
CHAPTER 36

Outcome Research on 12-Step and Other Self-Help Programs

Rudolf H. Moos, Ph.D.

Christine Timko, Ph.D.

Twelve-step self-help groups (SHGs), often called mutual help or support groups, are an important component of the system of informal care for patients with substance use disorders (SUDs). Individuals make more visits to SHGs for help with their own or family members' substance use and psychiatric problems than to all mental health professionals combined. As many as 9% of adults in the United States have been to an Alcoholics Anonymous (AA) meeting at some time in their lives, and more than 3% have been to a meeting in the prior year (Room and Greenfield 1993). Moreover, many SUD treatment service providers have adopted 12-step techniques in treatment, and most of them refer patients to SHGs.

SUD patients have high rates of posttreatment relapse and additional episodes of specialized care; SHGs may improve the likelihood of achieving and maintaining remission and reduce the need for further professional care. SHGs provide continuing support, goal direction, and structure; exposure

to abstinent role models and rewarding, substance-free activities; a forum wherein individuals can express their feelings in a safe setting; and a focus for building self-confidence and coping skills. The American Psychiatric Association (2000) recommends referrals to SHGs as an adjunct to the treatment of patients with SUDs.

Participation in Self-Help Groups and Substance Use Outcomes

Individuals with SUDs who participate in 12-step SHGs tend to experience better alcohol and drug use outcomes than do individuals who do not participate in these groups. The most common index of participation has been attendance at group meetings; however, recent attention has fo-

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cused on aspects of involvement, such as reading 12-step literature, working the steps, obtaining and interacting with a sponsor, becoming a sponsor, and doing service work.

ATTENDANCE AND SUBSTANCE USE OUTCOMES

Several prospective studies have shown that SHG attendance is associated with good substance use outcomes. Project MATCH was a large clinical trial that compared the outcome of 12-step facilitation, cognitive-behavioral, and motivational enhancement treatment for patients with alcohol use disorders. Patients who attended AA more often in each 3-month interval after treatment were more likely to maintain abstinence from alcohol in that interval. In addition, more frequent AA attendance in the first 3 months after treatment was related to a higher likelihood of abstinence and fewer alcohol-related consequences in the subsequent 3 months; these findings held for patients in each of the three types of treatment (Tonigan et al. 2003).

Comparable findings have been obtained in several other studies. For example, inpatients with alcohol use disorders who attended AA at least weekly reported more reductions in alcohol consumption and more abstinent days at a 6-month follow-up than did individuals who attended AA less frequently or those who did not attend at all (Gossop et al. 2003). Alcohol-dependent individuals who participated in SHGs in the first and second years after intensive outpatient treatment were more likely to be abstinent in the second and third years, respectively; attendance at two or more meetings per week was associated with less severe relapses (Kelly et al. 2006).

Although there is much less empirical evidence, these findings apply to participation in Narcotics Anonymous (NA), as would be expected given the commonalities between AA and NA, which follow the same 12 steps and have similar literature, speaker and step meetings, and home groups and sponsors. Individuals who consistently attended NA at least weekly during a 12-month interval had lower levels of alcohol and marijuana use at follow-up than did those who attended NA less consistently (Toumbourou et al. 2002). Among individuals with drug use disorders, those who participated only in AA, only in NA, or both in AA and NA had comparable 1-year abstinence rates, all of which were higher than the rate for individuals who did not participate in AA or NA (Crape et al. 2002).

Individuals who continue to attend SHGs over a longer interval are more likely to maintain abstinence than are individuals who stop attending. Patients with drug use disorders who participated in 12-step groups at least weekly at 6-month and 24-month follow-ups were more likely to maintain abstinence from both drugs and alcohol (Fiorentine 1999). In another study, continuous attendance at baseline and at 6- and

30-month follow-ups was associated with better substance use outcomes at each follow-up; in addition, 6-month attendance was associated with better 30-month outcomes. Individuals who discontinued attendance or attended intermittently had substance use levels that were similar to those of individuals who reported no regular attendance (Kissin et al. 2003).

