RESEARCHUPDATE

BUTLER CENTER FOR RESEARCH DECEMBER 2004

Hazelden Betty Ford Foundation

Research Update is published by the Butler Center for Research to share significant scientific findings from the field of addiction treatment research.

Alcoholics Anonymous

Alcoholics Anonymous (AA) was founded in 1935 by Dr. Robert Smith and Bill Wilson. Today, AA is an extensive mutual-help organization that spans the globe. From its humble beginnings in Akron, Ohio, AA has expanded to over 100,000 groups meeting in 150 countries with membership exceeding 2 million people (AA World Services, 2004). AA is one of the most commonly sought sources of help for alcoholism (Weisner, Greenfield, & Room, 1995; Workgroup on Substance Abuse Self-Help Organizations, 2003). Attendance is free and open to anyone who has a desire to stop drinking.

As utilization of AA and related groups has soared, researchers have examined the impact of AA on addiction outcomes. Most recently, studies have begun to identify the mechanisms by which AA exerts its effect.

The Twelve Step Philosophy

AA members support each other by meeting regularly and "working" the Twelve Steps to maintain abstinence from alcohol and drugs (AA World Services, 1976). Members recognize problem drinking and develop hope for recovery. They conduct a self-inventory of personal shortcomings, address the consequences of alcoholism, and make restitution for harmful actions. They engage in healthy behaviors including daily meditation, ongoing AA participation, and developing spirituality and serenity. Members change maladaptive thoughts (known as "stinkin' thinkin'"), make healthy choices (e.g., avoiding drinking events), and reach out to others who can support them in their recovery.

Because AA does not maintain membership records or conduct research (AA World Services, 2004), most studies of its effects have been conducted on those who attend AA following formal treatment. While randomized designs comparing AA to no treatment are not likely to occur, numerous quasi-experimental, descriptive, correlational, and path modeling designs have demonstrated its relationship to reduced alcohol use and improved psychosocial functioning.

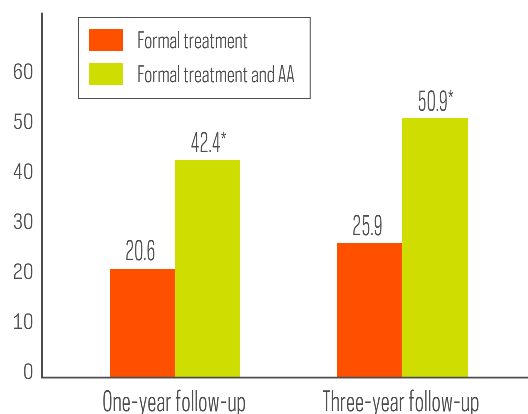
AA's Impact on Outcomes

AA membership and participation is positively related to improved psychosocial and drinking outcomes. In the early 1990s, Emrick et al. (1993) conducted a meta-analysis of 107 studies and found a positive correlation between AA involvement and substance use outcome when professional treatment and AA were combined.

The authors also found support for a positive relationship between AA attendance and psychological health. A later meta-analysis of 74 studies by Tonigan, Toscova, and Miller (1996) reached a similar conclusion, with positive relationships found between AA involvement and drinking and psychosocial outcome.

Higher levels of AA involvement in the year after treatment are predictive of better long-term outcomes (McKellar et al., 2003; Moos & Moos, 2004). Moos and Moos (2004) found those who participated longer in AA in the year following treatment had better one- and eight-year outcomes compared to those who attended for shorter durations.

One- and three-year abstinence rates among those attending formal treatment alone and those attending formal treatment plus Alcoholics Anonymous (AA)



* p < .05.
SOURCE: Timko, Moos, Finney, & Lesar (2000).

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THE HAZELDEN BETTY FORD FOUNDATION EXPERIENCE

The Hazelden Betty Ford Foundation incorporates the Twelve Steps of AA as part of professional treatment. In 2002, the Butler Center for Research at the Hazelden Betty Ford Foundation studied how AA works to promote abstinence. Findings were presented at the Research Society on Alcoholism and published in Alcoholism: Clinical and Experimental Research (Owen et al., 2003).

