Help-Seeking by Substance Abusers: The Role of Harm Reduction and Behavioral-Economic Approaches To Facilitate Treatment Entry and Retention

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Many substance abusers make repeated attempts to quit or control their drug use. Some attempts involve participation in formal treatment or self-help groups, but recovery also can occur outside the context of interventions (Sobell et al. 1991). It is important to determine what promotes help-seeking at some times and not others, and how influences on help-seeking may differ from influences on recovery (Tucker and Gladsjo 1993). Survey research has demonstrated that most substance abusers do not enter substance-focused treatments or self-help groups (Price et al. 1991; Regier et al. 1993), although those who seek care utilize other medical and mental health services with higher frequency than do individuals who do not have substance-related problems (Putnam 1982). The help-seeking problem thus involves underutilization of substance-focused services and over- or misutilization of other health and mental health services. Importantly, interventions aimed strictly at treatment retention cannot address the more general problem of why so many substance abusers avoid traditional drug treatment programs, and efforts to increase appropriate care utilization require knowledge of the help-seeking process.

There are several reasons that the clinical import of understanding the help-seeking process has not been widely recognized in the substance abuse area and why research is in the very early stages. First, although help-seeking for medical and other psychological disorders has been studied for decades, clinical research on substance disorders historically has not been well integrated into mainstream health-related research, so focal issues have often diverged in the literatures. Second, the urgent need for effective interventions for substance disorders has captured most of the research resources for several decades, and related issues such as help-seeking that were not specifically tied to interventions have been neglected. Indeed, the randomized controlled clinical trial, which is the sine qua non of evaluation research, assumes that treatment effects are not context dependent and treats the help-seeking process as a nuisance variable because randomization eliminates concern with how individuals came to seek care (Mechanic 1978;

Moos and Finney 1983; Moos et al. 1990; Vuchinich and Tucker, in press). However, treatment providers do not have the control over treatment delivery that is implicit in randomization (and in much research on treatment matching); practically speaking, clients vote with their feet with respect to selecting interventions and electing to remain in them or not. Thus, Moos and colleagues (1990) have argued for naturalistic studies of treatment entry and treatment outcome that evaluate how influences on help-seeking interact with treatment engagement and the behavior change process.

Third, dominant disease model views of substance disorders have a singular view of the help-seeking process that does not promote concern with the range of variables found to influence help-seeking for other health problems. This perspective holds that substance abusers will deny or minimize their problem and will be unmotivated to seek help until their disease reaches an advanced stage and overwhelming problems accrue in many areas of functioning (i.e., they hit bottom). Breaking through denial and accepting substance abuse as the central problem in their lives is considered essential for help-seeking and successful behavior change, neither of which is held to occur until late in the disease process. Apart from the use of confrontational interventions to break down denial, this perspective has little to say about the help-seeking process. Moreover, it contains circular assumptions about the role of intrinsic motivation in help-seeking and successful behavior change (Miller 1985; Pringle 1982) (i.e., only intrinsically motivated individuals will seek help and change, and those who do not were not intrinsically motivated). This view is at odds, however, with studies discussed later that show that entering treatment to reduce substance use is less common than entering treatment for substance-related problems and that labeling someone an alcoholic or drug addict has a detrimental, not facilitative, effect on help-seeking. Treatment participation is not always essential for successful behavior change, but little is known about what promotes entry into treatment at some times and not others. Moreover, the acquired immunodeficiency syndrome (AIDS) epidemic and the need to modify the drug-injecting practices of substance abusers who have little interest in stopping substance use also have made salient the need to understand factors that deter interactions with traditional treatment programs and that may promote interactions with low-threshold harm-reduction interventions (e.g., needle-exchange programs).

The following section summarizes research on help-seeking for substance disorders (also see reviews by Hartnoll 1992; Jordan and Oei 1989), which is a relatively new development compared to research on help-seeking for health and other psychological disorders (reviewed by Cockerham 1983; Mechanic 1978). This work has been guided by the health belief

(Rosenstock 1966) and related service utilization (e.g., Aday and Anderson 1974) models, which emphasize the interactive influence of barriers and incentives that are structural (e.g., economic, geographic factors) or functional (e.g., social influences, dysfunctions in daily living) in nature. Help-seeking for medical and mental health problems is more strongly related to functional than to structural variables and, as described in the following section, help-seeking for substance disorders shows similar relationships. In the next major section, interventions to facilitate referral and treatment entry are reviewed, including outreach programs, reducing waiting time for treatment access, role induction and preparation for treatment, case management, and motivational enhancement. Final sections discuss harm reduction and behavior-economic approaches as possible ways to facilitate treatment entry and retention.

CORRELATES OF HELP-SEEKING

These studies evaluated general associations between help-seeking status (treated versus untreated) and demographic, substance use, psychosocial, and health variables. Studies that lacked an untreated comparison group are not emphasized because of the problems that this creates for data interpretation.

Demographic Characteristics

Few significant demographic differences have been found in studies that compared treated and untreated opiate addicts or polydrug abusers who used opiates (Brunswick 1979; Graeven and Graeven 1983; O'Donnell et al. 1976; Power et al. 1992*a*; Rounsaville and Kleber 1985), cocaine abusers (Carroll and Rounsaville 1992; Castro et al. 1992; Chitwood and Morningstar 1985), and drug abusers with unspecified or highly variable drug histories (Keil et al. 1982; Morrison and Plant 1990). When differences were observed, they often suggested poorer functioning among treated than untreated subjects (e.g., Brunswick 1979; Castro et al. 1992; Graeven and Graeven 1983; Keil et al. 1982). Studies of treated and untreated problem drinkers (Bannenberg et al. 1992; Coney 1977; George and Tucker, in press; Hingson et al. 1982; Tucker 1995; Tucker and Gladsjo 1993; Weisner 1993) similarly observed few demographic differences, with the possible exception that women problem drinkers tend to be proportionately underrepresented in treatment samples (but also see Allen 1994; Room 1989).

The lack of robust relationships could be due in part to sampling problems; for example, some studies used the snowball method of recruitment and/or recruited treated and untreated subjects using different methods, and few included large or representative samples of relevant subgroups. However, the

pattern of positive and negative findings did not appear to vary systematically with these methodological features, and the lack of robust demographic differences is consistent with the broader health-related literature on help-seeking.

Substance Use Variables

The partition made in most diagnostic schemes between substance use and substance-related problems (e.g., McLellan et al. 1981) has proven relevant to help-seeking, because substance-related problems, but not substance use practices, have been consistently associated with treatment seeking. Studies of opiate addicts or polydrug abusers who used opiates either found no relationship between help-seeking status and opiate use (Power et al. 1992*a*; Rounsaville and Kleber 1985) or found higher opiate use among treated subjects (Brunswick 1979; Graeven and Graeven 1983; O'Donnell et al. 1976). Studies of cocaine abusers similarly showed either no differences in cocaine use (Carroll and Rounsaville 1992) or higher use among treated subjects (Castro et al. 1992; Chitwood and Morningstar 1985). The same relationships have been observed in studies with problem drinkers (Bannenberg et al. 1992; George and Tucker, in press; Hingson et al. 1980, 1982; Timko et al. 1993; Tucker 1995; Tucker and Gladsjo 1993; Weisner 1993).