A prospective study of individuals with alcohol use disorders showed that a longer duration of attendance in AA in the first year after help seeking was associated with a higher likelihood of 1-year, 8-year, and 16-year abstinence and freedom from drinking problems. Moreover, after controlling for the duration of AA attendance in year 1, the duration of attendance in years 2–3 and 4–8 was related to a higher likelihood of 16-year abstinence. Thus, individuals who continued to attend AA regularly over the long term experienced better substance use outcomes than those who did not (Moos and Moos 2006). In addition, the combination of a longer duration of AA attendance and better drinking outcomes at the 1-year follow-up was associated with a lower mortality rate in the subsequent 15 years (Timko et al. 2006b).

These findings hold for SUD patients with different diagnoses. According to Witbrodt and Kaskutas (2005), individuals who attended more 12-step group meetings in the first 6 months after seeking treatment were more likely to be abstinent at a 6-month follow-up; those who attended more meetings in the subsequent 6 months were more likely to be abstinent at a 12-month follow-up. Comparable findings were obtained for patients with alcohol use disorder diagnoses only, patients with drug use disorder diagnoses only, and patients with both drug and alcohol use disorder diagnoses. In general, the duration of SHG attendance is more strongly related to substance use outcomes than is the frequency of attendance. The benefits of SHGs do not appear to be dependent on attending 90 meetings in 90 days.

INVOLVEMENT AND SUBSTANCE USE OUTCOMES

Attendance is an important indicator of participation, but it may not adequately reflect an individual's level of group involvement, as shown by such indices as number of steps completed, acceptance of 12-step ideology, and self-identification as a group member. These and related aspects of involvement are relatively highly correlated with indices of attendance; nevertheless, aspects of group involvement may be associated with substance use outcomes independent of the duration and frequency of attendance per se.

In support of this idea, individuals who were more accepting of 12-step ideology, especially belief in the need for lifelong attendance at 12-step meetings and the need to surrender to a higher power, were more likely to attend 12-step meetings at least weekly. Belief in 12-step ideology, specifi-

cally the idea that nonproblematic drug use was not possible, was associated with abstinence independent of 12-step group attendance (Fiorentine and Hillhouse 2000b). In Project MATCH, AA attendance, the number of steps completed, and self-identification as an AA member were most closely associated with abstinence. The composite of these three items was more highly related to abstinence than was attendance by itself (Cloud et al. 2004).

In a study of treatment for individuals with cocaine use disorders, active 12-step involvement in a given month predicted less cocaine use in the next month. Moreover, patients who increased their 12-step involvement in the first 3 months of treatment had better cocaine and other drug use outcomes in the next three months. Patients who regularly engaged in 12-step activities but attended meetings inconsistently had better drug use outcomes than did patients who attended consistently but did not regularly engage in 12-step activities (Weiss et al. 2005). Maintaining passive attendance may indicate reluctance to fully embrace 12-step group ideology and the goal of abstinence. Individuals who attend SHGs but are unable to embrace key aspects of the program are less likely to benefit from it.

DELAY IN PARTICIPATION AND DROPOUT

Compared with individuals who begin to participate in SHGs either soon after initiating help seeking or during treatment, those who delay entering SHGs do not appear to benefit as much from them. For example, individuals who delayed participating in AA for more than a year after recognizing that they had an alcohol-related problem and initiating help seeking were more likely to have drinking problems and dependence symptoms 8 years later than were individuals who entered AA in a timely fashion. Moreover, these individuals experienced no better 8-year alcohol-related outcomes than did individuals who did not participate in AA at all. Individuals who entered AA but then dropped out also were more likely to relapse or remain nonremitted (Moos and Moos 2006).

In support of these findings, Fiorentine (1999) noted that patients who continued to participate in AA after a 6-month follow-up were more likely to maintain abstinence at 24 months than were patients who dropped out of AA. Patients who did not enter AA until after the 6-month follow-up were no more likely to be abstinent at 24 months than patients who did not attend AA at all. According to Kelly and Moos (2003), 91% of patients with SUDs attended at least one 12-step group meeting either during treatment or in the year after treatment; however, 40% of these individuals had dropped out by a 1-year follow-up. Compared with patients who continued to attend, those who dropped out were less likely to be abstinent or in remission and more likely to report substance-related problems at a 1-year follow-up.

