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Does America Spend Enough on Addiction Treatment?:
Results from Public Opinion Surveys

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Abstract

Addiction treatment is often misunderstood and underappreciated in the U.S. While a large body of literature clearly demonstrates the clinical and economic benefits of addiction treatment for many clients and in most settings, the general public has a somewhat ambivalent attitude towards treatment expansion and taxpayer financing. A potential reason for this disconnect between economic evidence and public opinion is a weak identification with the need for or success of addiction treatment for those individuals without a substance abuse problem themselves or in some member of their family. Alternatively, addiction treatment stakeholders may be delivering an ineffective or misdirected message about the social value of this industry. This paper explores these and other potential explanations for the paradoxically low placement of the addiction treatment industry among other socially important institutions in the U.S. Although none of the explanations advanced in this paper are scientifically tested or verified, it is hoped that the historical inquiry and information provided herein will offer practical strategies for the stability and growth of the addiction treatment industry.

Key Words: Addiction treatment; Public spending; Public attitudes
1. Introduction

Alcohol and other drug addiction is a widespread problem in the U.S. Data from the most recent National Household Survey on Drug Abuse indicate that 22.5 million people in the U.S. have been diagnosed with substance abuse/dependence (Substance Abuse and Mental Health Services Administration [SAMHSA], 2005a). A large proportion of households in the country are therefore directly or indirectly impacted by alcohol and drug addiction, regardless of gender, race/ethnicity, socioeconomic status, or region of residence. Increasing evidence indicates that substance abuse treatment can result in positive clinical outcomes and economic benefits (Marwick, 1998). It is somewhat surprising, therefore, that the addiction treatment industry is experiencing declining reimbursement rates from public and private insurance, deteriorating working conditions and wages among treatment personnel, and increasing community ambivalence or even opposition to placement of addiction treatment facilities in certain neighborhoods (Mark & Coffey, 2004; McLellan, Carise, & Kleber, 2003).

One possible explanation for the shortage of tangible (i.e., financial and legislative) support for addiction programs despite the encouraging economic evidence relates to the deep division among politicians and the public on whether substance abuse/dependence is a medical condition. Advocates of the medical model of substance abuse believe that addiction treatment is the most appropriate and effective health care intervention for this chronic health condition. Such a paradigm does not view relapse as a failure, but rather as a common event on the path to sustained recovery (McLellan, Lewis, O'Brien, & Kleber, 2000). Alternatively, criminal justice advocates generally view substance use as a voluntary or controllable behavior. They
therefore take the position that illicit drug users should be handled by the criminal justice system rather than the health care system. These divergent attitudes influence private, public, and community support/opposition (e.g., government budgets, fundraising efforts, public service announcements, media coverage, Not in My Back yard (NIMBY) campaigns) for addiction programs.

Richmond and Kotelchuck’s Approach to Health Policy (1983) provides a useful framework for understanding the roles played by political will, research, and social strategies in the formulation of health policy. Their model offers insight into why the addiction treatment industry is not more widely embraced by communities and better financed with public and private dollars. While it is important for researchers and practitioners in the treatment field to continue to strengthen the knowledge base with advances in clinical and economic research, they must also consider public opinion and the political process so that an effective social strategy can be designed to generate more support for the industry.

With this background, the present paper seeks to contribute to the substance abuse treatment literature by accomplishing five objectives: 1) review the existing knowledge base and articulate the economic value of addiction treatment both to individuals and to society at large; 2) evaluate the public perception of spending on drug abuse treatment from 1984-2004 by analyzing the responses of individuals with different demographic, political, and religious characteristics to a question in the General Social Survey (GSS) that asks whether too much, too little, or the right amount is being spent on drug abuse rehabilitation; 3) explore the interaction between public opinion, research findings, and the development of drug control policy; 4) review and critique some of the
recent marketing and public relations campaigns for addiction treatment, which can be viewed as part of the treatment industry's social strategy; and 5) formulate a set of recommendations for how the addiction treatment industry can positively influence public perception and generate additional support.

2. The Drug Treatment Industry's Economic Knowledge Base

Recent research developments have strengthened the drug treatment industry's clinical and economic knowledge base. Although more needs to be done to evaluate various types of interventions, results indicate that treatment can lead to positive clinical outcomes, particularly for those who remain in long term programs (McLellan et al., 2000). The main purpose of this section is to provide an empirical context for the apparent disconnect between economic evaluation findings and the public image of addiction treatment by summarizing the economic evaluation findings for treatment programs/interventions and highlighting some of the key results.

