Press.

Helzer, J.E., and Canino, G.J. (1992). Comparative analysis of alcoholism in ten cultural regions. In J.E. Helzer and G.J. Canino (Eds.), *Alcoholism in North America, Europe, and Asia* (pp. 289-308). New York: Oxford University Press.

Helzer, J.E., Robins, L.N., Taylor, J.R., Carey, K., Miller, R.H., Combes-Orme, T., and Farmer, A. (1985). The extent of long-term moderate drinking among alcoholics discharged from medical and psychiatric treatment facilities. *New England Journal of Medicine*, 312, 1678-1682.

Hilton, M.E. (1987). Drinking patterns and drinking problems in 1984: Results from a general population survey. *Alcoholism: Clinical and Experimental Research*, 11, 167-175.

Hilton, M.E. and Clark, W.B. (1991). Changes in American drinking patterns and problems, 1967-1984. In D.J. Pittman and H.R. White (Eds.), *Society, culture, and drinking patterns reexamined* (pp. 157-172). New Brunswick, NJ: Center of Alcohol Studies.

Hyman, S.E. (1996). Shaking out the cause of addiction. *Science*, 273, 611-612.

Mattson, M. (1997, March). Treatment can even work without triage: Initial results from Project MATCH. *EPIKRISIS: Newsletter of the North Carolina Governor's Institute on Alcohol and Substance Abuse, Inc.*, 8(3), 2-3.

Miller, W.R., Brown, J.M., Simpson, T.L., Handmaker, N.S., Bien, T.H., Luckie, L.F., Montgomery, H.A., Hester, R.K., and Tonigan, J.S. (1995). What works?: A methodological analysis of the alcohol treatment outcome literature. In R.K. Hester and W.R. Miller (Eds.), *Handbook of alcoholism treatment approaches* (2nd Ed., pp. 12-44). Boston: Allyn and Bacon.

Miller, W.R. and Hester, R.K. (1986). Inpatient alcoholism treatment: Who benefits? *American Psychologist*, 41, 794-805.

Mugford, S. and Cohen, P. (1989). Drug use, social relations and commodity consumption: A study of recreational users in Sydney, Canberra and Melbourne. Canberra, Australia: Research into Drug Abuse Advisory Committee, National Campaign Against Drug Abuse.

Murphy, S., Reinerman, C., and Waldorf, D. (1989). An 11-year follow-up of a network of cocaine users. *British Journal of Addiction*, 84, 427-436.

Nash, J.M. (1997, May 5). Addicted: Why do people get hooked? Mounting evidence points to a powerful brain chemical called dopamine. *Time*, pp. 68-76.

Peele, S. (1991, December). What we now know about treating alcoholism and other addictions. *Harvard Mental Health Letter*, pp. 5-7.

Peele, S. (1995). *Diseasing of America: How we allowed recovery zealots and the treatment industry to convince us we are out of control.* San Francisco: Jossey-Bass.

Peele, S., Brodsky, A., with Arnold, M. (1991). *The truth about addiction and recovery.* New York: Simon & Schuster.

Polich, J.M., Armor, D.J. and Braiker, H.B. (1981). *The course of alcoholism: Four years after treatment*. New York: Wiley.

Project MATCH Research Group. (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol*, 58, 7-29.

Robins, L.N., Helzer, J.E., Hesselbrock, M., and Wish, E. (1980). Vietnam veterans three years after Vietnam: How our study changed our view of heroin. In L. Brill and C. Winick (Eds.), *The Yearbook of Substance Use and Abuse* (Vol. 2, pp. 213-230). New York: Human Sciences Press.

Roman, P.M., and Blum, T.C. (1997). *National treatment center study*. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.

Room, R. (1980). Treatment seeking populations and larger realities. In G. Edwards and M. Grant (Eds.), *Alcoholism treatment in transition* (pp. 205-224). London: Croon Helm.

Room, R., and Greenfield, T. (1993). Alcoholics Anonymous, other 12-step movements and psychotherapy in the U.S. population, 1990. *Addiction*, 88, 555-562.

Rudy, D. (1986). *Becoming alcoholic*. Carbondale, IL: University of Southern Illinois.

SAMHSA (1996). *National household survey on drug abuse: Main findings 1994*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

SAMHSA (1997, February). *National admissions to substance abuse treatment services: The treatment episode data set (TEDS) 1992-1995* (Advance Report No. 12). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Schaler, J. (1996, August/September). Selling water by the river: The Project MATCH cover-up. *PsychNews International*, 1(5).

Siegel, R. K. (1984). Changing patterns of cocaine use. In J. Grabowski (Ed.), *Cocaine: Pharmacology, effects, and treatment of abuse* (ADM 84-1326; pp. 92-110). Rockville, MD: U.S. Government Printing Office.

USDHHS (1987). Treatment. In *The Sixth Special Report to the U.S. Congress on Alcohol and Health* (ADM 87-1519; pp. 120-142). Washington, DC: USDHHS.

Vaillant, G.E. (1983). *The natural history of alcoholism*. Cambridge, MA: Harvard University Press.

Waldorf, D., Reinerman, C., and Murphy, S. (1991). *Cocaine changes: The experience of using and quitting*. Philadelphia: Temple University.

Walsh, D.C., Hingson, R.W., Merrigan, D.M., et al. (1991). A randomized trial of treatment options for alcohol-abusing workers. *New England Journal of Medicine*, 325, 775-782.

Weisner, C.M. (1990). Coercion in alcohol treatment. In Institute of Medicine (Ed.), *Broadening the*

base of treatment for alcohol problems (pp. 579-609). Washington, DC: National Academy Press.

Weisner, C. and Room, R. (1984). Financing and ideology in alcohol treatment. *Social Problems*, 32, 167-184.

World Health Organization (1995, March 14). Publication of the largest global study on cocaine ever undertaken. Press Release, Brussels, Belgium.

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