Individuals who delay participating in SHGs may develop more severe substance use problems before they are motivated to obtain help and thus may have poorer prognoses than individuals who enter SHGs quickly. Most individuals who seek formal help for SUDs enter treatment and/or SHGs relatively soon. Accordingly, individuals who hesitate to join these groups may be less motivated for recovery, find it harder to establish a relationship with a sponsor, and drop in and out of SHG groups or attend only intermittently, a pattern that is associated with poorer outcomes.

Connections Between Self-Help Groups and Treatment

Many individuals participate in both treatment and SHGs; in general, these two sources of help appear to strengthen or bolster each other. For example, compared with help-seeking individuals who initially entered only AA, individuals who entered both treatment and AA participated in AA as much or more in the subsequent 15 years. Individuals who stayed in treatment longer in the first year after initiating help-seeking subsequently showed more sustained participation in AA. More extended treatment later in individuals' help seeking careers was not associated with later participation in AA, which suggests that treatment providers' referrals to AA have more influence in the context of an initial treatment episode (Moos and Moos 2005).

There also is a more specific link in that individuals who participate in 12-step treatment, which introduces patients to 12-step philosophy and encourages them to join a group and get a sponsor, are more likely to affiliate with 12-step SHGs than are individuals who participate in treatment that is not oriented toward 12-step principles. Patients with cocaine use disorders who received individual drug counseling based on 12-step philosophy were more likely to attend and participate in SHGs than were comparable patients who received supportive-expressive or cognitive treatment (Weiss et al. 2000). Similarly, patients and their partners in marital therapy that included AA/Al-Anon facilitation attended more AA and Al-Anon meetings during treatment than did patients in two other marital therapy conditions that did not include such facilitation (McCrary et al. 1996).

In Project MATCH, patients who developed a stronger alliance in treatment were more likely to attend AA during and after treatment. In addition, patients in 12-step facilitation treatment were more likely to attend and affiliate with AA after treatment than were patients in cognitive-behavioral or motivational enhancement treatment (Tonigan et al. 2003). In another study, patients with SUDs treated in 12-step facilitation and eclectic programs (which also emphasized 12-step principles) participated more in 12-step SHGs after treatment

than did patients treated in cognitive-behavioral programs. Specifically, these patients were more likely to attend meetings, talk to a sponsor, read 12-step literature, incorporate the steps into their daily life, and talk to friends in 12-step groups (Humphreys et al. 1999a).

These findings suggest that referral and alliance processes in treatment contribute to participation in SHGs. The development of a treatment alliance may enhance patients' motivation for recovery and underlie the impact of counselors' recommendations to affiliate with SHGs and the overall duration of continuing to obtain help. Moreover, treatment that specifically emphasizes the value of SHGs in recovery encourages more SHG involvement than treatment that does not have this emphasis.

TREATMENT, SELF-HELP GROUPS, AND SUBSTANCE USE OUTCOMES

Participation in treatment and participation in SHGs have independent effects on substance use outcomes and tend to augment each other. Compared with patients who participated only in 12-step SHGs or only in outpatient mental health care after discharge from residential care, patients who participated in both outpatient care and SHGs experienced better 1-year substance-related outcomes (Ouimette et al. 1998). Similarly, among clients with drug use disorders, longer episodes of treatment and weekly or more frequent SHG attendance during and after treatment were each independently associated with 6-month abstinence (Fiorentine and Hillhouse 2000a). Moreover, findings obtained in a nationwide sample of alcohol-dependent individuals showed that those who participated in 12-step SHGs in addition to treatment were more than twice as likely to achieve an abstinent recovery as were individuals who obtained formal treatment alone (Dawson et al. 2006).