Studies that assessed drug use other than the primary drug of abuse suggest that greater other drug use is associated with help-seeking when the primary drug of abuse is alcohol (Bannenberg et al. 1992; Brown et al. 1994; Tucker and Gladsjo 1993). The findings were more variable when the primary drug of abuse was an illicit substance, and several studies observed greater other drug use among untreated opiate or cocaine abusers (Brunswick 1979 (females only); Carroll and Rounsaville 1992; Graeven and Graeven 1983; Rounsaville and Kleber 1985). This suggests that the role of other drug use in help-seeking may depend on whether the primary drug of abuse is legal. Additional drug use by illicit drug users may not promote help-seeking to the same degree that illicit drug use does for problem drinkers.

Psychosocial Problems Related to Substance Misuse

Positive associations have been consistently observed between help-seeking and psychosocial problems related to substance misuse, and more robust relationships have been found for psychosocial than for demographic and substance use variables in studies that assessed all three variable classes. This general pattern has been found across studies of treated and untreated opiate (Graeven and Graeven 1983; Power et al. 1992*a*; Rounsaville and Kleber 1985), cocaine (Carroll and Rounsaville 1992; Chitwood and Morningstar

1985), polydrug (Morrison and Plant 1990), and alcohol (Bannenberg et al. 1992; George and Tucker, in press; Hingson et al. 1982; Tucker 1995; Tucker and Gladsjo 1993; Weisner 1993) abusers. In addition, uncontrolled descriptive studies that only included treated subjects found results suggesting that treatment entry was associated with increased psychosocial problems among opiate (Oppenheimer et al. 1988; Sheehan et al. 1986), cocaine (Brooke et al. 1992), marijuana (Stephens et al. 1993), and alcohol (Thom 1986, 1987; Weisner 1990*a*) abusers.

For example, Rounsaville and Kleber's (1985) treated opiate addicts had less adequate social functioning, more drug-related legal problems, and more depressive symptoms than did untreated addicts, but the groups did not differ substantially in their drug use patterns or demographic characteristics. Power and colleagues (1992*a*) found treated and untreated opiate addicts to be distinguished primarily by psychological, health, and financial problems (treated > untreated), whereas demographic and most drug use variables did not discriminate the groups. Studies with cocaine (Chitwood and Morningstar 1985), alcohol (e.g., Bannenberg et al. 1992; Tucker 1995; Tucker and Gladsjo 1993), and polydrug (Morrison and Plant 1990) abusers found similar results. The only exception was Carroll and Rounsaville (1992), who found greater legal problems, less adequate social functioning, and more polydrug abuse among untreated than treated cocaine abusers. Nevertheless, their treated subjects reported more cocaine-related problems with family and friends and at work.

Conclusions

These data strongly implicate psychosocial problems related to substance use in promoting help-seeking, whereas substance use patterns and demographic variables are not consistently related. This pattern emerged across studies that were highly variable in sampling procedures, measurement practices, and data analytic techniques. The association between help-seeking and psychosocial problems appears robust across drug classes, and the pattern of results is very similar to that found for other medical and psychological problems. This suggests that the variables controlling help-seeking for substance disorders are not fundamentally different from those controlling help-seeking for other health problems.

COMPONENTS OF THE HELP-SEEKING PROCESS

Despite the global associations observed between help-seeking and psychosocial problems, the above-mentioned studies do not elucidate the process by which such problems influenced decisions to seek care. Studies

that investigated components of the help-seeking process are selectively summarized next. These descriptive, largely uncontrolled studies further implicate psychosocial problems in promoting help-seeking.

Self-Recognition of Substance-Related Problems

Self recognition of substance-related problems has been associated with heavy (e.g., near daily) substance use and increased negative consequences (Hingson et al. 1980, 1982; Lorch and Dukes 1989; Skinner et al. 1982). In addition, studies conducted with alcoholics in treatment and/or Alcoholics Anonymous (AA) (Orford and Hawker 1974; Park 1973; Park and Whitehead 1973; Pokorny et al. 1981) indicated that alcohol treatment entry occurred quite late in the development of alcohol problems and that seeking medical care typically preceded treatment or AA attendance. Studies that included more representative samples of problem drinkers (Bucholz et al. 1992; Room 1989) and drug abusers (Price et al. 1991) similarly found alcohol or drug treatment to be preceded by contact with a health care professional. Thus, primary medical care settings may be early contact points for problem identification and possible referral.

These developmental sequences, however, may not be shared by untreated, minimally treated, or less severely impaired substance abusers. For example, this pattern does not appear to hold for adolescents. Lorch and Dukes (1989) found that most adolescents, including very heavy drug users, did not consider themselves to have a drug problem, although problem recognition was related to frequent engagement in burglary. Benson (1990) found that adolescents were most likely to express willingness to seek help for a drug problem from an adult friend and then a parent. Adolescents' drug problems thus appear more likely to surface in social and legal than in health care settings.

Room's (1989) national survey of adult drinking and help-seeking practices is especially noteworthy because it systematically assessed the role of the social network in problem recognition and help-seeking. Receipt of treatment typically was preceded by informal social controls; before entering treatment, most problem drinkers first experienced social pressure to cut down on drinking and then informally discussed their drinking problem with someone (a family member, friend, doctor, or co-worker, in that order). Studies of the help-seeking practices of family members of substance abusers similarly implicated the social network (Corrigan 1974; Gorman and Rooney 1979; Jackson and Kogan 1963; Sisson and Azrin 1986; cf. Finlay 1966). For example, Sisson and Azrin (1986) reported a successful behavioral intervention with family members (primarily wives) that reduced physical abuse to them and facilitated treatment entry by their alcoholic spouses.

These studies suggest that there is some sort of self-recognition process that is tied to increasing substance use (especially daily use) and to substance-related problems, but recognition does not inevitably lead to help-seeking. Treatment entry appears to occur late in the development of substance use problems, although further research on sequencing effects is needed. It is better established that treatment entry often is preceded by social pressure to reduce substance use and by informal discussions with social network members or health care professionals. Expanding their involvement may facilitate appropriate help-seeking and may reach substance abusers who avoid traditional intensive treatments.

Barriers to and Incentives for Help-Seeking

Problem recognition probably entails some consideration of helping resources and the barriers to and incentives for their use. Studies of incentives for treatment using treated problem drinkers (Beckman and Amaro 1986; Thom 1986, 1987) indicated that psychosocial (especially interpersonal) problems were primary motives, more so than a desire to reduce drinking. However, because most substance abusers do not seek help, certain studies are especially pertinent to understanding barriers to help-seeking, notably those that included untreated drug (Carroll and Rounsaville 1992; Klingemann 1991; Rounsaville and Kleber 1985) and/or alcohol (Cunningham et al. 1993; George and Tucker, in press; Tucker 1995) abusers, either solely or in comparison with treated subjects.