Economic evaluations of addiction treatment, like those of other health care programs or interventions, almost always start with an economic cost analysis of program or intervention resources required for delivery (Alexandre, Roebuck, French, & Barry, 2003; Sculpher et al., 1993). Because costs alone are rarely sufficient to determine whether a program/intervention should be adopted or continued, economists consider costs in conjunction with a measure of program/intervention outcome or economic benefit. Comparing incremental cost to incremental outcome in the form of a ratio is known as cost-effectiveness analysis (CEA) (Ludbrook, 1981; McCollister et al., 2003). Comparing economic cost with the monetized values (i.e., economic benefits) of
program/intervention outcomes is known as benefit-cost analysis (BCA) (McCollister & French, 2003; Soderstrom et al., 2005). Additional material explaining the conceptual basis and empirical approach for these studies can be found in several excellent reference books and articles in the general health economics (Drummond, O’Brien, Stoddart, & Torrance, 2005; Gold, Siegel, Russell, & Weinstein, 1996) and substance abuse (French & Drummond, 2005; French, Salome, Sindelar, & McLellan, 2002; Jofre-Bonet & Sindelar, 2004) literatures.

It is important to highlight one of the key differences between addiction treatment and most other forms of health care. Most standard health care interventions are designed to impact a single patient, with most if not all of the benefits accruing to this individual. Addiction treatment, however, is a patient-directed intervention with both positive and negative social externalities. Quite often, the economic benefits resulting from addiction treatment extend well beyond the individual patient. Therefore, although the multiple and diverse outcomes introduce additional challenges into the evaluation of addiction interventions that are not present in the assessment of other health care programs, the social contributions of these evaluations can be considerable.

In this regard, the growing body of economic evaluation studies suggests that much of the tepid or negative public sentiment toward addiction treatment is probably unwarranted. Roebuck, French, and McLellan (2003) recently published summary cost data from a variety of treatment programs that completed the Drug Abuse Treatment Cost Analysis Program (DATCAP). Results show that the average weekly costs for residential, intensive outpatient, standard outpatient, and methadone maintenance treatment are $700, $462, $121, and $91 (Roebuck et al., 2003). These costs compare
favorably to treatment estimates for other chronic conditions. For example, the average weekly cost of care for in-center hemodialysis was estimated to be CAN$1,322 while the average weekly cost of home nocturnal hemodialysis was estimated to be CAN$1,082 (McFarlane, Pierratos, & Redelmeier, 2002).

Several studies have found that some substance abuse treatments result in substantial economic benefits (Belenko, Patapis, & French, 2005; Harwood et al., 2002; McCollister & French, 2003). These benefits can easily exceed $5,000 per client during the 12-month period following admission to treatment. When combined with treatment costs, net benefits are almost always positive; benefit-cost ratios are usually greater than 1 and often greater than 5 (Cartwright, 2000; Ettner et al., 2006; French & Drummond, 2005; Zarkin, Dunlap, Hicks, & Mamo, 2005). These values are probably understated, because not all outcomes can be valued and the follow-up periods are usually 12 months or less.

Considering all modalities, settings, and patients, the largest component of total economic benefit of addiction treatment is almost always the value of avoided criminal activity. Better health status (reduced health care utilization) and improved employment measures are also important outcomes (McCollister & French, 2003). Some of the most positive economic evaluation results have been found with brief interventions delivered through physicians' offices and emergency departments (Fleming, et al., 2002; Kunz, French, & Bazargan-Hejazi, 2004) and criminal justice based interventions such as adult and juvenile drug courts (Logan et al., 2004; McCollister, French, Prendergast, Hall, & Sacks, 2004).
Several CEAs of addiction treatment have been published (Jofre-Bonet & Sindelar, 2004; McCollister et al., 2003; Zarkin, Lindrooth, Demiralp, & Wechsberg, 2001). Yet it remains difficult to draw general conclusions from the findings of these studies because the outcome measures are not consistent, most analyses are not incremental due to the absence of a no-treatment control group, and the cost-effectiveness ratios are difficult to assess without accepted threshold values. Unlike other healthcare economic evaluations, very few cost-effectiveness studies of addiction interventions have examined quality-adjusted life-years (QALYs) gained (Zaric, Barnett, & Brandeau, 2000), primarily because patient well-being is only one of many potential outcomes.

This brief summary of the modest yet growing economic evaluation literature highlights the high social value of many addiction treatments. Although it is possible that economic evaluation studies of some of the economically inefficient programs were not submitted for publication and/or accepted in the peer-reviewed literature, the sheer number and significant range of encouraging studies suggests that addiction treatment is often easy to justify from an economic perspective. Such studies could prove useful when making decisions about how to allocate scarce resources among competing alternatives. Given the encouraging findings of the studies described above—but the lack of political, financial, or public support for substance abuse treatment nationwide—one wonders whether the general public and policymakers are aware of these results.