Among patients dependent on cocaine, participation in individual drug counseling and 12-step SHGs each had unique benefits; patients who received the counseling and increased their 12-step SHG participation in the first 3 months of treatment had the best drug use outcomes at the end of treatment (Weiss et al. 2005). In the long-term study of individuals with alcohol use disorders described earlier, individuals who participated in both treatment and AA were more likely to be remitted at both 1-year and 16-year follow-ups than were individuals who received only treatment in the first year (Moos and Moos 2005). These findings counter the concern that entry into treatment might reduce motivation to affiliate with SHGs; in fact, they suggest that participation in treatment tends to strengthen SHG affiliation and thereby to bolster the effects of treatment.

SUPPORT AND INTENSITY OF TREATMENT

A supportive and spiritually oriented treatment environment can enhance participation in 12-step activities. In this

vein, patients in more supportive treatment environments increased more in 12-step involvement during treatment—that is, they were more likely to acquire a sponsor and 12-step friends and to read 12-step literature. Moreover, when patients who had a high risk of dropping out of SHGs after treatment were treated in a more supportive environment, their risk of dropout declined (Kelly and Moos 2003). A stronger spiritual orientation in treatment also has been related to more posttreatment SHG involvement (Mankowski et al. 2001).

In contrast, participation in SHGs may compensate for the lack of services provided in treatment. In a study of dually diagnosed patients in residential programs, more attendance at 12-step SHGs was associated with better substance use and psychiatric outcomes both at discharge and 1-year follow-up. Importantly, the benefits of 12-step SHG attendance depended on the intensity of services provided during treatment. More 12-step SHG attendance during treatment was associated with better alcohol and drug outcomes at discharge only among patients treated in low-service intensity programs; also, more attendance after discharge was associated with better psychiatric and family/social functioning at 1 year only among patients receiving low-service intensity care (Timko and Sempel 2004).

MEDIATION OF TREATMENT EFFECTS

Participation in SHGs may mediate or explain part of the effects of treatment on substance use outcomes. According to Humphreys et al. (1999a), the orientation of treatment influenced the outcome of SHG participation: as the treatment emphasis on 12-step approaches increased, the positive relationship of SHG participation to better substance use outcomes became stronger. More specifically, there was a stronger relationship between 12-step SHG participation and better substance use outcomes among patients from 12-step treatment programs than among patients from cognitive-behavioral or eclectic programs. Posttreatment SHG involvement partially mediated higher rates of abstinence and freedom from substance use problems in patients from 12-step than in patients from cognitive-behavioral treatment programs.

Essentially comparable findings were obtained in the National Institute on Drug Abuse Collaborative Cocaine Treatment study. Patients in individual drug counseling that emphasized 12-step principles changed more in 12-step beliefs and behaviors than did patients in supportive-expressive therapy and cognitive therapy, which placed less emphasis on 12-step ideology. These patients also experienced better end-of-treatment substance use outcomes; changes in patients' 12-step beliefs and behaviors explained or mediated part of this effect (Crits-Christoph et al. 2003). However, changes in 12-step involvement did not precede changes in drug use,

suggesting that increases in 12-step involvement may occur together with or after improvements in drug use. For example, individuals might attribute reductions in their drug use to the 12-step approach and then increase their commitment to 12-step SHGs in the expectation that this will help them maintain abstinence. Thus, declines in substance use may precede and motivate subsequent changes in 12-step beliefs and behaviors.

Self-Help Groups and Health Care Utilization and Costs

Two prospective studies have highlighted the potential for SHG involvement to reduce the use and costs of health care. Compared with individuals who initially obtained professional outpatient care, individuals who entered AA had less income and education and experienced more adverse consequences of drinking at baseline, suggesting somewhat worse prognoses. Nevertheless, individuals who initially sought help from AA had alcohol-related and psychosocial outcomes comparable with those who initially obtained outpatient treatment and had 45% lower alcohol-related health care costs over a 3-year period (Humphreys and Moos 1996).

By increasing their patients' reliance on SHGs, professional treatment programs that emphasize 12-step approaches may lower subsequent health care costs. In this vein, compared with patients treated in cognitive-behavioral programs, patients treated in 12-step programs were more involved in SHGs at both 1-year and 2-year follow-ups after discharge from acute treatment. In contrast, patients treated in cognitive-behavioral programs received more inpatient and outpatient care after discharge, resulting in 64% higher 1-year and 30% higher 2-year annual health care costs. Substance use and psychiatric symptom outcomes were comparable across treatments, except that 12-step patients had higher rates of abstinence at both the 1-year and 2-year follow-ups (Humphreys and Moos 2001, 2007).