For example, Cunningham and colleagues (1993) found that alcohol and drug (primarily cocaine) abusers who entered treatment cited similar barriers that reflected embarrassment or pride, not wanting to share problems, and the stigmatizing effects of treatment. Untreated substance abusers cited similar barriers, but their negative attitudes towards treatment and concerns about labeling were even more pronounced; many also indicated that they did not perceive that their problem required treatment or they wanted to handle it on their own. Monetary cost was not a widely mentioned deterrent. Tucker (1995) and George and Tucker (in press) obtained similar results using problem drinkers with different help-seeking histories. Also, Klingemann (1991) found that untreated recovered heroin addicts and problem drinkers cited barriers reflecting pride in quitting on their own, or they were critical of current treatments; relative to problem drinkers, heroin addicts were more likely to lack information about treatment options. Carroll and Rounsaville (1992) and Rounsaville and Kleber (1985) reported that untreated substance abusers (cocaine and opiate abusers, respectively) cited as deterrents their belief that their substance use was under control and that treatment was not needed. About half of Rounsaville and Kleber's opiate addicts also indicated

that methadone maintenance treatment would "make their addiction worse" (p. 1076).

Role of Event Occurrences in Help-Seeking

Several studies investigated whether events reflecting substance-related problems preceded discrete help-seeking episodes by drug abusers (Brooke et al. 1992; Oppenheimer et al. 1988; Power et al. 1992*b*) and problem drinkers (Bardsley and Beckman 1988; George and Tucker, in press; Weisner 1990*a*, 1990*b*). Most studies found increased negative events, especially substance-related events, to precede treatment entry. However, only a few included an untreated comparison group, which is necessary to establish that patterns of events were uniquely associated with help-seeking and were not common occurrences in the lives of substance abusers.

A recent study (George and Tucker, in press) that included both treated and untreated problem drinkers and assessed events over a lengthy (2 year) pretreatment interval failed to find group differences. Instead, all groups reported increased events over the assessment period, which was suggestive of a memory-recency effect. Thus, further research that includes an untreated comparison group is needed to clarify the role of events in discrete help-seeking episodes. Although distinct patterns of event occurrences have been found to precede and maintain stable recoveries achieved with and without interventions (Klingemann 1991; Tucker et al. 1994, 1995), the role of events in help-seeking patterns remains uncertain.

Coercive Elements in Help-Seeking

Although court-ordered treatment has become increasingly common, traditional views of the essential role of client motivation in help-seeking and behavior change imply that coerced clients are more likely to have poor outcomes compared to volunteers (Pringle 1982). However, studies that compared treatment participation and outcomes among coerced and voluntary clients found similar outcomes across groups and reduced attrition among coerced clients (see reviews by De Leon 1988; Stitzer and McCaul 1987; Weisner 1990*c*). Although this suggests that coerced clients may require relatively more treatment to attain similar outcomes to volunteers (De Leon 1988), little evidence exists to support traditional notions that only intrinsically motivated clients benefit from interventions (cf. Miller 1985). In addition, Stitzer and McCaul (1987) argued that the potential of coercion to promote treatment participation and behavior change may be underestimated; many studies that evaluated legal coercion did not enact optimal contingencies between treatment participation and legal

consequences, or they did not implement empirically supported interventions.

However, because some negative consequences of coercion have been reported (Institute of Medicine 1990), when coercion is used to promote help-seeking, the least restrictive alternative that will satisfy a client's needs should be the intervention of choice (Weisner 1990*c*).

Summary Concerning Help-Seeking

Both correlational and process-oriented studies implicate psychosocial problems related to substance use in motivating help-seeking, although it is unclear whether discrete events reflecting such problems typically precede help-seeking or whether an accumulation of problems over time is more typical. Many substance abusers enter treatment primarily to address these problems rather than to reduce substance use. Most treatment programs, however, emphasize abstinence and are not problem-focused, which may contribute to many substance abusers' avoiding them.

In contrast to traditional notions that emphasize the importance of intrinsic motivation for help-seeking and behavior change, extrinsic influences (e.g., family, social, and job problems) provide a great deal of the incentive for help-seeking. Also contrary to traditional notions, recognizing substance-related problems and desiring to change them do not necessarily entail acceptance of labels such as "alcoholic" or "drug addict," nor does problem recognition inevitably lead to help-seeking. Many individuals with substance disorders reject such labels and recover without interventions (Sobell et al. 1991). Conversely, although substance abusers may participate in nontraditional interventions, such as community-based needle-exchange programs, they may come to seek medical or drug treatment through such gateways (Carvell and Hart 1990).

Process-oriented studies further suggest that informal social networks influence help-seeking patterns and that few substance abusers enter treatment without having experienced network messages to seek help. Among adults, treatment entry also is often preceded by discussion of substance-related problems with a health care professional. The frequent reticence of substance abusers to seek help, especially from formal treatment programs, seems to be rooted not in denial of their substance-related problems, but in concerns about privacy, labeling, and the stigmatizing effects of current treatments. Structural factors such as treatment cost and accessibility are less influential.

INTERVENTIONS TO FACILITATE REFERRAL AND TREATMENT ENTRY

Seeking treatment does not necessarily imply that an individual will successfully engage in treatment (Stark 1992). A very large number of individuals fail to appear for initial intake appointments; many drop out after only a brief period (e.g., Stark 1992; Stark and Campbell 1988). Based on patterns of perceived motivators for or barriers to treatment, researchers have proposed several interventions to increase treatment entry (Brooke et al. 1992; Kleyn and Lake 1990; Miller 1985; Oppenheimer et al. 1988). These clinical efforts may be directed at either helping individuals become more aware of their problems and consider a need to change (e.g., "restorative" strategies) or solidifying readiness to change among those with problem awareness and translating this among help-seekers into solidified motivation for treatment entry and compliance (e.g., "consummation" strategies) (Fiorentine and Anglin 1994). A number of interventions have been introduced in an attempt to increase treatment entry, but many have not been fully evaluated.

Outreach Efforts

The traditional view that the client needs to be motivated to change before interventions shall be provided has led many agencies to be reactive, waiting for the drug user to approach them for care (Hartnoll 1992). However, this philosophy has begun to change in a more proactive direction with increased concerns about the risk of human immunodeficiency virus (HIV) infection and transmission among drug users (Stimson et al. 1994). An important factor in attempting to facilitate help-seeking is presenting interventions that are low threshold, easily accessible, nonthreatening, and that have no attached stigma. To reduce perceived barriers, changes must be made in traditional aspects of treatment, including the type of services available and how and where treatment is offered (Cunningham et al. 1993), and services should be responsive to the heterogeneous needs of potential clients by providing a broad range of intervention approaches (Oppenheimer et al. 1988). This might involve moving treatment services from standard agency settings to be closer to prospective clientele. Examples of such moves include the methadone by bus project (Buning et al. 1990), in which methadone doses are delivered to clients on the streets (eliminating the need for clinic attendance), or the provision of vouchers redeemable for free and immediate treatment (Levine 1991). The use of such vouchers appears to be particularly effective in attracting into treatment those intravenous (IV) drug users who have had no previous treatment exposure (Sorensen et al. 1993).