3. Political Will
Although a well-developed knowledge base can form the basis for some decisions, moving an issue to the public agenda and generating the resources to deal with the issue requires political will. In turn, political will stems from support from a constituency of decision-makers, advocacy groups, leaders in a field, and the general public (Peters, 2004; Richmond & Kotelchuck, 1983). While public opinion shapes public policy in America, this relationship is probably reciprocal (Burstein, 2003). Therefore, evaluating public opinion regarding drug abuse treatment may offer some insight into the direction of policies and steps the addiction treatment industry might take to increase political will.

The empirical evidence regarding a program’s effectiveness can influence the level of support it receives from legislators and the public (Arnold, 1990; Corrigan & Watson, 2003). At the same time, legislators and decision-makers do not rely solely on performance indicators when developing policies. They also respond to their constituents, which includes the electorate and special interest groups. Political leaders may support popular interventions as a means to reelection or public approval regardless of whether those programs are effective (Peters, 2004).

Support for drug abuse rehabilitation is influenced by perceptions of the nature of substance abuse, the effectiveness of treatment, and the beneficiaries of rehabilitation in addition to the perspectives of the media and politicians (Blendon & Young, 1998; Johnson, Wanta, & Boudreau, 2004; Timberlake, Lock, & Rasinski, 2003). Timberlake et al. (2003) concluded that policy attitudes (defined as the perception of policy effectiveness and beliefs about whether willpower plays a role in addiction) strongly predicted support for drug control spending. While the mass media is a primary source
of information for the public about drugs, research suggests that powerful political figures such as the president can be equally if not more influential than the media in shaping public opinion about substance abuse (Blendon & Young, 1998; Johnson et al., 2004).

In their review of 47 surveys carried out between 1978 and 1997, Blendon and Young (1998) determined that the public was greatly concerned about the problem of drug abuse in the U.S., especially during the late 1980s and early 1990s. Although support for education grew throughout the 1990s and a criminal justice approach remained popular, the authors found weaker support for greater spending on drug abuse treatment. This may be a reflection of the dominant public understanding of drug use as a moral issue, specifically a result of weak will and an unwillingness to control voluntary behavior (Blendon & Young, 1998). Studies have indicated that people are more reluctant to allocate resources to programs with clients who are perceived to be responsible for their situation (Corrigan & Watson, 2003). Thus, public perceptions about the role of voluntary behavior in substance use and in substance abuse treatment may shape the policies that distribute resources to treatment interventions.

Opinions about drug control policy may also be affected by ideology and political affiliation. Timberlake et al. (2003) concluded that conservatives and liberals agree on overall support for spending on anti-drug abuse programs, but disagree in their support of law enforcement, treatment, and prevention interventions. The lower levels of support of traditionally conservative groups (males, whites, Protestants, and political conservatives) for spending on drug abuse rehabilitation as compared to general drug.
control policies were related to attitudes toward the welfare state, punishments, and minorities (Timberlake, Rasinski, & Lock, 2001).

We extend Timberlake et al.'s (2001) analysis of attitudes toward spending on drug abuse rehabilitation by applying a different modeling strategy and including more recent data from the General Social Survey (GSS). We examine the perception of drug abuse rehabilitation from 1984-2004 and explore the possible linkages between public opinion and the financing of treatment programs. In addition to aggregate trends in public opinion over time, we will also examine differences among demographic, political, and religious groups.

4. Methods

Data for this analysis come from multiple years of the GSS, a repeated cross-sectional survey that has been administered annually (most years between 1972 and 1994) or bi-annually (1994 through 2004). The GSS is a multi-stage area probability sample with a full probability sample selected since 1975. The sample is nationally representative of the English-speaking U.S. adult population (aged 18 and older) living in non-institutionalized settings (Davis, Smith, & Marsden, 2005).

We examined the surveys conducted from 1984 through 2004, the years during which the dependent variable question assessing attitudes toward spending on drug abuse rehabilitation was asked. Core questions (e.g., demographics) and many others are repeated in all of the individual surveys. Since 1994 the GSS has used a reduced set of core questions and a split sample design with different special topic modules. Thus, not all items of interest are necessarily asked of each respondent in each survey.
year. For the years 1984 to 2004, about 61% of GSS respondents were not asked the question we used as our dependent variable. Of those who were asked and eligible for inclusion in the analyses, 7.5% of cases had missing data on this item. In all, 84.9% (n=11,094) of eligible cases were included in the analyses; missing cases are due both to the split sample design (i.e., political ideology) and to non-response, most notably on the income measure.