Personal Factors, Participation, and Self-Help Group Outcomes

In a search to identify individuals who may be especially well-suited for participation in SHGs, researchers have examined a range of personal factors, including severity and impairment related to substance use, psychiatric disorders, and disease model beliefs and religious/spiritual orientation. In addition, some studies have focused on the suitability of SHGs for individuals who are court mandated to attend as well as for women and youth and older adults.

SEVERITY AND IMPAIRMENT

Individuals who are heavier substance users and have more substance-related problems, are more dependent on substances, and lack control over their substance use are more likely to affiliate with SHGs. More-impaired clients also are more likely to continue SHG attendance and less likely to drop out after treatment than are less impaired clients (Connors et al. 2001; Tonigan et al. 2006).

Compared with individuals with less severe substance use problems, those with more-severe problems may benefit more from SHG involvement. Morgenstern et al. (2003) found that patients with more-severe substance use and psychosocial problems who had high levels of SHG affiliation had better 6-month substance use outcomes; outcomes were poor when group affiliation was low. For patients who had less severe problems, levels of SHG affiliation were not related to outcomes. Individuals with more-severe problems may benefit more from the support and structure of SHGs because it helps to alleviate their distress and increase their self-control and interpersonal and coping skills.

PSYCHIATRIC DISORDERS

Many patients with SUDs also have co-occurring psychiatric disorders. With the exception of patients with psychotic disorders, these dually diagnosed patients are as likely to attend 12-step SHGs as are patients with only SUDs (Jordan et al. 2002). More importantly, some dually diagnosed patients appear to benefit as much from substance use-focused 12-step SHGs as do patients with only SUDs. A study of patients discharged from hospital-based residential treatment showed that dually diagnosed patients attended a comparable number of 12-step SHG meetings in the 3 months before 1-year, 2-year, and 5-year follow-ups as did patients with only SUDs. SHG attendance was similarly associated with a higher likelihood of 1-year and 5-year remission for both groups of patients (Ouimette et al. 1998; Ritsher et al. 2002a, 2002b).

A few studies have focused on patients with specific psychiatric disorders. Patients with SUDs and posttraumatic stress disorders who were more involved in 12-step SHGs during treatment relied more on approach and less on avoidance coping at discharge; they also had fewer psychological symptoms. In contrast, there was little or no relationship between SHG involvement during treatment and these discharge outcomes among patients who had only SUDs. Patients with SUDs and posttraumatic stress disorder participated as much in 12-step SHGs in the first 2 years after discharge from treatment as did patients with only SUDs. The dually diagnosed patients who participated more in SHGs were more likely to be abstinent and experienced less distress; they also were more likely to maintain stable remission (Ouimette et al. 2000).

The situation may be different for patients who have SUDs and co-occurring major depression. Compared with patients with only SUDs, those who also have major depression were less likely to become involved in 12-step SHGs in the year after treatment. At a 2-year follow-up, the association between SHG involvement and abstinence was stronger for patients who had only SUDs than for patients who also had major depression, who did not benefit as much from contact with a sponsor, 12-step friends, reading 12-step literature, and working the steps. Depressed individuals may have interpersonal problems that make it harder to develop friendships and acquire a sponsor; thus, they may need more support to become involved in and benefit from 12-step SHGs (Kelly et al. 2003).

Traditional 12-step SHGs may have some limitations for dually diagnosed individuals because these individuals may bond less with other members who do not share the experiences associated with psychiatric problems. The guidance dually diagnosed individuals obtain from other members, although well-intentioned, may be misinformed; other members also may have equivocal or negative attitudes about the use of medications to prevent relapse or alter mood. Given these issues, some dually diagnosed individuals, especially those with Axis I psychiatric disorders, may do better in dual-focused 12-step SHGs, such as Double Trouble in Recovery (DTR). DTR is a mutual aid program adapted from the 12-step method of AA to focus specifically on dually diagnosed individuals' needs.