Another example of outreach is the development of needle-exchange programs for IV drug users. Needle exchanges have developed within the framework of so-called harm reduction or minimization models (Brettle 1991), which are based on two fundamental principles (Springer 1991). First, preventing the spread of HIV and AIDS has greater priority than the prevention of drug use or abuse. Second, abstinence from drugs is not the only goal of treatment agencies. The purpose of such programs is to provide clean needles or instructions on how to clean injection equipment to reduce needle sharing among IV drug users, thus reducing the likelihood of the spread of HIV among this high-risk group. No explicit focus is placed on stopping drug use. Despite the potential public health benefits (Clark and Corbett 1993; Des Jarlais 1995), many have objected to needle exchange and other harm-reduction approaches as going against the more traditional goals of getting drug users to abstain. There has also been concern that such programs condone and thus may promote drug use (DuPont and Voth 1995). However, needle-exchange programs do not appear to be associated with increased drug use or needle sharing among drug users, or increased initiation of non-IV drug users into injecting (Guydish et al. 1993). Rather, consistent with the intended program goals, attendees at needle-exchange programs typically demonstrate a reduction in drug use, needle sharing, and unsafe sexual practices (Frischer and Elliot 1993).

Although not explicitly intended to move drug users toward treatment, needle-exchange programs bring services to otherwise unreached groups (Grund et al. 1992) and may serve as a precursor to treatment entry (Carvell and Hart 1990; Clark and Corbett 1993). In addition to reducing barriers to treatment entry, such programs provide counseling and preventive health and drug education that may facilitate drug users' consideration of treatment as an option (Brettle 1991). Carvell and Hart (1990), for example, found that more than one-third (38 percent) of clients in a needle-exchange program accepted referrals to drug treatment or medical/health-related agencies. Those accepting referrals had begun initial opiate use, injecting, and daily injecting at an earlier age, and also were more likely to indicate that they were seeking help compared to those not receiving an onward referral. Carvell and Hart (1990) suggest that low-threshold outreach programs that have open-access policies, attempt to attract clients not in contact with traditional treatment agencies, and promote a harm-reduction focus can serve as gateways to other services.

Reduced Waiting Time

Health and social service research suggests that treatment program characteristics may affect treatment entry in a number of ways. Miller (1985) suggested that relatively straightforward environmental interventions

that reduce program barriers can improve individual motivation for treatment. Of the different program variables potentially affecting drug treatment entry, only waiting time has received much study. Free treatment that is available on demand has been advocated by harm-reduction proponents as a means of facilitating treatment entry (Carvell and Hart 1990; Hartnoll 1992; Springer 1991). However, because limited treatment slots and few alternative treatment approaches are available in many public agencies due to restricted funding, decreased treatment availability often translates into increased waiting times (Anonymous 1990).

Efforts to decrease waiting time have been questioned by some (Addenbrooke and Rathod 1990) on the grounds that making it easier for people to get into treatment may reduce treatment retention. On the other side, advocates of reducing waiting time note that many people who apply for treatment are often ambivalent about stopping drug use, have unstable lives, and may interpret waiting time to mean that the treatment program is not prepared to help them and thus may decide to address their problems elsewhere or to continue their drug use (Brown et al. 1989; Stark et al. 1990). Shorter waiting times between a drug abuser's receipt of a referral or an initial phone contact with a clinic and the initial intake appointment appear to be associated with an increased likelihood of appearing for the initial appointment and a trend toward slightly longer treatment participation (Addenbrooke and Rathod 1990). Longer waits appear to be associated with a decreased interest in entering treatment and with significant increases in legal involvement, incarceration, family separation, and rates of death (Brown et al. 1989; Patch et al. 1973).

For example, in one study (Stark et al. 1990), drug users who requested entry into an outpatient community treatment agency were randomly assigned to receive either an appointment in the next 2 weeks or to come as soon as possible to begin the intake process. Those who were asked to come the same day they called appeared at the clinic at a significantly higher rate (60 percent) than those who were given a delayed appointment (38 percent). Similarly, Festinger and associates (1995) found that the number of days between the initial phone contact and scheduled intake appointment was the only variable among a number of client and clinic characteristics to predict whether cocaine abusers attended their initial appointment. The greatest decrease in initial attendance occurred in the first 24 hours following the phone inquiry. Such findings suggest that changes in program barriers such as waiting time may be easier to implement and have more impact on facilitating treatment entry than attempting to change client characteristics (Festinger et al. 1995; Miller 1985).

If treatment entry cannot be expedited, providing support while clients wait may be an important interim step. Brown and colleagues (1989) found that 65 percent of drug abusers who were waiting for a bed in a residential drug treatment program indicated interest in attending a once- weekly group counseling program until they could be admitted. Such pretreatment groups can provide support, a cost-effective orientation to treatment, and therapeutically focused time structure while clients await more formal or intensive therapy (Brekke 1989). Such programs also may increase treatment entry, treatment compliance and completion, and/or involvement in aftercare (Conti and Verinis 1989; Olkin and Lemle 1984; Ravndal and Vaglum 1992), although such positive effects have not been reported consistently (Alterman et al. 1994).

ROLE INDUCTION

Several studies evaluated the effectiveness of using role-induction techniques to increase retention of drug-abusing clients early in treatment, and Ravndal and Vaglum (1992) suggested that the pretreatment intake groups discussed above should be developed as role-induction strategies in which clients learn coping skills to help them adjust to treatment. These approaches have evolved out of the general psychotherapy literature, where client misperceptions and lack of agreement between client and therapist about important features of therapy (e.g., length of treatment, client-therapist roles) have contributed to premature dropout (Zweben and Li 1981). These interventions attempt to promote treatment engagement by reducing confusion, clarifying expectations and roles, and providing the client with a better understanding of the treatment process. Such efforts appear particularly appropriate for drug abusers because many who seek treatment have no previous treatment experience and often express numerous fears (e.g., their knowledge is limited about the treatment process generally, or about the specific agency or treatment to which they had been assigned; they worry about not getting treatment that matches their needs or expectations; they are concerned about not having their problems understood, or they fear failing in treatment) (Cunningham et al. 1993; Oppenheimer et al. 1988; Sheehan et al. 1986).

Support for the use of role induction with substance abusers is mixed. Stark and colleagues (1990) evaluated a brief role-induction intervention presented when drug abusers contacted a clinic. Clients who received the intervention were asked about potential barriers to attendance, and an attempt was made to help resolve them. At the end of 1 month, however, only 11.1 percent of the sample were active clients, indicating that a brief discussion about barriers to treatment was insufficient to overcome the barriers or to increase

clients' commitment to treatment. Zweben and Li (1981) evaluated a single group session of role induction prior to treatment in an outpatient substance abuse clinic. Clients who participated in one of three different role-induction conditions were somewhat (although not significantly) more likely (54.4 percent) to remain for the initial four sessions of treatment than were those in the control group (34.6 percent). An interaction between the type of induction procedure and the match between clients' and staff's beliefs about treatment suggested that role induction may be particularly effective in reinforcing the expectations of clients who are already relatively knowledgeable about treatment, more so than in reducing discrepancies among clients who hold less accurate expectations. This process might be facilitated further by use of ex-clients who share first-hand experiences about the treatment process and serve as role models of individuals for whom treatment was effective.