The dependent variable is measured by responses to the following question:

“We are faced with many problems in this country, none of which can be solved easily or inexpensively. I’m going to name some of these problems, and for each one I’d like you to tell me whether you think we’re spending too much money on it, too little money, or about the right amount... drug rehabilitation.”

For purposes of this study, the “too little” and “too much” categories are each compared with the “about right” category in the multivariate analyses.

We included several variables identified in published research as important covariates of attitudes toward drug-related spending (Timberlake et al., 2001). These included continuous measures for age, family income, and education as well as indicators for gender, black race, marital status, parental status, employment status, political party (Republicans, Independents, and Democrats), political ideology (conservatives, moderates, and liberals), and religious affiliation (no affiliation as the comparison group). For Protestants, the conservative/non-conservative (i.e., liberal and moderate) distinction was based on a series of questions concerning specific denominations. We followed the work of Ellison and Bartkowski (2002) in determining the denominations comprising conservative Protestants.

We also included two sets of control measures in the analyses (results not shown but available upon request). Because we combined multiple years of the GSS, we used
dummy variables to represent the years of the survey. To control for possible regional differences in attitudes, we also included dummy variables to indicate residence in one of nine areas of the U.S.

Because the dependent variable has three categories, we used multinomial logistic regression to analyze the data. In the tables we present the beta coefficients (and accompanying standard errors) as well as relative risk ratios. Relative risk ratios are the exponentiated values of the beta coefficients and indicate the relative risks of saying that “too much” or “too little” rather than “about [the] right” amount is being spent for a one unit increase on the independent variable.

5. Results

As Figure 1 shows, between 49.3% and 67.1% of respondents indicated that the U.S. spent “too little” on drug abuse rehabilitation programs between 1984 and 2004, the period during which this item was asked (Davis et al., 2005). The percentage of respondents who reported that “too little” money is being spent peaked at 67.1% in 1990, and returned to about 50% again by 2004. Considering the other extreme of attitudes, between 7.4% and 15.6% felt that the country is spending “too much” on drug abuse rehabilitation (Davis et al., 2005). Averaging across all years of data, 57.6% said “too little,” 32.1% said “about right,” and 10.3% said “too much” money was being spent on drug abuse rehabilitation.

Table 1 shows the mean values of the independent variables across the three response categories of the dependent variable. As the table indicates, there are significant differences across those who answered “too little,” “about right,” and “too
much.” Females were more likely than males, blacks more likely than non-blacks, separated and divorced persons more likely than married people, Democrats more likely than Republicans and independents, and political liberals were more likely than conservatives or moderates to answer “too little.” Those who responded “about right” tended to have more years of education and higher family income. Respondents who answered “too much” tended to be male, Republican, politically conservative, and unaffiliated with any religion.

Table 2 presents the multinomial logistic regression results for attitudes toward spending on drug abuse rehabilitation. The first column displays the results for the contrast between “too little” and “about right” while the second column includes the results for the contrast between “too much” and “about right.” Several measures are important predictors of attitudes toward spending on drug abuse rehabilitation. Males were 0.89 times as likely as females to say “too little” rather than “about right” and 1.47 times as likely to respond “too much.” Blacks were 1.86 times as likely as Whites to say “too little.” There were no significant racial differences in the comparison of “too much” and “about right.”

Other demographic factors such as marital status, income, age, and education also predicted how individuals felt toward spending on drug abuse rehabilitation. Divorced individuals were more likely to answer either extreme (“too little” and “too much”) rather than “about right.” Older people were more likely than younger ones to say that “too much” is being spent on drug abuse rehabilitation. Higher levels of education and greater family income were both associated with a reduced likelihood of saying “too much” rather than “about right.” Those with higher education also were less
likely to respond “too little” rather than “about right.” People who were currently employed were 1.2 times as likely as those not working to say that “too much” money is spent on drug abuse rehabilitation.

The results also showed significant effects related to religion, ideology, and political associations. Republicans and political conservatives were more likely than Democrats and liberals to believe that “too much” money is spent and less likely to answer “too little.” Specifically, Republicans were 0.74 times as likely as Democrats, and political conservatives 0.86 times as likely as liberals to say “too little” rather than “about right.” On the other hand, Republicans were 1.18 times as likely as Democrats, and conservatives 1.37 times as likely as liberals to answer “too much” rather than “about right.” Conservative Protestants were 0.79 times, non-conservative Protestants 0.63 times, and Catholics 0.76 times as likely as persons with no religious affiliation to say that “too much” money is spent on drug abuse rehabilitation. Additionally, persons who belong to other religions (e.g., Judaism, Islam) were more likely than those with no affiliation to say that “too little” money is spent.