Individuals who experience more psychiatric symptoms and more severe consequences of substance use are more likely to maintain attendance in DTR, which is associated with better adherence to medication regimens. Two processes that are closely related to group support involve assuming a helping role by providing support to other members and reciprocal learning, or the opportunity to learn new attitudes and skills from role models and share information at meetings. DTR members who assumed a helping role and engaged more in reciprocal learning were more likely to be abstinent at a 1-year follow-up (Magura et al. 2003). Members who had more sustained participation in DTR over a 1-year interval were less likely to use substances at a 2-year follow-up; this effect was partially explained by their higher levels of group-related social support (Laudet et al. 2004).

DISEASE MODEL BELIEFS AND RELIGIOUS/SPIRITUAL ORIENTATION

Individuals whose beliefs are more consonant with the 12-step orientation are more likely to affiliate with 12-step SHGs. More specifically, patients who believe in the disease model of substance use and have an abstinence goal and an alcoholic or addict identity tend to become more involved in SHGs and are less likely to drop out (Kelly and Moos 2003;

Mankowski et al. 2001). Patients with both SUDs and post-traumatic stress disorder whose identity matched 12-step philosophy participated more in SHG activities; more participation was associated with less distress for these patients but with more distress for patients who did not have a 12-step identity (Ouimette et al. 2001).

Because of the emphasis on spirituality in 12-step SHGs, there has been speculation that less religious or less spiritually inclined individuals may participate and benefit less from these groups. In fact, individuals with stronger religious beliefs are more likely to attend and become involved in 12-step SHGs and are less likely to drop out (Kelly and Moos 2003; Timko et al. 2006a). In a 3-year study that examined the role of religiosity in AA, more spiritually oriented individuals reported attending more meetings than did secular individuals; in addition, secular and uncommitted individuals had a sharper decline in AA involvement than spiritual and religious individuals did. These findings suggest that 12-step SHGs are accessible but somewhat less engaging for more secular individuals (Kaskutas et al. 2003).

Importantly, when they do become involved in SHGs, less religious individuals appear to derive as much or more benefit from them as more religious individuals do (Kaskutas et al. 2003). In two large multisite studies, participation in SHGs was associated with better substance use outcomes, irrespective of the strength of individuals' religious beliefs or belief in God (Tonigan et al. 2003; Winzelberg and Humphreys 1999).

COURT-MANDATED ATTENDANCE

Individuals who are court mandated to attend AA appear to have quite similar experiences in AA as do individuals who participate without a court mandate. In this vein, Humphreys et al. (1998) found that, compared with nonmandated patients, mandated patients attended more meetings and were more likely to report having had a spiritual awakening. By extension, patients who are court mandated to treatment should be as good candidates for referral to AA as patients who enter treatment without a court mandate. In fact, mandated and nonmandated patients may be equally likely to have prior experience with AA, to report an alcoholic identity, and to become involved in 12-step SHGs during and in the year after treatment.

WOMEN

Women with alcohol or drug use disorders are as or more likely than men to attend SHGs and to continue to participate in them. Participation in SHGs also is associated with as good or better outcomes for women as for men (Kaskutas et al. 2005). In a comparison of women and men with alcohol use disorders, women were more likely than men to attend AA and went to more AA meetings in the first year after ini-

tiating help seeking. More extended participation in AA was associated with a higher likelihood of 1-year remission for both women and men; however, the positive association between a longer duration of AA attendance and stable remission was stronger for women (Moos et al. 2006).

Compared with men, women may be more in tune with 12-step philosophy, which involves acceptance of powerlessness over the abused substance and dependence on a higher power to attain sobriety. Women with SUDs often report low self-esteem, an external locus of control, stable attributions for failure, and frequent substance use when feeling powerless or inadequate. These personal characteristics are congruent with 12-step ideology, which expects individuals with substance use problems to admit past wrongdoing, acknowledge inability to control substance use, and trust a higher power to achieve recovery. Importantly, however, Women for Sobriety is a self-help program that provides an alternative for women who prefer an emphasis on improving self-esteem, independence, and personal responsibility rather than powerless, humility, and surrender (Kaskutas 1996).