CONTROVERSIES & QUESTIONS

Question: *Is AA a religious organization?*

Response: No. People of all faiths and beliefs are welcome. Although emphasis is placed on spirituality, a Higher Power is a personal and individually conceptualized construct. Data show that while people of agnostic and atheist beliefs may be initially reluctant to attend, they receive the same benefits from AA as those with spiritual and/or religious beliefs (Tonigan, Miller, & Schermer, 2002).

Question: *How do AA and Twelve Step-based treatments differ?*

Response: Twelve Step-based treatment incorporates the Twelve Step philosophy of AA and includes an interdisciplinary team of professionals who, working with a substance dependent individual, assess addiction problems, develop a treatment plan, and implement specific treatment methods. AA is a mutual-help organization that provides no formal professional treatment services to its members (AA World Services, 2004).

HOW TO USE THIS INFORMATION

Treatment Providers: Refer substance dependent people to AA and related groups. Educate them about the beneficial effects of AA participation on long-term outcomes.

Researchers: Continue to study AA and its mechanisms of effect.

Policy Makers: Include referral to AA in the development of best-practice guidelines.

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Alcoholics Anonymous

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Formal treatment combined with AA participation results in better initial outcomes than formal treatment alone. Timko and colleagues (2000) found those attending formal treatment plus AA had significantly higher rates of abstinence than those who attended formal treatment alone at one- and three-year follow-ups (see Figure on front).

AA's effects appear to be independent of motivation or severity levels. McKellar, Stewart, and Humphreys (2003) assessed a sample of 2,319 male alcohol-dependent veterans at one and two years following treatment. AA predicted improved outcomes. However, neither motivation levels nor psychopathology explained the relationship between AA involvement and outcome.

How AA Works

Because AA positively impacts outcomes, attention has turned to examining the mechanisms by which AA exerts its effect. AA improves outcomes in part by increasing self-efficacy (the confidence to reduce and stop drinking), increasing social support for sobriety, and improving coping skills, which in turn increase abstinence.

Morgenstern and colleagues (1997) studied 100 patients in a Twelve Step treatment program. Because problem severity, pre-treatment use frequencies, baseline commitment to abstinence, and self-efficacy levels at discharge were correlated with outcome, these factors were controlled for in the analyses. Overall, affiliation with AA after treatment was found to promote ongoing motivation and commitment to abstinence, increased use of active coping skills, and the maintenance of self-efficacy, which independently predicted positive substance use outcomes.

Self-efficacy as a mediator of AA's effects was further supported by an analysis of Project MATCH data by Connors, Tonigan, and Miller (2001). In their analysis of 914 participants, AA participation predicted the percentage of abstinent days in the 7–12 months after treatment. Self-efficacy was a mediator of this effect; that is, AA participation predicted self-efficacy levels, which in turn predicted percentage of days abstinent at one year. Later analyses found this effect to persist at the three-year follow-up (Owen et al., 2003).

Humphreys, Mankowski, Moos, and Finney (1999) found support for the role of active coping and changes in social support networks. They studied 2,337 male VA patients seeking treatment who had no prior AA experience. AA involvement after treatment had a direct effect upon reduced substance abuse in the year following discharge. Participation resulted in the use of active coping responses, improvements in the quality of friendships, and support from friends to remain abstinent. These three mediators subsequently predicted reductions in substance use.

Additional evidence confirms the role of social support within AA is important. Bond, Kaskutas, and Weisner (2003) assessed one- and three-year outcomes among a sample of 655 people in treatment. AA's impact on outcome was mediated by the number of AA contacts who encouraged a reduction in drinking. In a study of 112 patients in a residential treatment setting, Owen et al. (2003) found that AA participation in the year after treatment positively impacted lifestyle changes, which included ending relationships with using friends and making new friends in recovery. Lifestyle changes, in turn, positively impacted abstinence rates at one-year follow-up.

Summary

Regular AA participation promotes abstinence from alcohol and other drugs. Members develop confidence to maintain ongoing recovery, learn and implement positive social skills, develop social networks supportive of abstinence, and make other lifestyle changes that positively impact their recovery from substance dependence.

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The Butler Center for Research informs and improves recovery services and produces research that benefits the field of addiction treatment. We are dedicated to conducting clinical research, collaborating with external researchers, and communicating scientific findings.

Valerie Slaymaker, PhD, Director

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