The research here indicated significant differences among social, demographic, religious, and political groups in their support for drug abuse rehabilitation. Results suggested that males, Republicans, and conservatives were less supportive of funding for treatment; each of these groups was more likely to respond that “too much” is being spent and less likely to answer “too little.” Blacks were more likely than whites to feel that drug abuse rehabilitation receives insufficient funding. People with higher education levels were more likely to indicate that spending is “about right” than they were to answer “too much” or “too little.”

We now examine the relationships between expressed support for drug abuse rehabilitation and public spending for drug abuse treatment. Figure 2 presents actual federal drug control spending for the period from 1986 through 2002 and the proportion spent on drug abuse rehabilitation in constant 2002 dollars. During this time, spending on treatment and treatment research comprised approximately 19% of the total drug control budget (range was 16% in 1999 to 24% in 1986) (Office of National Drug Control Policy [ONDCP], 1998; 2002).

During President Reagan's two terms, federal funding on drug control increased from $2.97 billion in 1981 to $7.15 billion in 1988 (constant 2002 dollars) (Carnevale & Murphy, 1999). During that period, drug abuse was framed as a moral issue related to crime, illustrated by the "Just Say No" campaign and the emphasis on law enforcement as a means to control drug use (Carnevale & Murphy, 1999). The idea behind these approaches was that individuals should be accountable and responsible for their decision to use drugs.

Following Reagan, President Bush continued to make drug control a priority. Domestic law enforcement made up 44% of the drug control budget by 1990, an increase from 1986 when it accounted for only 39% of the budget (ONDCP, 1998). Spending on treatment was only 18% of the budget in 1990, a decrease from 24% in 1986 (ONDCP, 1998). Johnson et al. (2004) concluded that President Bush had the greatest influence on both the public agenda and the media regarding the issue of illicit drugs compared to Presidents Reagan, Nixon, and Carter. The local and national
media, a primary source of information for the public, carried many stories about the "drug problem" in the country during Reagan and Bush's presidencies (Blendon & Young, 1998).

As the public learned about illicit drugs from the presidents and the media, it responded by expressing its belief that not enough was being spent on treatment. A greater proportion of Republicans felt this way during President Reagan's and President Bush's terms than at other times when the question was asked. In 1988, the proportion of Republicans responding "too little" nearly equaled the proportion of Democrats (just over 60%). This was a change from 1984, when only about 45% of Republicans responded this way. As our results show, the greatest proportion (67%) of all respondents reported that "too little" was being spent on drug abuse rehabilitation in 1990, just one year after President Bush appointed William Bennett to be the first Drug Czar and head of the ONDCP (Carnevale & Murphy, 1999). Drug abuse ranked #2 in 1990 on Gallup polls that asked respondents about the most important problem facing the country (Blendon & Young, 1998).

The levels of public support for funding of treatment programs during the Bush and Reagan administrations may have reflected the increased attention on drugs. Unfortunately, we cannot determine from our analyses the rankings individuals place upon alternative approaches to treatment. Sociologists argue that public sentiment at this time was part of a "moral panic" fueled by media coverage and presidential rhetoric rather than actual rates of drug use and drug-related problems (Hawdon, 2001).

President Bush proposed the 1992 strategy against drugs, which continued during the Clinton administration and focused on assisting those addicted to drugs by
strengthening drug treatment programs (Carnevale & Murphy, 1999). Although President Clinton concentrated more than his predecessors on reducing the demand for drugs, spending on domestic law enforcement was over 50% of the total drug control budget between 1994 and 1999 (Carnevale & Murphy, 1999; ONDCP, 1998). This occurred in part because the portion devoted to corrections expenditures cannot be easily reduced, but it was also the result of Clinton's 1994 Crime Control Act, which allocated additional funds for community policing and for drug courts (Carnevale & Murphy, 1999). The gap between Republicans' and Democrats' perceptions of spending on drug abuse rehabilitation widened during the Clinton administration. Until 2000, the proportion of Democrats who responded “too little” remained over 60%, while the proportion of Republicans decreased to 45%.

Under the administration of President George W. Bush, the federal drug control budget rose to over $18 billion (ONDCP, 2002). The proportion who felt the country was spending the “right amount” on drug abuse treatment increased while those who felt that insufficient resources were being spent decreased. Only about 35% of Republicans and 58% of Democrats felt that “too little” was being spent in 2004. The drop in support for additional funding for treatment in recent years, particularly 2001-2004, may reflect shifting public opinion during the post-9/11 period as the Bush administration and many Americans began to focus on terrorism and international rather than domestic policies. Another possible explanation for the decrease in support may be related to the “issue attention cycle.” Following an initial phase of great public concern about an issue (for substance abuse, the late 1980s and early 1990s), the public enters a stage of “sober realism” as the challenges to develop a lasting solution
to the problem become apparent. As another issue captures the public's attention, concern about drug abuse and support for program funding will wane (Peters, 2004).