YOUTH

Many adolescents attend SHGs after treatment, and those who do tend to experience better substance use outcomes. SHG attendance in the 3 months after discharge is associated with better 3-month and 6-month outcomes among youth; the association between attendance and remission holds for youngsters who have severe substance use and personality problems (Kelly et al. 2000; Kennedy and Minami 1993). SHG attendance in the first 6 months after treatment also has been associated with better 12-month outcomes.

According to Kelly et al. (2002), attendance at 12-step meetings in the first 3 months after treatment was associated with more motivation for abstinence and self-efficacy at 3-month follow-up, which predicted abstinence at 6-month follow-up. The strength of affiliation with SHGs explained part of the connection between 12-step attendance and motivation for abstinence, which explained some of the link between attendance and 6-month outcomes. Thus, youngsters' attendance appears to contribute to affiliation, which enhances motivation for abstinence; motivation then helps to explain why attendance is related to better substance use outcomes.

Adolescents often attribute their relapses to social situations and the pressure to use substances. Therefore, they may benefit from contact with a sponsor who can be a role model, structure that helps them avoid high-risk situations, participation in substance-free social events, and the opportunity to try out a new lifestyle. However, there also are important barriers to SHG participation for adolescents, including less severe substance-related problems and less motivation for abstinence, discomfort with the emphasis on

spirituality, and younger age relative to most members, who may be concerned with marital and employment problems that are less relevant to adolescents.

OLDER ADULTS

Late-middle-aged and older adults participate in and benefit from 12-step SHGs. In two studies, groups of older patients (ages 55 years or more) with SUDs were matched with younger (ages 21–39 years) and middle-aged (ages 40–59 years) patients on the basis of demographic factors and dual diagnosis status. These three groups of patients attended a comparable number of SHG meetings during and in the 2 years after residential treatment and were equally likely to have a sponsor. Overall, patients who attended more group meetings and those who had a sponsor in the first year experienced better 1-year alcohol and psychological distress outcomes. Patients who attended more meetings and had a sponsor in the second year reported less alcohol consumption at a 5-year follow-up. The three age groups did not differ in the associations between 12-step SHG attendance and these outcomes (Lemke and Moos 2003a, 2003b).

Self-Help Groups for Family Members

Al-Anon and other mutual help groups, such as Nar-Anon, Alateen, and Adult Children of Alcoholics (ACA), were developed to support the family members and friends of individuals with substance use problems. These groups try to help individuals affected by another person's substance use increase their own well-being, independence, and self-esteem. The groups provide support and guidance, teach members new coping skills, and expose them to models of how to handle a family member's abuse. Although these groups have not been extensively evaluated, some evidence indicates that they improve their members' psychological well-being and functioning (Fernandez et al. 2006).

In a study that compared family members of patients with SUDs who attended Al-Anon with those who did not, the Al-Anon group improved more in family functioning; moreover, the 3-month relapse rate for patients whose family members attended Al-Anon was lower than that for patients whose family members did not attend (Friedemann 1996). Another study showed that ACAs who had substance use problems and attended an ACA-specific mutual help group, which followed Al-Anon and 12-step principles, reported more benefits from being an ACA member than did comparable individuals who attended substance abuse education classes. The group participants also declined more in depression and substance use; individuals who participated more intensively in the group experienced less stigma and more

self-esteem at a 6-month follow-up (Kingree and Thompson 2000).

Ingredients of Self-Help Group Outcomes

The effectiveness of SHGs in curtailing substance use is based largely on four key ingredients: 1) support, goal direction, and structure that emphasizes abstinence and the importance of strong bonds with family, friends, work, and religion; 2) participation in substance-free social activities, 3) identification with abstinence-oriented role models and a consistent belief system that espouses a substance-free lifestyle, and 4) an emphasis on bolstering members' self-efficacy and coping skills and helping others overcome substance use problems.