Treatment-specific role induction appears to be more effective than interventions focusing on either more general psychotherapeutic issues or on general drug information (Stark and Kane 1985). Of clients assigned to the drug treatment-specific role-induction condition, 91 percent returned at least once after an initial intake compared to 72 percent, 61 percent, and 5 percent of those who received general psychotherapy information, drug information, or no information, respectively. However, the percentage of clients who remained active in treatment 3 months later did not differ across conditions. Finally, Siegal and colleagues (1993) developed a weekend-long treatment-induction process. Although the program's efficacy has not been evaluated, such an intensive introduction to treatment may increase compliance and be more useful for reducing discrepancies among less informed clients than Zweben and Li (1981) were able to induce in a single-session intervention.

Case Management

Role-induction approaches, while showing some promise in increasing treatment entry, appear to be insufficient to maintain a high rate of continued involvement. Those entering treatment have more concerns about and perceive a greater need for help with problems in a wide range of life areas (Power et al. 1992*a*). Furthermore, data on beliefs about treatment suggest that many clients expect treatment programs to provide access to other health and social support services (Brooke et al. 1992; Thom 1986), which is the goal of case management approaches. Although case management is more commonly employed as part of active treatment or aftercare, these services also have been used in assessment and referral centers to try to facilitate treatment entry (Graham and Timney 1990; Ogborne and Rush 1990; Timney and Graham 1989). They may also be used

to solidify the gains made in treatment readiness brought about through role-induction approaches (Siegal et al. 1993). Case management functions ordinarily include assessment of service needs, planning, linking, and monitoring service delivery. They can also include client advocacy, delivery of therapeutic services, and community activism (Graham and Timney 1990). The development of linkages to community services can help remove barriers to treatment that homelessness, physical or mental illness, or other problems can create (Cook 1992; Willenbring et al. 1991).

Case management has not only involved linking clients with ancillary services, but with treatment as well. In a study by Bokos and associates (1992), drug injectors who sought publicly funded treatment were assigned to a case manager (who conducted an assessment, facilitated treatment entry, and addressed other immediate needs) and were compared with controls (who were given the names, addresses, and phone numbers of three treatment clinics). Ninety percent of the case- managed group entered treatment compared to only 35 percent in the control group. Average time to admission for case-managed clients was 6.2 days compared to 31.7 days for controls. Similarly, transitional case management for street-based drug injectors not in treatment, involving referrals for services based on an individualized needs assessment and services, resulted in the receipt of more concrete help and greater entry into alcohol and drug abuse treatment services than did standard referral procedures (Lidz et al. 1992).
Further research is needed to evaluate the efficacy of case management approaches in aiding treatment entry and compliance. Case management used to enhance treatment entry has been limited in scope and duration, which appears appropriate as it may not be cost effective to provide overly intensive services to clients who have not fully committed to treatment (Stark et al. 1990). However, modifications may be required in the case management methods to maximize their use at the point of treatment entry (Bachrach 1993).

Motivational Interventions

Miller (1985) identified a number of motivational interventions to increase the probability of substance abusers' entering and continuing in treatment and otherwise complying with an active change strategy. Specific components identified across successful motivational interventions (Miller 1989; Miller and Rollnick 1991) include: (1) providing feedback from assessments concerning the impact of substance use on physical, social, and psychological functioning; (2) providing direct advice about the need for change and how it may be accomplished; (3) attempting to remove significant barriers to change; (4) suggesting or

providing alternative approaches from which the individual can choose to achieve change; (5) decreasing the attractiveness of substance use through increasing awareness of the negative consequences and risks associated with it; (6) utilizing external contingencies or pressures to enhance commitment; and (7) developing a clear set of personal goals for change and maintaining periodic contact. In using each of these components, the desired outcome is to increase the individual's commitment to and motivation for change (DiClemente 1991).

Interventions based on these motivational principles have been shown to facilitate referral for and continuation in alcohol treatment (Bien et al. 1993; Zweben et al. 1988); they have also been applied to drug users (Saunders et al. 1991; van Bilsen 1991, 1994), although motivational interventions used to encourage drug treatment entry have varied in approach and outcome. Saunders and colleagues (1991), for example, described a two-session motivational intervention used with heroin addicts who were beginning methadone maintenance that appeared to incorporate the general principles described by Miller (1989; Miller and Rollnick 1991) as well as specific interventions derived from identified components in the self-change process among drug users. As an example, clients were assisted in reviewing the benefits and negative consequences associated with using heroin and other drugs, evaluating their level of satisfaction with their current lifestyle, elaborating their current concerns (especially those identified as causing the most emotional distress), engaging in a decisional balance of weighing the costs and benefits of continuing drug use or changing this behavior, and establishing some future-oriented goals for changing drug use. Allsop and Saunders (1991) employed a similar approach in dealing with severely dependent alcoholics to develop what they described as robust resolutions.

Conclusions

Treatment entry is only one of many steps in the behavior change process. More research is needed to extend the application and evaluate the utility of each of the interventions reviewed above. Stark and associates (1990) suggested that regardless of demographic status, personality traits, and drug of choice, the majority of substance abusers who seek treatment will have difficulty continuing or completing it (see Stark 1992 for a more thorough review of variables influencing dropping out of treatment). While holding promise, interventions to date have had limited effectiveness in facilitating treatment involvement much beyond the entry point. Combinations of the different intervention strategies, such as role induction and case management (Siegal et al. 1993), may prove to have a greater impact than any used in isolation. In addition,

Stark and Campbell (1988) suggested the development of more specialized attrition-prevention strategies based on the general principles of Marlatt's relapse prevention model (Marlatt and Gordon 1985). In such an approach, circumstances that are associated with dropping out of treatment would be identified and clients would be assisted in developing skills to recognize their occurrence and to cope with them more effectively.

RECOMMENDATIONS TO FACILITATE HELP-SEEKING AND RETENTION

What do these findings suggest about facilitating appropriate help-seeking? First, current treatments that are tied to the health care delivery system are stigmatizing, and treatment innovations that are delivered through this system probably will not substantially increase utilization. Nevertheless, better integration into the health care system of the more intensive treatments needed by a minority of substance abusers will likely reduce the stigma somewhat. Furthermore, covering substance-related treatments in comprehensive medical insurance plans produces well known cost-offset benefits (Holder and Blose 1992) and probably helps reduce the misutilization of health services by substance abusers.

Second, less intensive interventions aimed at the majority of substance abusers who do not meet clinical criteria for dependence probably will serve more affected persons if they do not have to enter the health care system as a patient with a substance-related diagnosis. Community-based, low-threshold interventions would seem to be especially attractive alternatives. However, AA, Narcotics Anonymous (NA), Cocaine Anonymous (CA), and related groups that share a 12-step philosophy currently are the only widely available community-based interventions. Because their appeal is not universal, additional community-based interventions are needed (e.g., Rational Recovery, Women for Sobriety, Secular Organization for Sobriety, Moderation Management).