7. **Policy Implications and Industry Recommendations**

As noted earlier, the economic evidence highlights the value of drug abuse treatment for society as a whole. While differences exist in levels of support among some groups, the majority of those surveyed in the GSS said "too little" was spent on drug abuse rehabilitation. Yet even with this knowledge base and public attitudes supportive of funding, the substance abuse treatment industry has not garnered strong political or financial support. How can the industry bridge this gap to better inform the public, particularly those segments expressing low support, about the benefits of treatment?

A social strategy is a plan developed to translate public opinion and a knowledge base into political will and policy (Richmond & Kotelchuck, 1983). Based on the data presented it appears that the drug treatment industry should formulate a comprehensive social strategy - targeting both the general public and policymakers - that attempts to achieve the following aims: (1) to actively communicate the effectiveness of treatment as evidenced by the economic and clinical literatures; (2) to keep the issue of drug abuse prominent on the public and political agenda; (3) to influence the public's perception of those at risk for addiction; and (4) to clearly articulate the benefits of treatment, not just for the treatment recipient but for society as a whole. Since results from economic evaluations are relevant to each of these goals, the economic knowledge base should be integrated throughout this strategy.
Marketing and public relations are valuable techniques that can be used to communicate findings from the knowledge base to influence political will. Previous marketing efforts such as Nancy Reagan’s “Just Say No” campaign stressed prevention and framed substance use as an individual choice. President Clinton’s “National Youth Anti-Drug Media Campaign,” the largest public health media campaign at the time, encouraged parents to talk to their children about drugs. Unfortunately, it did not coincide with an investment in services to meet the needs of those who would seek treatment in response to the campaign (Dejong & Wallack, 1999).

During SAMHSA’s annual Recovery Month public agencies partner with non-profit organizations to increase awareness about treatment for drug and alcohol abuse (SAMHSA, 2005b). SAMHSA has used innovative approaches such as an “Ask the Expert” section on its website to reach a wider audience in the past few years. SAMHSA reported an increase in Recovery Month web site hits from 2.5 million in 2002 to 8.3 million in 2004 (SAMHSA, 2005c). This suggests that more people are interested in seeking resources and learning about substance abuse treatment, and that many are willing to use the Internet to do so. Involving other public figures in the campaign, such as athletes, politicians, and celebrities, and developing additional partnerships with private, commercial companies could also help extend the reach of Recovery Month.

Part of the disconnect between objective research findings and public attitudes about addiction treatment may be due to the misdirected or ineffective dissemination of information in marketing strategies specifically focused on treatment. For example, one of the most popular slogans among addiction treatment stakeholders and personnel is “treatment works.” Unfortunately, “treatment works” campaigns can be easily
challenged and refuted because not all treatment is effective, and even the best treatment does not lead to abstinence or other desirable outcomes for all clients. Those who are not fully educated on the nuances of addiction treatment can become skeptical of such blanket statements.

Several other factors may explain the lack of marketing success in changing public opinion about addiction treatment. These include limited financial and human resources, lack of coordination among stakeholders and constituents, vague or inconsistent messages from advocates, and competing interests within the addiction treatment industry. Fragmentation within the treatment industry among those promoting different approaches can limit the ability to communicate with the public in a unified way (Schroeder, 2005). Organizations such as the National Center on Addiction and Substance Abuse are relatively new yet important entities within the substance abuse community. Such organizations can raise the public's consciousness about some of these issues (Schroeder, 2005). The treatment industry could also benefit from citizens' groups that carry out advocacy, education, and fundraising.

Unfortunately, there continues to be a deep-rooted stigma surrounding drug users and addiction. It is important to clarify the fact that many individuals in society are at risk of becoming addicted to alcohol and/or other drugs. "Treat Me," a Public Service Announcement that aired in Times Square twice an hour during August 2005, attempted to reduce the stigma surrounding people who have gone through addiction treatment. In the commercial, which featured images of a firefighter, judge, and minister, the announcer described addiction as an "equal opportunity disease" (SAMHSA, 2005b). Future communication campaigns should consider continuing stories from professionals
such as doctors, lawyers, and others outside the stereotypes of drug users to illustrate the extensive reach of addiction, elicit greater recognition of the problem, and foster more support for treatment.