SHGs are an important source of abstinence-specific and general support and may be especially effective in counteracting the influence of substance users in a social network. These groups provide guidance, goal direction, and monitoring by offering modeling of substance use refusal skills, ideas about how to avoid relapse-inducing situations, and practical advice for staying sober. Individuals who continue to attend AA more regularly after treatment are more likely to have social network members who support cutting down or quitting substance use than are individuals who attend AA less regularly. In fact, the increase in friends' support associated with SHGs explains part of their positive influence on remission (Humphreys et al. 1999b).

In addition to obtaining support, providing support to others may benefit recovering individuals because it increases a commitment to abstinence, satisfaction from helping other individuals in need, and the helper's own sense of independence and self-efficacy. In fact, recovering individuals who help their peers to maintain long-term sobriety are better able to maintain sobriety themselves (Pagano et al. 2004). Patients who engage in more helping during treatment tend to be more involved in SHGs after treatment and, in turn, are more likely to achieve abstinence (Zemore et al. 2004). Moreover, SHG members who become sponsors are more likely to maintain abstinence than those who do not; this effect appears to be independent of SHG attendance (Crape et al. 2002).

Participation in SHGs also is related to increases in common change factors other than social support, especially mo-

tivation for recovery, self-efficacy to resist drinking, and approach coping (Morgenstern et al. 1997). In Project MATCH, participation in AA was related to more self-efficacy to avoid drinking, which predicted a higher likelihood of abstinence. Self-efficacy explained part of the association between participation in AA and abstinence. In addition, AA attendance at 6 months posttreatment predicted self-efficacy at 9 months, which predicted abstinence at 15 months. Self-efficacy to avoid drinking mediated part of the effect of AA attendance on abstinence for both less severe and more severe alcoholic individuals (Bogenschutz et al. 2006; Connors et al. 2001).

A few other studies have also shown that improvements in common change factors explain some of the effects of SHGs. Individuals who attend 12-step groups tend to develop new friends who are more likely to abstain from substances and provide more support for recovery (Humphreys and Noke 1997); this is also associated with increases in approach coping. According to Humphreys et al. (1999b), almost half of the association between SHG involvement and 1-year substance use was explained by these support and coping indices. Friends' support for abstinence was a more powerful mediator of the relationship between SHG involvement and substance use than was general friendship quality.

Affiliation with 12-step SHGs also tends to promote more reliance on behaviorally oriented substance use coping processes. In this respect, Snow et al. (1994) found that individuals who were more involved in AA were more likely to rely on specific coping responses aimed toward reducing substance use, such as spending time with nondrinking friends, talking to someone about their drinking problems, rewarding themselves for trying to stop drinking, and becoming more aware of social efforts to help people stop drinking.

The effective ingredients of SHGs reflect the four critical factors that appear to aid long-term recovery from an SUD: 1) forming bonds and obtaining social support from new relationships, such as a new spouse or partner or a sponsor; 2) supervision or monitoring, such as by a sponsor or a spouse or partner, and the provision of positive consequences for continued remission; 3) involvement in rewarding activities that do not involve substance use, such as a program of exercise, spiritual or religious pursuits, or social and service activities and include helping other people; and 4) affiliation with a group that provides a sustained source of hope, inspiration, and self-esteem, such as AA or a religion.

Key Points

- Sustained attendance at self-help groups (SHGs) is associated with a higher likelihood of abstinence and better substance use outcomes.
- Involvement in SHGs may accrue benefits over and above those of attendance itself.

- Delay in participation and dropout from SHGs foreshadows poorer substance use outcomes.
- Participation in SHGs can substitute for, bolster, and help to explain the benefits of treatment; it can also reduce health care utilization and costs.
- Less religious individuals appear to benefit from SHGs as much as do individuals who are more religious.
- Individuals who are court mandated to participate in SHGs benefit as much from them as do nonmandated patients.
- Women and older adults engage in and benefit from SHGs as much as or more than men and younger adults do.
- SHGs contribute to better substance use outcomes by providing support, goal direction, and structure; exposure to abstinent role models; reward for substance-free activities; and a focus for building self-confidence and coping skills.

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