Third, health care professionals in primary care settings could be more effective referral agents if they had a broader range of assessment and intervention alternatives to offer patients with a possible substance disorder. For example, being able to offer an evaluation opportunity that is not an inevitable precursor to extended treatment (such as the Drinker's Check-Up, Miller and Sovereign 1989) would be preferable to referring patients to treatment and/or self-help groups regardless of problem severity.

If one were to consider designing an ideal program based on the foregoing review of issues related to help-seeking and treatment entry for substance abuse problems, what can be recommended? Overall, the goals of such a program would include reducing the stigma of the problem, providing low-threshold access to treatment options, integrating prevention and treatment services for both substance abuse and mental health problems, matching programs to individuals based on both professional advice and consumer choice, and providing ongoing case management and followup services (including relapse management).

With a primary focus on prevention and health promotion, the stigma of substance abuse treatment could be substantially reduced. Community-based programs could be established in schools, worksite settings, community centers, and primary health care facilities (cf., Institute of Medicine 1990). The core theme and public image for such programs would be lifestyle management and habit change. A variety of positive health habits and high-risk behaviors could be covered, including diet and exercise; drinking, smoking, and other drug use; and high-risk sexual behaviors. Programs run by peer-based counselors trained in the principles of health promotion probably would be more appealing to the public than professionally led treatment programs for substance abuse.

Combining Behavioral, Harm-Reduction, and Public Health Principles: The McHabit Center Example

One might consider calling the ideal program the McHabit Center—a one-stop center that provides low-threshold access to various health promotion options. Rather than embracing a disease model of addiction, the center would be guided by a more comprehensive biopsychosocial model (Marlatt 1992). Personal responsibility for adopting healthy lifestyle habits would be emphasized within a psychoeducational approach that emphasizes learning adaptive coping skills. The atmosphere would resemble a community college more than a clinic.

Upon arrival at the McHabit Center, students would first be assigned an advisor who meets with them individually to guide them through the program offerings. Initial assessment of lifestyle habits could be accomplished by having students complete a computerized lifestyle assessment battery (Skinner 1993). After completion of the computerized assessment and other diagnostic evaluation, the student meets with the advisor for a session providing feedback, motivational enhancement, and selection of program goals for lifestyle change. All students would be assigned to a core course on the principles of habit change and health promotion. Other courses would deal with specific

health habits and would be assigned on the basis of the initial assessment. Course offerings might include smoking cessation, nutrition and diet, exercise and relaxation, alcohol and other drug use, changing high-risk sexual behavior, as well as anger management and assertiveness training. Most classes would be taught in a group format with many opportunities for discussion, role-playing, and practicing new behaviors as the main homework assignment. Instead of receiving grades, students would be given frequent feedback on their progress based on monthly followup computerized assessments. Advisors would continue to meet individually with students periodically to monitor progress and setbacks and to offer support and guidance. Advisors would also offer referral to primary health care providers so that there would be access to medications and other medical services when appropriate.

Although the advisor may recommend specific goals to match the needs of a particular individual, students/clients will also be asked for their opinions and preferences for various goals and program options (Krantz et al. 1980). To increase awareness of different programs, clients would be encouraged to visit or sit in on various classes to see how they work in actual practice. Another possibility would be to provide students with a menu of program alternatives presented in the form of videotaped segments that portray samples of each program in action. This procedure combines elements of role induction, treatment matching (in which advisors recommend specific programs), and consumer choice or client preference. After the advisor and student agree on a particular choice, additional role-induction training could be used to further prep the student prior to the beginning of the program. When professional matching recommendations are in conflict with the client's own preferences, a negotiation process would be necessary to select priorities and alternatives (e.g., if the client selects a program that later proves to be unsuccessful, a second "backup" program can be introduced). Here the primary aim is to keep the client engaged throughout the intervention process and to prevent treatment dropout (attrition prevention).

With prevention and risk reduction as the central themes for working with substance use behaviors, the center would provide primary, secondary, and tertiary prevention programs depending on the needs of the clientele. For those who are assessed to be relatively free of current drug problems, the emphasis would be on primary prevention and on helping those who have experimented with initial substance use to prevent future abuse and dependency problems. For others who have already had experience with alcohol, smoking, or other drug use, goals would include both secondary prevention (e.g., to reduce excessive alcohol consumption) and tertiary prevention (e.g., to prevent relapse in smoking

cessation). Prevention programs in general would be guided by a threefold approach that combines individual self-management training with enhancing social support and facilitating environmental reinforcement for behavioral alternatives to substance use.

In this approach, no formal distinction is made between prevention and treatment programs. Problems including substance abuse are viewed along a continuum of severity or harm, with no clear demarcation point to indicate which clients need treatment. In a sense, all programs offered would represent preventive interventions and would differ only in terms of the prevention goal. Target behavior change would include both moderation (secondary prevention) and abstinence (tertiary prevention). Special relapse prevention classes or groups would be offered to clients who experience setbacks or lapses in an attempt to keep these individuals engaged in the intervention process.

The McHabit Center, ideally situated in easily accessible environments (e.g., shopping malls), would also provide community outreach services to provide information and assessment opportunities to at-risk groups who otherwise might be overlooked. For example, outreach programs could target individuals who are deemed to be at risk based on such factors as age (e.g., adolescents or the elderly), gender, ethnic status, family history, living environment, and comorbidity of substance use and psychological problems. For prospective clients who are interested in knowing more about prevention and treatment program options, short informational programs would be offered to teach people about the range of programs and services available. The center would also accommodate individuals who are court mandated to receive services. To reduce problems of noncompliance associated with coerced treatment, such clients would be mixed in with the voluntary clients rather than treated as a separate group. Centers could be run on a for-profit basis (similar to commercial weight-loss or fitness centers) and/or could be supported financially by existing health maintenance organizations (HMOs) and associated insurance programs.

The primary assumption guiding both prevention and treatment programs based on this model is that the person is to be viewed as a unique individual who is deserving of an integrated approach to his or her life problems. A client's substance use problems are assessed in the context of other life problems within a holistic perspective. By using a functional analysis to assess behaviors targeted for change, the emphasis shifts from a diagnostic focus (substance abuse or mental illness per se) to assessing the consequences of maladaptive coping patterns. Clients who use substances to cope with psychological problems (e.g., drinking in an

attempt to cope with depression) are distinguished from those whose life problems are a consequence of substance abuse. Unlike many contemporary programs that treat substance abuse separately from other mental health problems (or vice versa), the McHabit Center would provide an integrative model that examines the interaction and complexity of each client's unique lifestyle and problems in living. Such a center would probably have particular appeal to adolescents and young adults who are more likely to be motivated by a program that emphasizes general lifestyle coping and health promotion as compared to traditional programs that focus exclusively on substance abuse and addictive disease.

How would decisions be made about the intensity and duration of intervention programs in a center that integrates prevention and treatment services? Many traditional addiction treatment agencies offer comprehensive fixed-length programs (e.g., 28-day residential programs). In these programs, clients are assigned to treatments of fixed duration based on a one-size-fits-all assumption. Adolescents who show early signs of substance abuse problems are often treated the same way as older, chronic users, because they are all assumed to have the same disease that differs only in terms of whether it is early or late stage. This uniform disease model implies the same treatment goal for all: total and lifelong abstinence.