Increasing public awareness of the medical model of addiction may help reduce the stigma surrounding treatment clients and establish realistic expectations about treatment. The medical model of addiction views relapses not as failures but as part of the process of rehabilitation. Indeed, in the absence of a cure, it is clear that many treatments can induce long abstinence periods in former users, garnering significant benefits for the person in treatment, their family, and society as a whole. The medical community could also play a role in influencing public opinion about the nature of addiction by involving physicians, who are respected sources of health information, in individual doctor-patient interactions and in the media.

Certain policies may be able to bridge the gap between those who view addiction through a medical model and those who subscribe to a criminal justice approach. For example, the use of adult and juvenile drug courts may reconcile some of the differences regarding how to treat addiction. Drug courts are carried out in a criminal justice setting, which would satisfy those who feel that drug abuse should be punished, but the focus of the approach is on rehabilitation. Highlighting the use of drug courts could increase support from those who traditionally would not advocate for treatment.

The fact that a larger proportion of the public felt that “too little” was spent on treatment during the late 1980s and early 1990s may be attributed to the marked presence of drug abuse and crime on the national agenda. The treatment industry should try to elevate drug abuse on the public’s ranking of social problems to generate
greater political will, but it must be careful to avoid creating another moral panic, in
which one group is perceived as a threat to society (Hawdon, 2001). Emphasizing the
medical model, employing strategies to reduce stigma, and providing accurate
assessments of the drug problem and of the effectiveness of drug treatment in this
country are essential components of this social strategy. Furthermore, the treatment
industry can partner with the local and national media to clearly publicize objective
scientific developments, particularly in areas that are understandable to policymakers
such as economic evaluation.

An emphasis on economic costs and benefits could motivate the public,
insurance administrators, policymakers, and fiscal conservatives to place more
importance on drug abuse treatment. If the net benefits (total benefit minus total cost)
from treatment could be communicated clearly, employers and others concerned with
issues such as workplace productivity or high health care costs might find drug abuse
treatment more relevant to them. Recent budget pressures at the state and federal
level have led legislators and administrators to attempt to incorporate economic
outcomes into decision-making about social programs. Referring to drug abuse
treatment, the 2000 Republican Party Platform stated, "We will bring accountability to
anti-drug programs, promote those that work, and cease funding for those that waste
resources" (Cable News Network [CNN], 2000). Raising awareness about the evidence
demonstrating the effectiveness of certain treatment interventions and the savings that
can be incurred in other sectors could make these programs more appealing to
politicians and the public.
Conveying results of economic studies that examine the consequences of drug abuse on the health care system, employers, crime victims, and government agencies in addition to the benefits of treatments for clients could strengthen the link between the knowledge base and public opinion to garner greater support. The data presented here suggest that certain groups have been less supportive of treatment in the past. Efforts to target these groups as well as those who are undecided about their feelings could benefit the industry. At the same time, the sentiments of strong supporters should be reinforced so that drug treatment can continue to be viewed as a priority.

8. Conclusion

The aims of this article are to articulate the developments in the addiction treatment industry's economic knowledge base, to describe trends in public opinion regarding the field, and to consider the relationships between these two sets of information. Recent declines in public support, demonstrated in our statistical analysis, may partly explain why the drug abuse treatment industry has experienced decreased funding and other challenging conditions. Levels of support do not reflect the results from evaluations, since the literature consistently quantifies the positive economic benefits associated with treatment. It is important to continue to make improvements in research designs and economic evaluation methods so researchers can produce updated and accurate findings.

Substance abuse and dependence are important problems in the U.S. (SAMSHA, 2005a), and the availability of and access to effective treatment options are critical. Although none of the explanations advanced in this manuscript have been scientifically tested or verified, it is hoped that the historical inquiry and information
provided herein will offer practical strategies for the stability and growth of the addiction treatment industry. The recommendations noted above may be an appropriate start. Developing a comprehensive social strategy that incorporates scientific developments, advocacy, public relations, organization, and health communications could enhance the industry’s ability to translate the growing economic knowledge base into political will and to effect greater, more meaningful change.
Acknowledgements

Financial assistance for this study was provided by the National Institute on Alcohol Abuse and Alcoholism (grant number R01 AA13167) and the National Institute on Drug Abuse (grant numbers R01 DA018645 and 3P50 DA07705). We gratefully acknowledge John Kimberly, Tom McLellan, and participants at the inaugural Center for Organization and Management in Addiction Treatment (COMAT) conference for technical suggestions on earlier versions of the paper; Ana Guzman and Jamila Wade for research assistance; and William Russell for editorial assistance. The authors are entirely responsible for the research and results reported in this paper, and their position or opinions do not necessarily represent those of the University of Miami, the National Institute on Alcohol Abuse and Alcoholism, or the National Institute on Drug Abuse.