One promising alternative to the one-size-fits-all approach is a stepped-care model (Abrams et al. 1991; Sobell and Sobell 1993). Derived from a public health perspective, the stepped-care model provides a series of intervention options that vary in intensity and degree of professional involvement. Interventions begin with a minimal step or brief intervention that might prove effective for many clients. Additional steps of increased intensity are offered only if former (less intensive) interventions prove ineffective. The stepped-care approach is used with certain primary health care problems such as the treatment of borderline hypertension. Here the physician might begin the intervention process by recommending that the client take the initial step of reducing salt intake and changing diet to lose weight. Blood pressure is continuously monitored to evaluate the impact of these changes. If changing dietary patterns is not sufficient, the client may then be advised to begin a regular exercise program before blood pressures are again assessed. Additional steps may then be recommended until the desired blood pressure reduction is achieved, including prescription of medications. Medication levels are titrated upwards (from lower doses to higher ones) or other medications are prescribed until the treatment goal is achieved and the hypertension is under control.

A similar stepped-care model can be applied to working with substance abuse problems. Here the initial steps could include various self-help options, such as manuals, books, and computer software programs for habit change, or membership in a self-help support group. If these steps are unsuccessful, the client could be stepped up to receive more extended professional services in the form of classes or groups (as described in the McHabit Center curriculum). If additional services are required, individual outpatient counseling could be introduced. Residential treatment would also be available, but only as a final step if less intensive interventions continue to be ineffective. Of course, clients could be moved to higher levels of intensity depending on the severity of the case.

The stepped-care model has recently been successfully applied in a program designed to reduce alcohol abuse (e.g., binge drinking) in adolescents and young adults in the college setting (Marlatt et al. 1995). In this study, high-risk drinkers were randomly assigned to receive either a stepped-care intervention program or to a no-treatment control group. Participants who received the stepped-care program first were given a brief intervention (less than 1 hour) in which each student met individually with a member of the authors' staff in the context of a motivational interview (Miller and Rollnick 1991). The purpose of this interview was to provide support and motivational enhancement for reducing harmful drinking levels. Each participant was provided feedback about his or her drinking levels and associated health risks. Interviewers adopted an empathic style, supporting any attempts the student reported having made to reduce risky drinking behavior. Tips for making additional changes were offered in a nonconfrontational manner. During followup assessment periods, high-risk participants who received this brief intervention along with annual feedback reports on their drinking reported a significant decrease in both drinking rates and associated harmful consequences over a 3-year period, compared to the no-treatment control group (Marlatt et al. 1995).

Although the majority of participants reported significant reductions in drinking problems after receiving this single session of feedback and advice, some did not respond and others actually increased drinking rates. For them, additional program options of greater intensity were offered, in accordance with the stepped-care model, including group support meetings, individual counseling, and even a seminar they could take for credit on the topic of guided habit change. Subjects who showed signs of severe alcohol problems or dependence were seen individually and recommended for abstinence-based treatment.

The alcohol risk-reduction program described above, along with the McHabit Center concept, are congruent with a harm-reduction approach to addictive behavior change (Engelsman 1989; Heather et al. 1993; Marks 1992; O'Hare et al. 1992). Harm reduction refers to policies and programs designed to reduce or minimize the harmful consequences of ongoing addictive behaviors. Needle exchange, discussed in an earlier section, is a harm-reduction policy designed to reduce the risk of HIV infection by eliminating the need for addicts to share injection equipment. Harm reduction embraces a wide variety of previously unrelated programs and techniques, including methadone maintenance, nicotine replacement therapy, and safer-sex programs designed to reduce the risk of sexually transmitted disease (Marlatt and Tapert 1993). Controlled drinking or moderation training fits well with a harm-reduction framework (Marlatt et al. 1993).

Harm-reduction programs are designed to be low threshold, removing barriers to treatment access. One such potential barrier to initial help-seeking may be the requirement of abstinence as a condition of entry into treatment. Although abstinence is embraced as the distal goal for substance abuse treatment, harm reduction encourages incremental risk reduction with an emphasis on attainable proximal goals (e.g., reduced consumption, safer methods of drug administration).

Programs based on harm-reduction principles are often developed in collaboration with the target population. As an example, the impetus for the original development of needle-exchange programs in The Netherlands came from organized groups of addicts (Engelsman 1989). Future harm-reduction programs also will benefit from input and consultation with those who are directly affected. Professionals in the addictive behaviors field can work cooperatively with people who are experiencing these problems to facilitate help-seeking and treatment access. Rather than dictating program requirements and procedures by administrative directives issued from the top down, harm-reduction procedures can be developed in partnership with the population most affected. Through mutual discussion and respect (e.g., in focus groups or other combined meetings), barriers to help-seeking may be reduced or eliminated. By having people with addictive behaviors play a greater role in designing alternative programs and treatment options, the empowerment they experience as a result will go a long way toward removing the stigma associated with this problem.

Harm-reduction programs place greater emphasis on input from the clients seeking services than do most traditional addiction treatment programs. This perspective puts more onus on the consumer of such

programs to become active and responsible in the behavior change process. One approach that speaks directly to the question of consumer choice and environmental options is the topic of behavioral economics. In the concluding section that follows, some preliminary ideas are presented about how substance abuse treatment might be interpreted within a framework of behavioral economics.

Behavioral-Economic Theory and its Implications for Help-Seeking

Traditionally, psychological views of addictive behavior have focused on internal mediational constructs (e.g., anxiety, tension, self-efficacy) thought to motivate alcohol and drug consumption. The general practical implication of this focus has been that if these mediational variables could be changed, usually as a result of therapy, it would lead to addictive behavior change. It is now known, however, that contextual environmental forces outside the psychotherapy situation have powerful effects on addictive behavior (Moos et al. 1990; Tucker et al. 1995; Vuchinich and Tucker 1988), and it is difficult to characterize these contextual variables adequately by incorporating them into internal mediational constructs (Vuchinich, in press-*a*; Vuchinich and Tucker, in press). This presents a need for a fresh perspective with new concepts and methods, and it is suggested that behavioral economics provides a potentially useful conceptual framework for understanding the effects of extratherapeutic variables on addictive behaviors.

Basic behavioral economics originated with a merger of methods from the experimental analysis of behavior and of concepts from consumer demand theory in economics (e.g., Rachlin et al. 1981). Instead of focusing on internal mediational constructs, it relates temporally extended behavior patterns to molar features of environmental contexts, which is the level of analysis needed in a broadened psychological perspective on addictive behavior change. The general goal of behavioral economics is to understand how scarce resources are allocated to gain access to a set of valued activities under variable constraints, and it has been quite successful in improving understanding of environmental variables that control demand for a variety of commodities (Kagel et al. 1995).

Given that behavioral economics is directly concerned with demand for commodities, it is readily applicable to the study of addictive behavior where the fundamental problem is excessive demand and consumption. Behavioral economics has been successfully applied to studying several aspects of alcohol and drug abuse (DeGrandpre and Bickel, in press; Green and Kagel, in press; Vuchinich, in press-*b*; Vuchinich and Tucker 1988).