References


<table>
<thead>
<tr>
<th>Variable</th>
<th>Too Little (N=6,389; 57.6%)</th>
<th>About Right (N=3,564; 32.1%)</th>
<th>Too Much (N=1,141; 10.3%)</th>
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<tr>
<td>Demographics</td>
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<tr>
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<td>31.3</td>
<td>8.1</td>
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<td>43.8 (16.9)</td>
<td>46.7 (16.5)</td>
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<td>10.7</td>
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<td>10.9</td>
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<td>9.3</td>
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<td>10.5</td>
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<td>9.9</td>
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<td>13.1 (2.9)</td>
<td>13.4 (2.9)</td>
<td>13.0 (3.0)</td>
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<td>Family income (constant $1986)</td>
<td>31,376 (28,059)</td>
<td>34,319 (30,044)</td>
<td>31,681 (28,284)</td>
</tr>
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</table>
### Political Party/Ideology

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<tr>
<td>Republican (%)</td>
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<td>57.5</td>
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<tr>
<td>Conservative (%)</td>
<td>51.9</td>
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<td>Moderate (%)</td>
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<tr>
<td>Liberal (%)</td>
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### Religious Affiliation

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<tr>
<td>Catholic (%)</td>
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<td>Conservative protestant (%)</td>
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<tr>
<td>Non-conservative protestant (%)</td>
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<tr>
<td>Other religion (%)</td>
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<td>10.9</td>
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<tr>
<td>No religious affiliation (%)</td>
<td>57.2</td>
<td>30.7</td>
<td>12.1</td>
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</table>

Notes: Standard deviations in parentheses for continuous variables. The statistics shown in this table are based on a pooled sample of the General Social Survey (GSS) from 1984-2004.
Table 2. Multinomial Logistic Regression Results for Opinion about Money Spent on Addiction Treatment (N=11,094)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Too Little versus About Right</th>
<th>Too Much versus About Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>-.102*** (.045) [.887]</td>
<td>.385*** (.072) [1.469]</td>
</tr>
<tr>
<td>Age (years)</td>
<td>.003 (.002) [1.003]</td>
<td>.011*** (.003) [1.011]</td>
</tr>
<tr>
<td>Black(^a)</td>
<td>.620*** (.079) [1.859]</td>
<td>.111 (.134) [1.117]</td>
</tr>
<tr>
<td>Other race(^a)</td>
<td>.102 (.107) [1.108]</td>
<td>.123 (.169) [1.131]</td>
</tr>
<tr>
<td>Single(^b)</td>
<td>-.089 (.072) [0.915]</td>
<td>-.074 (.122) [0.929]</td>
</tr>
<tr>
<td>Divorced(^b)</td>
<td>.234*** (.069) [1.264]</td>
<td>.222*** (.107) [1.249]</td>
</tr>
<tr>
<td>Separated(^b)</td>
<td>.427*** (.134) [1.532]</td>
<td>.221 (.215) [1.247]</td>
</tr>
<tr>
<td>Widowed(^b)</td>
<td>-.065 (.092) [0.937]</td>
<td>-.016 (.144) [0.984]</td>
</tr>
<tr>
<td>Any children in family</td>
<td>.066 (.061) [1.068]</td>
<td>.143 (.101) [1.154]</td>
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<tr>
<td>Currently working</td>
<td>.057 (.051) [1.059]</td>
<td>.214** (.085) [1.239]</td>
</tr>
<tr>
<td>Education (years)</td>
<td>-.021** (.009) [.979]</td>
<td>-.039*** (.013) [.961]</td>
</tr>
<tr>
<td>Variable</td>
<td>Parameter</td>
<td>Standard Error</td>
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<tr>
<td>----------------------------------</td>
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<tr>
<td>Family income (constant $1986)</td>
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<td>Republican c</td>
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<td>Constant</td>
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Notes: Standard errors in parentheses and relative risk ratios in brackets. Dummy variables representing GSS year and 9 regions of the U.S. are included as controls, but were not listed above due to space considerations.
* Statistically significant, p ≤ 0.10; ** Statistically significant, p ≤ 0.05; *** Statistically significant, p ≤ 0.01
\(^a\) comparison is Blacks; \(^b\) comparison is married; \(^c\) comparison is Democrats; \(^d\) comparison is Liberals; \(^e\) comparison is no religious affiliation.
Figure 1: Attitudes Toward Spending on Drug Abuse Rehabilitation (N=11,094)
Figure 2: Federal Drug Control Spending in Constant 2002 Dollars (Sources: ONDCP, 1998; 2002)