This work has shown that alcohol and drug consumption is a joint function of constraints on access to the addictive substance and other valuable activities that are available and constraints on access to them. In general, alcohol and drug consumption varies inversely with constraints on access to alcohol or drugs, and varies directly with constraints on access to valuable alternative activities. This is consistent with the basic tenet of behavioral economics: Demand for any commodity is a function of the economic context (e.g., the price of the commodity of interest, other available commodities and their price, income) in which it is available.

Several findings from the help-seeking literature reviewed earlier can be interpreted from a behavioral-economic perspective. A striking feature of the data on help-seeking for substance abuse is that only a small minority of abusers seek treatment, even though it appears to be readily available at an affordable cost. The behavioral-economic literature on discounting of delayed and probablistic outcomes (Rachlin et al. 1991) may be relevant to this issue. It is well known that the value of delayed and probablistic outcomes, both positive and negative, is discounted to various degrees, although the shape of the discount function is a matter of some dispute (Rachlin et al. 1991). Such discounting may be relevant to help-seeking in that treatment entry places the substance abuser in a position of foregoing a certain, immediately available, and highly valued commodity (the abused substance) in order to obtain a probablistic and delayed outcome (benefits of treatment). Given the value of the abused substance and the probablistic and/or delay discounting of treatment benefits, it is perhaps understandable why most substance abusers do not seek treatment.

The role of discounting delayed and probablistic outcomes may be especially important with substance abusing populations who may discount such outcomes at a higher rate than do nonabusers: It is possible that alcohol and drug abusers engage in excessive consumption partly as a result of heavily discounting delayed and probablistic outcomes. If so, then such populations present a doubly difficult problem: They are substance abusers because they heavily discount the future, and because they heavily discount the future, they are unlikely to enter treatment.

At least three implications for potentially increasing help-seeking and treatment retention follow from these speculations. First, these behaviors might increase if the current demand for immediate and continuous abstinence during treatment were relaxed to allow some level of continued consumption of the abused substance. Although this suggestion is anathema to traditional views, it is consistent with the so-

called harm-reduction perspective described earlier and with behavioral-economic concepts. For whatever reason, consumption of the abused substance is a highly (if not the most) valued activity of substance abusers. Demanding immediate and continuous abstinence is therefore taking away something of high value without replacing it with anything of equal value. Permitting some continued consumption, at least temporarily, may increase help-seeking in that the substance abuser would not face the certain loss of the highly valued abused substance when entering treatment, and it may provide a buffer period during which alternative valuable activities could be developed.

Second, help-seeking and treatment retention might be increased if treatments were more effective, and refined and specialized as discussed in the previous section. Improved treatment is a valued goal from any perspective, but it appears to be the case that treatment effectiveness is rarely if ever cited in the current literature as an important determinant of help-seeking or staying in treatment. Behavioral economics provides a sound theoretical reason for a possible relation between treatment effectiveness and help-seeking and treatment retention: Benefits from current treatments are far from certain, but if they were better defined, more probable, and occurred sooner, their value would be discounted less and treatment would be engaged in more.

Third, and somewhat related to the first two points, treatments should more quickly and more directly address improving clients' access to valued activities other than the abused substance. In behavioral economic terms, facilitating clients' engagement in such valued alternative activities would provide effective substitutes for substance consumption. As mentioned above, demand for any commodity, including alcohol or drugs, is a function of the economic context of its availability. It is well documented that the ready availability of alternative activities is a critical aspect of this context in that it has a powerful effect on reducing alcohol and drug consumption (Carroll, in press; Vuchinich and Tucker 1988). This issue seems particularly relevant to help-seeking; the literature shows that individuals seek treatment more because of the life problems caused by their addictive consumption than because of the addictive consumption itself. Thus, if treatments focused on these life problems as much or more than they focus on consumption of the abused substance (Allsop and Saunders 1991; Cox et al. 1991; Saunders et al. 1991), then treatment-seeking and retention might be increased. Moreover, recent work (discussed in Carroll, in press) indicates that the ready availability of a valued alternative reinforcer can block the development of drug self-administration in animals. This relation may have important prevention implications given that most substance abusers begin using the abused

substance during a relatively brief period in adolescence (Kandel and Logan 1984). Thus, from a behavioral economic perspective, enriching the environment with valuable nondrug activities provides a potentially powerful vehicle to prevent the development of substance abuse, promote treatment entry, and design more effective interventions.

CONCLUSIONS

The themes presented in this chapter about help-seeking, treatment retention, and recommended changes in the U.S. substance abuse treatment delivery system emerged coherently out of highly disparate and previously unrelated literatures. Whereas in the past the major thrust of scientific, clinical, and some policy initiatives has been to advance increasingly more effective treatments for substance disorders, these recent literatures point in a different direction. It is the authors' view that currently dominant treatments for substance disorders have probably reached an asymptote with respect to their effectiveness and range of applicability. Continued efforts to improve them without attending to the broader systems and contexts within which they are available are not likely to prove fruitful or to reach the chronically underserved majority of substance abusers. Emphasis should thus be shifted towards understanding the broader contexts in which substance disorders emerge and are maintained and within which help-seeking experiences of many different forms are encouraged or discouraged. Expanding community involvement in the management of substance-related problems is a clear priority (Institute of Medicine 1990).

Understanding and modifying the health care delivery system as it pertains to substance disorders will be an important piece of this focus (and there will be many opportunities for modification as health care reform and managed care initiatives evolve). In the authors' view, however, interventions tied exclusively to the health care system have been and will likely continue to be insufficient, even if the particulars of treatment programs are revised and more treatment slots become available. This is true because treatments made available through this system are stigmatizing (Cunningham et al. 1993; Tucker 1995), and, as concluded by Weisner and colleagues (1995) in a review of trends in the U.S. alcohol treatment delivery system during the past decade, "[I]t is clear that simply achieving increased treatment capacity does not necessarily result in changes in utilization patterns" (p. 59). Changing utilization patterns in a positive way will depend on improved understanding of contextual influences on help-seeking patterns and on

increased availability of alternative, low-threshold interventions in the community.

This shift in perspective and resource allocation has been occurring during the past 10 to 15 years in several European countries with some initial success, but it has been slow to develop in the United States (Hartnoll 1995). One can only speculate why this is the case, but several reasons come to mind. First, relative to the insurance-based health care system in the United States, for some time European systems have been organized in a more socialized fashion around primary care physicians who serve as system gatekeepers; this has probably contributed to differing sensitivities to the role of the health care system in promoting or deterring health care delivery, which is more widely acknowledged and researched in Europe. Second, in the United States, the for-profit substance abuse treatment delivery system typically is based on a medical staffing arrangement (including a responsible physician along with nurses and other subdoctoral staff including certified substance abuse counselors) that is economical and efficient, but it has retarded the involvement of other professionals and minimized the influence of alternative views of behavior change that lie outside the purview of medicine. Third, in the United States, many more Federal dollars have been allocated to reducing drug availability through interdiction, while demand-side approaches that emphasize prevention and treatment have been relatively neglected. Behavioral-economic theory points to the potential utility of demand-side interventions that enrich the environments of substance abusers by providing nondrug alternative activities that compete with drug use.

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